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**RELATIONSHIPS BETWEEN MALADAPTIVE
DAYDREAMING, ADDICTION TENDENCY AND
EXECUTIVE FUNCTIONS**

BY

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ÖZET

KARALOĞLU, Fatma Sena. Uyumsuz Gündüzdüşü Kurma, Bağımlılık Eğilimi ve Yürütücü İşlevler Arasındaki İlişkiler. Başkent Üniversitesi, Sosyal Bilimler Enstitüsü, Klinik Psikoloji Tezli Yüksek Lisans Programı, 2024.

Uyumsuz gündüzdüşü kurma (UGK), kişinin günlük aktivitelerinin yerini alan, sosyal, mesleki ve akademik alanda sorunlara sebep olan, yoğun ve kontrol edilemeyen gündüzdüşü kurma eğilimi olarak tanımlanır. Bu çalışmada, UGK, bağımlılık eğilimi ve yürütücü işlevler arasındaki ilişkiler araştırılmaktadır. Araştırmanın 77 kişilik örneklemini yaşları 19-25 arası değişen üniversite öğrencileri (63 kadın ve 14 erkek) oluşturmaktadır. Bu çalışma çevrimiçi ve yüz yüze olmak üzere iki bölümden oluşmaktadır. İlk aşamada katılımcılar, çevrimiçi ortamda araştırmaya gönüllü olarak katılmayı kabul ettikten sonra Demografik Bilgi Formu'nu, Uyumsuz Gündüzdüşü Kurma Ölçeği'ni (MDS-16), Bağımlılık Profil İndeksi İnternet Bağımlılığı Formu'nu (BAPİNT), Bağımlılık Profil İndeksi Risk Tarama Ölçeği (BAPİRT) Alkol ve Madde Formları'nı tamamlamışlardır. Sonrasında katılımcılar MDS-16 ölçeğinden aldıkları puanlara göre uyumsuz gündüzdüşü kuranlar ve kurmayanlar olarak iki gruba bölünmüş ve araştırmanın ikinci aşamasına davet edilmişlerdir. Burada katılımcılarla yüz yüze gelerek yapılan uygulamalarda Stroop Testi TBAG Formu ve Wisconsin Kart Eşleme Testi (WKET) kullanılarak veriler toplanmıştır. Korelasyon analizleri sonucunda, UGK ile internet bağımlılığı arasında anlamlı ve pozitif yönlü korelasyon olduğu bulunmuştur. Regresyon analizi, internet bağımlılığı puanlarının MD puanlarını yordadığını ortaya koymuştur. Bağımlılık eğiliminde (internet, alkol ve madde bağımlılığı) ve yürütücü işlevlerde UGK grup faktörünün temel etkisi MANOVA ile incelenmiştir. Yapılan analiz sonuçlarına göre UGK grup faktörünün yalnızca internet bağımlılığı üzerinde anlamlı bir etkiye sahip olduğu bulunmuştur. Bu bulgu araştırmanın temel hipotezini kısmen doğrulamaktadır. Araştırmanın bulguları ilgili literatür ışığında tartışılmıştır. Son olarak, araştırmanın katkıları, güçlü yönleri ve sınırlılıkları değerlendirilerek gelecek çalışmalara önerilerde bulunulmuştur.

Anahtar Kelimeler: Uyumsuz gündüzdüşü kurma, bağımlılık eğilimi, yürütücü işlevler

ABSTRACT

KARALOĞLU, Fatma Sena. Relationships between Maladaptive Daydreaming, Addiction Tendency, and Executive Functions. Başkent University, Institute of Social Sciences, Clinical Psychology Master's Program with Thesis, 2024.

Maladaptive daydreaming (MD) is an intense and uncontrollable tendency to engage in immersive daydreaming that replaces daily activities and causes problems in social, occupational, and academic domains. In this study, the relationships between MD, addiction tendency, and executive functions were investigated. The study sample consists of 77 university students aged between 19-25 (63 females and 14 males). This study consists of two parts: online and face-to-face. In the first phase, participants volunteered to participate in the research online and completed the Demographic Information Form, Maladaptive Daydreaming Scale (MDS-16), Addiction Profile Index Internet Addiction Form (APIINT), Addiction Profile Index Risk Screening Form (APIRSF) Alcohol and Drug Forms. Then, participants were divided into two groups, maladaptive daydreamers and non-maladaptive daydreamers, according to the scores obtained from the MDS-16 scale, and invited to the second phase of the research. Data were collected through face-to-face applications using the Stroop Test TBAG Form and the Wisconsin Card Sorting Test (WCST). Correlation analyses revealed a significant and positive relationship between MD and internet addiction. Regression analysis revealed internet addiction scores predict MD scores. The main effect of the MD groups on addiction tendency and executive functions was examined with MANOVA. According to the analysis, the MD group factor only had a significant impact on internet addiction. This result partially confirms the main hypothesis of the research. The findings of the study were discussed in the light of relevant literature. Finally, the study's contributions, strengths, and limitations are evaluated, and suggestions for future research were made.

Keywords: Maladaptive daydreaming, addiction tendency, executive functions

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LIST OF ABBREVIATIONS

APIINT	Addiction Profile Index Internet Addiction Form
APIRSF	Addiction Profile Index Risk Screening Form
APIRSF-A	Addiction Profile Index Risk Screening Form Alcohol Scale
APIRSF-D	Addiction Profile Index Risk Screening Form Drug Scale
BiLNOT	Neuropsychological Test for Cognitive Potentials Battery
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, fifth edition
MANOVA	Multivariate analysis of variance
MD	Maladaptive daydreaming
MDers	Maladaptive daydreamers
MDS-16	Maladaptive Daydreaming Scale
N-MDers	Non-maladaptive daydreamers
NPT	Neuropsychological tests
STP1-D	Stroop Test TBAG Form 1 st Section Duration Score
STP2-D	Stroop Test TBAG Form 2 nd Section Duration Score
STP3-D	Stroop Test TBAG Form 3 rd Section Duration Score
STP4-D	Stroop Test TBAG Form 4 th Section Duration Score
STP5-D	Stroop Test TBAG Form 5 th Section Duration Score
STP1-E	Stroop Test TBAG Form 1 st Section Error Score
STP2-E	Stroop Test TBAG Form 2 nd Section Error Score
STP3-E	Stroop Test TBAG Form 3 rd Section Error Score
STP4-E	Stroop Test TBAG Form 4 th Section Error Score
STP5-E	Stroop Test TBAG Form 5 th Section Error Score
STP1-C	Stroop Test TBAG Form 1 st Section Correction Score

STP2-C	Stroop Test TBAG Form 2 nd Section Correction Score
STP3-C	Stroop Test TBAG Form 3 rd Section Correction Score
STP4-C	Stroop Test TBAG Form 4 th Section Correction Score
STP5-C	Stroop Test TBAG Form 5 th Section Correction Score
WCST	Wisconsin Card Sorting Test
WCST1	Total Responses
WCST2	Total errors (incorrect responses)
WCST3	Total correct responses
WCST4	Completed Categories
WCST5	Total perseverative responses
WCST6	Total perseverative errors
WCST7	Total non-perseverative errors
WCST8	Percentage of perseverative errors
WCST9	Responses used to complete the first category
WCST10	Conceptual level responses
WCST11	Percentage of conceptual level responses
WCST12	Failure to maintain the set-up
WCST13	Learning to learn score

1. INTRODUCTION

Daydreaming is an everyday activity that virtually everyone engages significantly in daily life (Poerio & Smallwood, 2016). According to the American Psychiatric Association (2013), daydreaming is a waking fantasy or imaginative process wherein desires, expectations and other potentials are visualized internally. Throughout history, scholars have offered diverse definitions and analyses of this phenomenon. For instance, Singer (1966, as cited in Somer, 2018) contends that daydreaming involves shifting attention from primary tasks or external stimuli to internal stimuli. Sigmund Freud, the pioneer of psychoanalysis, characterized daydreaming as an attempt to construct an alternative to reality's mundane and unsatisfying aspects.

Despite varying definitions and perspectives, daydreaming comprises nearly half of all human thought processes, as noted by Killingsworth and Gilbert (2010), and is recognized for its multifaceted positive functions. These functions encompass enhancing learning, planning, problem-solving abilities, and fostering creativity (Zedelius & Schooler, 2016). Additionally, daydreaming serves as a mechanism for self-care and stress relief, allowing individuals to navigate external pressures and achieve psychological comfort (Naidu et al., 2018). Moreover, it facilitates the review of past experiences and preparation for future scenarios (Aron & Poldrack, 2006). Singer (1975) further asserts that daydreaming is fundamental to healthy psychological functioning. However, excessive engagement in daydreaming, despite its beneficial functions, can lead to various challenges. West and Somer (2020) underline the complexity of daydreaming, highlighting its potential to reach destructive levels that can interfere with individuals' daily lives.

1.1. Maladaptive Daydreaming

A psychological construct initially introduced by Somer (2002), maladaptive daydreaming (MD) is characterized as an immersive and extensive fantasy engagement that supplants human interaction and/or induces distress, thereby impacting interpersonal, professional, and academic performance. More recently, Schimmenti and colleagues (2019) defined MD as a clinical phenomenon associated with significant time loss, accompanied by a sense of compromised control over daily activities, hindering the establishment and

maintenance of relationships, and academic and professional pursuits. Despite being labeled as an 'unrecognized clinical syndrome' by Somer and colleagues (2016b), which detrimentally affects numerous individuals, research on MD remains limited. Nonetheless, the existing studies, albeit sparse, delineate a consistent pattern and highlight commonalities, underscoring MD as a pervasive clinical phenomenon (Akyüz, 2022). While not officially included in the DSM-5, individuals with maladaptive daydreaming (MDers) often exhibit substantial impairments and frequently meet criteria for various DSM-5 disorders, distinguishing MD from normative daydreaming in terms of intensity, frequency, time allocation, and functional impairment (Somer et al., 2017a).

Individuals afflicted with MD typically dedicate an average of 4-5 hours daily to their meticulously structured daydreams (Soffer-Dudek & Somer, 2018). As noted by Bigelsen and colleagues (2016), these daydreams may encompass a wide array of themes, including familial dynamics, romantic entanglements, sexual encounters, social hierarchies, heroic narratives, vindictive scenarios, aspirations for fame, manifestations of violence, or entirely fictional personas within fantastical realms. Somer (2002) suggests that individuals with maladaptive daydreaming tendencies seek solitude, often indulging in daydreaming episodes when alone, such as before bedtime. Repetitive behaviors such as listening to mnemonic music and engaging in brisk walking appear to facilitate daydreaming and are frequently associated with MD (Schimmenti et al., 2019). Additionally, Bigelsen and Schupak (2011) observed that 80% of individuals exhibit movement while daydreaming, with reported actions including pacing, limb waving, body swaying, and gesturing (Akyüz, 2022).

A comprehensive examination of the existing literature underlines the scarcity of studies focused on MD, leading to a lack of awareness or neglect of MD symptoms among experts (Somer et al., 2016b). However, the pathological nature of MD becomes apparent through its association with DSM-5 disorders. Based on both self-reported measures and clinician-administered assessments, a substantial proportion (74.4%) of individuals diagnosed with MD met criteria for more than three additional DSM-5 disorders, with 41.1% meeting criteria for more than four. Among the most prevalent comorbid conditions were attention deficit hyperactivity disorder, anxiety disorder, depression, and obsessive-compulsive disorder (Somer et al., 2017b). Notably, a significant proportion (28.2%) of individuals with MD reported having attempted suicide (Schimmenti et al., 2019).

Despite its interference with various aspects of functioning, MD enables specific positive outcomes that incentivize individuals to perpetuate this behavior. These beneficial

outcomes, termed functionalities, encompass stress alleviation, indulgence in fantasies concerning the realization of desires about companionship and intimacy (Somer, 2002), evasion of distressing feelings of shame in specific contexts (Bigelsen et al., 2016), perception of daydreaming as a source of comfort, serenity, and pleasure (Sándor et al., 2021), and enhancement of feelings of connectedness and happiness in individuals experiencing deficits in these domains (Poerio et al., 2015). Consequently, it can be inferred that MD harbors a rewarding aspect, serving, as posited by Somer (2002), as a coping mechanism for adverse life experiences. Nonetheless, notwithstanding its favorable functions, it is critical to acknowledge that MD is a condition fraught with numerous adversities in individuals' lives over the long term.

Studies have shown that despite deriving some satisfaction from the functionalities mentioned above, MDers express dissatisfaction owing to its negative ramifications. For instance, findings from a study conducted by Somer and colleagues (2016b) revealed that while MDers find daydreaming pleasurable, they experience significant discomfort due to missed opportunities and experiences in real life during the daydreaming process. Moreover, Bigelsen and Schupak (2011) proposed that MD induces distress through three primary mechanisms: difficulty in controlling the impulse to daydream, apprehension regarding the interference of daydreaming with real-life relationships and objectives, and intense shame associated with the fantasies, leading to extensive efforts to conceal the behavior. Similarly, participants in another study reported a dual experience of satisfaction and tranquility, juxtaposed with developing a maladaptive mental habit (Witkin, 2019). Corroborating these findings, Schimmenti and colleagues (2019) identified instances where MDers characterized the experience as a self-destructive psychological addiction. Furthermore, a study conducted in Turkey extended these notions by describing MD as akin to an addiction (Akyüz, 2022). Consequently, the existence of research suggesting the potential classification of MD as a behavioral addiction (Pietkiewicz et al., 2018) underscores the necessity to explore the relationship between MD and addiction further.

1.1.1. Addiction tendency

The term 'addiction' originates from the Latin word 'addicere,' which signifies feeling compelled to something or someone, dedicating oneself to it (Uzbay, 2009). Addiction can be delineated as a proclivity or intense urge to persist in the consumption of a specific

substance despite recognizing its deleterious effects on one's life. Characterized as a biopsychosocial ailment, this pathological state, arising from multifarious factors, commences with the repetitive utilization of the substance (Uğurlu et al., 2012). It progresses against the person's will due to changes in the balance of the release of hormones such as dopamine and serotonin in the brain (Leshner, 1997). It necessitates recurrent usage to avert withdrawal symptoms such as tremors and irritability, which manifest upon cessation or reduction of substance intake. The condition advances with the emergence of tolerance, denoting the necessity to escalate the dosage of the substance when its consistent use fails to elicit the anticipated effect (Güleç et al., 2015).

In addition to substance-related dependencies such as smoking and alcoholism, behavioral addictions, including internet and gambling addictions, have garnered recognition. Behavioral addiction is characterized by an overwhelming compulsion to repeat an activity that brings pleasure or alleviates personal distress despite the individual's awareness of the potential negative repercussions (Griffiths, 1996). It is noteworthy that irrespective of the addiction type, the neurochemical and anatomical underpinnings remain broadly consistent (Holden, 2001). Consequently, craving, tolerance, and numerous established diagnostic criteria for substance-related dependencies are considered to be applicable in assessing behavioral addictions.

1.1.1.1. Internet addiction

In what can be aptly termed the era of technology, internet usage has become an indispensable facet of modern life. The widespread availability of the internet, serving as a crucial medium for communication and information dissemination across various domains including education, employment, and community engagement, coupled with its facilitation of domestic, academic, and occupational tasks, alongside its entertainment value, has precipitated a surge in internet usage and time allocation. While some individuals exercise control over their internet consumption according to their needs and preferences, others struggle to do so, experiencing many associated issues. Consequently, this behavioral pattern has garnered several designations in psychological literature, including 'technology addiction,' 'internet addiction,' 'excessive internet use,' and 'problematic internet use.'. In this study, the term 'internet addiction' will be used, as it is the most prevalent term in literature and exhibits clear parallels with substance addiction (Meerkerk et al., 2009). Termed a '21st-

century epidemic' by some scholars, this behavioral predicament has garnered increased scientific acknowledgment in the past decade (Christakis, 2010). However, internet addiction has yet to attain fully classified diagnostic status in either the ICD-11 or DSM-5. It is delineated as 'Internet Gaming Disorder' in the third section of DSM-5, accompanied by recommendations for further research. Presently, despite its absence from diagnostic manuals, numerous researchers have developed diagnostic criteria for internet addiction, with ongoing studies addressing this phenomenon.

Internet addiction is characterized as a behavioral addiction marked by excessive use of online applications, resulting in detrimental effects on the lives of afflicted individuals (Kuss et al., 2014). From a diagnostic standpoint, it manifests through symptoms such as prolonged internet usage beyond intended limits, unsuccessful attempts to curtail internet use, an insistent urge to engage in online activities, and persistence in internet use despite experiencing psychological, physical, and social detriments. Additionally, individuals may exhibit symptoms of anxiety, restlessness, aggression, and heightened irritability when access to the Internet is restricted, leading to social difficulties (Shapira et al., 2000; Young, 2007). Moreover, neglect of scholastic, occupational, and familial responsibilities often accompanies internet addiction, resulting in adverse effects across various domains of life. Notably, diagnostic criteria for internet addiction exclude internet gambling, occupational or academic internet use, and other creative pursuits (Ögel et al., 2015).

Studies within the literature have underscored the adverse effects of internet addiction, including depression, feelings of loneliness, social isolation (Young & Rogers, 1998), interpersonal relationship difficulties (Milani et al., 2009), and attentional deficits (Li et al., 2019). Despite these negative consequences, Davis (2001) posits that the internet serves as a mechanism of reward to cope with real-life adversities. Similarly, Young (1996) consistently argues that individuals employ the Internet as an avenue to evade real-world challenges. It is noteworthy that these patterns parallel the utilization of maladaptive daydreaming (MD) as a coping mechanism, characterized by its rewarding nature (Somer, 2002), alongside the experiences of depression, social isolation, relational challenges, and attentional issues observed among individuals with MD (Bigelsen & Schupak, 2011; Bigelsen et al., 2016).

Recent discourse has seen the emergence of discussions linking behavioral addiction and maladaptive daydreaming (MD). Several researchers (Pietkiewicz et al., 2018; Somer, 2018; Perales et al., 2020) propose that MD could be conceptualized as a subtype of

behavioral addiction, characterized by loss of control over daydreaming impulses and an intense craving for daydreaming episodes. Over time, this behavior escalates in frequency, impeding daily functionality and becoming a time-consuming, albeit initially pleasurable, activity that proves challenging to cease, resulting in numerous adverse consequences. Within the specific realm of Internet addiction, only one study (Zsila et al., 2018) has identified a positive correlation between MD and problematic Internet use, suggesting that as MD intensifies, so does problematic internet use. Considering the addictive nature of both phenomena, it is conceivable that these maladaptive behaviors may initially provide a sense of reward and reinforcement. However, over time, they may evolve into full-blown addictions, exerting devastating impacts on the individual's life.

Mounting evidence suggests that the neurobiological mechanisms underlying Internet addiction bear resemblance to those observed in substance addictions (Holden, 2001). Analyses of studies investigating the relationship between Internet addiction and substance-related dependencies corroborate this notion. Lee and colleagues. (2013) concluded that drug usage may serve as a predictor for heightened risk of Internet addiction, while Kumar and colleagues (2015) identified a significant association between substance use disorders and excessive internet utilization. Additionally, Alaçam and colleagues (2015) explored the correlation between Internet addiction and smoking as well as alcohol consumption among university students, revealing a positive link between Internet addiction and both smoking and alcohol use. Furthermore, investigations into Internet and alcohol addiction have unveiled a nexus between Internet addiction and problematic alcohol consumption (Ko et al., 2009; Yen et al., 2009). Collectively, these findings suggest that individuals grappling with any form of addiction exhibit an elevated susceptibility to other addictive behaviors compared to non-addicted individuals.

Addictions are recognized to induce alterations and impairments in the brain's functioning mechanisms, particularly in executive functions. Zhou and colleagues (2014) conducted a study exploring the association between Internet addiction and executive functions, revealing that the addicted group exhibited lower levels of mental flexibility and response inhibition compared to the healthy control group. Similarly, other investigations by Kuo and colleagues (2018) and Nageeb and Al Enzi (2020) identified a significant correlation between executive function and Internet addiction, with executive function performance being notably inferior in the Internet addiction group relative to the control group. Furthermore, neuroimaging studies by Pawlikowski and Brand (2011) and Dong and

colleagues (2013) provided corroborative evidence, demonstrating impaired executive function performance, encompassing deficits in attentional selection and decision-making, among individuals classified as Internet-addicted.

1.1.1.2. Alcohol and drug addiction

Throughout human history, substance use, encompassing alcohol and drugs, has been evident since ancient times. Various methods of substance consumption can modulate mood, psychological states, perception, motor and cognitive functions and induce alterations in the central nervous system, potentially leading to addiction (Dankı et al., 2005). These substances span a broad spectrum, including alcohol, caffeine, cannabis, hallucinogens, inhalants, opiates such as heroin, sedatives, anxiety relievers, stimulants such as cocaine and amphetamines, tobacco, unidentified substances, as well as prescription and non-prescription drugs. Alcohol and drug addiction are typified by the deterioration of an individual's personal, social, and occupational spheres due to long-term physiological and psychological dependence on the substance of use. The development and perpetuation of addiction are multifactorial, stemming from biopsychosocial factors. Numerous researchers (Uzbay, 2009; Bahar, 2018) underscore that individuals resort to alcohol or substances as a means to alleviate tension and anxiety and cope with adverse life experiences. Moreover, it is recognized that alcohol and substances are employed to enhance arousal and foster positive emotions (Cooper et al., 1995). Similarly, MD, akin to addiction, is purportedly utilized as a coping mechanism for navigating adverse life events (Somer, 2002). Notably, Somer and colleagues (2019) observed that individuals with substance use disorders demonstrated a propensity for heightened daydreaming compared to healthy counterparts. Drawing on these insights and Somer's (2018) assertion regarding the rewarding nature of MD, it can be inferred that MD, akin to addiction, exerts an impact on brain and cognitive functions.

Research on the cognitive effects of addiction reveals that individuals struggling with addiction commonly exhibit deficits in attention, memory, abstract reasoning, and verbal skills (Teichner et al., 2002). Substance use is purported to induce alterations in cognitive functions such as attention and decision-making, with the extent of these changes varying depending on the substance of use (Rogers & Robbins, 2001). Studies differentiating between types of substances have yielded insights into the specific cognitive impairments

associated with addiction. For instance, a study comparing cocaine-addicted individuals with healthy controls revealed deficits in attention, executive function, and verbal memory tasks among those with addiction (Woicik et al., 2009). Similarly, investigations focusing on alcohol addiction have identified impairments primarily in executive functions, memory, and visual-spatial functions when compared to healthy control groups (Ratti et al., 1999). Furthermore, attentional deficits have been consistently observed in alcohol addicts relative to healthy controls in several studies (Gudeman et al., 1977; Ham & Parsons, 1997; Sullivan et al., 2000), although conflicting findings suggesting no impairment in attention-related domains in alcohol addiction have also been reported (Karakaş & Karakaş, 2000). This discrepancy underscores the necessity for further investigation into the cognitive consequences of addiction.

It is noteworthy that Bigelsen and colleagues (2016) also found that those with MD exhibited significantly higher rates of attention deficit symptoms in control groups. Examining the literature on daydreaming, Singer (1975) delineated a style of daydreaming as one characterized by poor attentional control and pronounced difficulty maintaining focus on ongoing thoughts or external tasks. This particular style of daydreaming hints at a potential relationship between MD and attentional processes. Furthermore, observing that individuals with MD engage in stereotypic movements during daydreaming and struggle to cease this behavior despite recognizing its negative consequences suggests deficits in perseveration, an aspect of executive functioning. However, it is noteworthy that no studies have explored these issues within the literature.

1.1.2. Executive functions

Executive functions encompass the capacity to establish and maintain a suitable problem-solving framework for goal-directed behaviors (Irak, 2005). This multifaceted cognitive domain encompasses various components, including complex attention, sustained attention, dual-task processing, inhibition of distracting stimuli, suppression of inappropriate responses, insight, foresight, outcome prediction, abstraction, reasoning, problem-solving, mental flexibility, set-shifting, planning, organization, prioritization, holistic perception, avoidance of getting bogged down in details, initiation of behavior, adherence to multi-step instructions, inhibition of impulsive reactions, and avoidance of perseveration (Pennington & Ozonof, 1996). Given the breadth of executive functions, this thesis focuses on attention and perseveration, which are deemed relevant to the study's variables. To assess these aspects, the

Wisconsin Card Sorting Test (WCST) and Stroop Test TBAG Form have been selected, as they are among the most widely utilized neuropsychological tests for evaluating executive functions (Karakaş & Karakaş, 2000; Pennington & Ozonof, 1996).

1.1.2.1. Attention

Attention, considered one of the fundamental processes of the human mind, has been defined in various ways. Dijksterhuis and Aarts (2010) characterize attention as the act of disregarding unrelated information while selectively and preferentially processing relevant aspects. Another definition posits attention as the state of perceptually opening oneself to stimuli from the environment, which are received through sensory organs and form awareness (Karakaş, 2017). These stimuli, like visual or auditory cues, may originate internally, such as thoughts, or externally. Despite the brain receiving many stimuli daily, it has limited capacity to process and respond to all of them (Karaduman, 2004). Thus, attention can be defined as a selective process that determines which stimuli and actions gain access to these capacity-limited cognitive processes. While various classifications exist for attention, a widely accepted framework proposed by Posner and Petersen (1990) delineates it into arousal, attentional stimulus orientation, and attentional processing (executive function). According to Posner and Rothbart (1998), attention, under the governance of executive functions in the brain, constitutes both a foundational and supportive aspect of executive functioning.

Attention can be classified into several types based on various factors, such as how stimuli are perceived, the number of stimuli to be attended to, and reaction time. Selective attention involves choosing one stimulus (or one aspect of a stimulus) from many (Karakaş, 2017). Focused attention entails concentrating on a task or specific aspect of the environment while disregarding distractions. Individuals experiencing difficulties with focused attention are often prone to being distracted by stimuli other than the target (Şahin, 2013). Sustained attention demands sustained cognitive effort to maintain focus on a task throughout its duration (Coull, 1998). Divided attention refers to allocating attention across multiple tasks or stimuli (Özmen & Demir, 2012). In this study, focused attention will be assessed using the Stroop Test TBAG Form (Karakaş et al., 1999), a validated and reliable measure for this purpose.

Attention, a multifaceted construct, is influenced by numerous factors, including individual psychology, social environment, and biological-physiological makeup, and in turn, impacts various aspects of functioning. Somer (2018) posits that daydreaming constitutes one aspect related to difficulties in maintaining attentional focus on external tasks. Looking at previous literature, Singer (1975), a notable figure in daydreaming research, described a form of daydreaming characterized by poor attentional control, indicating a potential link between MD, a problematic form of daydreaming, and attention. Indeed, it is noteworthy that Bigelsen and colleagues (2016) found significantly higher rates of attention deficit symptoms among individuals with MD compared to control groups. However, as the precise relationship between these constructs remains unresolved, it would be beneficial to investigate attention-related disorders in the context of MD (Somer, 2018).

The impact of alcohol and substance use on the brain, particularly on executive functions, has been extensively documented. In a systematic review, Bernabéu and colleagues (2020) highlighted alterations in executive functions not only in alcohol and substance addictions but also in behavioral addictions. Consequently, irrespective of the type of addiction, it is anticipated that executive functions would be adversely affected. For instance, studies have shown that individuals with internet addiction demonstrated lower performance on the Stroop Test TBAG Form, a commonly used measure of attention (Dong et al., 2011). Similarly, research by Sullivan and colleagues (2000), Teichner and colleagues (2002), and Woicik and colleagues (2009) has consistently shown that attention is compromised in individuals with alcohol and substance addiction.

1.1.2.2. Perseveration

Perseveration, defined as the inappropriate repetition or continuation of a previous response despite needing change, is a crucial concept in cognitive psychology (Hotz & Helm-Estabrooks, 1995). Karakaş (2017) characterizes perseveration as the tendency to persist in the same verbal or motor response even when it is clear that it is no longer suitable. Flexibility in behavior, or the ability to adapt to changing environmental demands, is a fundamental aspect of human consciousness (Stedron et al., 2005). Adaptability is essential for individuals to achieve their goals and navigate new circumstances (Woicik et al., 2011), so perseveration will likely have detrimental effects.

Although there are no studies directly linking perseveration with MD, the primary

focus of this study is that the behavior of individuals with MD exhibits characteristics akin to perseveration. Despite recognizing the adverse effects of MD, individuals often find themselves unable to disengage from their daydreaming habit, experiencing difficulty in altering their behavior or breaking free from the cycle of daydreaming. This observation resonates with the findings of Bigelsen and Schupak (2011), who noted that individuals with MD struggle to resist the urge to daydream, repeatedly returning to their fantasy worlds and failing in their attempts to cease daydreaming.

In their systematic review, Bernabéu and colleagues (2020) observed changes in executive functioning, including inhibitory control, decision-making, and verbal fluency, among individuals with internet addiction. While the findings did not yield a definitive internet addiction risk profile, they underscored the necessity for further investigation into this relationship. Regarding studies on internet addiction and perseveration, Zhou and colleagues (2014) compared individuals with internet addiction, alcohol addiction, and a control group using neuropsychological tests, revealing higher perseverative error scores on the WCST among both internet and alcohol addiction groups compared to controls.

Similarly, numerous studies (Goldstein et al., 2004; Salo et al., 2005; Verdejo-Garcia & Perez-Garcia, 2007; Woicik et al., 2009) have reported higher rates of perseverative errors on the WCST among individuals with substance use disorders compared to healthy controls. Additionally, Hotz and Helm-Estabrooks (1995) found that participants with a history of marijuana use exhibited poorer performance in perseveration skills. In a study involving alcohol-dependent individuals, Sullivan and colleagues (1993) concluded that the dependent group displayed impaired perseveration scores relative to controls. These results suggest a worthwhile understanding of the potential relationship between MD, which shares similarities with addiction, and perseveration.

1.2. The Aims and Importance of the Study

Despite being identified over two decades ago and the proliferation of online resources created by individuals afflicted with this condition, there remains a dearth of scientific research on MD. This scarcity suggests that symptoms of MD are often overlooked, misunderstood, or disregarded by professionals (Somer et al., 2016b). Consequently, individuals seeking assistance may receive alternative diagnoses, such as ADHD, which fail

to fully encapsulate the complexities of MD (Bigelsen et al., 2016). Furthermore, while there have been mentions of a potential link between MD, addiction tendency, and executive functions in existing literature, empirical investigations into these relationships are notably scarce.

Against this backdrop, the present study endeavors to explore the associations between MD, addiction tendency, and executive functions. By addressing this gap in the literature, the study aims to contribute to the understanding of MD and offer insights for future research in this field. Expanding the body of research on MD and elucidating its related and unrelated variables are crucial for its recognition within clinical settings and for effectively differentiating individuals seeking professional help. Moreover, it is paramount to investigate the potential psychological ramifications of MD and its interplay with various factors among university students, the chosen sample for this study.

1.3. The Hypotheses of the Study

The following hypotheses were tested while investigating the relationships between dependent and independent variables:

H₁: There is a positive relationship between MD scores and addiction tendency.

H₂: There is a negative relationship between executive function scores, MD scores, and addiction tendency.

H₃: Maladaptive daydreaming scores are predicted by addiction tendency and executive function scores.

H₄: Addiction tendency and executive function scores differ in MD levels (MDers and N-MDers).

2. METHOD

2.1. Participants

An a priori power analysis was conducted using G*Power 3.1 (Faul et al., 2009) to test the difference between two groups with multivariate analysis of variance (MANOVA) Global effects. With a medium effect size ($d = .25$), a significance level of $p < .05$, and the estimation of power is .90, the calculated total participant number was 72. Notably, the current research sample comprises a total of 77 participants, thereby exceeding the calculated sample size requirement.

Data were collected from 392 participants who voluntarily agreed to participate in the study's first phase via an online questionnaire. Seven participants who did not complete more than half of the questionnaire, 7 participants who did not meet the age criteria, 3 participants who with color blindness, 7 participants were using neurological or psychiatric medications, and 83 participants who had a psychiatric or neurological diagnosis were excluded from the data set. Additionally, 24 participants who completed the study more than once were also excluded from the analysis.

The MDS-16 scores of the remaining 261 participants were analyzed to establish the study's independent variable groups (MDers and N-MDers). Initially, data from two participants identified as univariate outliers based on MDS-16 scores were removed. Subsequently, the remaining sample of 259 participants was stratified into two groups using one standard deviation above and below the mean ($M = 27.81$, $SD = 14.89$) of the total MDS-16 scores. Accordingly, one standard deviation above this mean score is 42.70, and one standard deviation below is 12.92. Thus, the sample was categorized into MDers (MDS-16 > 42.70 , $n = 43$) and N-MDers (MDS-16 < 12.92 , $n = 46$). This classification approach aligns with methodologies utilized in previous literature (Batıgün & Büyükşahin, 2008; Bildik et al., 2004) for participant stratification. Subsequently, all 89 participants across the two groups were invited to participate in the study's second phase, with a total of 80 participants (38 from the MDers group and 42 from the N-MDers group) ultimately partaking in the second stage.

After completing the second stage, three participants were identified as univariate outliers and consequently excluded from the analysis. Additionally, Mahalanobis distance

analysis was employed to assess multivariate outliers, and no such outliers were detected. Following the removal of univariate outliers, descriptive and inferential analyses were conducted with a total of 77 participants.

2.2. Materials

2.2.1. Informed consent form

Confidentiality, participant rights, the study's requirements, and purpose are all included in informed consent. In this manner, the subjects assessed these conditions and indicated whether they would willingly participate in the research. (Appendix 1).

2.2.2. Demographic information form

In order to identify participants who met the inclusion and exclusion criteria for the study and to gather sociodemographic data on them, a demographic information form was provided prior to the scales in the online section (Appendix 2).

2.2.3. Maladaptive Daydreaming Scale (MDS-16)

The MDS-16 scale (Appendix 3), developed by Somer and colleagues (2016a), is the first instrument designed to assess MD. The MDS-16, a self-report scale, consists of 16 items and is an 11-point Likert-type scale with items ranging from 0% to 100% (0%= *Never*, 100%= *Always*). There are no reversed items. The total scale score is obtained by taking the arithmetic mean of the scores given to 16 items. A score of 40 or higher indicates the possibility of MD. In addition to the total score, the scale has four different sub-factors indicating the degree of Yearning, Kinesthesia, Impairment, and Music (Soffer-Dudek et al., 2021). Items 5,6,7,7,8,9,11 are in the Impairment subscale, items 2 and 4 in the Longing subscale, items 3 and 14 in the Kinesthesia subscale, and items 1 and 16 in the Music subscale (Soffer-Dudek et al., 2021). The scores of these dimensions are calculated by taking the arithmetic mean of the scores given to the items. The scale exhibits high internal consistency, with a Cronbach's alpha coefficient of 0.95.

The Turkish version of the MDS-16, translated by Vedat Şar in 2017, underwent a validity and reliability study conducted by Metin and colleagues (2022). This study, involving 377 participants at the university or higher education levels, yielded a Cronbach's alpha coefficient of 0.89 for reliability analysis. Item-total correlation analysis revealed correlations ranging from 0.45 to 0.70 for the MDS scale items. Moreover, Soffer-Dudek and colleagues (2021) conducted a cross-cultural study involving non-clinical participants from Turkey, the UK, the USA, and Italy to assess the scale's validity across different cultures. The results indicated that the sub-dimensions of Yearning, Kinesthesia, Impairment, and Music were consistent across various cultures, including Turkey. These findings suggest that the scale demonstrates adequate reliability, content validity, and convergent validity. Overall, the MDS-16 scale is deemed suitable for use in the Turkish population, with an average completion time of five minutes.

2.2.4. Stroop Test TBAG Form

The Stroop Test, a pioneering neuropsychological tool developed by J. R. Stroop in 1935, stands as an experimental task that meticulously evaluates selective attention and frontal lobe functions. It has earned the esteemed title of the 'gold standard' of attention in the literature (Karakaş et al., 1999). The Stroop Test TBAG Form, a variant of this test, involves the intriguing process of suppressing a habitual behavioral pattern (reading color words) and, instead, performing an unusual behavior (quickly saying the colors of word names written in mismatched colors). This unique test showcases the remarkable ease with which one can change one's perceptual pattern in response to changing demands, especially under a 'disruptive effect,' the ability to suppress the typical behavioral pattern and to perform the unusual behavior (Spreeen & Strauss, 1991; as cited in Karakaş et al., 1999). The absence of flexibility and the ability to shift perceptual set-up can lead to attention and behavior issues, perseverative, stereotypic, maladaptive behaviors, and difficulty in regulating and controlling motor movements.

The Turkish form of the Stroop Test, known as the TBAG Form, has undergone a rigorous process of standardization, validity, and reliability in Turkish culture, performed by Karakaş and colleagues (1999). This meticulously designed test will be used in our study. The test comprises of four stimulus cards, each measuring 14.0 cm x 21.5 cm (Appendix 4). Each card features six rows consisting of 4 items randomly ordered. The first card contains

words consisting of color names (red, green, blue, and yellow) printed in black, and the second card contains words consisting of color names (red, green, blue, and yellow) printed in color. On this card, the color used to print each word is different from the color the word refers to. The third card has circles 0.4 cm in diameter printed in blue, green, red, and yellow. The fourth card contains neutral words (enough, weak, if, and medium) printed in blue, green, red, and yellow without color names. Each application is meticulously recorded in seconds, and the application consists of five sections. The order of administration was as follows: reading the words on card 1 (STP1), reading the words on card 2 (STP2), saying the color of the shapes on card 3 (STP3), saying the color of the words on card 4 (STP4), and saying the color of the words on card 2 (STP5).

The Stroop effect is obtained when the color used in the spelling of the word and the color expressed by the word are different. The phenomenon, also known as the Stroop interference effect, is caused by the inability to inhibit; it takes longer to say the color names than to read the words that express the colors. The participant tries to complete each part of the five-part test as accurately and quickly as possible. The critical section, where the Stroop interference effect is seen, is the 5th section of the test. In this study, five sections will be administered sequentially, and 15 scores will be calculated, including completion time (duration score, STP-D), and number of errors (error score, STP-E), number of corrected responses (correction score, STP-C). The maximum score that can be obtained on the test is a "0" error score for each section, a "0" correction score, and as short as possible time for reading/coloring (Karakaş et al., 1999). The test takes ten minutes on average to administer.

The reliability study of the TBAG Form of the Stroop Test was conducted by Karakaş and colleagues (1996; 1999) on 65 subjects (32 women and 33 men) between the ages of 20 and 55. The test-retest correlation coefficients obtained for the duration scores in the five subtests ranged between 0.26 and 0.88, and these correlation coefficients were statistically significant ($p < 0.05$). Factor analysis studies revealed that the Stroop Test TBAG Form measured the interference effect and reading and coloring speed, reflecting attention. These results support the Stroop Test TBAG Form's validity and align with results obtained in the literature (Karakaş et al., 1999).

2.2.5. Wisconsin Card Sorting Test (WCST)

The Wisconsin Card Sorting Test (WCST) was initially developed by Berg in 1948

and has since undergone modifications by Heaton (1981) and Heaton and Staff (1993). This test evaluates various cognitive functions, including abstract thinking, complex attention, conceptualization skills, reasoning, attention maintenance, perseveration, resistance to interference, inhibition of inappropriate responses, and maintenance of goal-directed behavior. The WCST assesses various processes related to executive functions and concept formation. Initially developed for adult populations, the WCST can now be administered to individuals aged 6 to 89. Additionally, computerized versions of the test are available, offering convenience in administration. As a prototype of executive function tests in neuropsychology, the WCST is commonly used in clinical settings to assess patients with frontal lobe damage and in studies related to aging and basic science research. Its versatility and comprehensive assessment make it a valuable tool for understanding various aspects of cognitive functioning.

The Wisconsin Card Sorting Test (WCST) is administered using a deck of cards containing stimulus and response cards. The stimulus cards consist of four cards, each with different combinations of shapes (plus, circle, star, triangle), colors (red, green, blue, yellow), and quantities of shapes (one, two, three, four). The response cards, of which there are 64, also contain combinations of shapes, colors, and quantities. During the test, participants are required to match each response card with a stimulus card according to a particular rule or category. The task is to match the response cards to the stimulus cards correctly, and participants are informed whether their matches are correct or incorrect after each match. However, they are not told the correct answer. Participants advance to the next category after making ten consecutive correct matches within the same category. The test continues until participants complete all six categories or use all the cards in both decks. There is no time limit for completing the test, but the average administration time is approximately 20 minutes. Thirteen scores are calculated to assess performance on the WCST, including the total number of responses (WCST1), total errors (WCST2), total correct responses (WCST3), categories completed (WCST4) number of perseverative responses (WCST5), perseverative errors (WCST6), number of non-perseverative errors (WCST7), percentage of perseverative errors (WCST8), responses used to complete the first category (WCST9), conceptual level responses (WCST10), percentage of conceptual level responses (WCST11), failure to maintain the set-up (WCST12), and learning to learn score (WCST13). Poor performance in the WCST may manifest as difficulty maintaining the set-up, reaching six categories, perseveration errors, and changing categories (Karakaş et al.,

1996) (Appendix 5).

In Turkey, Karakaş and colleagues (1996) standardized the Wisconsin Card Sorting Test (WCST) as part of the BİLNOT (Neuropsychological Test for Cognitive Potentials) Battery (Karakaş et al., 1996). The reliability of the Turkish version of the WCST has not been specifically examined, as the nature of the WCST poses challenges for calculating traditional reliability coefficients (Heaton, 1981; Heaton & Staff, 1993). However, validity studies conducted within the framework of the BİLNOT Battery have demonstrated that the WCST is a valid measurement tool for assessing cognitive abilities in the Turkish population (Karakaş et al., 1999).

2.2.6. Addiction Profile Index Internet Addiction Form (APIINT)

The Addiction Profile Index Internet Addiction Form (APIINT) is a self-report scale developed by Ögel and colleagues (2015) to assess internet addiction (Appendix 6). Consisting of 18 items, the scale asks respondents about experiences within the last three months. Responses are provided on a 5-point Likert scale, ranging from 0 to 4 (0= *Never*, 100= *Almost always*). The scale encompasses five sub-dimensions: frequency of internet use, diagnostic criteria for addiction (symptoms of addiction), the impact of internet use on life, craving for internet use, and motivation to reduce internet use. The total score is computed by summing the average scores from the sub-dimension items. Higher total scores indicate greater levels of internet addiction. Completing the scale typically requires around 10 minutes, and it has been validated for use among high school and university students.

Reliability analysis was conducted to assess the internal consistency of the items, yielding a Cronbach's Alpha coefficient of 0.88, and a test-retest correlation of 0.85 was reported (Ögel et al., 2015). Item-total score correlation coefficients ranged from 0.44 to 0.68, while Cronbach's alpha coefficient for the sub-dimensions ranged from 0.64 to 0.77 (Ögel et al., 2015). Explanatory factor analysis identified four factors with eigenvalues greater than one, explaining 57.4% of the total variance. APIINT demonstrated a sensitivity of 0.90 and specificity of 0.90 at the cut-off point of 2 points. Moreover, the scale exhibited a correlation coefficient of 0.81 ($p < 0.01$) with another internet addiction scale, indicating strong concurrent validity. These findings from Ögel and colleagues' (2015) study affirm the reliability and validity of APIINT for measuring internet addiction (Appendix 6).

2.2.7. Addiction Profile Index Risk Screening Form (APIRSF)

The Addiction Profile Index Risk Screening Form (APIRSF) was devised by Ögel and colleagues (2017) to assess the risk level of individuals engaged in alcohol and drug use. This screening tool necessitates a thorough evaluation of users identified as at-risk. Eligible respondents are individuals aged eighteen and above. Comprising six items for alcohol use risk assessment and seven for substance use risk assessment, the scale employs a 3-point Likert scale (0= *Never*, 2= *Very often*) for responses (Appendix 7). The APIRSF-Alcohol (APIRSF-A) and APIRSF-Drug (APIRSF-D) scales yield a maximum total score of 12 points each. The total score calculation for APIRSF-D excludes the final question (question 7). Scores of 3 or higher on APIRSF-A and 4 or higher on APIRSF-D indicate "high risk," suggesting a heightened probability of addiction without confirming addiction itself. Completion of the scale typically takes around 10 minutes.

Internal consistency was assessed through reliability analysis to evaluate the scale's reliability, yielding a Cronbach's Alpha coefficient of 0.70 for APIRSF-A. Item-total score correlation coefficients ranged from 0.64 to 0.69. Explanatory factor analysis revealed two factors with eigenvalues exceeding one, accounting for 66% of the total variance. The APIRSF-D scale demonstrated a Cronbach's alpha coefficient of 0.88, with item-total score correlation coefficients ranging from 0.86 to 0.89. Factor analysis identified a single factor with an eigenvalue greater than one, explaining 64.7% of the total variance. These findings from Ögel and colleagues' (2017) study affirm the reliability and validity of the APIRSF for screening alcohol and drug addiction risk.

2.3. Procedure

In order to conduct the study, firstly, the necessary permissions were obtained from the scale owners via e-mail for the scales planned to be used in the study (Appendix 8). Then, ethical permission was obtained from the Başkent University Social Sciences and Humanities Scientific Research and Publication Ethics Committee (Appendix 9). For the study's first phase, the link to the questionnaire created through Qualtrics, an online survey platform, was disseminated through social media (Instagram, Twitter, Facebook, etc.) and instant messaging applications (WhatsApp, etc.). In addition, Başkent University Psychology Department professors also sent the link to their students. At this stage, to

encourage student participation, it was announced that two bonus points would be given to every student who participated in the online part. However, no bonus points were given to those invited who did not participate in the second part after the online part. The participants first encountered an informed consent form when they entered the link. In this form, participants were informed that participation was voluntary, that no identification information was requested, and that the answers would be kept confidential and used only for scientific purposes. The purpose of the study was mentioned, and it was stated that the results would only be used for scientific purposes. Within this information, the participants who gave their consent to continue the study were asked to fill in the Demographic Information Form, MDS-16, APIINT, APIRSF-A, and APIRSF-D. Data was collected between February 22, 2024, and March 13, 2024, and the first phase was completed when it reached sufficient data saturation.

After completing the first phase, the participants were divided into two groups, MDers and N-MDers (comparison group), according to their MDS-16 scores. The participants were then contacted via e-mail and/or telephone and invited to the Department of Psychology, Faculty of Arts and Sciences, Başkent University, to participate in the second part of the study. To arrange appointments at this stage, an online appointment table was sent to all participants, and they were asked to write their contact information on the day and time that was convenient for them. Appointments were scheduled from 09:00 to 16:00 on weekdays and lasted 45 minutes for each participant. A reminder e-mail or message was sent to the participants the day before and the morning of the appointment (Appendix 10).

In the second part of the data collection process, neuropsychological tests (Stroop Test TBAG Form and WCST) were administered to the participants. Neuropsychological tests were administered individually by the instructions developed within the scope of the BİLNOT Battery (Karakaş, 2006), and an environment suitable for test administration rules was provided. The order of administration of the tests was changed for each participant to distribute the negative situations, such as fatigue and interference between the tests, equally to all measurement tools. Each participant took an average of 20 minutes to complete the tests. This phase occurred between March 18, 2024, and April 18, 2024.

2.4. Research Design and Statistical Analysis

This study investigates the impact of maladaptive daydreaming (MD) as the independent variable, categorized into two levels: MDers and N-MDers (the comparison

group). The two dependent variables under scrutiny are addiction tendency, encompassing levels of internet addiction and alcohol-drug use risk assessed through APIINT, APIRSF-A and APIRSF-D, and executive function scores assessed through the Stroop Test TBAG Form and WCST neuropsychological tests.

The data collected from the participants were analyzed using the Statistical Package for Social Sciences (SPSS) 27 Program. After the univariate and multivariate outliers were analyzed, the normality assumptions were tested to determine whether they were met. Then, descriptive statistics and correlation analyses were performed. The regression analysis method was used to test whether the independent variable was predicted by the dependent variables. Lastly, One-Way MANOVA was applied to test whether the dependent variable measurements differed according to the independent variable levels.

3. RESULTS

In this section, the participants' demographic information and descriptive statistics related to the scores they obtained from the scales and tests were presented. Then, correlational analyses investigating the relationships between variables were reported. Lastly, the findings of the multiple regression and multivariate analysis of variance (MANOVA) analyses were presented.

3.1. Descriptive Statistics

The analysis was conducted with 77 participants. The ages of the participants ranged between 19-25 ($M= 21.88$, $SD= 1.47$). Sixty-three participants in the study were female (81.8%), and 14 were male (18.1%). All participants were undergraduate and associate degree students. More than half of the participants reported that their department was psychology [psychology (81.8%), political science and public administration (3.9%), history (2.6%), nutrition and dietetics (1.3%), and mechatronics (1.3%), mechanical engineering (1.3%), computer programming (1.3%), medicine (1.3%), communication and design (1.3%), international relations (1.3%), architecture (1.3%), and business administration (1.3%)]. Considering the grade levels of the participants, 1 (1.3%) in preparatory, 23 (29.9%) in 1st grade, 20 (26%) in 2nd grade, 15 (19.5%) in 3rd grade, and 18(23.4%) in 4th grade. In terms of GPA, there is 1 person (1.3%) whose GPA has not yet been calculated, 13 (16.9%) with 2.00 and below / 53.33 and below, 36 (46.8%) with 2.01-2.99 / 53.56-76.43, 22 (28.6%) with 3.00-3.50 / 76.66-88.33, 5 (6.5%) with 3.51-4.00 / 88.56-100.

There were 37 participants in the Maladaptive daydreamers (MDers) group and 40 participants in the Non-maladaptive daydreamers (N-MDers) group. The demographic characteristics of participants are demonstrated in Table 1 below.

Table 3.1. *Demographic Characteristics of Participants*

Demographic Characteristics				
Groups		Mean age	Gender	
			Male	Female
MDers	<i>n</i>	37	8	29
	%	21.54	21.62	78.37
N-MDers	<i>n</i>	40	6	34
	%	22.20	15	85
Total	<i>n</i>	77	14	63
	%	21.88	18.18	81.81

Note. MDers= Maladaptive daydreamers, N-MDers= Non-maladaptive daydreamers

The mean, standard deviation, minimum-maximum scores, skewness, and kurtosis values calculated for Maladaptive Daydreaming Scale (MDS-16), Addiction Profile Index InternetAddiction Form (APIINT), Addiction Profile Index Risk Screening Form Alcohol Scale (APIRSF-A), Addiction Profile Index Risk Screening Form Drug Scale (APIRSF-D) are shown in Table 2 below for both groups and the total sample.

Table 3.2. Descriptive Statistics for Behavioral Scales

Measures	Group	Mean	SD	Skewness	Kurtosis	Min	Max
Behavioral Scales							
MDS-16	MDers	52.17	6.67	.55	-.31	43.13	68.13
	N-MDers	8.70	3.19	-.82	.08	.00	12.50
	Total	29.59	22.45	.17	-1.78	.00	68.13
APIINT	MDers	2.41	.63	-.02	-.53	1.05	3.61
	N-MDers	1.73	.63	-.03	.38	.00	2.98
	Total	2.05	.71	-.01	-.14	.00	3.61
APIRSF-A	MDers	1.72	2.39	1.65	2.20	.00	9
	N-MDers	1.02	1.47	1.16	.70	.00	5
	Total	1.36	1.99	1.80	3.40	.00	9
APIRSF-D	MDers	.48	1.48	3.45	12.05	.00	7
	N-MDers	.07	.34	4.98	25.61	.00	2
	Total	.27	1.07	4.83	25.18	.00	7

Note. SD= Standard deviation, MDS-16= Maladaptive Daydreaming Scale, APIINT= Addiction Profile Index Internet Form, APIRSF-A= Addiction Profile Index Risk Screening Form Alcohol Scale, APIRSF-D= Addiction Profile Index Risk Screening Form Drug Scale, MDers= Maladaptive daydreamers, N-MDers= Non-maladaptive daydreamers

The mean, standard deviation, minimum-maximum scores, skewness, and kurtosis values calculated for the neuropsychological tests (NPT) which were WCST and Stroop Test TABG Form scores used to assess executive functions are shown in Table 3 below for both groups and the total sample.

Table 3.3. Descriptive Statistics for Neuropsychological Tests

	Group	Mean	SD	Skewness	Kurtosis	Min	Max
NPT							
WCST1	MDers	95.44	22.34	.38	-1.45	70	128
	N-MDers	93.36	20.48	.89	-.76	70	128
	Total	96.57	22.25	.42	-1.46	70	128
WCST2	MDers	22.74	13.63	.61	-.79	7	52
	N-MDers	22.42	15.29	1.22	.23	7	57

	Total	27.67	22.44	1.42	1.24	6	97
WCST3	MDers	68.10	13.34	-.58	.89	31	91
	N-MDers	69.62	9.38	.54	1.41	45	95
	Total	68.89	11.40	-.34	1.47	31	95
WCST4	MDers	5.74	.59	-2.25	4.14	4	6
	N-MDers	5.57	.90	-2.00	2.81	3	6
	Total	5.22	1.59	-2.13	3.61	0	6
WCST5	MDers	13.18	9.31	1.02	.26	4	37
	N-MDers	13.42	10.09	1.27	.69	3	39
	Total	15.49	13.38	1.64	2.26	3	59
WCST6	MDers	11.25	6.93	.87	-.14	4	28
	N-MDers	11.39	7.54	1.16	.28	3	30
	Total	13.07	10.09	1.60	2.29	3	47
WCST7	MDers	11.48	7.43	.73	-.17	3	29
	N-MDers	11.03	8.44	1.21	.24	2	31
	Total	14.67	15.23	2.54	7.67	1	81
WCST8	MDers	10.92	4.46	.66	-.14	5.26	21.87
	N-MDers	11.41	5.24	.61	-.36	3.09	23.43
	Total	12.46	7.44	2.05	5.77	3.09	46.09
WCST9	MDers	12.78	4.30	2.63	6.12	10	27
	N-MDers	14	7.13	3.31	11.09	10	43
	Total	13.55	7.84	4.32	21.10	10	61
WCST10	MDers	64.96	7.25	.85	-.21	53	82
	N-MDers	64.36	8.33	1.46	2.36	50	88
	Total	60.44	14.28	-1.64	4.22	6	88
WCST11	MDers	70.5	11.89	-.53	-.43	41.40	85.71
	N-MDers	71.41	13.69	-1.02	.21	39.06	88.65
	Total	66.41	20.10	-1.37	1.26	4.68	88.65
WCST12	MDers	.66	1.24	1.87	2.48	.00	4
	N-MDers	.69	1.18	2.07	4.57	.00	5
	Total	.63	1.13	1.98	3.52	.00	5
WCST13	MDers	-.87	2.82	.41	1.77	-7.14	7.17
	N-MDers	-1.31	5.74	-2.25	6.89	-23.39	7.28
	Total	-1.11	4.63	-2.30	9.55	-23.39	7.28
STP1-D	MDers	8.55	1.97	2.11	6.00	6.03	16.15
	N-MDers	8.54	1.85	.76	.72	4.75	13.35
	Total	8.55	1.89	1.44	3.29	4.75	16.15
STP2-D	MDers	8.61	1.56	.71	.43	5.79	13
	N-MDers	8.68	1.93	1.03	1.31	4.94	14.37
	Total	8.65	1.75	.94	1.13	4.94	14.37
STP3-D	MDers	10.92	1.72	.13	-.72	7.75	14.84
	N-MDers	10.41	1.77	2.20	9.41	7.72	18.34
	Total	10.65	1.75	1.17	3.63	7.72	18.34
STP4-D	MDers	13.01	2.39	.38	-.91	9.22	17.68
	N-MDers	12.30	2.01	1.92	7.86	8.88	20.97
	Total	12.64	2.22	1.02	1.71	8.88	20.97
STP5-D	MDers	18.96	4.40	.78	.05	12.97	31
	N-MDers	17.58	3.76	.96	1.41	11.81	29.54
	Total	18.25	4.11	.88	.57	11.81	31
STP1-E	MDers	.05	.32	6.08	37	.00	2
	N-MDers	.00	.00			.00	.00
	Total	.02	.22	8.77	77	.00	2
STP2-E	MDers	.00	.00			.00	.00
	N-MDers	.00	.00			.00	.00
	Total	.00	.00			.00	.00
STP3-E	MDers	.00	.00			.00	.00
	N-MDers	.00	.00			.00	.00
	Total	.00	.00			.00	.00
STP4-E	MDers	.00	.00			.00	.00
	N-MDers	.00	.00			.00	.00
	Total	.00	.00			.00	.00
STP5-E	MDers	.08	.36	4.78	23.56	.00	2
	N-MDers	.05	.22	4.29	17.28	.00	1
	Total	.06	.29	5.02	26.99	.00	2
	MDers	.02	.16	6.08	37	.00	1

STP1-C	N-MDers	.02	.15	6.32	40	.00	1
	Total	.02	.16	6.08	35.89	.00	1
STP2-C	MDers	.08	.27	3.20	8.71	.00	1
	N-MDers	.02	.15	6.32	40	.00	1
	Total	.05	.22	4.11	15.36	.00	1
STP3-C	MDers	.40	.72	1.96	3.85	.00	3
	N-Mders	.17	.44	2.63	6.86	.00	2
	Total	.28	.60	2.35	5.86	.00	3
STP4-C	MDers	.51	.73	1.07	-.22	.00	2
	N-Mders	.30	.51	1.48	1.37	.00	2
	Total	.40	.63	1.33	.66	.00	2
STP5-C	MDers	.86	.88	.52	-.89	.00	3
	N-MDers	.52	.71	1.45	2.39	.00	3
	Total	.68	.81	.93	.05	.00	3

Note. NPT= Neuropsychological Tests, SD= Standard deviation, WCST= Wisconsin Card Sorting Test, STP1= Stroop Test TBAG Form 1st Section, STP2= Stroop Test TBAG Form 2nd Section, STP3= Stroop Test TBAG Form 3rd Section, STP4= Stroop Test TBAG Form 4th Section, STP5= Stroop Test TBAG Form 5th Section, D= Duration, E= Error, C= Correction, MDers= Maladaptive daydreamers, N-MDers= Non-maladaptive daydreamers

3.2. Correlations among Variables

A bivariate Pearson's correlation coefficient (r) was calculated to investigate the size and direction of the relationship among age, gender, MD, addiction tendency, and executive functions.

Results of the analysis showed that there was a significant and positive correlation between MDS-16 and APIINT ($r = .494, p < .01$), indicating that as MD scores increased, internet addiction levels increased. A significant and positive correlation was found between the APIRSF-A and APIRSF-D scales ($r = .310, p < .01$), which means that as the risk of alcohol dependence increases, the risk of substance dependence increases. Age was found to have a significant and negative correlation with MDS-16 ($r = -.255, p < .05$), demonstrating that as age increased, MDS-16 scores decreased.

There are also significant and positive correlations between APIRSF-A and incorrect responses (WCST2) ($r = .233, p < .05$) and non-perseverative errors (WCST7) ($r = .327, p < .01$), which means that as the score on the APIRSF-A scale scores increases, the incorrect responses and non-perseverative errors on the WCST increase. There were also significant and negative correlations between APIRSF-A and correct responses (WCST3) ($r = -.450, p < .01$), categories completed (WCST4) ($r = -.303, p < .01$), trials to complete the first category (WCST9) ($r = -.198, p < .05$), conceptual level responses (WCST10) ($r = -.364, p < .01$),

percentage of conceptual level response (WCST11) ($r = -.202, p < .05$); that is, when the score on the APIRSF-A scale increases, the scores for correct responses, categories completed, number of trials to complete the first category, conceptual level responses, and percentage of conceptual level response decrease.

When the relationships between APIRSF-D and executive functions were analyzed, there were significant and positive correlations between APIRSF-D and perseverative responses (WCST5) ($r = .247, p < .05$), perseverative errors (WCST6), ($r = .252, p < .05$), percentage of perseverative error (WCST8) ($r = .362, p < .01$), and failure to maintain the set-up (WCST12) ($r = .213, p < .05$). Accordingly, it can be said that as the scores obtained from the APIRSF-D scale increase, the perseverative responses, perseverative errors, percentage of perseverative error, and failure to maintain the setup scores also increase.

No significant relationship was found between MD and executive functions.

Table 3.4. Correlations among Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
Age																				
Gender	.12																			
MDS-16	-.25*	.07																		
APIINT	-.07	-.30**	.49**																	
APIRSF-A	-.01	.40**	.18	.05																
APIRSF-D	-.07	.35**	.18	-.04	.31**															
STP5-D	.05	-.14	.14	.18	-.07	-.08														
WCST1	-.08	.03	.06	.13	.00	.16	.06													
WCST2	-.09	.11	.08	.04	.23*	.14	.01	.87**												
WCST3	.09	-.24*	-.05	.17	-.45**	.02	.09	.23*	-.27*											
WCST4	.04	-.17	-.05	.02	-.30**	-.10	-.01	-.69**	-.91**	.44**										
WCST5	-.05	-.07	-.02	.06	-.00	.24*	.04	.79**	.80**	-.03	-.65**									
WCST6	-.05	.05	-.02	.07	.01	.25*	.04	.80**	.83**	-.06	-.68**	.99**								
WCST7	-.09	.19*	.14	.01	.32**	.04	.00	.75**	.93**	-.36**	-.91**	.54**	.57**							
WCST8	-.08	-.04	-.03	.06	.07	.36**	.01	.69**	.75**	-.12	-.60**	.96**	.96**	.47**						
WCST9	-.11	-.01	-.14	.06	-.19*	-.09	.16	.34**	.30**	.19	-.39**	.29**	.30**	.27**	.24*					
WCST10	.08	-.11	-.10	.07	-.36**	-.00	.06	-.22*	-.66**	.86**	.75**	-.42**	-.45**	-.69**	-.45**	-.03				
WCST11	.12	-.08	-.11	-.06	-.20*	-.12	-.01	-.83**	-.98**	.30**	.89**	-.79**	-.82**	-.91**	-.75**	-.29**	.71**			
WCST12	.10	.09	-.08	.08	-.02	.21*	.06	.53**	.26*	.53**	-.26**	.26*	.28**	.19*	.20*	.22*	.35**	-.15		
WCST13	-.14	-.13	.06	.08	-.04	-.05	.13	-.27*	-.33**	-.10	.45**	-.30**	-.32**	-.31**	-.30**	.14	.08	.32**	-.15	

Note. Gender 1= Female, Gender 2= Male, MDS-16= Maladaptive Daydreaming Scale, APIINT= Addiction Profile Index Internet Form, APIRSF-A= Addiction Profile Index Risk Screening Form Alcohol Scale, APIRSF-D= Addiction Profile Index Risk Screening Form Drug Scale, STP5-D= Stroop Test TBAG Form 5th Section Duration Score, WCST= Wisconsin Card Sorting Test, * $p < .05$, ** $p < .01$

Table 3.5. *Correlations among Variables for MDers Group*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
Age																				
Gender	.12																			
MDS-16	-.21	-.03																		
APIINT	-.00	-.48**	.17																	
APIRSF-A	-.06	.53**	.05	-.16																
APIRSF-D	-.02	.49**	-.01	-.25	.31**															
STP5-D	.29*	-.19	-.24	.07	-.18	-.14														
WCST1	.02	.13	-.05	.06	.14	.24	-.05													
WCST2	-.03	.27*	-.11	-.13	.42*	.19	-.12	.84**												
WCST3	.10	-.28*	.11	.37*	-.52**	.06	.14	.16	-.38**											
WCST4	.00	-.30*	.18	.22	-.49**	-.13	.07	-.63**	-.92**	.61**										
WCST5	-.03	.03	-.03	.07	.07	.41**	-.06	.76**	.68**	.06	-.53**									
WCST6	-.03	.06	-.04	.07	.12	.43**	-.07	.81**	.73**	.05	-.57**	.99**								
WCST7	-.01	.31*	-.13	-.21	.47**	.03	-.12	.70**	.94**	-.53**	-.93**	.42**	.47**							
WCST8	-.09	.11	-.00	.06	.18	.57**	-.08	.67**	.62**	.01**	-.47**	.94**	.95**	.35**						
WCST9	-.03	-.17	-.06	.36*	-.12	-.12	.34*	.40**	.26	.42**	-.30*	.19	.21	.27	.11					
WCST10	.09	-.24	.10	.28*	-.46**	.02	.15	-.25	-.71**	.89**	.84**	-.27	-.29*	-.79**	-.25	.31*				
WCST11	.04	-.23	.08	.11	-.36	-.14	.12	-.82**	-.98**	.40**	.91**	-.67**	-.72**	-.94**	-.60**	-.18	.74**			
WCST12	.11	.08	-.14	.20	.06	.38*	.04	.52**	.24	.46**	-.16	.38**	.42**	.09	.38**	.60**	.32*	-.14		
WCST13	-.34*	-.32	.09	.20	-.05	-.19	.04	-.07	.11	.06	-.46**	.09	.06	.14	.02	.62**	-.02	-.04	.24	

Note. Gender 1= Female, Gender 2= Male, MDS-16= Maladaptive Daydreaming Scale, APIINT= Addiction Profile Index Internet Form, APIRSF-A= Addiction Profile Index Risk Screening Form Alcohol Scale, APIRSF-D= Addiction Profile Index Risk Screening Form Drug Scale, STP5-D= Stroop Test TBAG Form 5th Section Duration Score, WCST= Wisconsin Card Sorting Test, * $p < .05$, ** $p < .01$

Table 3.6. Correlations among Variables for N-MDers Group

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
Age																				
Gender	.18																			
MDS-16	-.11	-.07																		
APIINT	.06	-.30*	.13																	
APIRSF-A	.15	.18	.08	.16																
APIRSF-D	-.08	-.09	.08	.05	.19															
STP5-D	-.12	-.11	.20	.17	.02	-.10														
WCST1	-.16	-.08	-.11	.14	-.26*	-.13	.18													
WCST2	-.11	-.13	-.06	.12	-.15	-.10	.16	.90**												
WCST3	-.12	.08	-.11	.06	-.27*	-.07	.07	.37**	-.70											
WCST4	.05	.05	.00	-.12	.14	.11	-.13	-.81**	-.91**	.00										
WCST5	-.08	-.18	-.01	.10	-.11	-.09	.17	.82**	.96**	-.05	-.86**									
WCST6	-.09	-.16	-.00	.10	-.11	-.08	.15	.81**	.97**	-.09	-.88**	.99**								
WCST7	-.13	-.08	-.12	.13	-.19	-.12	.15	.93**	.96**	.07	-.89**	.87**	.88**							
WCST8	-.08	-.19	.01	.10	-.05	-.05	.14	.72**	.92**	-.16	-.81**	.97**	.98**	.81**						
WCST9	-.22	.05	.25	.12	-.24	-.08	.19	.38	.34*	.09	-.44*	.35*	.35*	.31*	0*					
WCST10	.01	.10	-.10	-.03	-.09	-.00	-.02	-.18**	-.58**	.57**	.57**	-.64**	-.68**	-.44**	-.74**	-.14				
WCST11	.17	.12	.03	-.12	.14	.09	-.16	-.85**	-.98**	.08	.88**	-.96**	-.97**	-.93**	-.94**	-.36**	One*			
WCST12	.08	.11	-.12	.07	-.13	-.13	.11	.56**	.30*	.50**	-.43**	.15	.16	.44**	.03	.11	.40**	-.18		
WCST13	-.06	-.06	.08	.01	-.04	.04	.18	-.45**	-.51**	-.26	.70**	-.46**	.06	-.48**	-.49**	-.42**	.04	.47**	-.33*	

Note. Gender 1= Female, Gender 2= Male, MDS-16= Maladaptive Daydreaming Scale, APIINT= Addiction Profile Index Internet Form, APIRSF-A= Addiction Profile Index Risk Screening Form Alcohol Scale, APIRSF-D= Addiction Profile Index Risk Screening Form Drug Scale, STP5-D= Stroop Test TBAG Form 5th Section Duration Score, WCST= Wisconsin Card Sorting Test, * $p < .05$, ** $p < .01$

3.3. Inferential statistics

To test Hypotheses 3 and 4, multiple stepwise regression and MANOVA analyses were conducted.

3.3.1. Multiple regression analysis

A multiple stepwise regression analysis was conducted to investigate whether MD scores could be predicted by addiction tendency. Table 7 presents the results of the stepwise regression analysis aimed at examining the predictive relationship between these variables. As depicted in the table, a single model emerged from the stepwise regression analysis, and this model was statistically significant ($p < .001$). Upon scrutinizing Model 1, it becomes evident that scores obtained from the APIINT scale significantly predicted scores obtained from the MDS-16 scale [$F(1, 254) = 50.472, p < .001$] and the scores obtained from the APIINT scale explained 16.2% ($R^2 = .162$) of the total variance of the scores obtained from the MDS-16 scale. Although scores from the APIRSF-A and APIRSF-D scales were also included in the stepwise regression analysis, they were excluded from the models due to their lack of significant predictive power regarding MDS-16 scores. According to the stepwise regression analysis, the only variable that significantly predicted the scores obtained from the MDS-16 in a positive direction ($\beta = .407, t = 7.104, p < .001$) was the APIINT scores. In summary, internet addiction positively and significantly predicts MD scores.

Table 3.7. *Model Summary of Stepwise Regression Analysis*

Model	R	R^2	Adj. R^2	SE of the Estimate	R^2 change	F change	$df1$	$df2$	Sig. F change
1	.40 ^a	.16	.16	13.69	.16	50.47	1	254	< .001

Note. a = Predictors: (Constant), APIINT, SE = Standard error, df = degrees of freedom

Separate regression analyses were conducted for the MDers and N-MDers groups to simultaneously include addiction propensity and NPT scores in the regression analysis. This was necessary because NPT scores were only available for participants in these two groups. The findings show that the regression model was not statistically significant for either group.

3.3.2. MANOVA

A MANOVA was conducted to analyze differences in addiction tendency and executive functions depending on MD groups. Maladaptive daydreaming groups were included in the analysis as an independent variable. Internet, alcohol, and drug addiction scores, WCST scores, and the STP5-D score were included in the analysis as dependent variables. The duration scores of the Stroop Test TBAG form, except for section 5, were not included in the analysis because they were not normally distributed. Scores 9 and 13 of the WCST were not included in the analysis because they were not normally distributed, and scores 3 and 7 of the WCST were not included in the analysis because they were composite scores. Box's test showed that the assumption for equality of covariances matrices was violated, $p < .001$. Therefore, as Tabachnick and Fidell (2007) suggested, Pillai's Trace was reported due to violating the equality of covariance matrices. Using Pillai's Trace, there were significant differences across the MD groups regarding addiction tendency and executive functions, $V = .443$, $F(13, 63) = 3.853$, $p < .001$, partial $\eta^2 = .443$. Accordingly, it can be said that the group variable explains 44.3% of the change in the dependent variables. Overall, according to the results of MANOVA analysis, Hypothesis 4, which states that addiction tendency and executive function scores differ in MD groups, was partially confirmed.

Then, univariate analyses of the dependent variables were examined separately. For internet addiction, Levene's test showed that the assumption of homogeneity of variances was not violated [$F(1, 75) = .008$, $p = .930$]. In this regard, it was found that, in terms of APIINT scores, there is a significant difference between MD groups [$F(1, 75) = 21.916$, $p < .001$, partial $\eta^2 = .226$]. However, the assumption of homogeneity of variances was violated according to Levene's test for alcohol addiction [$F(1, 75) = 4.670$, $p = .034$] and drug addiction [$F(1, 75) = 12.35$, $p < .001$]. As demonstrated in Table 8, the findings reveal that alcohol and drug addiction did not differ significantly according to MD groups. Therefore, it can be concluded that internet addiction scores differed between the two MD groups, while alcohol and drug addiction scores did not (Figure 1.).

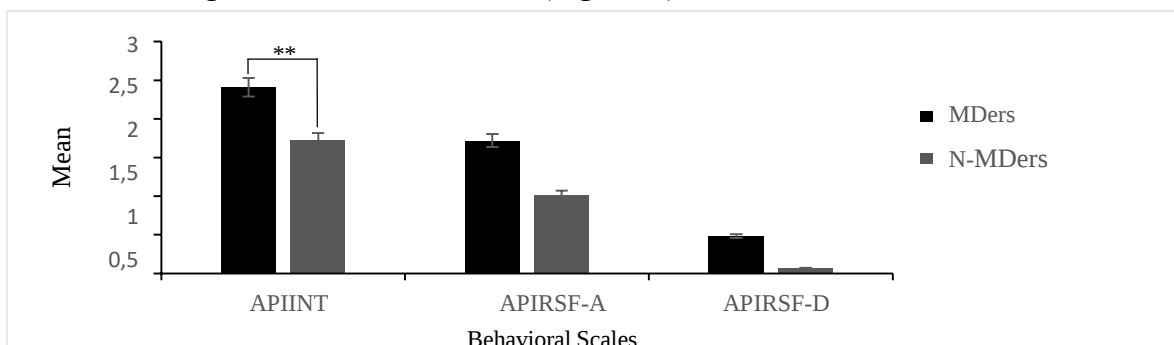


Figure 3.1. The Means of Behavioral Scales of Groups

Note. MDers= Maladaptive daydreamers, N-MDers= Non-maladaptive daydreamers, APIINT= Addiction Profile Index Internet Form, APIRSF-A= Addiction Profile Index Risk Screening Form Alcohol Scale, APIRSF-D= Addiction Profile Index Risk Screening Form Drug Scale, ** $p < .001$

The results of Levene's test showed that the homogeneity of variances assumption was met for the executive functions in terms of STP5-D score and nine scores (1, 2, 4, 5, 6, 8, 10, 11, 12) of the WCST. However, the analyses revealed that executive function scores did not differ significantly according to the group factor, as shown in Table 8 below.

Table 3.8. MANOVA results

Dependent Variables	N-MDers		MDers		<i>F</i> (1,75)	<i>p</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
APIINT	1.73	.63	2.41	.63	21.91	.00	.22
APIRSF-A	1.02	1.47	1.72	2.39	2.45	.12	.03
APIRSF-D	.07	.34	.48	1.48	2.90	.09	.03
STP5-D	17.58	3.76	18.96	4.40	2.19	.14	.02
WCST1	94.90	21.43	98.37	23.26	.46	.49	.00
WCST2	25.27	19.93	30.27	24.89	.95	.33	.01
WCST4	5.35	1.27	5.08	1.89	.54	.46	.00
WCST5	15.75	13.77	15.21	13.12	.03	.86	.00
WCST6	13.22	10.70	12.91	9.53	.01	.89	.00
WCST8	12.70	7.47	12.20	7.51	.08	.76	.00
WCST10	62.12	11.58	58.62	16.69	1.15	.28	.01
WCST11	68.92	17.92	63.71	22.15	1.29	.25	.01
WCST12	.70	1.15	.56	1.11	.25	.61	.00

Note. MDers= Maladaptive daydreamers, N-MDers= Non-maladaptive daydreamers, *M*= Mean, *SD*= Standard Deviation, APIINT= Addiction Profile Index Internet Form, APIRSF-A= Addiction Profile Index Risk Screening Form Alcohol Scale, APIRSF-D= Addiction Profile Index Risk Screening Form Drug Scale, STP5-D= Stroop Test TBAG Form 5th Section Duration Score, WCST= Wisconsin Card Sorting Test, η^2 = partial eta squared

4. DISCUSSION

This study aimed to investigate the relationships between maladaptive daydreaming (MD), addiction tendency, and executive functions. In this section, the findings of the analyses conducted to test the hypotheses of the study were discussed in light of the relevant literature. The discussion started by first evaluating the results of the correlation analysis between the main variables of the study and demographic variables. Then, the correlation results between the main variables of the study were evaluated. Afterward, regression analysis findings regarding whether MD is predicted by addiction tendency and executive functions are discussed. Next, the results of the multivariate analysis of variance (MANOVA) test on whether addiction tendency and executive functions differed according to MD groups were examined. Finally, this study's contributions, strengths, and limitations are presented, and suggestions are made for future studies.

4.1. Evaluation of the Findings

4.1.1. Relationships between variables and demographic information

In the analyses, it was found that MD decreased as age increased. While some studies in the literature have reported no significant relationship between MD and age (Somer et al., 2016a), others have found associations between MD and age. For example, Musetti and colleagues (2021) discovered that MD decreased with increasing age. Similarly, research involving participants from 45 countries revealed that individuals with MD tended to be younger (Bigelsen et al., 2016). The current study's findings are consistent with these findings. While inconsistencies exist in the literature, studies suggesting a higher prevalence of MD among young adults (Zsila et al., 2019) were frequently encountered. Additionally, it is pertinent to mention studies such as Doerwald and colleagues (2016), which concluded that older age is generally associated with greater emotion regulation knowledge and more adaptive emotion regulation strategies. This is significant because poor emotional processing, as highlighted by Greene and colleagues (2020), is linked to MD, and MD symptoms are associated with difficulties in emotional regulation. These results make it plausible to propose that the tendency toward MD may vary with age as individuals develop more robust emotion regulation skills and healthier coping mechanisms. However, it is

essential to note that MD can persist into adulthood. The lack of consensus in the literature highlights the need for further comprehensive studies to elucidate the complex relationship between age and MD. Moreover, examining longitudinal patterns of MD in various age groups may offer insightful information about the developmental course of this phenomenon and elucidate potential interventions customized to certain age groups.

In this study, it was found that the level of internet addiction was higher in women than in men. However, the literature presents conflicting results regarding the relationship between gender and internet addiction. Although some research has indicated an elevated prevalence of internet addiction in men (Anderson et al., 2017; Shan et al., 2021), others have found contradictory evidence (Sun et al., 2012). The predominance of women in the current study's sample may have influenced this finding. A meta-analysis suggests that women and men manifest internet addiction differently, with women more often engaging in social media use and men more frequently involved in gaming and video watching (Su & Huang, 2021). Given the diverse findings in the literature, further research on internet addiction is warranted. Considering the dynamic nature of technology and its changing impact on individuals' behaviors, it would be essential to consider these gender-specific differences in internet usage habits in future studies.

Examination of the relationship between gender and alcohol and drug addiction revealed higher levels of addiction among males, consistent with existing literature. Numerous studies (Ögel, 2005; Brady & Randall, 1999) have consistently reported higher rates of alcohol and drug abuse among men compared to women. Biologically, men's higher levels of alcohol metabolism may render them more susceptible to alcohol and substance consumption, thus increasing their risk of addiction (Baraona et al., 2001). Moreover, gender roles, such as risk-taking behaviors typically associated with masculinity, may further contribute to men's propensity for substance use (Byrnes et al., 1999). Conversely, women may encounter greater social stigma surrounding alcohol or drug use (Dragišić Labaš, 2016), potentially leading to underreporting of addiction issues and complicating the accurate assessment of addiction prevalence by gender. However, recent research by McHugh and colleagues (2018) highlights a narrowing gender gap in substance use disorders, traditionally characterized by higher prevalence in men. They emphasize the significance of understanding sex and gender roles in both the development and perpetuation of addiction disorders.

No significant relationship was found between MD and gender, a finding consistent

with existing literature. Consistently, studies such as that by Musetti and colleagues (2021), involving a large sample of 6,277 individuals, reported no significant association between MD and gender. Similarly, a recent study by Soffer-Dudek and Theodor-Katz (2022) with a large sample found no significant relationship between MD and gender. However, some studies suggest conflicting results regarding gender differences in MD. For instance, while Bashir (2021) suggests that men tend to experience MD more than women, others such as Karpal (2021) propose the opposite. This variation in findings may be attributed to women's greater propensity to share their problems and seek help and their higher participation rates in scientific research. Additionally, limitations inherent in the methodologies of various studies may contribute to the inconsistencies in results, underlining the need for further research on this topic.

4.1.2. Relationships between the main variables of the study

In this section, the relationships between MD, the internet, alcohol, and drug addiction, and executive functions, which are the main variables of the study, are discussed in terms of Hypothesis 1 and Hypothesis 2.

The primary finding of this study is the positive correlation between MD and internet addiction, consistent with the study's hypothesis. While some existing literature partially supports this finding, it is worth noting the limited research on this topic and the absence of contradictory evidence to the results of this study. For instance, Zsila and colleagues (2018) identified a positive correlation between MD and problematic internet use, while Pietkiewicz and colleagues (2018) associated MD with excessive internet use and pornography viewing. Given the scarcity of direct studies on internet addiction and MD, research on related phenomena such as internet gaming disorder and social media addiction is also informative. Sharma and Mahapatra (2021) noted a frequent co-occurrence of MD with internet gaming disorder, suggesting shared underlying mechanisms between these behaviors. Similarly, Ballabio and colleagues (2017) found parallels between individuals with MD and problematic internet gamers, both utilizing fantasy to escape real-life challenges or assume alternative identities. On the other hand, Mishra and Kewalramani (2023) discovered a positive association between higher MD tendencies and expanded time spent on social media platforms. These findings emphasize the complex relationship between MD and various forms of internet-related problematic behaviors.

The findings of this study, along with those of other research, provide evidence supporting the existence of a relationship between MD and internet addiction. Davis (2001) suggests that the Internet serves as a reward mechanism for coping with real-life adversities. Similarly, Somer (2018) examined MD and excessive internet use as forms of mental escape in a case study on MD. These perspectives reinforce the notion that individuals may utilize both MD and the internet as routes for entertainment, escape from life's challenges, and coping strategies for emotional relaxation.

Considering the addictive nature of both MD and internet addiction, these behaviors may initially serve as rewarding coping mechanisms to escape life's challenges. However, over time, they can escalate into full-blown addictions with detrimental consequences for individuals' lives. Individuals grappling with these issues may lack the necessary coping skills to manage emotional difficulties or have not learned healthy coping strategies. Consequently, there exists a reciprocal and potentially reinforcing relationship between internet addiction and MD. The findings of this study contribute to the ongoing discourse on whether MD should be classified as a behavioral addiction, but it is evident that further research is warranted. Moreover, researchers are contentious about classifying certain problematic behaviors as "new" behavioral addictions. To prevent over-pathologizing common daily activities, Billieux and colleagues (2015) emphasize the importance of delving into the underlying psychological processes and subjective experiences associated with these behaviors rather than merely comparing them to diagnostic criteria. This aspect warrants careful consideration in future research endeavors.

In the analyses, no significant relationship was found between MD and alcohol and drug addictions. This finding partially contradicts Hypothesis 1. However, reviewing the literature reveals relevant findings. Somer and colleagues (2019) found that individuals with substance use disorders tended to engage in higher levels of daydreaming compared to healthy individuals. In a study investigating comorbid disorders with MD, Somer and colleagues (2017b) suggested a notable prevalence of substance use disorders among participants with MD, with 65.4% exhibiting comorbidities. This high rate is noteworthy. Furthermore, MDers were found to engage in excessive alcohol consumption (Soffer-Dudek & Oh, 2024). These findings can be contextualized within Potenza's (2008) perspective, which suggests the presence of an addiction-prone brain predisposing individuals to excessive reliance on both behavioral patterns, such as daydreaming, and substance consumption, such as alcohol and drugs.

It is well-documented that alcohol and substances are commonly utilized to heighten arousal and induce positive emotions (Cooper et al., 1995). Numerous scholars (Uzday, 2009; Bahar, 2018) emphasize the usage of drugs or alcohol as a coping mechanism. to alleviate anxiety, tension, and manage adverse life circumstances. Similarly, MD is posited to serve as a coping mechanism for navigating challenging life events, akin to addiction (Somer, 2002). However, in the present study, no significant relationship was found between substance and alcohol addiction and MD. One plausible explanation for this absence of association is that individuals may resort to one of the two coping mechanisms for relaxation. From a neuropsychological perspective, the release of dopamine, a neurotransmitter, occurs during daydreaming. This neurotransmitter is also released when consuming alcohol or drugs, eliciting sensations of relaxation, pleasure, and reward. It can be inferred that through daydreaming, individuals may attain coping and relaxation, potentially obviating the need for alcohol or drug use. In the words of Somer and colleagues (2019), behavioral addiction may supplant chemical addiction in this context. Another plausible explanation for the lack of association is that the study sample may not accurately represent the addicted population, potentially contributing to inconsistency with existing literature.

Another noteworthy finding is the positive correlation found between the levels of alcohol addiction and drug addiction. Put differently, there exists a concurrent increase or decrease in both types of addiction. This finding aligns with prevailing perspectives in the literature. Previous research, such as that by Staines and colleagues (2001), indicates that approximately one-third of alcohol users simultaneously engage in the consumption of other drugs. Similarly, Grant and colleagues (2015) assert that the most people who suffer from alcohol use disorder also exhibit comorbid substance use disorder. The progression of addiction follows a cyclical pattern, whereby individuals, once addicted to a particular substance, develop a tolerance as their brain chemistry becomes accustomed to the addictive effects, necessitating increased stimulation. This cycle and heightened stimulation contribute to the development of tolerance to other substances, thereby reinforcing the interplay between different forms of addiction. Furthermore, the legalization of alcohol is hypothesized to serve as a gateway substance, with its increased use potentially escalating into drug addiction. Indeed, Kandel (2002) provides empirical evidence suggesting that drug use often ensues subsequent to alcohol and tobacco use. Consequently, the concurrent escalation of addiction levels across different substances is not unexpected. This trend may exert a more adverse impact on the health and well-being of individuals grappling with

addiction, thereby complicating treatment and rehabilitation efforts. Thus, adopting an individualized, integrated, and comprehensive treatment approach that accounts for comorbidity is deemed crucial in addressing addiction, an escalating public health concern.

Executive functions were evaluated in relation to alcohol and drug dependence levels, revealing a significant negative relationship between alcohol dependence severity and several executive function measures in the Wisconsin Card Sorting Test (WCST). Specifically, as alcohol dependence increased, the total number of correct responses, completed categories, and conceptual level responses in the WCST decreased, while the number of incorrect responses increased. Similarly, escalating drug addiction severity correlated with increased perseverative errors, perseverative responses, percentage of perseverative errors, and failure to maintain setup scores in the WCST, alongside a decrease in conceptual level responses. These findings suggest a detrimental impact of both alcohol and drug use on executive functions, corroborating existing literature and the study hypothesis. Numerous studies (Woicik et al., 2009; Sullivan et al., 2000) have consistently demonstrated lower executive function performance among individuals with substance and alcohol addiction compared to healthy controls. Executive functions encompass a range of brain-regulated cognitive processes, including planning, organization, attention, working memory, flexible thinking, and decision-making (Teichner et al., 2002). Addiction's influence on these processes stems from its disruption of brain areas associated with attention, the reward system, decision-making, and learning, leading to alterations in brain chemistry.

No significant association was found between internet addiction and executive functions, contradicting Hypothesis 2 of the study. Contrary to these findings, previous research by Zhou and colleagues (2014) revealed that the internet-addicted group exhibited inferior mental flexibility and response inhibition compared to the healthy control group. Similarly, other studies (Kuo et al., 2018; Nageeb & Al Enzi, 2020) reported diminished executive function performance in individuals with internet addiction relative to controls. Several factors may contribute to this discrepancy with existing literature. The severity and duration of addiction could potentially influence the impact on executive functions. The absence of a relationship in this study may also be attributed to methodological limitations, such as the sample size, which might not have adequately represented the internet-addicted population. Consequently, future research endeavors employing larger and more representative samples, alongside diverse measurement tools like comprehensive

neuropsychological test batteries, could elucidate this relationship further.

According to the findings of this study, no significant relationship was found between executive functions and MD, thus refuting the hypothesis positing a decrease in executive function performance with increasing MD severity. Despite this, literature suggests a relationship between MD and executive functions. Somer (2018) suggests that MD, with its rewarding nature akin to addiction, can impact brain and cognitive functions. Notably, Bigelsen and colleagues (2016) found higher rates of attention deficit symptoms among individuals with MD compared to control groups. Somer (2018) further suggests that daydreaming is associated with attentional difficulties in maintaining focus on external tasks, emphasizing the need for additional research in this domain. Maladaptive daydreamers propensity to consume time and energy on internal thoughts or daydreaming may detrimentally impact planning and organizational abilities such as executive functions in daily life (Soffer-Dudek & Somer, 2018). Individuals with MD often experience prolonged daydreaming periods, potentially diminishing their focus on external tasks and impairing attentional sustainment. Additionally, MD may induce a perseveration effect, wherein individuals struggle to disengage from recurring thoughts or dreams, further hindering their ability to shift attention. The absence of a relationship in this study may stem from methodological limitations, such as the homogeneity of participants' education levels and predominance of psychology students in the sample, alongside its small sample size. It is plausible that executive functions remained unaffected due to the participants' MD severity levels not reaching a threshold impactful enough to influence executive functions. Furthermore, the measurement method employed may have contributed to the failure to detect a significant relationship. Future studies could employ a broader neuropsychological test battery with a large and diverse sample to assess executive functions. This approach provide a more nuanced understanding of the relationship between these variables, thereby contributing to the advancement of knowledge in this area.

4.1.3. Multiple regression findings

According to the outcomes of the multiple stepwise regression analysis aimed at assessing whether addiction tendency predicts MD scores, it was revealed that MD scores were significantly and positively predicted solely by internet addiction scores. Interestingly, alcohol and drug addiction scores did not emerge as significant predictors in this model.

Additionally, when neuropsychological tests (NPT) scores were incorporated into the analysis and the regression analyses were conducted separately for MD groups; no variable was a significant predictor in these models. Given the absence of prior studies concurrently examining these variables, the findings were deliberated within the context of their individual characteristics and interrelationships.

Initially, the analysis revealed that while alcohol and drug addiction failed to predict MD, internet addiction did, underscoring the notion that different types of addiction may exhibit distinct relationships with MD. These findings suggest that MD may exhibit a closer association with behavioral addiction types compared to alcohol and drug addiction. Indeed, MD is often conceptualized as a behavioral addiction in various studies (Pietkiewicz et al., 2018; Sharma & Mahapatra, 2021). MD is characterized as an inclination to retreat from reality and immerse oneself in inner-world fantasies, while internet addiction involves seeking refuge from reality in online environments. The legality, accessibility, and instant access to desired content on the internet may render it a more convenient and secure avenue for individuals seeking an escape from their problems compared to alcohol and drug use. Hence, the predictive relationship between internet addiction and MD in this study is not entirely surprising. Recognizing this association between internet addiction and MD holds significance for clinical practice and treatment strategies. Incorporating considerations of MD in individuals with internet addiction, or vice versa, may enhance treatment efficacy and facilitate the management of the recovery process. Conversely, the absence of a predictive relationship between alcohol and substance addiction and MD in this study may be attributable to methodological limitations, such as inadequate representation of the addicted population. Notably, there are studies in the literature demonstrating a strong association between these phenomena (Soffer-Dudek & Oh, 2024; Somer et al., 2017b). Therefore, it is recommended that future studies reconsider these variables in regression analyses with diverse samples to explore their relationships further.

Another finding from the regression analysis indicated that MD scores were not predicted by executive functions. This outcome suggests either a lack of significant relationship between these variables or that such a relationship did not emerge as statistically significant within the regression model. Although no regression analysis specifically examining this relationship was found in the literature, extensive research exists on the association between MD and executive functions (Somer, 2018; Bigelsen et al., 2016). The absence of a predictive relationship between these variables in the current study may be

attributed to its methodological limitations. For instance, the study sample comprised individuals with similar educational and age backgrounds, and executive functions were evaluated using a limited number of neuropsychological tests.

Furthermore, while internet addiction emerged as a predictor of MD scores in the model solely considering addictive tendencies, it lost significance when NPT scores were incorporated into the analysis. The separate analyses conducted for each group revealed this insignificance, likely due to the small number of participants in the groups and the resulting lack of statistical power to adequately represent the sample.

4.1.4. MANOVA findings

The MANOVA revealed a significant difference in addiction tendency and executive functions based on MD levels (MDers and N-MDers). Further examination indicated that the group factor significantly influenced only internet addiction scores, partially supporting the study's main hypothesis. However, there were no statistically significant differences in other dependent variables, such as alcohol and drug addiction and executive functions, which partially falsifies the main hypothesis.

The notable finding that the group factor significantly influenced only internet addiction scores suggests the paramount importance of internet addiction concerning MD compared to other variables examined. Although research on this topic is limited, numerous studies (Zsila et al., 2018; Pietkiewicz et al., 2018) have demonstrated a positive relationship between MD and internet addiction. These behavioral issues serve similar purposes, such as escapism, relaxation, and coping, potentially reinforcing their relationship. These findings underline the significance of considering internet addiction in comprehending and addressing MD. Additionally, incorporating new evidence highlighting the strong association between MD and internet addiction, a form of behavioral addiction, into the discourse on whether MD constitutes a behavioral addiction or not could enrich the literature and guide future research in this area.

Another notable finding of this study was the absence of significant differences in alcohol and drug addiction based on MD levels, contrary to previous literature indicating a strong correlation between MD and alcohol and drug addiction (Soffer-Dudek & Oh, 2024; Somer et al., 2019). This inconsistency with existing literature partially falsifies Hypothesis

4 of the study. Possible explanations for this inconsistency include the inadequacy of the study sample in representing individuals with alcohol and drug addiction and/or varying levels of MD. Future studies should aim to work with samples that better reflect the spectrum of alcohol and substance addiction to gain a deeper understanding of how these addictions interact with MD levels.

Similarly, the analysis revealed no significant differences in executive functions according to MD levels, contradicting numerous studies in the literature that have found MD to impact executive functions (Somer, 2018; Bigelsen et al., 2016). This inconsistency with the literature also partially falsifies Hypothesis 4. Several factors may have contributed to this inconsistent finding, including the possibility that the MD levels of the participants were not representative of the broader MD population or that the severity of MD among the participants was insufficient to affect executive functions. Moreover, the concentration of the sample within similar educational and age stands may have resulted in an unrepresentative sample concerning executive functions. Finally, uncontrolled variables such as personality traits and stress levels may have influenced the findings. More research is needed to grasp these findings better and situate them within a broader context.

4.2. Contributions, Strengths, Limitations, and Suggestions for Future Studies

This study makes several notable contributions to the existing literature. Firstly, it addresses an ongoing debate in the literature regarding whether MD represents a novel form of behavioral addiction, providing significant insight into this discourse. Additionally, the study offers a comprehensive examination of both behavioral and substance-related addictions to elucidate their associations with MD. Moreover, by incorporating executive functions, which are known to be linked with addictive behaviors, the study offers a more nuanced exploration of the relationships between MD and addictive tendencies. From a broader perspective, given that MD is a relatively novel concept in Turkey, this study, conducted with a Turkish sample, has the potential to inform future research in this area. Furthermore, considering the limited literature on MD globally, this study contributes valuable insights to the MD literature and its related fields.

The methodology used in assessing executive functions stands out in the study's strengths. Directly observing participants' performance and behaviors during tests, alongside employing reliable and widely accepted measurement tools like the WCST and the Stroop

Test TBAG Form, enhances the accuracy and validity of the collected data. Additionally, excluding 83 participants with psychiatric/neurological diagnoses and 7 participants on psychiatric/neurological medication is crucial for mitigating potential confounding variables that could influence the results. Statistical methods such as MANOVA and regression allow for comprehensive data analysis, enhancing the study's analytical power.

It is essential to acknowledge several limitations within this study. Firstly, the predominance of psychology students within the sample may have introduced a familiarity bias in neuropsychological tests, potentially impacting test performances. This could compromise the generalizability of the findings to individuals experiencing MD within the broader population. Additionally, the overrepresentation of women in the sample may introduce a gender bias, limiting the applicability of the results to men. Excluding participants with high MD scores due to their diagnosis or medication usage may restrict the study's scope. Lastly, while the scales utilized in the study were validated and reliable, participant responses in online surveys may not fully or accurately capture their true sentiments, thoughts, and attitudes. Particularly, societal stigmatization surrounding addiction may have influenced participants' honesty in responding to addiction-related scales.

Some suggestions for future research to increase the breadth and depth of knowledge on MD are offered. Expanding the sample size with diverse demographic characteristics, including gender distribution and educational backgrounds, would strengthen the findings' generalizability to broader populations. Investigating the relationship between MD and the clinical population could provide valuable insights into the interplay between MD and various mental health conditions. In addition, observations during the research highlight the importance of investigating the relationship between MD and procrastination. Despite the partial confirmation of the hypotheses and the detection of significant associations between MD and internet addiction in particular, the call for continued research on MD and both chemical and behavioral addictions underlines the need for a more in-depth examination of this complex phenomenon. Given the scarcity of studies on MD in the existing literature, each new inquiry focusing on different variables within the MD domain is anticipated to enrich the literature and drive further inquiry.

4.2.1. Clinical implications

The findings of this thesis are anticipated to hold significant implications for clinical practice. Given that MD has not yet been officially classified as a disorder, it is possible that many mental health professionals may lack familiarity with MD or may not have encountered it in their practice (Somer et al., 2016b). Consequently, individuals with MD may often receive misdiagnoses such as Obsessive-Compulsive Disorder (OCD) or Attention-Deficit/Hyperactivity Disorder (ADHD), neither of which fully captures the essence of MD (Bigelsen et al., 2016). It is imperative for clinicians who encounter individuals exhibiting symptoms of MD to promptly identify the condition and formulate tailored intervention plans within the therapeutic process. From the client's perspective, failure to recognize or misunderstand MD by professionals can lead to a loss of motivation for treatment for clients who struggle to even share the problem with family members. Considering the potentially isolating nature of MD, its tendency to exacerbate over time, and its detrimental impact on individuals' functioning, it is believed that this study will play a crucial role in raising awareness about MD within the clinical domain.

The existing literature suggests that MD may exhibit characteristics of a behavioral addiction (Pietkiewicz et al., 2018; Sharma & Mahapatra, 2021). The positive correlation uncovered between MD and internet addiction in this thesis lends support to the notion that MD could be conceptualized as a variant of behavioral addiction. With the escalating prevalence of behavioral addictions, particularly internet addiction, there is a belief that assessing MD symptoms during therapy sessions could enhance the development of a more comprehensive case formulation. Moreover, it is proposed that MD could be addressed in clinical practice through an addiction-focused approach, drawing parallels with conventional addiction treatment methods. Specifically, the integration of cognitive-behavioral therapy or motivational interviewing techniques, commonly employed in addiction therapy, may offer viable routes for addressing MD symptoms effectively. Incorporating these therapeutic modalities into the treatment process for individuals suffer from MD is perceived to hold considerable potential for therapeutic benefit.

The association between MD and internet addiction could offer insights into identifying and bolstering protective factors. Strategies commonly endorsed in addiction treatment, such as fostering robust social support networks, establishing consistent daily routines, honing emotional regulation abilities, and fortifying coping mechanisms for stress

management, may prove efficacious in mitigating MD symptoms as well. Incorporating practical exercises to cultivate these skills during therapy sessions with clients grappling with MD could be beneficial. Furthermore, comprehending the interplay between addiction and MD may facilitate the recognition of risk factors contributing to the initiation and persistence of MD symptoms. For instance, acknowledging adverse childhood experiences as potential precursors to addiction may prompt exploration of their relevance to MD. Evaluating such factors in therapy sessions with individuals contending with MD is believed to be advantageous.

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APPENDIX 1: INFORMED CONSENT FORM

Değerli Katılımcı,

Bu çalışma Başkent Üniversitesi Klinik Psikoloji Yüksek Lisans Programı öğrencisi Psk. Fatma Sena Karaloğlu tarafından Doç. Dr. Elvin Doğutepe danışmanlığında yüksek lisans tezi olarak yürütülmektedir. Çalışma kapsamında üniversite öğrencilerinin hayal kurma deneyimleri ile ilişkili özelliklerinin incelenmesi amaçlanmaktadır. Çalışmaya katılabilmek için 18-25 yaş aralığında ve üniversite öğrencisi olmanız gerekmektedir.

Bu çalışma iki aşamadan oluşmaktadır. İlkinde sizden kendinizle ilgili birtakım sorulara yanıt vermeniz istenmektedir. Bu ortalama 15 dakika sürmektedir. Bu aşamadan bir süre sonra araştırmacı sizi Başkent Üniversitesi Bağlıca Kampüsüne davet edecektir. Bu aşama ise yaklaşık 45 dakika sürecektir; size bazı test uygulamaları yapılacaktır.

Çalışmaya katılım tamamen gönüllülük esasına dayanmaktadır. Elde edilen verilerin tümü saklanacak ve sadece bilimsel amaçlarla kullanılacaktır. Kişisel bilgileriniz tamamen gizli tutulacak ve araştırma kapsamı dışında hiçbir yerde kullanılmayacaktır. Elde edilen veriler toplu bir biçimde değerlendirilecek ve rapor edilecektir. Bu çalışmaya katılım, önemli herhangi bir risk taşımamaktadır.

Araştırma bulgularının sağlıklı ve geçerli olması açısından sorulara samimi bir şekilde eksiksiz yanıt vermeniz oldukça önemlidir. Lütfen tüm açıklamaları dikkatlice okuyunuz ve size en yakın gelen cevabı işaretleyiniz.

Çalışmaya katıldığınız süre zarfında rahatsızlık hissederseniz herhangi bir neden belirtmeden istediğiniz aşamada çalışmadan çekilebilirsiniz. Bu durumda herhangi bir yaptırımla karşılaşmayacaksınız.

Çalışma ile ilgili sorularınız için Fatma Sena Karaloğlu ile iletişime geçebilirsiniz.

Katılım ve katkınız için teşekkür ederiz.

Danışman:

Doç. Dr. Elvin DOĞUTEPE

Araştırmacı:

Psk. Fatma Sena KARALOĞLU

Çalışmaya gönüllü olarak katıldığınızı ve vereceğiniz bilgilerin bilimsel amaçlı kullanılmasını kabul ediyorsanız kabul ediyorum kutucuğunu seçerek çalışmaya başlayabilirsiniz.

Bu çalışmaya katılmayı kabul ediyorum. ☐

Bu çalışmaya katılmayı kabul etmiyorum. ☐

E-posta/Telefon: _____

APPENDIX 2: DEMOGRAPHIC INFORMATION FORM

1. Doğum yılınız: _____

2. Cinsiyetiniz: K () E () Diğer () Belirtmek istemiyorum ()

3. Lisans düzeyinde üniversite öğrencisi misiniz?

Evet () Hayır ()

4. Bölümünüz: _____

5. Sınıf Düzeyiniz:

Hazırlık () 1 () 2 () 3 () 4 ()

6. Genel Akademik Not Ortalamanız (4'lük/100'lük sistem):

2.00 ve altı / 53.33 ve altı ()

2.01-2.99 / 53.5676.43 ()

3.00-3.50 / 76.66 88.33 ()

3.51 / 4.00 / 88.56-100 ()

7. Renk ayırt etmeyle ilgili herhangi bir probleminiz var mı?

Var () Yok ()

8. Herhangi bir ilaç kullanıyor musunuz?

Evet () Hayır ()

Evet ise belirtiniz: _____

9. Daha önce psikolojik/nörolojik bozukluklarla ilişkili herhangi bir tanı aldınız mı?

Evet () Hayır ()

Evet ise belirtiniz: _____

APPENDIX 3: MALADAPTIVE DAYDREAMING SCALE (MDS-16)

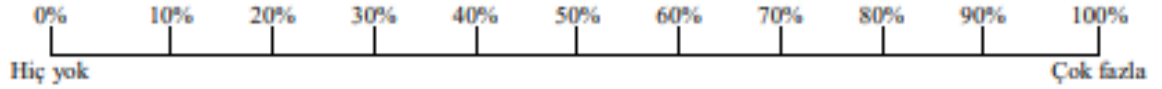
Aşağıdaki soruları yanıtlarken lütfen geçen ay içerisindeki hayal kurma (gündüzdeşi) yaşantılarını dikkate alınız. Başka zamana ait ise belirtiniz. Deneyimlerinize en uygun şıkkı seçiniz. Örneğin: Bazı insanlar kendilerini hayale o kadar çok kaptırırlar ki nerede olduklarını unuturlar. Hayal kurma sırasında nerede olduğunuzu unutmama ne sıklıkla olmaktadır? Örnekte yanıt olarak % 20 seçilmiştir.



1. Bazı insanlar, belirli müziklerin hayal kurmayı başlattığını farkederler. Müzik sizin hayal kurmanızı ne ölçüde aktif hale getirmektedir?



2. Bazı insanlar, dış dünyadaki bir olayın böldüğü hayal kurma durumuna devam etme gereksinimi duyarlar. Dış dünyadaki bir olay sizin hayal kurmanızı böldüğünde, sizin yarım kalan hayal kurma durumuna olabildiğince çabuk dönme gereksininiz ya da isteğiniz ne kadar güçlüdür?



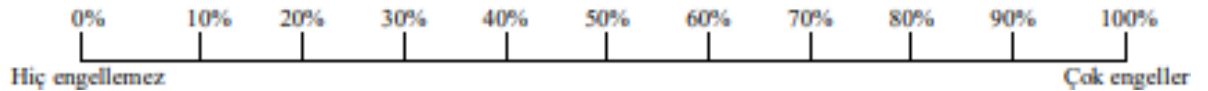
3. Hayal kurma durumunuza ne sıklıkla ses veya yüz ifadesi değişikliği eşlik eder? (örneğin gülme, konuşma veya çene çalma)?



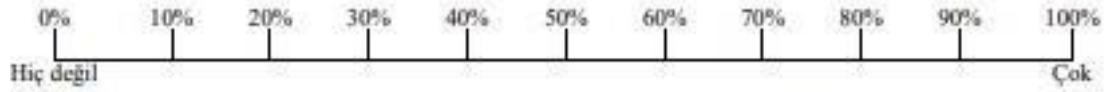
4. Belirli bir zaman diliminde gerçek dünyadaki sorumluluklarınız yüzünden hayal kuramadığınızda hayal kurmak için uygun bir zaman bulmayı ne kadar dert edersiniz?



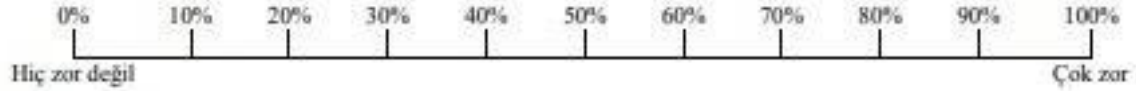
5. Bazı insanlarda hayal kurma durumu günlük iş veya görevlerine engel olur. Sizin hayal kurma durumunuz basit gündelik işleri yapma kapasitenizi ne kadar etkiler?



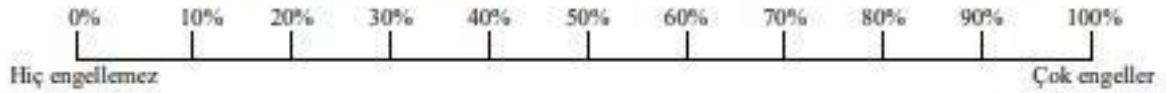
6. Bazı insanlar, hayal kurmaya harcadıkları zamanın miktarı konusunda endişeli veya sıkıntılı olurlar. Siz, halen hayal kurmaya harcadığınız zamanın miktarını ne kadar dert ediyorsunuz?



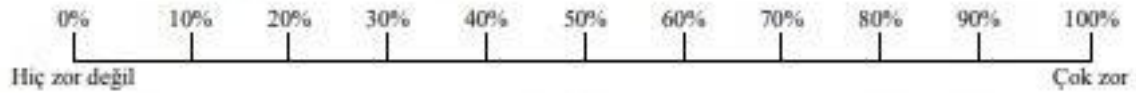
7. Önemli veya zor bir şeyle karşılaştığınızda dikkatinizi vermek veya o işi bitirmek için göreve odaklanmak veya hedefe ulaşmak amacıyla hayal kurmaktan uzak durmak sizin için ne kadar zordur?



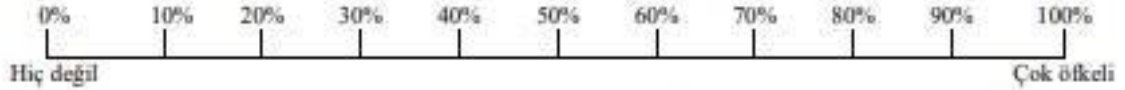
8. Bazı insanlar, kendi hayal kurma durumlarının kendileri için en önemli şeyleri engellediğini farketmişlerdir. Kendi hayal kurma durumunuzun sizin tümüyle yaşam amaçlarınızı başarmanıza engel olduğu hissini ne ölçüde duyuyorsunuz?



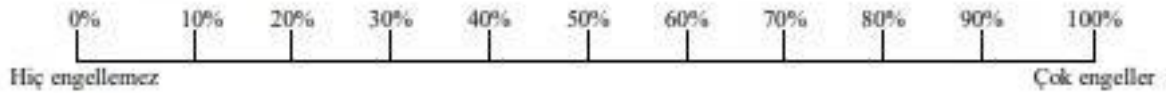
9. Bazı insanlar, kendi hayal kurma eğilimlerini kontrol altına almakta veya sınırlamakta zorlanırlar. Hayal kurma eğiliminizi kontrol altında tutmak sizin için ne ölçüde zordur?



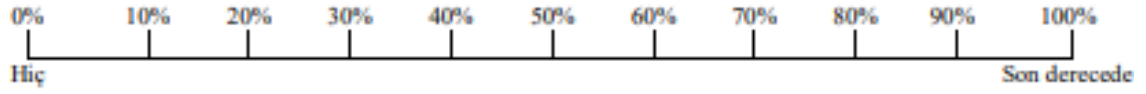
10. Bazı insanlar, dış dünyadaki bir olay hayal kurmalarını engellediğinde öfkelenirler. Dış dünya sizin hayal kurmanızı engellediğinde genellikle ne kadar öfkelenirsiniz?



11. Bazı insanlar, kendi hayal kurma eğilimlerinin akademik/mesleki veya kişisel başarılarını engellediğini farkedirler. Sizin hayal kurma eğiliminiz akademik/mesleki başarılarınızı ne ölçüde engellemektedir?



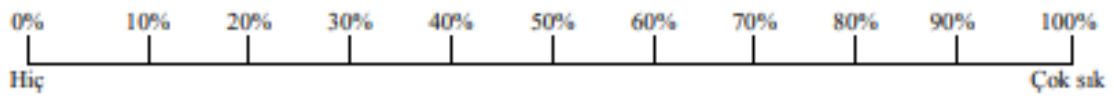
12. Bazı insanlar, hayal kurmayı başka şeylere tercih ederler. Siz diğer insanlarla yakın ilişki kurmak veya sosyal aktivitelere katılıp hobi edinmektense hayal kurmayı ne ölçüde tercih edersiniz?



13. Sabah uyandığınızda ilk olarak hayal kurmaya hemen başlamak için ne kadar güçlü bir eğilim duyarsınız?



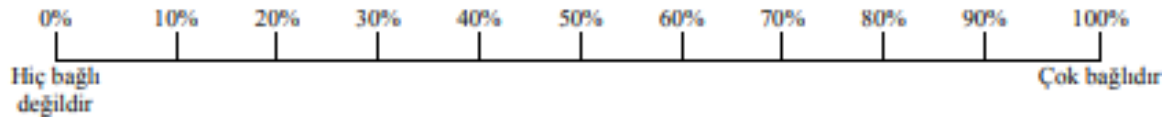
14. Sizin şimdiki hayal kurma durumunuza, yürüme, ayaklarınızı veya ellerinizi sallama gibi fiziksel aktiviteler ne sıklıkla eşlik etmektedir?



15. Bazı insanlar, hayal kurmayı severler. Siz hayal kurarken bu durumunuzu ne kadar rahatlatıcı veya zevkli bulursunuz?



16. Bazı insanlar için müzik dinlemedikleri zaman hayal kurma durumlarını sürdürmek zordur. Sizin hayal kurmanız müzik dinlemenin eşlik etmesine ne ölçüde bağlıdır?



APPENDIX 4: STROOP TEST TBAG FORM

341

STROOP TESTİ TBAG FORMU*

KAYIT FORMU

Adı Soyadı : Uygulayıcının
Doğum Tarihi :/...../..... Adı Soyadı :
Yaşı : Uygulama Tarihi :/...../.....
Cinsiyeti : Uygulama Yeri :
Eğitim Düzeyi :

Bölüm I: Siyah Basılmış Renk İsmi Okuma

M S K Y
Y M S K
Y K M S
K Y S M
S K Y M
K M S Y

Bölüm II: Renkli Basılmış Renk İsmi Okuma

M S K Y
Y M S K
Y K M S
K Y S M
S K Y M
K M S Y

Bölüm III: Şekil Rengi Söyleme

Y M S K
S K Y M
M Y S K
M S K Y
K Y M S
S Y M K

Bölüm IV: Renk İsmi Olmayan Kelime Rengi Söyleme

Y M S K
S K Y M
M Y S K
M S K Y
K Y M S
S Y M K

	TOPLAM SÜRE	HATA SAYISI	DÜZELTME SAYISI
BÖLÜM I			
BÖLÜM II			
BÖLÜM III			
BÖLÜM IV			
BÖLÜM V			

Bölüm V: Renk İsmi Olan Kelime Rengi Söyleme

Y M S K
S K Y M
M Y S K
M S K Y
K Y M S
S Y M K

*BİLNOT Bataryasının araştırma ve geliştirme çalışmaları TBAG-Ü / 17-2 sayılı proje ile TÜBİTAK tarafından desteklenmiştir.

WISCONSIN KART EŞLEME TESTİ*

KAYIT FORMU

Adı Soyadı :
Doğum Tarihi :/../.....
Yaşı :
Cinsiyeti :
Eğitim Düzeyi :

Uygulayıcının
Adı Soyadı :
Uygulama Tarihi :/...../.....
Uygulama Yeri :

WISCONSIN KART EŞLEME TESTİ PUANLARI	
1- Toplam tepki sayısı	
2- Toplam yanlış sayısı	
3- Toplam doğru sayısı	
4- Tamamlanan kategori sayısı	
5- Toplam perseveratif tepki sayısı	
6- Toplam perseveratif hata sayısı	
7- Toplam perseveratif olmayan hata sayısı	
8- Perseveratif hata yüzdesi	
9- İlk kategoriye tamamlamada kullanılan tepki sayısı	
10- Kavramsal düzey tepki sayısı	
11- Kavramsal düzey tepki yüzdesi	
12- Kurulumu sürdürmede başarısızlık	
13- Öğrenmeyi öğrenme	

Kategoriler: R, Ş, M, R, Ş, M

1 - 22

23 - 44

45 - 64

1 - 22

23 - 44

45 - 64

[illegible]

* BİLNOT Bataryasının araştırma ve geliştirme çalışmaları TBAG-Ü / 17-2 sayılı proje ile TÜBİTAK tarafından desteklenmiştir.

APPENDIX 6: ADDICTION PROFILE INDEX INTERNET ADDICTION FORM (APIINT)

Aşağıdaki sorularda sözü edilen internet kullanımı; iş veya eğitim amaçlı internet kullanımı dışında internet kullanımıyla ilgilidir (örneğin oyun, sosyal medya, e-posta, internet siteleri, sohbet (chat) odaları, forumlar vb).

- 1 Son 3 ay içinde internette ne kadar zaman geçirdiniz? (İş veya eğitim amaçlı internet kullanımı dışında oyun, sosyal medya gibi internet kullanımı)
- ☐ Hiç ☐ Haftada 1-5 kez veya daha az ☐ Günde 1 saatten az
- ☐ Günde 1-3 saat arası ☐ Günde 4-5 saat ☐ Günde 6 saat veya daha fazla

SON 3 AY İÇİNDE aşağıdakilerin ne sıklıkta olduğunu belirtiniz

- 2 İnternette olduğunuz süre zaman içinde giderek arttı mı? (son zamanlarda internette olduğunuz süre eskisinden fazla mı?)
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 3 İnternet kullanmaya başladıktan sonra, kullanmayı durdurmakta zorlandığınız oldu mu? (örneğin kısa süre kullanmayı planlayıp uzun süre kullanmak)
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 4 İnternette geçirdiğiniz zamanın fazla olduğunu düşündüğünüz oldu mu? (örneğin gününüzün önemli bir kısmının iş veya eğitim dışında internet kullanarak geçmesi gibi)
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 5 Kendinizi mutsuz, üzgün veya huzursuz hissettiğiniz için internet kullandığınız oldu mu?
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 6 İnternet kullanmak için hayatınızdaki başka etkinliklerden vazgeçtiğiniz oldu mu? (örneğin aile ziyaretleri, hobiler, spor, kitap okumak, sinema vb)
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

SON 3 AY İÇİNDE aşağıdakilerin ne sıklıkta olduğunu belirtiniz

- 7 İnternet kullanmak aile ilişkilerinizi olumsuz yönde etkiledi mi?
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 8 İnternet kullanmak eğitim/ iş hayatınızı olumsuz yönde etkiledi mi?
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 9 İnternetsiz bir yaşamın size anlamsız, sıkıcı ve boş geldiği oldu mu?
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman
- 10 İnternet kullanmak arkadaş veya diğer insanlarla olan ilişkilerinizi olumsuz yönde etkiledi mi? (Örneğin daha az arkadaşla görüşmeye başlamak, arkadaşlarla buluşmamak vb)
- ☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

11 İnternette iken acıktığınızı veya susadığınızı veya tuvaletinizin geldiğini veya uykunuzun geldiğini fark etmediğiniz zamanlar oldu mu?

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

12 Başkaları ile dışarıda zaman geçirmek yerine internette daha fazla vakit geçirmeyi tercih ettiğiniz oldu mu?

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

13 Sabah uyandığınızda internete girmek ilk aklınıza gelen şey oldu mu?

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

14 Aileniz veya çevreniz sizin çok fazla internet kullandığınızdan endişeleniyor mu?

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

SON 1 HAFTA İÇİNDE aşağıdakilerin ne sıklıkta olduğunu belirtiniz

15 Ne sıklıkta aklınıza interneti kullanmak ya da internetin keyif verici etkisi geliyor? (örneğin: Günlük işlerinizi yaparken interneti düşünmek, internete girmeyi hayal etmek gibi)

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

16 Ne sıklıkta internet kullanmak için kuvvetli bir istek, arzu veya dürtü hissediyorsunuz? (Örneğin: internete girmek için sabırsızlanmak vb)

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

17 İnternet kullanmanın sizin için bir sorun olduğunu düşünüyor musunuz?

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

18 İnternete ayırdığınız süreyi azaltmayı düşünüyor musunuz?

☐ Hiçbir zaman ☐ Nadiren ☐ Bazen ☐ Çoğu zaman ☐ Neredeyse her zaman

**APPENDIX 7: ADDICTION PROFILE INDEX RISK SCREENING FORM
(APIRSF)**

APIRSF-ALCOHOL SCALE (APIRSF-A)

A1	Son altı ay içinde ne sıklıkta alkol kullandınız?	Hiç kullanmadım veya ayda 1-3 kereden fazla değil Haftada 1-5 kez Hemen hemen her gün	☐ 0 ☐ 1 ☐ 2
A2	Son altı ay içinde, alkol içtiğinizde bir günde nekadariçerdiniz? Ortalama olarak söyleyebilir misiniz? <i>Aşağıdakine göre günlük standart içki miktarınıhesaplayıp, yanıtı öyle yazınız</i> Bir kadeh şarap = Bir standart içki Yarım duble rakı veya votka veya cin veya viski vb= Birstandart içki Bir büyük kutu bira= 1,5 standart içki	Hiç veya 1-2 standart içkiyekadar 3-4 standart içki 5 standart içkiden fazla	☐ 0 ☐ 1 ☐ 2
A3	Son altı ay içinde, bir seferde (6 kadeh şarapveya 3duble rakı veya dört kutu büyük bira)veya daha fazla içme sıklığınız ne kadardır? Parantez içindekistandard içki cinsini daha önceki soruda verdiği yanıtı göre belirleyiniz.	Hiç veya aydabirden az Ayda 1-3 kez Haftada bir veya daha fazla	☐ 0 ☐ 1 ☐ 2
A4	Gündüz saatlerinde de alkol kullandığınız zamanlar oldu mu? Ne sıklıkla?	Hiçbir zaman Bazen Çok sık	☐ 0 ☐ 1 ☐ 2
A5	Aileniz veya çevreniz sizin çok fazla alkol kullandığınızdan endişeleniyor muydu? Nesıklıkla?	Hiçbir zaman Bazen Çok sık	☐ 0 ☐ 1 ☐ 2
A6	Alkol kullandığınız için aile ziyaretleri, hobiler,sosyalilişkiler gibi hayatınızdaki başka etkinliklerden vazgeçtiğiniz oldu mu?	Hiçbir zaman Bazen Çok sık	☐ 0 ☐ 1 ☐ 2

APIRSF-DRUG SCALE (APIRSF-D)

M1	Son bir yıl içinde ne sıklıkta [madde] kullandınız?	Hiçbir zaman	☐	0
		En az bir kez	☐	1
		Üçten fazla kez	☐	2
M2	[Maddeyi] kestiğinizde veya azalttığınızda bazılar sorunlar ortaya çıktı mı? (örneğin uykusuzluk, terleme, sinirlilik, huzursuzluk, titreme vb)	Hiçbir zaman	☐	0
		Bazen	☐	1
		Çok sık	☐	2
M3	[Madde] kullandığınız için hayatınızdaki başka etkinliklerden vazgeçtiğiniz oldu mu? (örneğin aile ziyaretleri, hobiler, sosyal ilişkiler vb)	Hiçbir zaman	☐	0
		Bazen	☐	1
		Çok sık	☐	2
M4	[Madde] kullanmak beden veya ruh sağlığınızı olumsuz yönde etkiledi mi?	Hiçbir zaman	☐	0
		Bazen	☐	1
		Çok sık	☐	2
M5	[Madde] kullanmanız, az sonra sayacağım yaşam alanlarından birisi üstünde olumsuz etkileri oldu mu? Aile ilişkilerinizde? Arkadaşlarınızla olan ilişkilerinizde? Eğitim hayatınızda? İş hayatınızda?	Hiçbir zaman	☐	0
		Bazen	☐	1
		Çok sık	☐	2
M6	Gündüz saatlerinde de [madde] kullandığınız oldu mu?	Hiçbir zaman	☐	0
		Bazen	☐	1
		Çok sık	☐	2
M7	Hayatınız boyunca hiç damar yoluyla bir madde kullandığınız oldu mu?	Hiçbir zaman	☐	0
		Bazen	☐	1
		Çok sık	☐	2

APPENDIX 8: SCALE USE PERMISSIONS MALADAPTIVE DAYDREAMING SCALE (MDS-16)

Barış Metin [redacted] şunları yazdı (12 Eki 2023 08:36):

Tabi kullanabilirsiniz ölçek yoksa gondereyim

Android için [Outlook](#) edinin



Prof. Dr. Barış Metin
[redacted]
[redacted]
[redacted]

From: Sena Karaloğlu [redacted]
Sent: Wednesday, October 11, 2023 6:06:53 PM
To: Barış Metin [redacted]
Subject: Ölçek Kullanım İzni

[Bu kullanıcından çok sık e-posta [redacted] Bunun neden önemli olduğunu öğrenmek için
[redacted]

Barış Hocam,

Merhabalar. Ben psikolog Fatma Sena Karaloğlu. Başkent Üniversitesi Klinik Psikoloji Tezli Yüksek Lisans programında öğrenciyim. Doç. Dr. Elvin Doğutepe Hocam ile yürüttüğümüz tez çalışmamızda izniniz olursa "Maladaptive Daydreaming" ölçeğini kullanmak istiyoruz. Şimdiden çok teşekkür ediyorum. İyi çalışmalar dilerim.

Saygılarımla,
Fatma Sena Karaloğlu

STROOP TEST TBAG FORM and WISCONSIN CARD SORTING TES

Merhaba,

Stroop Testi TBAG Formunu ve Wisconsin Kart Eşleme Testini tez çalışmanızda kullanabilirsiniz.

İyi günler dilerim

PROF. DR. SİREL KARAKAŞ
[redacted]
[redacted]

PROF. DR. SİREL KARAKAŞ
Doğuş Üniversitesi Psikoloji Bölümü, İstanbul

On Wed, Oct 11, 2023 at 5:47 PM Sena Karaloğlu [redacted] wrote:
Sirel Hocam,

Merhabalar. Ben psikolog Fatma Sena Karaloğlu. Başkent Üniversitesi Klinik Psikoloji Tezli Yüksek Lisans programında öğrenciyim. Doç. Dr. Elvin Doğutepe Hocam ile yürüttüğümüz tez çalışmamızda izniniz olursa Stroop Testi TBAG Formu'nu ve Wisconsin Kart Eşleme Testi'ni kullanmak istiyoruz. Şimdiden çok teşekkür ediyorum. İyi çalışmalar dilerim.

Saygılarımla,
Fatma Sena Karaloğlu

**ADDICTION PROFILE INDEX RISK SCREENING FORM (APIRSF) and
ADDICTION PROFILE INDEX INTERNET ADDICTION FORM (APIINT)**

Fwd: Sitenizdeki -Fatma Sena Karaloğlu- ziyaretçinizin size maili var!



Kultegin Ogel

12.10.2023 14:34

Kime:

Merhaba. Ölçekleri kullanabilirsiniz. Ölçeklere www.bapi.info.tr sitesinden ulaşabilirsiniz

Sent from my mobile device

İleti başlangıcı:

Kimden:

Tarih: 11 Ekim 2023 21:51:51 GMT+3

Kime:

Konu: Sitenizdeki -Fatma Sena Karaloğlu- ziyaretçinizin size maili var!

Kültegin Hocam, Merhabalar. Ben psikolog Fatma Sena Karaloğlu. Başkent Üniversitesi Klinik Psikoloji Tezli Yüksek Lisans programında öğrenciyim. Doç. Dr. Elvin Doğutepe Hocam ile yürüttüğümüz tez çalışmamızda izniniz olursa BAPİRT-Madde ve BAPİRT-Alkol ve BAPİNT ölçeklerini kullanmak istiyoruz. Şimdiden çok teşekkür ediyorum. İyi çalışmalar dilerim. Saygılarımla, Fatma Sena Karaloğlu

Gönderen Kişinin Mail Adresi

APPENDIX 9: ETHICS COMMITTEE APPROVAL

Evrak Tarih ve Sayısı: 30.01.2024-309317



T.C.
BAŞKENT ÜNİVERSİTESİ REKTÖRLÜĞÜ
Akademik Değerlendirme Koordinatörlüğü



Sayı : E-62310886-605-309317
Konu : Fatma Sena Karaloğlu'nun Etik Kurul
Onay Başvurusu Hk.

30.01.2024

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 26.12.2023 tarih ve 297709 sayılı yazınız.

Enstitünüz Psikoloji Ana Bilim Dalı öğretim üyesi Doç. Dr. Elvin Doğutepe danışmanlığında, Klinik Psikoloji (Tezli) Yüksek Lisans Programı öğrencisi Fatma Sena Karaloğlu tarafından yürütülecek olan, "Relationships Between Maladaptive Daydreaming, Addiction Tendency and Executive Functions" adlı çalışma değerlendirilmiş ve bilgilerinize ekte sunulmuştur.

Prof. Dr. Sadegül AKBABA ALTUN
Kurul Başkanı

Ek: Değerlendirme Formu

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Sayı : 17162298.600-12
Konu : Bilimsel Çalışma

22 Ocak 2024

İlgili Makama

Üniversitemiz Sosyal Bilimler Enstitüsü Psikoloji Ana Bilim Dalı öğretim üyesi Doç. Dr. Elvin Doğutepe danışmanlığında, Klinik Psikoloji (Tezli) Yüksek Lisans Programı öğrencisi Fatma Sena Karaloğlu tarafından yürütülecek olan, "Relationships Between Maladaptive Daydreaming, Addiction Tendency and Executive Functions" adlı çalışma değerlendirilmiş ve yapılmasında bir sakınca olmadığı tespit edilmiştir. Bilgilerinize saygılarımızla sunarız.

Başkent Üniversitesi Sosyal ve Beşeri Bilimler ve Sanat Alan Araştırma Kurulu

Ad, Soyad	Değerlendirme	İmza
Prof. Dr. Gözen Güner Aktaş	Olumlu/ Olumsuz	
Prof. Dr. Sadegül Akbaba Altun	Olumlu/ Olumsuz	
Prof. Dr. Fatih Çetin	Olumlu/ Olumsuz	
Prof. Dr. Hasan Tahsin Fendoğlu	Olumlu/Olumsuz	
Prof. Dr. Filiz Kalelioğlu	Olumlu/ Olumsuz	
Prof. Dr. Hidayet Hale Künuçen	Olumlu/Olumsuz	
Prof. Dr. Özcan Yağcı	Olumlu/ Olumsuz	

Bu belge,güvenli elektronik imza ile imzalanmıştır.

APPENDIX 10: REMINDER E-MAIL/MESSAGE

Değerli Katılımcı,

Bu e-posta XX.XX.XXXX tarihinde, XX:XX saatte ve Başkent Üniversitesi Bağlıca Kampüsü, Fen-Edebiyat Fakültesi, Psikoloji Bölümü B-403 dersliği konumundaki randevunuzu hatırlatmak için size gönderilmiştir. Lütfen katılamayacaksanız beni bilgilendiriniz.

İyi günler,

Psk. Fatma Sena Karaloğlu