YEDITEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES

UNDERGRADUATES' ATTACHMENT STYLES AND SOCIAL MEDIA ADDICTION: THE MEDIATING ROLE OF EMOTION REGULATION DIFFICULTIES

Ahu Gök

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ABSTRACT

UNDERGRADUATES' ATTACHMENT STYLES AND SOCIAL MEDIA ADDICTION: THE MEDIATING ROLE OF EMOTION REGULATION DIFFICULTIES

In this study, attachment styles, emotion regulation (ER) difficulty and social media addiction (SMA) scores of undergraduate students living in Turkey were investigated. The main goal of the study was to examine how ER difficulties mediate the connection between attachment styles and SMA. It also aimed to explore the effect of sociodemographic characteristics on study variables. The research sample group consisted of 395 (292 female, 103 male) undergraduates between the ages of 18-25. Data were collected through online forms. The participants filled out the Demographic Information Form, Three-Dimensional Attachment Scale, Difficulties in Emotion Regulation Scale-Short Form, and Social Media Addiction Scale, respectively.

The results showed that as secure attachment scores increased, both ER difficulty and SMA scores decreased, and as avoidant and anxious attachment scores increased, both ER difficulty and SMA scores increased. It was found that as the ER difficulty scores increased, the SMA scores also increased. According to mediation analyses, ER difficulty mediated the relationships between all subscales of attachment styles and SMA. The analyses of socio-demographic variables revealed that while there were no significant differences in secure and anxious attachment concerning gender as opposed to avoidant attachment, ER difficulties, and SMA scores. When the undergraduates' ages, grade levels, and perceived economic status were examined, there were no significant differences in the study variables' scores. Considering whether the undergraduates have a diagnosed psychiatric or psychological disorder, the levels of ER difficulties and SMA showed a significant difference, while none of the attachment styles did. Finally, there was a significant difference in all variables except secure attachment in terms of the duration of daily social media platform usage.

The results provided support to the literature on the mechanisms underlying undergraduate students' social media addiction, such as attachment styles and emotion

regulation difficulties. It has been suggested that anxious and avoidant attachment and difficulty in ER may be risk factors for SMA, while having secure attachment and ER skills may be protective factors among undergraduates.

Keywords: Attachment styles, secure attachment, avoidant attachment, anxious attachment, difficulties in emotion regulation, social media addiction

ÖZET

ÜNİVERSİTE ÖĞRENCİLERİNİN BAĞLANMA STİLLERİ İLE SOSYAL MEDYA BAĞIMLILIĞI: DUYGU DÜZENLEME GÜÇLÜĞÜNÜN ARACI ROLÜ

Bu çalışmada Türkiye'de yaşayan üniversite öğrencilerinin bağlanma stilleri, duygu düzenleme güçlüğü ve sosyal medya bağımlılığı puanları araştırılmıştır. Araştırmanın temel amacı duygu düzenleme zorluklarının bağlanma stilleri ile sosyal medya bağımlılığı arasındaki bağlantıya nasıl aracılık ettiğini incelemek, ek olarak sosyodemografik özelliklerin çalışma değişkenleri üzerindeki etkisini incelemektir. Araştırmanın örneklem grubunu 18-25 yaş aralığındaki 395 (292 kadın, 103 erkek) üniversite öğrencisi oluşturmuştur. Veriler çevrimiçi formlar aracılığıyla toplanmıştır. Katılımcılar sırasıyla Demografik Bilgi Formu, Üç Boyutlu Bağlanma Ölçeği, Duygu Düzenleme Güçlükleri Ölçeği-Kısa Formu ve Sosyal Medya Bağımlılığı Ölçeği'ni doldurmuştur.

Bulgular, güvenli bağlanma stili puanları arttıkça hem duygu düzenleme güçlüğü hem de sosyal medya bağımlılığı puanlarının azaldığını, kaçıngan ve kaygılı bağlanma stili puanları arttıkça hem duygu düzenleme güçlükleri hem de sosyal medya bağımlılığı puanlarının arttığını göstermiştir. Duygu düzenleme güçlüğü puanları arttıkça sosyal medya bağımlılığı puanlarının da arttığı tespit edilmiştir. Aracılık analizlerine göre duygu düzenleme güçlüğünün, bağlanma stillerinin tüm alt boyutları ile sosyal medya bağımlılığı arasındaki ilişkide aracılık rolü olduğu bulunmuştur. Üniversite öğrencilerinin sosyo-demografik bilgileri incelendiğinde, güvenli ve kaygılı bağlanmada cinsiyete göre anlamlı bir farklılık bulunmazken, kaçıngan bağlanma, duygu düzenleme güçlüğü ve sosyal medya bağımlılığı düzeylerinde anlamlı farklılıklar olduğu ortaya çıkmıştır. Lisans öğrencilerinin yaşları, sınıf düzeyleri ve algılanan ekonomik düzeyleri incelendiğinde, çalışma değişkenlerinin puanlarında anlamlı bir farklılık görülmemiştir. Üniversite öğrencilerinin psikiyatrik ya da psikolojik bozukluk tanısı olup olmadığı dikkate alındığında, duygu düzenleme güçlüğü ve sosyal medya bağımlılığı düzeyleri anlamlı farklılık gösterirken, bağlanma stillerinden hiçbirinde farklılık görülmemiştir. Son olarak günlük sosyal medya platformu kullanım süresine göre güvenli bağlanma dışındaki tüm değişkenlerde anlamlı farklılık bulunmuştur.

Bulgular, üniversite öğrencilerinin sosyal medya bağımlılığının altında yatan mekanizmalar (bağlanma stilleri ve duygu düzenleme güçlükleri gibi) hakkında literatüre destek sağlamıştır. Üniversite öğrencileri arasında kaygılı ve kaçıngan bağlanma stilinin ve duygu düzenleme güçlüğünün sosyal medya bağımlılığı için risk faktörleri olabileceği, güvenli bağlanma ve duygu düzenleme becerilerine sahip olmanın ise koruyucu faktörler olabileceği düşünülmektedir.

Anahtar Kelimeler: Bağlanma stilleri, güvenli bağlanma, kaçıngan bağlanma, kaygılı bağlanma, duygu düzenleme güçlüğü, sosyal medya bağımlılığı,

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

In this section, research problem, the purpose, importance, assumptions, and limitations of the research were mentioned. Also, definitions of the study variables (attachment styles, emotion regulation difficulties, and social media addiction) were provided.

1.1. Research Problem

Nowadays, the internet has become a technological force that has greatly changed the lives of individuals. Smartphones, tablets, laptops, smart televisions, wearable devices, and many other technological products have transformed our lives by facilitating our daily activities, strengthening our communication, enabling our fast and broad access to information, and increasing our access to entertainment. Social media (SM) is a product of technology, and the internet provides the infrastructure that makes its existence and interaction possible (Carr & Hayes, 2015). In October 2024, the total number of internet users worldwide reached 5.35 billion, representing 66.2 percent of the total population (Petrosyan, 2024). According to the data of the Turkish Statistical Institute (2023), in 2022, 85% of individuals aged 16 to 74 used the Internet, and this percentage rose to 87.11% in 2023. While the global daily average duration of Internet usage among individuals aged 16 to 64 lasted for 6 hours and 37 minutes (Kemp, 2023), this timeframe extended to 7 hours and 24 minutes in Turkey (Kara, 2023). When the internet usage rate was classified concerning age, it demonstrated that the age group that used the internet the most in 2024 was 16–24 years old (Kara, 2024).

Increasing internet usage with the ongoing development of technology has made SM constantly accessible to individuals. SM platforms have become thoroughly ingrained in our daily routines, serving a wide range of functions such as facilitating social connections, procuring emotional support, presenting daily news, assisting with work-related tasks, informing about the latest fashion trends, keeping up to date, offering entertainment, providing products, services, and places evaluations (Kapoor et al., 2018). As of January 2024, 5.04 billion individuals among worldwide internet users were actively using SM, which accounted for 62.3 percent of the world's population (Petrosyan, 2024). The figure is estimated to grow close to 6 billion by 2027 (Dixon, 2023). Looking at the data in Turkey,

57.50 million, or 66.8 percent of Turkey's total population, were using SM (Kara, 2024). Social media use (SMU) in Turkey has experienced consistent growth, drawing in more users each year. As per the Statista Digital Market Outlook, the Turkish SM user base is projected to surpass 76 million by 2027 (Dierks, 2024). Although daily SM platform usage duration worldwide is 2 hours and 31 minutes among individuals aged 16 to 64, this duration has expanded to 2 hours and 54 minutes in Turkey (Kara, 2023). In light of this information, it can be said that SM has evolved into a habitual and essential aspect of daily existence.

In the literature, there are various definitions and characteristics associated with SM. Carr and Hayes (2015) asserted that, despite numerous descriptions, there is an absence of a precise and universally agreed-upon definition for SM. The commonality among definitions is that they emphasize the interaction maintained between individuals worldwide (Carr & Hayes, 2015). Besides, the researchers investigated the basic reasons why individuals utilize SM very frequently in their lives. Around the world, the main reason was to keep in touch with friends. Yet, the three primary reasons why individuals use SM in Turkey were staying informed about current events and maintaining connections with loved ones, and filling their spare time, respectively (Kara, 2023).

Current studies indicated that SM was predominantly utilized by young individuals (Dailey et al., 2020; Tutgun-Unal & Deniz, 2015; Vural & Bat, 2010). The young generation, called "My Media Generation", stands out with its desire to create their own world. Young people are quickly adopting and integrating free media tools into their lives that help them communicate, share their experiences, and shape their personalities. Especially university youth, who have various social opportunities, can make use of these opportunities as they wish (Tutgun-Unal & Deniz, 2015; Vural & Bat, 2010).

Young adulthood represents a critical period of biological, psychological, and social changes and personality development. Although scientists have different opinions about developmental periods, this period generally falls between the ages of 18-26 (Institute of Medicine & National Research Council, 2015). In this age range, university life begins, the personality structure begins to take shape, social responsibilities and roles change, and important experiences are gained in terms of close relationships (Aktu, 2016). Hence, it is crucial to analyze the SMU, emotional skills, and attachment styles that shape their relationship patterns with other people, of university students going through the phase of young adulthood.

Recent studies have addressed the fact that most of the SM use by young people is exaggerated (Hazar, 2011; Tutgun-Unal & Deniz, 2015). And in the literature, concerns have been expressed about this excessive use, especially regarding the likelihood of their acquiring an addiction (Andreassen, 2015; Kuss et al., 2014; Tutgun-Unal & Deniz, 2015). A study revealed that 47% of college students were experiencing social media addiction, as indicated by Mahamid and Berte in 2019. Additionally, according to research by Greenwood et al. (2016), 76% of Internet users visit Facebook daily, with around 55% visiting multiple times a day (as cited in Allahverdi, 2022). About 20% of YouTube users consider themselves compulsive users (Allahverdi, 2022).

Although research on addiction generally has concentrated on substance dependence, there has been a growing interest in behavioral addictions that do not involve substances in the last two decades (Estévez et al., 2017). Research on the phenomenon of social media addiction (SMA) are relatively young, with initial research emerging post-2010 (Allen et al., 2014; Van Den Eijnden et al., 2016). SMA is not encompassed within the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Statistical Classification of Diseases and Related Health Problems (ICD). Nevertheless, some researchers acknowledge its existence and believe that the absence of a precise explanation obstructs its research progress (Allahverdi, 2022; Van Den Eijnden et al., 2016). According to Eichenberg et al. (2024), this gap underscored the need to conduct more extensive research and gain deeper insights.

People do not seem to be dependent on the internet as a whole, but rather on particular online behaviors (the most compellingly associated activities are gaming and SM use (Griffiths & Szabo, 2014). The confusion both in terms of the scales and terms used for social media addiction has been observed in the relevant domain. For example, the domain of SMA is characterized by numerous assessment tools targeting specific manifestations of compulsive social media usage, most commonly including Facebook addiction, followed by Twitter addiction, social networking site use, and microblogging dependence (Van Den Eijnden et al., 2016). Also, social media applications are not limited to Facebook, and a person can develop an addiction to many SM platforms simultaneously (Aygar & Uzun, 2018). Van Den Eijnden et al. (2016) noted that due to the rapid changes in SM platforms, tools targeting them can easily become outdated, and they stress the importance of utilizing scales in social media research that assess general addiction to social media as a whole, rather than focusing on addiction to particular platforms. On the other hand, there are different

terms used by researchers in the field, such as “problematic social media use” or “compulsive social media use”. Yet “social media addiction (SMA)” is the most frequently preferred and appropriate expression to denote behavioral dependence on SM. The reason for this is the degree of control over SMU and its impact on a person's daily activities, rather than the quantity or type of SMU (Allahverdi, 2022). According to Andreassen (2015), this compulsive use of SM is most appropriately comprehended through the lens of addiction. Finally, the etiology of SMA shares common ground with numerous biopsychosocial factors involved in the etiology of other addictions (Kuss & Griffiths, 2011).

By definition, social media addiction (SMA) is defined by individuals' too much preoccupation with social media (Andreassen, 2015), lack of control over their SMU (Allen et al., 2014), a forceful drive to log in or participate in social networking (Andreassen & Pallesen, 2014), and expending a substantial amount of time and energy on SM to the point that it hinders various elements of life (Demircioglu & Kose, 2020). Although SM has been attached with benefits that make life easier, it can lead to disruptions in life satisfaction (Hawi & Samaha, 2017), academic or professional performance (Zivnuska et al., 2019), psychological well-being, social functioning, interpersonal relationships, etc. (Allen et al., 2014; Andreassen, 2015; Andreassen & Pallesen, 2014; Demircioglu & Kose, 2020). The addictive SMU increases the rate of incidence of depression (Koc & Gulyagci, 2013), long-term anxiety, feelings of loneliness, attention deficit disorder, and lower self-esteem (Van Den Eijnden et al., 2016).

Researchers have established several theoretical theories pertaining to SMA. Within the scope of this study, attachment styles considered a crucial factor in comprehending SMA, are closely examined. Attachment refers to the emotional bond formed as a result of an infant's initial and significant relationship with a caregiver (Bowlby, 1988). According to Bowlby, in human life, there are three fundamental purposes of attachment: being a safety haven while exploring the world, meeting physical needs, and providing the opportunity to develop a sense of security in life (Tuzun & Sayar, 2006). The caregiver's emotional availability and the belief that the infant deserves love and care contribute significantly to shaping the infant's attachment style (Ainsworth et al., 2015; Demircioglu & Kose, 2020). Bowlby based this situation on the principle he called the “internal working model” (the model of others and the model of self). At every stage of development, the infant needs to form a strong tie with a consistent and reliable caregiver to protect against internal changes and external stimuli. Attachment, in essence, is crucial for survival. The caregiver's early

interactions with the infant form the basis of the infant's personality and psychological development, including the capacity to cope with emotions (Bowlby, 1982).

Although the pioneer of attachment theory is known as Bowlby (1958), since the early times when it emerged, various studies have been conducted on its development, and various models have emerged in this process. Harlow revealed that the caregiver not only meets the infant's basic needs in the early period but also provides him/her comfort, warmth, and compassion, and all of them affect the infant's social relationships established in the future (D'Arienzo et al., 2019). The research conducted by Ainsworth et al. (2015), in which they constructed the attachment theory as a three-dimensional model (secure, avoidant, anxious-ambivalent,) is noteworthy. Main and Solomon added the fourth style, "disorganized", in 1990. Hazan and Shaver (1994), based on the Ainsworth model, emphasized that forming attachment styles is a lifelong process. Even if attachment orientations play a crucial impact during childhood, it is also possible to observe extensions of these styles in adulthood. These styles shape an individual's pattern of relating and lay the foundation for their intimate and romantic relationships in adult life (Tuzun & Sayar, 2006). Also, this contribution of theoreticians to the field paved the way for other studies. Bartholomew and Horowitz (1991) suggested that the key factor in elucidating adult attachment behavior is the individual's perspectives, which are centered on themselves and others, based on Bowlby's internal working model. The researchers introduced four attachment styles: secure attachment (positive assessment of self and others), dismissing attachment (perceiving self positively and others negatively), preoccupied attachment (perceiving self negatively and others positively), and fearful attachment (negative assessment of self and others) (Bartholomew & Horowitz, 1991).

In a clinical context, the proposal has been made that the theory of attachment may help elucidate the emergence of dependency behaviors (Bayraktar & Celik, 2023; Demircioglu & Kose, 2020; Estévez et al., 2017; Hart et al., 2015; Liese et al., 2020; Liu & Ma, 2019b; Mikulincer & Shaver, 2016; Wilke et al., 2020; Worsley et al., 2018; Yousaf et al., 2021). Flores (2004) presents the idea that addiction can be viewed as an attempt at self-regulation and characterized as a form of attachment disorder. According to Flores (2004), individuals who have been nurtured with weak and insecure infant-parent attachment are more likely to develop patterns of addictive behavior. This implies that addiction, particularly SMA, may have its roots in a lack of secure attachment to a primary caregiver during early infancy or childhood (D'Arienzo et al., 2019). Likewise, additional

investigations have indicated that persons who are raised in families with more secure and stronger parental bonding are inclined to engage in less risky behaviors than others (D'Arienzo et al., 2019; Estévez et al., 2017; Senormancı et al., 2014).

Experiences with a primary caregiver may impact the sufficiency of the child to build healthy interactions, develop a healthy sense of self, and regulate emotions later in life. An experience of deprivation in these conditions leads individuals to seek an external object that can fill the gap within them (D'Arienzo et al., 2019; Taluy, 2021). In this context, Kohut's "self-object needs theory" (1971) provides a framework for understanding addiction as a reflection of basic psychological needs not being met in a healthy way. From this perspective, if an individual is neglected, does not receive emotional support, or develops an unfavorable self-perception due to adverse interpersonal experiences during early development, this deficiency may be tried to be satisfied elsewhere: through the use of substances such as drugs or alcohol, engaging in activities like SMU, or anything else that aids in alleviating the sense of emptiness (D'Arienzo et al., 2019; Estévez et al., 2017; Flores, 2004).

Within the relevant literature, research that illustrates the impact of attachment patterns on internet addiction in a broader sense, more particularly on SMA has been encountered. Individuals engage with SM in various ways based on the style of attachment they have (D'Arienzo et al., 2019). From a lifespan viewpoint, this study builds upon and expands prior significant research that has explored the link between attachment patterns and SMA.

Securely attached individuals can establish healthy social relationships, deal with problems effectively, and have positive self-perception, emotional balance, and a sense of trust in their interactions with others (Yousaf et al., 2021). Research in the subject area suggested that persons who securely attached prone to utilize SM more positively and hence are at a lower risk of developing SMA opposed to those with other attachment types (Monacis et al., 2017b; Taluy, 2021).

On the other hand, the opposite of these findings is observed in insecurely attached individuals. Individuals with a highly anxious or preoccupied attachment pattern may constantly need the approval of others and reassurance (Blackwell et al., 2017). They desire closeness and emotional intimacy but may also have difficulty trusting them (Remondi et al., 2020). Given the difficulty they face in maintain the essential close relationships in the physical realm, individuals attempt to fulfill this need through SM platforms (Worsley et al.,

2018). These individuals struggle to manage negative emotions, thus they turn to SM as a means of relaxation (Remondi et al., 2020). SM tools can aid these individuals by allowing them additional time to consider their thoughts carefully and get over uncomfortable pauses that might arise during face-to-face conversations (Blackwell et al., 2017). In fact, this way they can control their self-presentation and it may make it easier for them to handle or manage the experience of being rejected (Jenkins-Guarnieri et al., 2012; Taluy, 2021). The common opinion of researchers in studies conducted in this field was that attachment anxiety was positively and significantly associated with SMA and contributed to the evolution and maintenance of SMA (Blackwell et al., 2017; Demircioglu & Kose, 2020; Liu & Ma, 2019b; Taluy, 2021; Worsley et al., 2018).

Individuals with an avoidant-dismissive attachment type have doubts about closeness and emotional connection and attach importance to independence and freedom. They think they don't need anyone else, and they don't trust others. So, they are not interested in developing and maintaining interpersonal relationships (Taluy, 2021). Research has shown that individuals exhibiting attachment avoidance typically demonstrate a tendency to have less problematic SM usage as compared to those with an anxious attachment style (Lin, 2015; Liu & Ma, 2019b; Worsley et al., 2018). It could be assumed that they might avoid SMU considering their tendency toward social withdrawal (Liu & Ma, 2019b; Worsley et al., 2018). Despite this information, there are also studies mentioning avoidant attachment style positively predicted SMA (Blackwell et al., 2017; Monacis et al., 2017b). When viewed from the addiction perspective, it has been proposed that individuals who have an avoidant-dismissive orientation that a type of insecure attachment styles face addiction as a way of handling the complications in social relationships. Since SM allows them to keep their social relationships in their lives from a certain distance (Taluy, 2021). Findings from earlier research about the predictive role of avoidant attachment style for SMA are complicated, so further research is needed (Demircioglu & Kose, 2020; Liu & Ma, 2019b; Remondi et al., 2020). Future investigations should prioritize exploring the connection between avoidant attachment style and SMU, as some of the measured coefficients neared statistically significant values (D'Arienzo et al., 2019).

Another variable examined is difficulties in emotion regulation (ER) which is considered as a factor associated with individuals' SMA levels. ER involves both extrinsic and intrinsic processes that observe, assess, and alter emotional responses, particularly in terms of their intensity and duration, to achieve one's objectives (Thompson, 1994). As

mentioned by Thompson (1994), there is no singular definition for the term emotion regulation. Additionally, it is a matter of concern that definitions of ER in the empirical literature predominantly focus on minimizing negative emotions. On the contrary, most theoretical perspectives on emotion regulation emphasize that positive emotions, as well as negative emotions, are involved in the ER process and that the aim of the ER process is to modulate feelings (minimize, maximize, mask, or dissemble), not just minimize (Bridges et al., 2004; Gratz & Roemer, 2004). According to Gross (1998), individuals' efforts towards increasing or decreasing positive or negative emotions, consciously or unconsciously, at any phase of the emotion formation process are called emotion regulation.

Difficulties in ER mean deficits in recognizing, comprehending, and accepting emotions. Specifically, it includes the lack of capacity to manage impulsive actions, to act accordingly with intended objectives during the existence of adverse feelings, and to employ contextually suitable ER mechanisms to modulate emotional reactions (Gratz & Roemer, 2004). In addition, difficulties in ER are a phenomenon that is considered a common risk factor for many clinical disorders (Gratz & Roemer, 2004; Gross & Muñoz, 1995).

The addiction components model introduced by Griffiths in 2005 consists of six criteria, and one of them is mood modification. Mood modification takes place when an individual uses substance or participates in activities to alter their emotional state (Griffiths, 2005). Several studies have indicated that adults facing ER difficulties resort to dependency behaviors as a means of escaping or modulating negative affective states (Aldao et al., 2010; Estévez et al., 2017). Essentially, many individuals struggling with addiction employs substances or behaviors as a coping strategy, but it is hypothesized as a maladaptive coping strategy (Griffiths, 2005; Liese et al., 2020). Thus, clinicians and scholars commonly regard addiction as a striving for self-regulation or self-soothing, and individuals with addiction are identified by their unsuccessful efforts in self-repair (Flores, 2004). According to Marino et al. (2023), emotion dysregulation can be related to problematic social networking site use (PSNU), but investigation of this relationship is currently lacking. Also, the clarifying of the relationship between these variables could help identify key psychological aspects for consideration in developing online behavior prevention programs and interventions (Marino et al., 2023).

People acquire the ability to manage negative emotions and anxiety in challenging and dangerous situations at early ages via their early experiences with their primary caregivers. Emotional self-regulation derives from this learning process (Estévez et al.,

2017; Field, 1994). To put it another way, parental figures' existence and reactions within the context of attachment lay the foundations of ER (Mikulincer et al., 2003; Morris et al., 2007). In essence, infants whose systems to regulate emotions independently have not yet developed can regulate their emotions with parental support and learn to regulate their emotions independently with this experience. As predicted, factors such as inconsistent and inadequate care of parents negatively affect ER skills (Gee, 2016). A comprehensive evaluation of numerous studies that investigated the association between attachment and difficulties in ER deduced that secure attachment style consistently correlated with higher ER capabilities compared to insecure attachment style (Pallini et al., 2018). Waters et al. (2010), in their study examining the predictors of young children's avoidance of talking to their mothers about events that create negative emotions, concluded that children who were insecurely attached and whose emotions were ignored exhibited more avoidance behaviors than children who were securely attached and whose emotions were validated.

Though there was abundant research exploring attachment types and their impact on SMA, there were not many studies revealing whether the relationship between these variables is affected by the presence of ER difficulties. Ozmen and Senay Guzel (2022) stressed that future studies on SMA should take into account the correlation between attachment styles and ER. As difficulties in ER are a fundamental developmental process that can be impacted by attachment styles, difficulties in ER could serve as a potential psychological mechanism linking attachment style to SMA. Therefore, this study aimed to highlight the interactions among these mentioned variables and examine the potential mediating influence of ER difficulties. It appears this model is untested in Turkey, based on our current knowledge. Moreover, according to Kuss and Griffith (2011), there are cultural differences in SMU patterns, examining and comparing SMA across various cultures seems essential to identify both commonalities and discrepancies. Consequently, the research problem question of the present study can be summarized as: “Is the relation between young adults’ attachment styles and social media addictions mediated by difficulties in emotion regulation?”

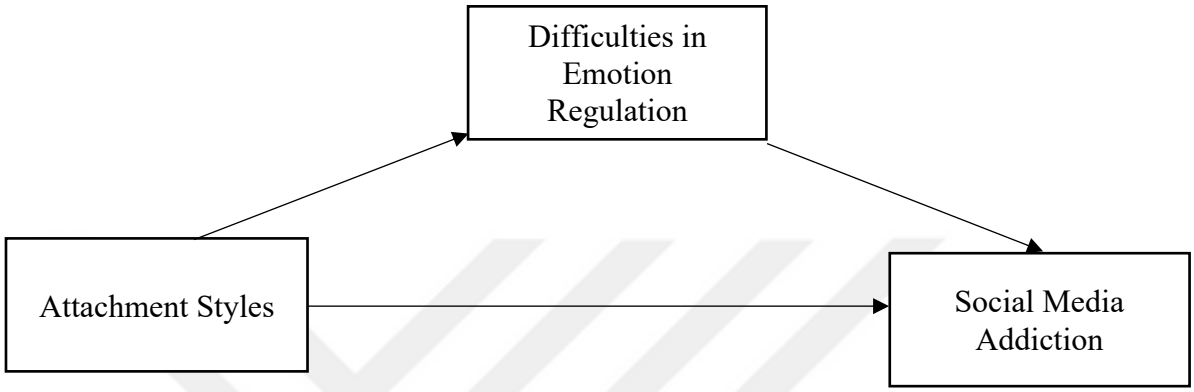
1.2. The Purpose of the Research

The primary objective of this study is to explore whether emotion regulation difficulties have a mediating role in the relationship between attachment styles and social

media addiction among undergraduate students aged 18 to 25 living in Turkey. Figure 1 displays the model that has been proposed.

Figure 1

Hypothesized mediation model (Hayes, 2018, Model 4)



Based on this major purpose, below are the sub-questions for the study:

H1: Are there meaningful relationships among undergraduates' attachment styles, social media addiction, and difficulties in emotion regulation?

H2: Is the relationship between undergraduates' attachment styles and social media addictions mediated by difficulties in emotion regulation?

H3: Do undergraduates' attachment styles, difficulties in emotional regulation, and social media addiction levels differ significantly in terms of gender?

H4: Do undergraduates' attachment styles, difficulties in emotional regulation, and social media addiction levels differ significantly based on age?

H5: Do undergraduates' attachment styles, difficulties in emotional regulation, and social media addiction levels differ significantly regarding grade levels?

H6: Do undergraduates' attachment styles, difficulties in emotional regulation, and social media addiction levels differ significantly depending on the presence of a diagnosed psychiatric or psychological disorder?

H7: Do undergraduates' attachment styles, difficulties in emotional regulation, and social media addiction levels differ significantly in terms of perceived economic status?

H8: Do undergraduates' attachment styles, difficulties in emotional regulation, and social media addiction levels differ significantly regarding the average daily time spent on social media platforms?

1.3. The Importance of the Research

Looking at the data in 2024, the ages between 16 and 24 were determined to be the age range that uses the internet the most (Kara, 2024). 57.50 million people in Turkey are social media (SM) users (Kara, 2024), and their amount is expected to exceed 76 million in 2027 due to steady growth (Dierks, 2024). Even, recent data showed that the biggest goal of internet usage for most teenagers and young adults is to gain entry to SM sites (Dierks, 2024). Internet users in Turkey spend an average of two hours and fifty-four minutes per day on SM platforms (Kara, 2023). One of the most significant reasons that raise worries about the potential for social media addiction (SMA) is the growing incorporation of SM into the daily lives of individuals, particularly the young age group. Apart from the advantages that come from SM, some people have faced SMA, which is linked to issues with functioning in various aspects of their lives. Mahamid and Berte (2009) reported that 47% of college students were suffering from SMA (as cited in Allahverdi, 2022). Therefore, this study investigated university students between the ages of 18 and 25. Also, based on the research conducted by Kuss and Griffith (2011), it is crucial to analyze and compare SMA in different cultures in order to uncover both similarities and variations, as there are distinct patterns of SMU influenced by cultural factors.

Furthermore, most of the research on SMU and SMA has often focused on a single SM platform (Facebook), and it is often observed that they evaluate this variable with the "Facebook Intensity Scale". SM applications are not confined solely to Facebook; individuals may become dependent on numerous distinct SM platforms (Aygar & Uzun, 2018). Researchers advocate for the utilization of scales measuring general SMA, rather than focusing on specific platforms, by highlighting the rapid evolution of SM tools (Van Den Eijnden et al., 2016).

Despite a fair amount of study on the impacts of SMA, there are rarer studies that have thoroughly examined its predictive factors (Demircioglu & Kose, 2020). According to studies in the literature supporting the idea that attachment theory offers a solid framework for analyzing SM behaviors, individuals raised in families characterized by weaker and more insecure parental bonds tend to participate in higher risky behaviors compared to those raised in families characterized by stronger and more secure parental bonds (D'Arienzo et al., 2019; Estévez et al., 2017; Senormancı et al., 2014). Based on the conducted studies, those who have an insecure attachment orientation are more susceptible to excessive usage of SM

platforms and have a higher propensity to develop addiction compared to those with a secure attachment orientation (D'Arienzo et al., 2019; Demircioglu & Kose, 2020; Hart et al., 2015; Monacis et al., 2017b). However, whereas certain studies within the current study literature have examined the relationship between SMA and avoidant attachment style, which is a subset of insecure attachment type, and have found consistent outcomes, other studies have yielded contrasting findings. This study builds upon and broadens previous important research that has examined the correlation between attachment types and SMA.

According to Liu and Ma (2019b) and Liese et al. (2020), despite the ongoing research illuminating the link between attachment orientations and SMA the mechanism underlying this relationship remains elusive. Flores (2004) suggests that addiction can be interpreted as an endeavor in self-regulation and described as a manifestation of attachment disorder. Attachment theory has pointed out that individuals with insecure attachment styles struggle with emotion regulation (ER). As a dysfunctional coping technique, they turn to addictive activities (such as SMU) to escape their distressing feelings (Griffiths, 2005; Monacis et al., 2017). Therefore, despite the abundance of investigation on attachment styles and their impact on SMA, very few studies have been encountered examining attachment styles, SMA, and ER difficulties.

Liese et al. (2020) revealed that while attachment styles tend to show resistance to change, research has shown that emotion dysregulation can be modified and may serve as a possible focus in treating substance use disorders and certain behavioral addictions in individuals with insecure attachment. Therefore, it would be important to focus on this issue by providing clinical psychologists, educational psychologists, and psychological counselors with pivotal information about how to cope with SMA, and how to help clients struggling with that problem. Ultimately, the present research is critical because it will shed light on the current state of addiction and guide mental health professionals in determining the necessary precautions for those with SMA.

1.4. The Assumptions of the Research

The results of this study relied on certain assumptions:

1. It was supposed that the study group represented the research population.

2. It was postulated that the research's data collection tools were appropriate for the research objectives and comprised the conditions of validity and reliability.
3. It was presumed that the participants engaged in the research responded truthfully and genuinely to the scales.
4. It was assumed that the statistical methods applied in the research aligned with the study's variables and the conducted analyses.

1.5. The Limitations of the Research

This study has certain constraints regarding the sample, geographical region, time, and measurement instruments. The limitations of the research are elaborated upon below:

1. In terms of sample and geographical region, the sample of this study is restricted to undergraduates aged 18-25 living in Turkey.
2. In terms of time, the research is limited to the university students studying in the 2023-2024 academic year.
3. In terms of the measurement tools employed in gathering research data, the study is restricted to the attributes measured by the Demographic Information Form, the Three-dimensional Attachment Style Scale, the Difficulties in Emotion Regulation Scale (DERS), and the Social Media Addiction Scale (SMAS).

1.6. Definitions

1.6.1. Attachment Styles

Attachment is described as the emotional bond that is formed due to the initial and invaluable relationship established within a caregiver during an infant's early stages (Bowlby, 1988). The quality of the interactions shapes the individual's attachment style, influencing mental working models that structure cognitions, emotions, and behaviors in subsequent relationships; emotional regulation; and self-image (Bowlby, 1982; Mikulincer, 1995). Basic attachment styles are generally classified as secure, anxious, and avoidant.

1.6.1.1. Secure Attachment Style

Secure attachment is generally based on safe and supportive relationships with caregivers during infancy and childhood. Securely attached individuals rely on the presence of their attachment figures when they need them and seek their help when necessary. They also develop a sense of comfort, trust, closeness, and satisfaction in relationships. Secure attachment has been associated with positive outcomes in establishing healthy relationships, developing emotional security, and coping with problems (Mikulincer, 1995).

1.6.1.2. Insecure-Avoidant Attachment Style

The avoidant-dismissive attachment style is defined by high caution about emotional intimacy rather than desiring closeness. They do not feel that they need others, they tend to be independent and emotionally distant (Mikulincer, 1995; Taluy, 2021).

1.6.1.3. Insecure-Anxious Attachment Style

The anxious-ambivalent attachment style is identified by a deep longing for emotional intimacy coupled with worry about how others will respond to this longing and a fear of rejection (Mikulincer, 1995; Remondi et al., 2020).

1.6.2. Difficulties in Emotion Regulation (ER)

ER refers to the efforts made by people to down or up negative or positive affects in an explicit (aware) or implicit (unconscious) way, internally (their own emotions) or externally (the emotions of others) to influence their feelings (Gross, 1998). ER difficulties denote inadequacy in identifying, perceiving, and acknowledging emotions, volunteering to encounter emotional challenges while pursuing the goal, behaving in alignment with intended goals in the face of these negative feelings, and seeking contextually effective strategies to adjust emotional responses (Gratz & Roemer, 2004).

1.6.3. Social Media Addiction (SMA)

Social media addiction (SMA) is defined by excessive and uncontrolled participation in SM platforms, a strong motivation to access them, and dedicating substantial amounts of effort and spare time to their use. In addition, this condition is characterized by symptoms such as online interactions negatively affecting real-world relationships, real-life activities, relationships, responsibilities, and generally the individual psychologically and socially

(Allen et al., 2014; Andreassen, 2015; Andreassen & Pallesen, 2014; Demircioglu & Kose, 2020; Tutgun-Unal & Deniz, 2015).

2. LITERATURE REVIEW

In this section, the theoretical framework concerning the study variables (attachment styles, emotion regulation difficulties and social media addiction) of the current research were explored. Following the theoretical framework, the existing research conducted on the relevant variables were reviewed.

2.1. Attachment Styles

In the 1960s, the attachment theory conceptualized by Bowlby still maintains its significance and effectiveness today. The attachment theory, while being a diverse blend of various developmental disciplines, is rooted in Freudian analytic principles (Tuzun & Sayar, 2006). Bowlby (1982) defined attachment as the close bond formed between the infant and the primary caregiver during early childhood and stated that it is one of the vital requirements for safe and healthy development. The caregiver, usually the mother, who is a safety haven for the infant, forms the basis of the process of exploring the outside world, trying new things, and establishing healthy bonds with the people around one (Tuzun & Sayar, 2006). This is the basic point of the attachment theory. Bowlby (1982) states that the established attachment is not solely based on the need for survival, but rather on the emotional accessibility of the caregiver and the infants' perception of their own deserving care and love. When the infant feels in danger or under stress, it is extremely important for the infant's attachment pattern that the primary caregiver is present and understands the signals given by the infant, empathizes with the one and gives appropriate reactions (Taluy, 2021). All of these are factors that determine the infant's attachment styles and carry permanent scars. Therefore, the attachment patterns formed during the early period provide signals about how individuals will exist in their future relationships. Additionally, it has been emphasized that attachment patterns can actively persist throughout a person's entire life (Bowlby, 1988).

2.1.1. Bowlby and Internal Working Model

Bowlby (1982) proposed that attachment theory encompasses a cognitive dimension. According to him, infants develop an internal working model. This model can be considered as a mental representation of the infant's relationship with its primary caregiver. The

internalization of mental representations formed as a result of this bond that the infant establishes with its caregiver will play a major role in how individuals will exist in their future relationships (i.e., friendships, working, and romantic relationships). Because an individual's internal working model carries forward childhood attachment patterns into adolescence and adulthood throughout their life cycle (Holmes, 2004). What's more, the internal working models of attachment have a considerable impact on various aspects of human behavior, including social cognition, emotional regulation, dynamics within relationships, and overall psychological well-being (Mikulincer & Shaver, 2010). As relationships progress over time, it has been noted that individuals' working models tend to be relatively stable, although they may not fully accommodate change and revision and can be resistant to modification over time. It also is believed to function subconsciously, leading perceptions, emotions, and behaviors in situations related to attachment (Bretherton & Munholland, 1999).

There are two types of this model: the internal working model of the self and the internal working model of others. The internal working models of self represent an individual's perception of their own lovability, whereas the internal working models of others encompass beliefs and expectations concerning the caregiver's sensitivity and emotional availability (Bowlby, 1982). If the caregiver (usually the mother) is emotionally available and responsive, meaning she meets the infant's all kinds of needs, a secure attachment develops between the infant and the mother. Consequently, the infant develops a model where they see themselves as worthy and lovable, and others as sensitive and accessible. On the other hand, if the mother is rejecting, unresponsive, and inconsistent in meeting the infant's needs, an insecure attachment develops between the mother and the infant. Consequently, these infants perceive themselves as inadequate and worthless, and others as rejecting and insensitive (Taluy, 2021).

2.1.2. Harlow and Attachment Theory

Harlow is one of the contributors to the view that the emotional bond established between the caregiver and the infant has a strong effect on the development of the sense of trust in the relationships the infant establishes in adolescence and adulthood. In his study on monkeys with his students in 1958, he tried to understand the basic motivation in monkeys. One notable result of the study is that not only the physical needs but also comfort and warmth are of great importance to the caregiver. In addition, Harlow observed that in his

experiment where the mother was distant and socially deprived, the monkeys experienced great difficulties in their social relationships in the future (Tuzun & Sayar, 2006).

2.1.3. Ainsworth and Attachment Theory

After Bowlby, many theorists developed attachment theory with their studies. One of these is the "Strange Situation Experiment" conducted by Ainsworth, which involves two important processes: separation and reunion from the caregiver. She suggested that there are three different attachment styles in children, based on their reactions to these processes and individual differences. As a result of this study, three main attachment styles are determined: secure, insecure-avoidant, and insecure-ambivalent/resistant (Ainsworth et al., 2015). Firstly, mothers of children with a secure attachment pattern are sensitive and respond appropriately to children's different needs. These children normally feel uneasy in their mother's absence, but when the mother returns to the room, they calm down, establish physical contact, and continue to explore the outside world in harmony. Secondly, mothers of children with attachment anxiety are incoherent in meeting their children's emotional requirements. Likewise, these children exhibit an ambivalent/resistant behavioral pattern towards the attachment figure. They typically display behavior characterized by clinging and dependence, but they are intensely distressed when their mothers are absent. Upon the mother's return, they refuse her, resist physical contact, and are not relieved by her attempts to interact. Thirdly, mothers of children with avoidant attachment styles are rejecting and neglectful to children's needs. These children show indifference to their mother's absence when she exits the room. Upon reuniting with their mother, they demonstrate minimal interest and motivation to interact with her. They do not seek guidance from their mother while exploring their surroundings (Ainsworth, 1979). They exhibit significant independence from the attachment figure in regard to both physical proximity and emotional reliance (Behrens et al., 2007).

Following Ainsworth's three categories, Main and Solomon (1990) presented the fourth category, known as "disorganized", as a result of studies conducted on children exposed to maltreatment. These children's attachment figures may have psychiatric disorders, are physically abusive, or neglectful. The most specific feature of this pattern is the child's fear of one's caregiver (Main & Solomon, 1990).

2.1.4. Attachment Style in Adulthood

An extension of attachment orientations that are formed in the earliest years can be observed in adulthood (Tuzun & Sayar, 2006). A certain longitudinal study by Waters et al. (2000) demonstrated that 72% of young adults maintain identical attachment patterns twenty years after infancy. It is believed that the relationship established between a child and a caregiver serves as a model for peer relationships in adolescence and romantic relationships in adulthood (Taluy, 2021). In other words, according to Mahler, the child uses the lenses created by the attachment figure when relating to other people. Another theorist, Horney, suggested that infants harbor a fear of being abandoned by their parents, and this fear varies depending on the level of peace and security within the family. How the child copes with these anxieties and fears (i.e. submissive, rejecting, or grandiose attitude) shapes their approach to interpersonal relationships in adulthood (Tuzun & Sayar, 2006).

2.1.5. The Adult Attachment Models

Hazan and Shaver (2017), who conducted pioneering studies on adult attachment patterns, introduced a model analogous to the classification by Ainsworth et al. (2015). Adults who have secure attachment pattern have high self-confidence, can comfortably establish closeness, feel secure in their relationships, express their feelings and thoughts to others comfortably, and can regulate their emotions effectively. Anxious-ambivalent attachment style is characterized by feeling unworthy of love, desire for closeness and approval and being overly dependent and demanding. They also perceive others as unreliable and carry a fear of rejection and abandonment in their relationships. So, they exhibit more jealous and obsessive attitudes and behaviors in their relationships. Avoidantly attached individuals prefer and value independence rather than emotional closeness. They have very weak feelings of trust and tend to perceive others as demanding and intrusive. They may also remain indifferent and unresponsive to any matters related to emotions because they tend to suppress their feelings (Hazan & Shaver, 2017).

Bartholomew and Horowitz (1991) introduced four adult attachment styles which are secure, dismissive, preoccupied, and fearful based on Bowlby's Internal Working Model. These four attachment styles have 2 subdimensions: positive or negative model of self and positive or negative model of others. Individuals demonstrating secure attachment tendency incline to develop a positive model of themselves as valuable and others as sensitive and

accepting. Dismissively attached individuals are prone to develop a positive self-image and a negative image of others as unreliable. Adults with preoccupied attachment styles perceive others positively yet hold the belief that the self is worthless and unworthy of love. Fearful attachment type is demonstrated by adults with adverse models of self as worthless and negative models of others as repudiate (Bartholomew & Horowitz, 1991).

2.2. Difficulties in Emotion Regulation (ER)

Themes related to emotion regulation (ER) have had an important place in a variety of other disciplines such as philosophy, anthropology, religion, economics, political science, and literature, etc. since the mid-1990s. Over the last century, social sciences, like psychology, have addressed this theme, with Sigmund Freud focusing on anxiety control. More specifically, it has been an active subject of research in many sub-fields of psychology, including cognitive, clinical, social, industrial organizational, developmental, etc. (Gross, 2015). Although ER research began in developmental psychology, psychoanalytic theory, particularly defense mechanisms, has been credited with being a pioneer in this area (Gross, 1998). Defense mechanisms are the mental strategies individuals employ to handle or avoid uncomfortable emotions, thus protecting their positive self-worth perceptions (McWilliams, 2011). Similarly, Cramer (2008) has revealed that defense mechanisms are activated more frequently in circumstances that lead to excessive anxiety, negative feelings, or a sense of diminished self-worth than others, and this use reduces these emotions on a consciousness level. From this perspective, it can be said that defense mechanisms are closely related to ER, especially implicit ER.

In general, ER has been defined as keeping track of, evaluating, and modifying emotional responses to meet one's own goals (Thompson, 1994). According to Gross (2015), the characteristics of ER processes can be discussed in the context of ER goals, the degree of awareness of the emotion regulator, and whose emotions are being regulated. Firstly, ER is the reduction (down-regulation) or increase (up-regulation) in the intensity of emotions to achieve a desired and appropriate objective (Gross, 2015). Although reducing negative emotions and increasing positive emotions is known to be the most common situation, Gross (2015) showed that the individual can also aim to reduce positive emotions and increase negative emotions. Secondly, ER strategies can be applied consciously or unconsciously.

Finally, ER can include regulating one's own emotions (i.e. intrinsic regulation) as well as regulating the emotions of others (i.e. extrinsic regulation) (Gross, 2015).

On the other hand, Gratz and Roemer (2004) described ER difficulties as an absence of awareness about feelings and comprehension of them, non-acceptance of unpleasant feelings, having a challenge in controlling impulsive actions, lack of possessing the skill to employ contextually suitable ER mechanisms flexibly to manage emotional reactions, inability to fulfill personal objectives and adapt to situational requirements.

The ability of a healthy ER is vital for one's psychological well-being, physiological health, quality of life, and even overall functioning. Nevertheless, this ability might not always be practiced consistently or healthily. Hence, difficulties in comprehending and perceiving emotions, and modulating emotional reactions can result in individuals encountering emotional or psychological conflicts (Yigit & Yigit, 2017).

Difficulties in ER appear as a common dimension when examining the diagnoses of many different psychological disorders (Cole et al., 2019). A research investigation examining the criteria of 176 diagnoses in DSM-IV revealed that 40.3% of them included difficulties in ER (Jazaieri et al., 2013). In addition, it is seen that it is one of the basic elements of mental functions in the Psychodynamic Diagnostic Manual M-axis (Lingiardi & McWilliams, 2017). These outcomes highlighted the prevalence of difficulties in ER in conceptualizing and addressing mental health issues.

Moreover, studies have found that ER difficulties are linked to generalized anxiety disorder (GAD) (Mennin et al., 2009), anxiety disorder (Cisler & Olatunji, 2012), major depressive disorder (MDD) (Joormann & Stanton, 2016;), posttraumatic stress disorder and related disorder (PTSD) (McLean & Foa, 2017), eating disorders (Brockmeyer et al., 2014), borderline personality disorder (Salsman & Linehan, 2012), alcohol/substance use disorders (Stellern et al., 2022). Consequently, it is essential to thoroughly comprehend the concept of ER difficulties in both clinical and non-clinical populations.

2.2.1. Theoretical Model of Emotion Regulation (ER)

Gross' (2015) process model of emotion regulation (ER) is the most accurate representation of the micro approach to ER. This model which aligns with the modal model of emotion generation and combines common elements shared by several distinct approaches to emotion, is comprised of the situation-attention-appraisal-response sequence (Gross, 2015).

Gross (1998; 2015) developed a three-stage model of the ER process to elucidate emotion regulation. These phases, respectively, consist of the formation of emotion, ER strategies, and the process the individual goes through while applying these strategies to diverse circumstances. The first stage, known as the formation of emotion, includes the situation-attention-appraisal-response sequence. Accordingly, the individual encounters a psychologically relevant situation, pays attention to the characteristics of this situation, then appraises it in the light of one's own goals, and finally shows an experiential, physiological, and/or behavioral response (Gross, 2015; McRae & Gross, 2020). This process is also cyclical and the situations in this whole process can be internal or external (Gross, 2015).

The second phase of the process model of ER is ER strategies. These are situation selection (the individual's active choice of the environment/situation in which one wants to create a desirable emotion or prevent a disturbing emotion; for example, the most common strategy is avoidance), situation modification (an active effort to change one's external, physical environment to influence one's emotions; for example like requesting directly), attentional deployment (an effort of directing one's attention in order to change one's emotions, such as distraction, rumination etc.), cognitive change (an effort to alter perceptions about the situation, and its meanings with the goal of influencing emotions; for example; denial, isolation of affect, intellectualization, cognitive reappraisal, acceptance etc.), response modulation (an individual's attempt to regulate emotions to directly alter physiological, experiential, or behavioral responses; for instance exercise and relaxation training, alcohol, drug or cigarette use, expressive suppression). The first four strategies are antecedent-oriented, aiming to influence emotion before emotional reactions occur. The rest of the strategies are reaction-oriented, aiming to modify the feelings after they occur. These strategies can be applied to affect different stages of this process, and different ER strategies are predicted to produce different outcomes (Gross, 1998; 2015). To sum up, the five ER strategies in the second stage of the process model are "situation selection, situation modification, attentional deployment, cognitive change, and response modulation" (Gross, 2015, p.7).

The final stage of the model is the process that individuals go through when applying ER strategies. This stage has four steps; the individual determines that there is an opportunity to regulate emotion (the identification of stage), then chooses an emotion regulation strategy (the selection stage), followingly, implements these strategies using specific methods (the

implementation stage), and finally monitors whether the process was successful (follow-up stage) (McRae & Gross, 2020).

2.3. Social Media Addiction (SMA)

2.3.1. The Definition and Features of Behavioral Addiction

In the conceptualization of addiction, particularly in determining behavioral addictions' criteria, there are uncertainty regarding the operational definition (Giordano, 2021; Griffiths, 2000/ 2005; Kardefelt-Winther et al., 2017). Considering the traditional approaches to addiction, substance dependence is seen in the center, and it is described as a lack of control over one's alcohol use or another drug abuse (Estévez et al., 2017; Giordano, 2022). Following subsequent scientific investigations, there has been a growing consensus that addiction extends beyond substance use and should also encompass repetitive and detrimental behaviors (Alavi et al., 2012; Derevensky et al., 2019; Grant & Chamberlain, 2016). DSM-5, which was published in 2013, has certain modifications pertaining to addictions. For instance, DSM-5 has modified the section on addictions by altering the title from "Substance-Related Disorders" to "Substance-Related and Addictive Disorders" in order to reflect evolving understandings in this field (Grant & Chamberlain, 2016). Moreover, in DSM-4-TR, gambling was categorized as "pathological gambling" under the section for "Impulse-Control Disorders Not Classified Elsewhere". However, in DSM-5, gambling is now referred to as "gambling disorder" within the section for "Substance-Related and Addictive Disorders" (American Psychiatric Association, 2013).

Kardefelt-Winther et al. (2017, p.3) suggested a definition of behavioral addiction that specifically emphasizes two elements: “(a) significant functional impairment or distress as a direct consequence of the behaviour and (b) persistence over time”. There has been a continued debate in several domains of behavioral addiction over whether some excessive behaviors should be officially categorized as actual addictions (Griffiths, 2013). Griffiths (2005, p.193) has stated that “the components of addiction are salience, mood modification, tolerance, withdrawal, conflict, and relapse”. According to him, any behavior (such as social networking) meeting these six criteria can be operationally classified as an addiction (Griffiths, 2013). Some behavioral addictions that show phenomenological and biological parallels with substance use disorders have been revealed, such as compulsive buying,

gambling addiction, eating disorders, exercise addiction, sexual addiction, and internet-based activities (video game addiction and social media addiction) (Griffiths, 2005).

2.3.2. The Definition and Features of Internet Addiction (IA)

The term “Internet addiction (IA)”, which is considered under the category of behavioral addiction, began to come to the fore in the fields of psychology and medicine in the 1990s and 2000s, as the Internet gained popularity. With the spread of the internet, it was realized that some individuals’ excessive and uncontrolled internet use caused harmful consequences (such as serious impact on one's functionality, personal relationships, financial situation, academic performance, and professional goals), and this situation began to be called “internet addiction” (Kuss & Pontes, 2018). Young (1999), the first to make theoretical efforts to define internet addiction, characterized it as a comprehensive phrase that encompasses a diverse range of behaviors and issues in controlling impulses.

Griffiths (2000, p.414) emphasized three questions in his investigations about internet addiction: “(1) What is addiction? (2) Does internet addiction exist? (3) If internet addiction exists, what are people addicted to?”. The first question showed that this term has been a major topic of debate among academics and mental health professionals (Kuss & Pontes, 2018). According to Griffiths (2000), if any behavior (such as internet use) contains the previously mentioned six criteria, it is an addiction. The third question is probably the most exciting and crucial when conducting research in this field. Unlike Young (1999), Griffiths (2000) addressed the answer to this question from a different perspective. According to him, people who use the internet excessively are not internet addicts, they only use the internet excessively to fuel other addictions. Griffiths and Szabo (2014) have emphasized that people are not addicted to the entirety of the Internet, but rather to particular online activities. In their study, it appeared that the internet is just an online medium where the activities take place, so online activity is more important than that (Griffiths & Szabo, 2014). The strongest correlations for internet addiction have been found in gaming and SMU (Van Den Eijnden et al., 2016). In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), “Internet gaming disorder (IGD)” is considered a disorder that requires more clinical research and experience than the other ones (APA, 2013).

2.3.3. The Definition and Features of Social Media Addiction (SMA)

The internet, particularly SM, permeates almost all facets of daily life and has become an essential component by significantly simplifying people's daily activities compared to the past (Andreassen et al., 2017). While earlier research primarily addresses internet addiction as a whole, more recent research has shifted its attention to a particular facet of IA, namely, SMA (Grau et al., 2019). While there are numerous motives why people use social media, the main motivations revolve around creating and sustaining both online and offline connections. “The motivations for SMU were most likely to be passing time, meeting new people and socializing, expressing or presenting a more popular self, entertainment, and lower information and education motives” (Kircaburun et al., 2020, p.12). The most commonly utilized and recognized SM tools are Facebook, WhatsApp, YouTube, Instagram, WeChat, TikTok, Telegram, Snapchat, X (formerly known as Twitter) (Oladipo, 2024).

Over the past few years, there has been a significant rise in SMU, and social media use has become quite prevalent among various populations, especially among students. Thirty-four percent of women aged 18 and 34 reported that they accessed Facebook prior to using the bathroom in the morning, moreover thirty-nine percent of them identified themselves as dependent to Facebook (Abhijit, 2011; as cited in Cetinkaya et al., 2021). Another study conducted with 1000 students revealed that 85% of participants logged into Facebook at least once a day, while half of the participants felt socially left out when they were not connected to the site (Abhijit, 2011; as cited in Cetinkaya et al., 2021). Moreover, about 20% of YouTube users consider themselves compulsive users (Allahverdi, 2022). While social media usage presents numerous of advantages, there has been a rising focus on its adverse reflections. Excessive and uncontrolled social media use is often held responsible for the rising mental health issues, especially among younger individuals. This situation is not surprising, especially for young people growing up in the digitalization age (Piko & Kiss, 2024). Keles et al. (2019) carried out a comprehensive investigation and revealed that there was a correlation between SMU and the presence of depression, psychological distress, and anxiety. Also, Wheatley and Buglass (2019) noted that excessive SMU deteriorates people’s subjective well-being. In a study on academic performance of university students, it has shown that SMU has a major impact on their academic achievement (Azizi et al., 2019). Although SMA does not have a status in the Diagnostic and Statistical Manual of Mental

Disorders (DSM-5) and the World Health Organization (WHO), Allahverdi (2022) and Kircaburun (2016) mentioned that researchers are growing more concerned about addiction to SM and have highlighted it as a topic that requires additional investigation. Allahverdi (2022) stated that uncertainty about the definition hinders development in this field.

In general terms, Social Media Addiction (SMA) was described by excessive preoccupation with SM (Andreassen, 2015), excessive and uncontrolled involvement (Allen et al., 2014), a strong incentive to log into SM platforms (Andreassen & Pallesen, 2014). In the realm of SMA, like behavioral addiction and IA, there is disagreement regarding the categorization of excessive use as “addiction” (Griffiths, 2013). For example, Piko and Kiss (2024) state that intense SMU can frequently result in addiction. On the other hand, according to Andreassen (2015), while people who use SM heavily can retain control over their use, those who are addicted to SM will engage with it compulsively, even if it leads to negative outcomes. So, SMA also was characterized by devoting significant time and effort to SM platforms to a degree that obstructs multiple facets of life (i.e., worsening a person's functionality and quality of life) (Demircioglu & Kose, 2020). Although SMA has not been accepted as a diagnosis, Kuss and Griffiths (2011) and Andreassen (2012) noted that SMA encompasses components that Griffiths (2005, p.192) describes as "if it meets these 6 criteria, it can be operationally classified as an addiction". These criteria for SMA are salience (i.e., intense focus emotionally, cognitively, and behaviorally on SM), mood modification (i.e., involvement in SM platforms results in a positive alteration of emotional states), tolerance (i.e., gradually growing SMU over an amount of time), conflict (i.e., interpersonal and intrapsychic issues arise due to SM use), withdrawal symptoms (i.e., encountering adverse physical and/or emotional symptoms when SMU is limited or discontinued), and relapse (i.e., rapidly resuming to excessive SMU after a period of abstinence) (Kuss & Griffiths, 2011).

When the literature is examined, researchers bring up similar problems by choosing one of the terms “Social Media Addiction”, “Compulsive Social Media Use” or “Problematic Social Media Use”. Out of these terms, SMA (including its variations like “Facebook Addiction”, “SNS addiction”, and “Problematic SNS use”) is the most frequently utilized. Sun and Zhang (2020) claimed that some researchers express concern that using the term may be premature in pathologizing this problem. While some scholars support the term “problematic SM use”, according to Sun and Zhang (2020), the identification and measurement of problematic SM use are inconsistent. Because “problematic SM use” is a

broad term encompassing activities like illegal or unethical online behavior such as stalking, distributing false information, and cyberbullying (Sun & Zhang, 2020).

2.4. The Relationship between Attachment Styles and ER Difficulties

The developmental perspective's discussion of approaches and findings regarding the influence of primary caregivers in the progress of emotion regulation (ER) is its most notable addition to the literature on ER (Lewczuk et al., 2018; Thompson, 1994). Infants' systems to regulate their emotions independently have not yet developed. They need direct ER interventions from their primary caregivers to cope with their negative emotions and relax themselves (such as calming down in the caregiver's arms or using the caregiver's reaction as a reference) (Lunkenheimer et al., 2017). At this point, the attachment figure serves as a physical and emotional sanctuary for the infant (Mikulincer et al., 2003). This experience aids in their independent learning of ER.

When the neural mechanisms underlying ER in infancy are examined, it is seen that the autonomic nervous system (ANS), especially the parasympathetic nervous system (PSNS), and the amygdala play an important role. The sympathetic and parasympathetic nervous systems are the basic parts of ANS and work together to provide balance. While the sympathetic nervous system (SNS) directs the individual to the "fight or flight" response in stressful situations, PSNS serves to regulate this response. And especially the development of PSNS in the first two years is under the influence of external factors directly (e.g. parental conflict, caregiver's high stress level, and depression) and indirectly (e.g. caregiver's sensitivity) (Salzwedel et al., 2019). Furthermore, Salzwedel et al. (2019) found that the amygdala exhibits high plasticity in infancy, reaching an adult pattern at the end of this period, indicating the formation of ER. Following this line of research, Gee (2016) noted that environmental factors, such as irregular and inadequate care from caregivers, damage the development of the amygdala, which is necessary for ER skills. Fonagy and Target (2002) concluded that the improvement of self-regulation constitutes the entirety of child development (Schore & Schore, 2008).

Attachment theory offers a consistent structure for explaining the effects of attachment mechanisms, which are shaped by early interactions between the infant and the primary caregiver, on ER and is also noted in Bowlby's groundbreaking studies (Ferraro &

Taylor, 2021). Bowlby (1988) argued that effectively fulfilling the functions of regulating emotions is the outcome of a sense of secure attachment.

Gottman et al.'s (1996) concept of "parental meta-emotion philosophy" supports the idea that a healthy emotion regulation process is dependent on whether the infant develops a secure attachment with his/her primary caregiver or not. According to this concept, a group of parents are more aware of their own and their children's emotions, validate these emotions, and assist their children in managing unpleasant feelings more effectively compared to other parents. Those parents establish secure attachments with their infants. On the other hand, parents in the other group have low awareness and prefer to ignore or suppress negative emotions, thinking that they will cause harm. They have insecure attachments with their infants. These attitudes of parents in this group cause children to internalize this philosophy and develop dysfunctional ER mechanisms (Gottman et al., 1996).

Morris et al. (2007) put up a tripartite model in their review research on the crucial role of the familial context in the growth of ER capabilities. According to them, one of the three channels through which parents influence their children is the emotional climate within the household. General parenthood methods, attachment patterns, family and /or marital relations, and family's emotional expressiveness are formed based on this climate (Morris et al., 2007).

According to a few numbers of authors, secure attachment is formed through the awareness and validation of the child's feelings and maternal responsiveness and consistency to infant distress, which subsequently serves as the foundation for adult ER (McElwain & Booth-LaForce, 2006; Stevens, 2014). Because this maternal attitude increases the children's repertoire of emotions, which in turn, leads to the formation of ER, their ability to activate internal processes when they experience negative emotions. Thus, these children tend to exhibit fewer behavioral problems, have a more optimistic perspective on life, make less exaggerated evaluations of threats, and lower emotional reactivity, and so develop more effective and constructive ER strategies than others (Mikulincer & Shaver, 2019; Stevens, 2014).

When secure attachment fails to occur (that is to say, when the reliance that others will be sensitive and helpful when needed is not developed), the formation of inner resources necessary to effectively deal with stressors is hindered. Thus, the child struggles to appropriately use ER strategies (Mikulincer & Shaver, 2019; Stevens, 2014). In other words,

difficulties in emotional regulation might indeed be equivalent to insecure attachment during childhood (Stevens, 2014).

Mikulincer et al.'s (2003) model delineates two strategies for handling the activation of an insecure attachment system: hyperactivating and deactivating emotional strategies. Hyperactivating emotional strategies means excessive alertness concerning cues associated with threat and attachment and are related to anxious attachment which is a type of insecure attachment. Deactivating emotional strategies signify creating distance from cues regarding threat and attachment and are related to attachment avoidance which is another type of insecure attachment (Mikulincer et al., 2003; Stevens, 2014). Although the path followed in the two insecure attachment styles is different, the common point is that the proximity seeking to relieve distress fails.

Anxiously attached individuals have greater desires for their attachment figures to offer more attention and more dependable protection and support than others. Hence, they are inclined to magnify the gravity of threats and overreact to negative events in their lives to attract the attention and care of attachment figures (Liu & Ma, 2019b; Mikulincer et al., 2019). Anxiously attached individuals often ignore or avoid recognizing their own emotional reactions, so they deny or suppress thoughts and memories about their emotions (Liu & Ma, 2019b; Mikulincer et al., 2019). In short, individuals characterized by avoidant attachment display significant challenges in recognizing emotions, whereas those with anxious attachment experience heightened challenges in managing and regulating their emotional responses. The outcomes of several studies disclosed that attachment anxiety and avoidance were positively correlated with ER difficulties (Pepping et al., 2013; Stevens, 2014). As supported by many existing studies, individuals attached anxiously may experience more difficulties in ER than those with an avoidant attachment because they are more hypervigilant (Liu & Ma, 2019b) than others. In conclusion, all these findings show that ER skills originate from attachment styles.

2.5. The Relationship between ER Difficulties and SMA

Emotions have been identified by modern science as a significant construct, emphasizing their critical function in survival and their beneficial role in mental health and subjective well-being (Cole et al., 2019; Saxena et al., 2011). Tice et al. (2018) referred that one of the fundamental aspects of the selfhood is the capacity of managing and regulating

impulses, emotions, performances, desires, and other behaviors. Consequently, interest in the important role of self-regulation in mental health has been increasing in psychological research in recent years (Saxena et al., 2011). Emotion dysregulation is widely acknowledged in many fields and theoretical perspectives as a transdiagnostic characteristic linked to varied mental health problems (Beauchaine & Cicchetti, 2019). Research pointed out that challenges in regulating emotions (ER) contribute to many psychological distresses and several mental health problems (Cole et al., 2019). ER difficulties can lead to some negative consequences such as reduced levels of well-being, elevated levels of stress and anxiety, damaged relationships, lack of emotional awareness, especially impulsive, and dysfunctional behaviors (Gogos, 2022; Peker & Yildiz, 2022). Insufficiencies in managing impulses have been connected to a broad spectrum of personal and communal issues, such as addiction, substance abuse, smoking, alcohol use, gambling and compulsive shopping, obesity, aggression and violence, criminal behavior, academic failure, financial challenges resulting in indebtedness and bankruptcy, sexually transmitted disease. When people experience emotional difficulties, they may turn to actions that provide immediate gratification as a method of self-regulation, so they feel better in a short time (Tice et al., 2018).

Difficulties in ER have appeared to be a probable contributory factor for developing and maintaining addiction (Aldao et al., 2010). It also makes it difficult for individuals to terminate addiction (Liu & Ma, 2019b). Flores (2004) considers addiction as an attempt to self-regulate or self-soothe. One of the main elements of Griffith's (2005) addiction components model is “mood alteration”. Based on the idea by Griffiths (2005), mood modification happens when an individual uses a substance or participates in an activity in an attempt to create a reliable and consistent change in mood state. In this context, there are studies to show that individuals who have more difficulties in ER have a higher risk of participating in substance use such as cocaine, alcohol, opioids, and methamphetamine than others. Apart from these, the function of difficulties in ER has also been examined in the development of non-substance-related addictions such as gambling disorder, gaming addiction, internet addiction (IA), and problematic social networking site use (PSNSU) (Quaglieri et al., 2021).

Several studies explored PSNSU and how it relates to ER difficulties. The findings demonstrated that there is a significant relationship between difficulties in ER and PSNSU (Hormes et al., 2014; Hussain et al., 2021; Liu & Ma, 2019b; Marino et al., 2023; Peker &

Yildiz, 2022; Zsido et al., 2021). Likewise, in the study conducted on university students, a strong and positive connection was determined between the indicated variables (Giordano, 2021). Additionally, other research carried out among young adults observed that greater emotion dysregulation was positively and significantly with more PSNSU (Hormes et al., 2014; Pontes et al., 2018). Marino et al. (2019) showed ER difficulty as a predictor of problematic Facebook use in their investigation conducted among young adults. Hussain et al. (2021) stated that the lack of ability to manage feelings may be linked to a dysfunctional coping mechanism. Therefore, the individual uses social network sites and social media platforms to compensate for this, which becomes repetitive, resulting in problematic use (Hussain et al., 2021).

Similarly, according to many researchers (Gioia et al., 2021; Marino et al., 2023; Peker & Yildiz, 2022; Pettorruso et al., 2020; Quaglieri et al., 2021), internet addiction also might serve as a strategy to make it easier to handle the difficulties of ER, especially among young internet users. However, their risk of developing addiction increases as they choose these platforms instead of more functional coping strategies (Dailey, 2020). Many theorists have referred to the significant and positive relationship between difficulties in ER and IA (Akbari et al., 2017; Ceyhan et al., 2019; Wartberg & Lindenberg, 2020). A similar relationship was also obtained between these variables in a study performed with young adults in Turkey. (Evren et al., 2018). Casale et al. (2016) suggested that self-regulation failures should be considered as stronger predictors of problematic Internet use (PIU) than negative emotional conditions.

Jacob's (1986) “general theory of addiction” posits that the need to avoid negative emotional experiences is one of the main mechanisms underlying addictive behavior. As many previous studies have indicated that individuals who have deficits in ER are inclined to use the Internet and SM platforms with the intent of moving away from distressing feelings (Gioia et al., 2021; Pettorruso et al., 2020), minimizing or avoiding negative emotions, regulation of emotion state (Liu & Ma, 2019b; Pettorruso et al., 2020; Taluy, 2021), or get away from reality (Gioia et al., 2021). In the same vein, problematic social media use (PSMU) may be seen as escape behavior to deal with emotional difficulties (Ozmen & Senay Guzel, 2022). Previous studies in the literature have already revealed a significant and positive correlation between SNS addiction and difficulties in ER (Liu & Ma, 2019b); and between SMA and difficulties in ER (Peker & Yildiz, 2022). In addition, other studies by Lannattone et al. (2024) and Quaglieri et al. (2021) have disclosed emotion

dysregulation predicted PSMU. Ozmen and Senay Guzel (2020) stated that individuals who have difficulty in regulating emotions tend to turn to elevated SMU, and this hinders their ability to focus on personal life goals. Lannattone et al. (2024) have suggested that this pattern of PSMU has been interpreted as an ER deficit. Theorists have referred to challenges in controlling impulses and pursuing goals which are both aspects of emotion dysregulation as a possible explanation for PSMU (Lannattone et al., 2024). Despite all, it is noteworthy that studies investigating the association between emotion dysregulation and SMA are limited (Peker & Yildiz, 2022).

2.6. The Relationship between Attachment Styles and SMA

Theoreticians suggested that the theory of attachment may facilitate a deeper comprehension of how addictive behaviors progress (D'Arienzo et al., 2019; Estévez et al., 2017; Liese et al., 2020; Liu & Ma, 2019b). Attachment theory categorizes attachment orientations based on what kinds of interactions individuals experience with their primary caregivers during infancy period. These experiences can substantially impact on individuals' attitudes and conducts in social relationships throughout their lives (Bowlby, 1982). The comprehensive literature review conducted by D'Arienzo et al. (2019) showed that insecure attachment patterns were linked to risky behaviors, and they stated, "these attachment styles could represent a risk and predictive factor for addictive behaviors" (D'Arienzo et al., 2019, p.3). In addition, Flores (2004) views addiction as a means to regulate and comfort oneself, and he proposes that addiction can be seen as a form of attachment and self-regulation disorder. For establishing healthy relationships and forming a strong sense of identity, and having adequate self-regulation, self-object needs should be met by primary caregivers effectively (Kohut, 1971). If they are not met, it can create problematic behaviors in individuals. Within this framework, Kohut's theory of self-object needs (1971) offers a structure for interpreting addiction as a manifestation of unmet fundamental psychological needs in an unhealthy manner. To cope with the deprivation experienced in these needs, individuals look for an external object to fill the internal void they feel (Flores, 2004). For example, it seems that drug use can compensate for the lack of intimacy (Flores, 2004) because it creates an illusory sense of security and emotional support (Höfler & Kooyman, 1996). However, Estévez et al. (2017) stated that this situation applies not only to substance addictions but also to non-substance addictions. According to Flores (2004), unless addicted

individuals learn the necessary skills to regulate their emotional states and develop healthy relationships, they will continue to sustain their addictions or turn to an addictive object (such as SMU as an activity) to alleviate the feeling stemming from deprivation. To sum up, addicted individuals are defined by their ineffective efforts in self-repairing (Höfler & Kooyman, 1996).

Several researchers revealed that being raised in a well-functioning family environment facilitates the development of a mature and healthy personality and the incapacity of families to establish emotional bonds seems to contribute a lot to the development of dependent patterns of behaviors (D'Arienzo et al., 2019; Estevez et al., 2017; Flores, 2004; Senormancı et al., 2014; Yousaf et al., 2021). These findings implies that addiction, particularly SMA, may be caused by challenges originating during infancy or early childhood (D'Arienzo et al., 2019). The theory of attachment seems to offer a useful foundation for comprehending particular facets of involvement with SM (D'Arienzo et al., 2019; Hart et al., 2015; Monacis et al., 2017a; Monacis et al., 2017b; Ozmen & Senay Guzel, 2022; Taluy, 2021). D'Arienzo et al. (2019) mentioned that an expanding body of literature has investigated the impacts of attachment styles on IA in general and SMA in particular.

Secure attachment pattern was found to negatively predicted the three types of online addictive behaviors (internet addiction (IA), online gaming addiction (GA), and social media addiction (SMA)) (Monacis et al., 2017a; Salehi et al., 2023). Consistent with this result, in other different studies, secure attachment negatively predicts IA (Eichenberg et al., 2017; Lei & Wu, 2007; Lin et al., 2011; Savci & Aysan, 2016). Previous research has concluded that a stronger bond between parents and their children is associated with a decreased inclination to utilize the internet as a means to escape daily problems (Soh et al. 2014; Yang et al. 2016). The secure attachment established with parents provides children with emotional security (a sense of security that helps the child feel loved and accepted and that their emotional requirements will fulfill to a great extent) and enhances their emotional regulation skills, thereby preventing them from seeking escape routes (Soh et al. 2014). Furthermore, investigations were determined that it could function as a protector (Eichenberg et al. 2017; Savci & Aysan 2016). Other empirical evidence has also supported the idea that people who are more securely attached related to lower levels of Facebook time and Facebook addiction (Bashir et al., 2017; Rao & Madan 2012). Toqeer's et al.'s (2021) research conducted on university students also revealed the same result. In line with this finding, studies revealed that individuals who are more securely attached have reduced levels

of social networking sites (SNSs) addiction (Monacis et al., 2017b) and SMA (Dilsiz & Kandemir, 2020; Monacis et al., 2017a; Yousaf et al., 2021). Secure attachment makes the individual feel loved and accepted, thus developing a more positive sense of self. It also boosts individuals' self-esteem and self-confidence, and helps individuals develop strong relationship skills. Individual with this orientation seem to have a reduced likelihood of developing IA in general as well as specifically SMA (Bashir et al., 2017; Eroglu, 2015; Monacis et al., 2017a; Monacis et al., 2017b; Odaci & Cikrikci, 2014; Rao & Madan, 2012). Additionally, Jenkins-Guarnieri et al. (2012) have indicated that people with secure attachment patterns incline to have broader social networks and establish more social connections with others. These results imply that individuals with secure attachment orientation may use SNSs in a positive manner, employing them to cultivate reliable friendships and enhance their feelings of social belonging and connection (Jenkins-Guarnieri et al., 2012; Oldmeadow et al., 2013). Consequently, these individuals are more inclined to employ effective coping mechanisms, managing their use of social networking sites without developing addiction (Bashir et al., 2017; D'Arienzo et al., 2019; Monacis et al., 2017b; Savci & Aysan, 2016).

In individuals with insecure attachment type, the opposite of these findings is observed. Salehi et al. (2023) have shown that there is a negative correlation between insecure attachment style and three types of online addictive behaviors (internet addiction, online gaming addiction, and social media addiction). Individuals who possess insecure attachment patterns are more prone to developing excessive usage and SMA compared to those who exhibits secure attachment patterns (Demircioglu & Kose, 2020; Yousaf et al., 2021). The risk of IA has significantly heightened in college students who have insecure attachment styles with fearful, preoccupied, or dismissive (Lin et al., 2011; Odaci & Cikrikci, 2014), and workers who have insecure attachment styles (attachment anxiety and attachment avoidance) (Shin et al., 2011). Research conducted with patients in the Turkish sample who have IA, it has been found that the daily internet usage time of the patient group is 7.5 hours, and those patients tend to have a higher prevalence of anxious attachment style, which is significantly associated with disruptions in family functioning (Senormancı et al., 2014). Many studies have shown that anxious attachment, one of the insecure attachment styles, has a positive relationship with SNS addiction (Liu et al., 2013; Liu & Ma, 2019b; Marino et al., 2023; Monacis et al., 2017b), Facebook addiction (Eroglu, 2015; Hart et al., 2014; Jenkins-Guarnieri et al., 2012; Oldmeadow et al., 2013; Stănculescu & Griffith, 2023)

and SMA (Arikan et al., 2022; Blackwell et al., 2017; Demircioglu & Kose, 2020; Monacis et al., 2017a; Ozmen & Senay Guzel, 2022; Worsley et al., 2018). People who exhibit attachment anxiety are typically characterized by concerns of being unloved or rejected, thus experiencing a profound sense of insecurity towards themselves and their surroundings. They may participate in online interactions as a secure setting to seek what they consider is lacking in their everyday experiences (Hart et al., 2015; Oldmeadow et al., 2013; Rom & Alfasi, 2014; Savci & Aysan, 2016; Schimmenti et al., 2014). Anxiously attached people are constantly seeking approval and acceptance from others. These individuals are more inclined to dedicate a substantial portion of their time to utilizing SNS in order to gain social acceptance and feedback provided by these platforms. They often browse through online comments received from others, motivated by their desire to find good feedback. This use also offers the chance to alter their self-perception and recognize their worthiness of love. Thus, they expose themselves to the risk of addiction (Andangsari et al. 2013; Monacis et al., 2017a; Monacis et al., 2017b). Additionally, individuals with high anxious attachment use SM as a means to manage the risks of rejection by controlling their self-presentation. They strive to maintain the desired intimacy they struggle to achieve in the real world within the realm of SM (D'Arienzo et al., 2019; Worsley et al., 2018). Finally, one of the reasons why anxiously attached individuals use SM intensively is that they use SM to comfort. Liu and Ma (2019b) have stated that the connection between attachment anxiety and SNS addiction is mediated by emotion regulation. These individuals use SM intensively, especially to relieve distressing feelings such as fear of refusal or solitude, and to find a sense of belonging (D'Arienzo et al., 2019; Liu & Ma, 2019b; Musetti et al., 2022; Oldmeadow et al., 2013).

The findings on the relationship between avoidant attachment, one of the insecure attachment styles, and SMA vary. Some studies have reported a negative association (Liu & Ma, 2019a; Worsley et al., 2018), while others have found a positive association (Bayraktar & Celik, 2023; Blackwell et al., 2017; Dilsiz & Kandemir, 2020; Monacis et al., 2017a). Additionally, Arikan et al. (2022), Liu and Ma (2019b) found no significant association. On the one hand, individuals who possess attachment avoidance reject closeness and distance themselves emotionally within interactions (Liu & Ma, 2019a). According to Yaakobi and Goldenberg (2014), individuals do not seek social relationships for this reason. According to some studies, no significant relationship has been found between avoidant attachment dimension and time spent on Facebook (Lin, 2015) or social media addiction (Liu & Ma,

2019b). Arikan et al. (2022) also stated that attachment avoidance does not predict SMA. However, some studies point out that individuals with attachment avoidance tend to use SM less frequently because they have low extroversion and are less preoccupied with social interaction (Liu & Ma, 2019a; Worsley et al., 2018). Adults with a high degree of avoidant attachment style indicate less frequency of SNS use (Chen, 2019; Liu & Ma, 2019a) and show less interest in using Facebook compared to anxiously attached adults (Hart et al., 2015; Oldmeadow et al., 2013). These results appear to align with the traits commonly linked with this attachment orientation (Oldmeadow et al., 2013). Interestingly, Oldmeadow et al. (2013) discovered a noteworthy positive correlation between avoidant attachment style and evaluation concern. This finding has indicated that individuals with avoidant attachment are concerned about how others perceive them on SM platforms (Oldmeadow et al., 2013). On the other hand, Blackwell et al. (2017) and D'Arienzo et al. (2019) mentioned that persons with elevated levels of attachment avoidance exhibit a preference for abstaining from social interaction (i.e., face-to-face interaction) in their daily lives, so the interactions they prefer through SM platforms fulfill their desire for social belonging they need. This social media use serves as a way for these individuals to keep people at a certain distance (a safe distance) in their lives (Monacis et al., 2017b). There is research in the academic field demonstrating that avoidant attachment positively predicts IA (Savci & Aysan, 2016; Shin et al., 2011) and SMA (Bayraktar & Celik, 2023; Blackwell et al., 2017; Dilsiz & Kandemir, 2020; Monacis et al., 2017a). Monacis et al. (2017b) mentioned that attachment avoidance is positively correlated with SNS addiction.

Taluy (2021) asserted that on one hand, avoidant attachment is similar to dismissive attachment which included in Bartholomew and Horowitz's atttachment model, on the other hand, anxious attachment type has similar properties with preoccupied attachment of this model. According to Eroglu (2015), Facebook addiction had a negative correlation with secure and dismissive attachment types but had a positive correlation with the preoccupied attachment type. Conversely, another study revealed that IA (Odaci & Cikrikci, 2014; Savci & Aysan, 2016) and PIU (Kozan et al., 2016) are related with preoccupied and dismissive attachment style. Similarly, the results of Demircioglu and Kose's study (2020) indicated that preoccupied attachment could be contributor factor to an increased risk of SMA in university students.

2.7. The Relationship between Attachment Styles, ER Difficulties, and SMA

Many psychosocial factors are considered to contribute to the emergence and continuity of addictive behaviors. Personality traits, family environment, attachment styles, level of perceived social support, impulsivity, emotion regulation (ER), and alexithymia are some of the factors that have been studied (Zilberman et al., 2019). Upon examining the literature, it is seen that attachment styles and ER difficulties, which are the variables of this study, and many addictive behaviors have been investigated. Some of them are problematic social networking site use (PSNSU) (Liu & Ma, 2019b), internet addiction (IA) (Karaer & Akdemir, 2019), smartphone addiction (Kwan & Leung, 2015), gambling disorder (Di Trani et al., 2017), and substance addictions (Estévez et al., 2017).

SM accelerated and facilitated the formation and maintenance of communication among people, especially overcoming physical restrictions. However, along with its advantages, the growing utilization of social media has also begun to reveal some negative consequences. The main ones were relationship problems, lack of sleep (Andreassen, 2015), depression (Shensa et al., 2017), and stress (Hou et al., 2019). Horwood and Anglim (2020) proposed that recent studies indicated that lower emotion regulation could potentially elucidate several addictive behaviors. Numerous studies in the literature have revealed a significant relationship between ER difficulties and problematic social media use (PSMU) (Lannattone et al., 2024; Quaglieri et al., 2021), PSNSU (Hormes et al., 2014; Hussain et al., 2021; Liu & Ma, 2019b; Marino et al., 2023; Peker & Yildiz, 2022; Zsido et al., 2021), problematic internet use (PIU) (Lei & Wu, 2007), problematic smartphone use (Horwood & Anglim, 2020). Ozmen and Senay Guzel (2022) stated that difficulties in regulating emotions can pose a risk for SMA. In other words, people who struggle with regulating their emotions are at a higher risk of cultivating SMA, because social media use is seen as an effective way to cope with difficulties in emotion regulation (Dailey, 2020). Individuals turn to utilize SM in order to get away from the emotion that disturbs one and to create a change in one's emotional state (Gioia et al., 2021; Griffiths, 2005; Pettorruso et al., 2020). However, this is a dysfunctional coping style. When it becomes repetitive, it leads to problematic use (Hussain et al., 2021).

Furthermore, several investigations have demonstrated that attachment style emerges as a particularly significant predictor when studying factors that contribute to SMA (Chen et al., 2019; Worsley et al., 2018). While research has begun to shed light on the connection

between attachment styles and social media addiction, the mechanism behind this association remains uncertain (Liu & Ma, 2019b). Ozmen and Senay Guzel (2022) highlighted that the connection between types of attachment and ER should take into account in upcoming studies on SMA.

Lim et al. (2020) noted that inadequate control over emotions is one psychological mechanism that could explain how adverse childhood experiences with caregivers affect increased susceptibility to addiction in adulthood. Emotion regulation skills have been closely linked to attachment styles and interactions with caregivers in early childhood (Musetti et al., 2018), which have, in turn, shown a close connection to PSNSU and PIU (D'Arienzo et al., 2019). Also, Lim et al. (2020) proposed that poor emotion regulation in adults who have gone through hardship experienced during childhood may develop patterns of addictive behaviour, based on the perspective of existing addiction theories. This can lead them to uninhibited engagement in addictive activities to cope with the withdrawal symptoms associated with addiction (Lim et al., 2020).

Individuals who securely attached are characterized by high self-confidence, having the view that the self is lovable, having trust in relationships, being able to communicate and establish rapport more easily, being able to regulate emotions well, and being emotionally available (Taluy, 2021). As per the research conducted by Ceyhan et al. (2019), young adults with secure attachment patterns generally demonstrate better emotional regulation skills compared to individuals with preoccupied and fearful attachment styles. Generally, the quality of the bond established between caregiver and child is considered an important factor in determining the child's capacity for handling challenges they will encounter in adult life (Shaver & Mikulincer, 2007). Additionally, Estévez et al. (2017) noted that individuals who are raised in secure attachments typically demonstrate fewer risky and addictive behaviors.

Marino et al. (2023) noted that insecure attachment orientations have contributed to the development of SMA by weakening ER. Anxious attachment, classified as one of the insecure attachment types, is distinguished by a lack of self-confidence, a strong dependence on others for approval and reassurance, a tendency towards jealousy in partnerships, and a struggle with solitude. These individuals perceive themselves as unloved in their relationships and fear the possibility of abandonment at any moment (Taluy, 2021). Therefore, they have a propensity to overstate the gravity of threats and respond excessively in order to gain the focus and backing of their attachment figures (Liu & Ma, 2019b; Shaver & Mikulincer, 2007). Research investigating the correlation between attachment anxiety and

ER difficulties has remarked that individuals who exhibit anxious attachment are more likely to encounter greater difficulty in regulating their emotions (Pepping et al., 2013; Stevens, 2014). According to Ozmen and Senay Guzel (2021), persons with an anxious attachment orientation who face challenges in ER are at considerably higher possibility of cultivating SMA. Additionally, a study highlighted that attachment anxiety is a predictor of ER difficulties, which in turn leads to SNS addiction, discovering the mediating role of ER difficulties on the association between anxious attachment type and SNS addiction in Chinese college students (Liu & Ma, 2019b). Therefore, this finding suggests a dysfunctional coping style associated with ER, as mentioned before.

Adults who possess an avoidant attachment style experience discomfort when it comes to openly articulating their emotions. They also possess a minimal degree of trust in relationships and hold pessimistic expectations regarding their bilateral relations. They are characterized by keeping people around them at a distance and avoiding emotional and physical closeness (Taluy, 2021). People who possess an avoidant attachment style attempt to manage their negative emotions by either suppressing or denying their thoughts and memories associated with those feelings (Liu & Ma, 2019b; Shaver & Mikulincer, 2007). A study conducted by Liu and Ma (2019b, p.4) discovered that “attachment avoidance was positively correlated with emotion dysregulation”. In contrast, another study reported that young adults exhibiting secure and avoidant attachment styles possessed greater ER capabilities in comparison to those with anxious attachment types (Ceyhan et al., 2019). A similar ambiguity arises in the connection between avoidant attachment pattern and SMA. While certain studies suggested a positive link between the avoidant attachment style and PSMU (Bayraktar & Celik, 2023; Dilsiz & Kandemir, 2020), some studies did not find a significant connection between them (Arikan et al., 2022; Liu & Ma, 2019b). Additionally, the study conducted by Liese et al. (2020) revealed that emotional dysregulation acts as a mediator between avoidant attachment orientation and certain addictive behaviors. Therefore, it is considered that it is important to investigate the relationship between these three variables and the mediating role of ER difficulties between avoidant attachment and SMA in this study.

3. METHOD

In this section, the research model, study group, data collection tools, data collection procedure, and data analysis were outlined in detail.

3.1. Research Model

The main goal of the present study was to examine whether direct and indirect relationships existed among the variables of attachment styles, social media addiction, and emotion dysregulation levels of Turkish undergraduate students. Hence, the multifactorial predictor correlational research design, which is a quantitative research model, was employed. Correlational research is a research model that investigates the presence of a statistical relationship between two or more variables. This relationship elucidates the strength and direction of the association between variables. The multifactorial predictor correlational research design, a subtype of correlational research model, seeks to understand the links between variables while simultaneously evaluating the impact of predictor factors on the predicted variables. The purpose of it is to ascertain the direct and indirect relationships between variables (Büyüköztürk et al., 2023). In this context, the present study aimed to investigate the mediating role of Turkish undergraduates' emotion dysregulation levels in the relationship between their attachment styles and social media addiction.

3.2. Study Group

The study group of the research consisted of undergraduates aged 18 to 25 who used social media tools. The process of determining the sample of the study was based on the convenience sampling and criterion sampling methods. Convenience sampling is a method of collecting data in which the sample is selected from easily accessible units, taking into account factors such as time or financial resources. Furthermore, the criterion sampling method entails creating a sample by selecting individuals, events, objects, or circumstances that exhibit the specific qualities indicated by the researcher about the relevant issue. The primary reason for employing this approach is to carry out study with individuals who exhibit specific traits (Büyüköztürk et al., 2023).

In deciding the sample size, the number of students was initially determined based on Istanbul governorship's statistical guidelines. It was found that there were 1.001.834 undergraduates living in Istanbul (Istanbul Governorship, 2023). According to the sample size formula (Büyüköztürk et al., 2023), the sample should include at least 384 undergraduates.

A total of 406 undergraduate students voluntarily participated in this study, but the data of 11 participants were excluded from the study due to the missing or outlier data. For this reason, the study analyses were conducted with a total of 395 participants' results. In this context, undergraduate students who were educated in the 2023-2024 academic year and used social media constituted the sample of the research.

Table 1 shows the study group's distribution of demographic information.

Table 1

Distribution of demographic information of the participants

Variables	Categories	n	%
Gender	Female	292	73.9
	Male	103	26.1
Age	18-20	143	36.2
	21-23	211	53.4
	24-25	41	10.4
University Type	Public	32	8.1
	Private	363	91.9
Grade Level	Preparatory class	12	3.0
	1st class	128	32.4
	2nd class	51	12.9
	3rd class	106	26.8
	4th class and above	98	24.8
University Departments	Faculty of Arts and Sciences	208	52.7
	Faculty of Education	20	5.1
	Faculty of Engineering	50	12.7
	Faculty of Architecture	10	2.5
	Faculty of Economics and Administrative Sciences	38	9.6
	Faculty of Health Sciences	29	7.3
	Faculty of Dentistry	1	0.3

Table 1 (continue)

	Faculty of Fine Arts	3	0.8
	Faculty of Communication	17	4.3
	Faculty of Nursing	4	1.0
	Institute of Social Sciences	5	1.3
	Faculty of Law	5	1.3
	Faculty of Medicine	2	0.5
	Faculty of Computer and Information Sciences	2	0.5
	Faculty of Pharmacy	1	0.3
Psychiatric or Psychological Disorder Diagnosis Status	Yes	69	17.5
	No	326	82.5
Perceived Economic Status	Lower	34	8.6
	Middle	187	47.3
	Top	174	44.1
Social Media Usage Status	Yes	395	100.0
	No	0	0.0
Daily Social Media Usage Time	less than 1 hour	20	5.1
	1-3 hours	173	43.8
	4-6 hours	172	43.5
	7-9 hours	26	6.6
	More than 9 hours	4	1.0
	Total	395	100.0

As seen in Table 1, the study group consisted of 292 female (73.9%) and 103 male (26.1%) undergraduate students. Considering the age of participants, the youngest participant reported being 18 years of age, while the oldest was 25 The mean age for all participants was 21.28 years (*SD* = 1.77). Among the participants, 143 (36.2%) undergraduate students were between the ages of 18-20, 211 (53.4%) undergraduates were between the ages of 21-23, and 41 (10.4%) undergraduates were between the ages of 24-25.

Moreover, 32 (8.1%) of the students were educated at public universities while 363 (91.9%) of them were educated at private universities. In terms of the grade levels of participants, 12 of them were preparatory students (3.0%), 128 of them were first grade (32.4%), 51 of them were second grade (12.9%), 106 of them were third grade (26.8 %), 98 of them were fourth grade and above (24.8%). In terms of universities department, a significant number of participants were enrolled in Faculty of Arts and Sciences (52.7%,

n=208), with the remainder distributed among Faculty of Education (5.1%, n=20), Faculty of Engineering (12.7%, n=50), Faculty of Architecture (2.5%, n=10), Faculty of Economics and Administrative Sciences (9.6%, n=38), Faculty of Health Sciences (7.3%, n=29), Faculty of Dentistry (0.3%, n=1), Faculty of Fine Arts (0.8%, n=3), Faculty of Communication (4.3%, n=17), Faculty of Nursing (1.0%, n=4), Institute of Social Sciences (1.3%, n=5), Faculty of Law (1.3%, n=5), Faculty of Medicine (0.5%, n=2), Faculty of Computer and Information Sciences (0.5%, n=2), and Faculty of Pharmacy (0.3%, n=1).

69 (17.5%) of the sample had a diagnosed psychiatric or psychological disorder while 326 (82.5%) of them had no diagnosed psychiatric or psychological disorders. A diagnosed mental health condition was reported by 69 of the participants. The majority of these consist of anxiety disorders, panic disorder, obsessive-compulsive disorder (OCD), depressive disorders, attention deficit hyperactivity disorder (ADHD), fibromyalgia, eating disorders, post-traumatic stress disorder (PTSD), and many others. Regarding to perceived economic status of the participants, 34 of them (8.6%) were in low level, 187 of them (47.3%) were in medium level, and 174 of them (44.1%) were in high level perceived socioeconomic status.

When looking at the participants' social media usage, all participants reported using it (%100, n=395). Considering daily social media platforms usage duration of participants, 20 participants (5.1%) stated spending less than 1 hour, 173 participants (43.8%) stated spending 1-3 hours, 172 participants (43.5%) stated spending 4-6 hours, 26 participants (6.6%) stated spending 7-9 hours, 4 participants (1.0%) stated spending more than 9 hours.

3.3. Data Collection Tools

In this study, four instruments were used for data collection. One of them is a Demographic Information Form developed by the researcher. Other tools are Three-Dimensional Attachment Style Scale, Difficulties in Emotion Regulation Scale- Brief Form (DERS-16), and Social Media Addiction Scale.

3.3.1. Demographic Information Form (DIF)

The demographic information form (see Appendix B) was created by the researcher to determine the participants' personal information that would be valuable for the research. It consisted of questions regarding demographic variables such as gender, age, university type, grade level, department, whether they had a diagnosed psychiatric and psychological

disorder, perceived economic status, whether they used social media platforms, and how many hours per day on average they spent on social media platforms.

3.3.2. Three-Dimensional Attachment Style Scale (TDASS)

Three-Dimensional Attachment Styles Scale (see Appendix C) was developed by Erzen (2016) with the aim of generating an alternative measurement tool that solves the problems related to validity and reliability issues encountered in the scales used in Turkey in measuring attachment styles. The goal of the scale was to ascertain the adult attachment styles. There were three sample groups including secondary school, high school, and university students. The scale is made of 18 items that are answered on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree*)*. The three sub-dimensions were identified as overlapping exactly with Ainsworth's attachment model. The first sub-dimension is termed the "avoidant attachment style", comprising 7 items, and encompassing attitudes where the individuals keep up their own self-worth while denying the worth of others. The second sub-dimension is named the "secure attachment style", consisting of 5 items, and involving attitudes in which the individuals assess both themself and the individuals around them as valuable. The final sub-dimension is called "anxious-ambivalent attachment style" comprising 6 items. It includes attitudes involving a desire for constant interaction with individuals around them by seeing themselves as worthless and a simultaneous avoidance of being with others due to the potential harm that may come from them. After conducting a reliability analysis, the internal consistency coefficients for three sub-dimensions were determined to be .80, .69, and .71, respectively ($p < .05$). For the present study, the internal consistency coefficients of Avoidance, Secure, and Anxious-Ambivalent subscales were .80, .57, .82 respectively ($p < .05$).

3.3.3. Difficulties in Emotion Regulation Scale- Brief Form (DERS-16)

The Difficulties in Emotion Regulation Scale (DERS) is a self-report questionnaire developed by Gratz and Roemer in 2004. Its purpose is to ensure a detailed appraisal of various dimensions of ER difficulties that significantly impact individuals' psychological well-being and functional abilities. This scale consists of 36 items, and 6 subscales ["Awareness" (deficiency of emotional awareness), "Clarity" (deficiency of emotional clarity), "Strategies" (restricted access to emotion regulation strategies), "Non-Acceptance"

(non-acceptance of emotional reaction), “Goals” (challenges in carrying out goal-directed behavior), and “Impulse” (problems with managing impulse control]. Gratz and Roemer (2004) stated that the scale is valid and reliable to measure level of ER difficulties (as cited in Yigit & Yigit, 2017). Yigit and Yigit (2017) stated that this outcome has been confirmed by multiple investigations involving clinical participants as well as non-clinical participants.

In 2016, Bjureberg et al. created a short version of the scale (DERS-16) by eliminating the Awareness sub-scale and lowering the overall number of items from 36 to 16 items. This decision was made due to the low correlation of the “Awareness” sub-scale with other DERS sub-scales (as cited in Yigit & Yigit, 2017), and because it did not measure the underlying structure assessed by the other DERS sub-scales (Bardeen et al., 2012). DERS-16 consists of five subscales (Clarity, Strategies, Non-acceptance, Impulse and Goals) and employs a 5-point Likert scale which ranges from 1 (representing “almost never”) to 5 (representing “almost always”) like DERS. This version demonstrated a strong internal consistency (α = .92), good test-retest reliability (r = .85) and showed a strong correlation with DERS (r = .93). Miguel et al. (2016) proposed that opting for DERS-16 could be a more favorable choice compared to using DERS. This recommendation was based on DERS-16 scores' Cronbach’s alphas, which ranged from .80 to .87, and its confirmed five-factor structure through confirmatory factor analysis (CFA).

Yigit and Yigit (2017) pointed out that numerous studies conducted in diverse cultural contexts have underscored the ability of DERS to be effectively adapted for cross-cultural use. Difficulties in Emotion Regulation Scale-Brief Form (DERS-16) (see Appendix D) was also adapted into Turkish by Yigit and Yigit (2017). As in the original scale, five subscales, and a 5-point Likert scale were revealed. The DERS-16 total scores have a potential range of 16 to 80 score, and as the score obtained from the scale increases, the level of difficulty in regulating emotions also increases. The sample of this study included 316 undergraduate students, comprising 169 females and 147 males, with ages ranging from 18 to 28 years. The five-factor structure of DERS-16 was assessed with a confirmatory factor analysis (CFA) and measurement invariance across gender was tested through a multiple-group confirmatory factor analysis, while testing the psychometric properties of DERS-16 in the mentioned sample. Yigit and Yigit (2017, p.4) stated that “the internal consistency coefficients were found to be .92 for overall DERS-16, .84 for Clarity, .84 for Goals, .87 for Impulse, .87 for Strategies, and .78 for Non-acceptance. Cronbach’s alpha coefficients were found to be .86 and .88 for the two randomly divided parts of the scale”. To sum up, these

results indicate that DERS-16 is a reliable and valid scale for measuring the level of difficulties in emotion regulation due to its strong psychometric properties. The internal consistency coefficient was recorded at .93 ($p < .05$) for the present study.

3.3.4. Social Media Addiction Scale

The Social Media Addiction Scale (see Appendix E) was developed by Aygar and Uzun (2018). The scale is a self-report measure to determine individuals' social media addiction levels. The study group was composed of 565 university students. The scale consisting of 54 items was prepared by reviewing the relevant literature, and then, based on expert feedback, some items were removed from the scale, and some were revised to create a total of 41 items. Afterward, the scale was developed, and the final version was determined as 26 items. Responses to these items are rated on a five-point Likert scale (ranging from 1 = *Never* to 5 = *Always*). It's possible to derive a total score from the scale. The scale's minimum achievable score stands at 26, while its maximum attainable score reaches 130. A rise in the score gained from the scale means an escalation in the degree of social media addiction. The scale has a structure with 3 factors called "functional deterioration" consisting of 12 items, control difficulty and deprivation consisting of 10 items, and social isolation consisting of 4 items. To determine the reliability level of the scale, internal consistency coefficients were calculated. Cronbach's alpha was found as .95 for the overall scale, .92 for control difficulty and deprivation, .91 for functional deterioration, and .81 for social isolation subscales. As a result of the exploratory factor analysis (EFA), factor loadings were found to vary between .493 and .792. Taken together, one can conclude that the Social Media Addiction Scale is a valid and reliable measurement tool to identify one's addiction level on social media tools. The internal consistency coefficient was found to be .91 ($p < .05$) for the current study.

3.4. Data Collection Procedure

Before commencing the data collection procedure, the necessary permissions were acquired for the scales to be used in the current research. Subsequently, ethical approval was received by Yeditepe University Social and Humanities Ethics Committee (see Appendix G).

Following the approvals obtained, a survey was constituted using Google Forms, an online data collection tool, and the data collection process was carried out through the link created on this platform. To reach enough participants, the link was delivered to the participants through study postings shared on social media platforms, e-mail groups of university communities, and relevant courses with the permission of the instructors. The link was available between January and February 2024.

Participants were asked to read and approve the informed consent form (see Appendix A) before starting the study. Then, they were asked to fill out the Demographic Information Form, Three-Dimensional Attachment Style Scale, Difficulties in Emotion Regulation Scale- Brief Form (DERS-16), and Social Media Addiction Scale respectively. Finally, after the participants completed the study, they were asked to read the Debriefing Form (see Appendix F). Participation in the current study was entirely voluntary, and the mean time for completing the respective forms was 5-10 minutes.

3.5. Data Analysis

For the analysis of data in this study, the software SPSS version 27 was employed, and various approaches were conducted to analyze the data obtained. First, missing and outlier values were examined as part of the data set preparation. No missing values were identified in the dataset. After, the remaining dataset underwent an analysis to detect outliers through Mahalanobis distance calculation. Subsequently, whether the research data showed a normal distribution was checked with Skewness-Kurtosis coefficients. Since the data exhibited a normal distribution having the skewness and kurtosis values falling within the range of +1.5 and -1.5 (Tabachnick & Fidell, 2019), all tests were analyzed using parametric methods.

The Pearson correlation was employed to assess the relationship between attachment styles, ER difficulties, and SMA. Then, in line with the main purpose of the research, a simple mediation analysis was conducted using the PROCESS macro for SPSS (Model 4), designed by Hayes in 2008, to explore the direct and indirect impacts of attachment styles on social media addiction through difficulties in emotion regulation (Hayes, 2018). In the final stage, the descriptive analyses and differential statistics of the participants were utilized.

In this context, the data analyses were conducted in the following order:

a) Descriptive statistics including mean, and standard deviation scores of the scales, and normality assumptions (e.g. skewness and kurtosis values), and Cronbach's alpha coefficients for each scale in the study were analyzed. Additionally, The Variance Inflation Factor (VIF) was calculated to test whether there was a multicollinearity problem.
b) To test whether there was a meaningful relationship between attachment styles, ER difficulties, and SMA, Pearson Correlation analysis was applied.
c) Mediation analyses using the bootstrapping sampling method via PROCESS Macro Model 4 were used to analyze the mediating role of undergraduates' ER difficulties in the relationship between attachment styles and SMA.
d) Differential statistics including independent samples t-test, one-way ANOVA, and Kruskal Wallis-H were applied to test whether the total scores of each variable varied in terms of gender, age, grade level, whether they had a diagnosed psychiatric and psychological disorder, perceived economic status, and how many hours per day on average they spent on social media platforms. Differential statistics were not performed because the distribution of participants concerning university type and department would not provide representative data.

4. RESULTS

In this study, all statistical analyses were performed with SPSS 27 package software. Before commencing the research analyses, preliminary analyses were undertaken. These included assessing multivariate normality, identifying missing data and outliers, and examining descriptive statistics. Following these preliminary analyses, the main analyses addressing the research problem were conducted. The level and direction of the relationship between the scales were examined using Pearson correlation analysis. Process Macro 4.2 was also preferred for mediation role analysis. Then, analyses were conducted for the research sub-problems. Independent samples t-test and One-way ANOVA test were performed to evaluate whether the scales differed concerning demographic variables, and in cases where the assumptions of parametric tests were not met, the Kruskal Wallis-H test was performed. All these statistical analyses were performed with a 95% confidence interval, and a p-value of 0.05 was accepted as the significance level.

4.1. Preliminary Analyses

Prior to conducting the main analysis, the data collected from a sample of 406 participants underwent a thorough examination with regards to the presence of missing and outlier values. To determine if the data contained any missing values, a thorough analysis was conducted on all replies provided by the participants. It was established that there were no missing values in the data. The dependent variable considered in this analysis was the Social Media Addiction Scale (SMAS) scores, while the independent variables included the Three-Dimensional Attachment Style Scale (TDAS) factors: Secure (SECA), Avoidant (AVOA), Anxious (ANXA), and Difficulties in Emotion Regulation Scale-Brief Form (DERS) scores. As part of the preliminary analysis for this study, to identify multivariate outliers, the Mahalanobis distance was calculated for each observation in the dataset, considering these variables. This step was critical in identifying and addressing potential anomalies in the normal distribution that could bias the results. The significance threshold for identifying outliers was set at an alpha level of .01, with degrees of freedom (*df*) of 4, corresponding to the number of variables examined. The critical Chi-square (χ^2) value used as a cutoff for identifying outliers was 4.988. Observations with a Mahalanobis distance exceeding this chi-squared value were considered multivariate outliers. A total of 11

participants were then excluded from the dataset using the listwise deletion method ($p < .01$) to ensure the robustness of the statistical analyses and to mitigate the potential influence of extreme values on the overall findings of the research. Prior to the main analyses, the data set contained 395 participants. The analyses that followed this adjustment were conducted on this refined dataset.

In the current study, a detailed descriptive statistical analysis was performed to explore the characteristics of key psychological constructs, consistent with established quantitative research methods. The descriptive statistics, summarized in Table 2, provide a basic understanding of the central tendency and variability of each variable, as well as insight into the shape of the distribution through measures of skewness and kurtosis.

Table 2

Evaluation of descriptive statistics and indexes of the normal distribution, including skewness and kurtosis, concerning the study variables

Measure	N	Min	Max	Mean	*SD*	Skewness	Kurtosis
SECA	395	12	25	19.80	2.65	-0.37	-0.14
AVOA	395	7	26	14.34	4.62	0.52	-0.45
ANXA	395	6	28	14.46	4.92	0.43	-0.45
DERS	395	16	80	46.34	13.68	0.08	-0.64
SMAS	395	27	113	67.82	16.68	-0.11	-0.41

Note. SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

As shown in Table 2, the study variables exhibited mean scores ranging from 14.34 to 67.82, with corresponding standard deviation values ranging from 2.65 to 16.68. The study variables' skewness and kurtosis values ranged from -0.64 to .52. The skewness and kurtosis values, which fall within the acceptable range of -1 to +1 for all variables, suggest that the distributions are approximately normal. This adherence to normality, as outlined by Tabachnick and Fidell (2019), allows for the use of parametric tests in subsequent analyses, ensuring the validity of the results.

Furthermore, the VIF scores of SECA, AVOA, ANXA, and DERS were recorded as 1.184, 1.065, 1.198, and 1.000 respectively. A Durbin Watson value of 1.869 was obtained. The absence of multicollinearity and singularity in the dataset can be deduced from correlation coefficients below .90 (Tabachnick & Fidell, 2019) and VIF scores below 10 (Hair et al., 1995).

4.2. Main Analyses

4.2.1. The Correlations Between the Levels of Attachment Styles, ER Difficulties, and SMA

Pearson Correlation Analysis was employed to examine the relationships between participants' levels of attachment styles, difficulties in emotion regulation, and social media addiction. Table 3 displays the results.

Table 3

Consequences of Pearson correlation coefficients among study variables

Study Variables	1	2	3	4	5
1.SECA	1				
2.AVOA	-.19**	1			
3.ANXA	-.38**	.22**	1		
4.DERS	-.38**	.10*	.50**	1	
5.SMAS	-.17**	.12*	.37**	.44**	1

Note. ***p<.001, **p <.01, *p <.05, SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

When the results of the given findings were examined, there was a significant and negative correlation between the scores of SECA and DERS (r = -.38, p < .01). In essence, participants exhibiting high degrees of secure attachment were shown to have low levels of difficulties in regulating their emotions. However, the relationship between the scores of AVOA and DERS (r= .10, p < .05) and the relationship between the scores of ANXA and DERS (r = .50, p < .01) were significant and positive. These findings indicated that participants who had high scores in avoidant attachment had higher scores in emotion regulation difficulty. Also, participants who had high scores in anxious attachment had

higher scores in emotion regulation difficulty. When the results of the relationship between the scores of DERS and SMAS were investigated, a significant and positive correlation was observed ($r = .44, p < .01$). Regarding this finding, participants with high levels of difficulties in regulating their emotion showed significantly more social media addiction than others. Finally, a significant and negative correlation has been noted between the SECA and SMAS scores ($r = -.17$, $p < .01$). Participants with elevated levels of secure attachment had decreased levels of social media addiction. In contrast, the link between the scores of AVOA and SMAS ($r = .12$, $p < .05$) and the relationship between the scores of ANXA and SMAS ($r = .37$, $p < .01$) were significant and positive. Namely, individuals exhibiting high levels of avoidant attachment were found to possess elevated levels of social media addiction. Participants exhibiting high levels of anxious attachment were also found to have high levels of social media addiction.

4.2.2. The Mediating Role of ER Difficulties in the Relationship between Attachment Styles and SMA

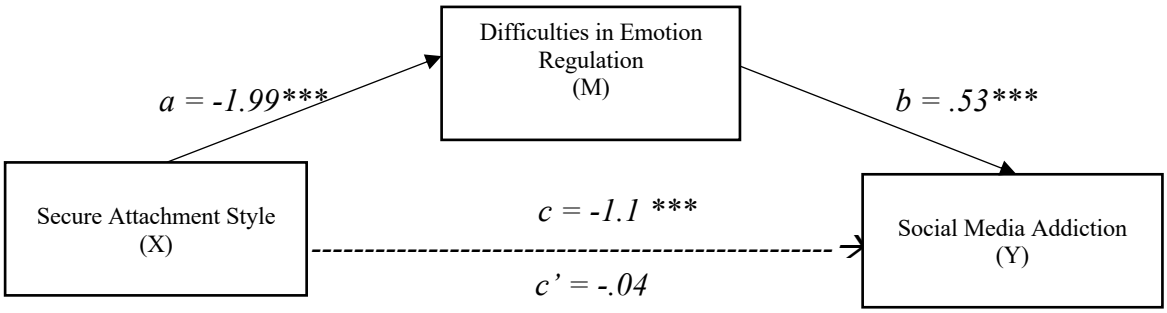
The primary objective of this analysis was to examine how the scores of difficulties in emotion regulation mediate the relationship between the scores of attachment styles subscales (secure attachment, avoidant attachment, and anxious attachment) and social media addiction scores. The research hypotheses were examined using the PROCESS macro for SPSS (Hayes, 2018, Model 4, with 5,000 bootstrapping samples).

4.2.2.1. The Mediating Role of ER Difficulties in the Relationship between Secure Attachment Style and SMA

Mediation analysis was employed to investigate the role of ER difficulties in the relationship between secure attachment and SMA. The results are shown in Figure 2 and Table 4.

Figure 2

The results of the suggested model concerning the secure attachment style



Note. The model shows the non-standardized regression coefficients, *β*. The bold lines represent significant relations. ****p*<.001, ***p*<.01, **p*<.05

In Figure 2, secure attachment scores significantly decreased the scores of difficulties in emotion regulation (*β* = -1.99, *SE* = .24, *t*(393)= -8.260, *p* < .001). However, the scores of the mediating variable significantly increased the social media addiction scores (*β* = .53, S *SE* = .06, *t*(393)= 8.788, *p* < .001).

Table 4

Direct and indirect effects of secure attachment style on social media addiction

			Boost 95 % CI	
	Effect	Boost SE	Lower Limit	Upper Limit
Total Effect of SECA on SMAS	-1.091	.313	-1.706	-.476
Direct Effect of SECA on SMAS	-.043	.310	-.653	.567
Indirect Effect of SECA on SMAS via DERS SECA → DERS → SMAS	-1.048	.173	-1.404	-.734

Note. SECA = Secure Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

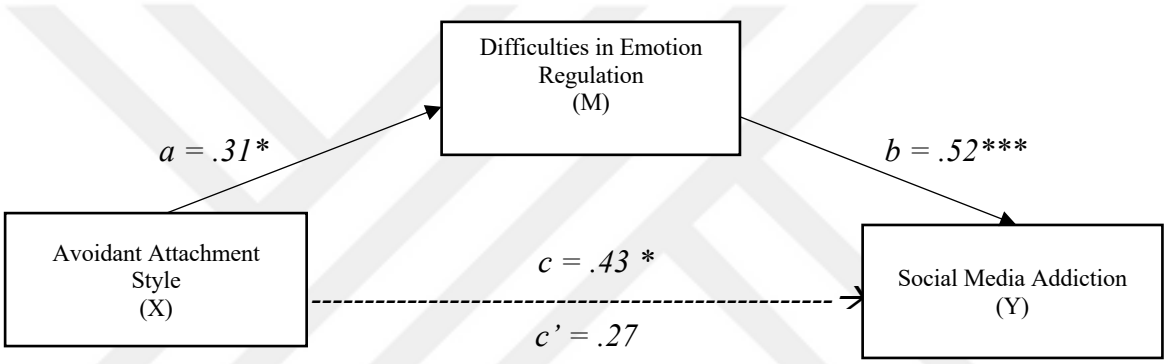
Moreover, as shown in Table 4, the total effect of secure attachment on social media addiction was statistically significant (*b* = -1.091, *SE* = .313, 95% BCa CI [-1.706, -.476]). Yet, the direct effect of secure attachment on social media addiction was not statistically important (*b* = -.043, *SE* = .310, 95% BCa CI [-.653, .567]). Besides, secure attachment indirectly shaped social media addiction via difficulties in emotion regulation (*b* = -1.048, *SE* = .173, 95% BCa CI [-1.404, -.734]), as the confidence intervals include no zero value.

4.2.2.2. The Mediating Role of ER Difficulties in the Relationship between Avoidant Attachment Style and SMA

Mediation analysis was employed to investigate the role of ER difficulties in the relationship between avoidant attachment and SMA. The results are shown in Figure 3 and Table 5.

Figure 3

The results of the suggested model concerning the avoidant attachment style



Note. The model shows the non-standardized regression coefficients, *β*. The bold lines represent significant relations. ***p<.001, **p<.01, *p<.05

In Figure 3, avoidant attachment scores significantly increased the scores of difficulties in emotion regulation (β = .31, SE = .15, t(393)= 2.057, p < .05). However, the scores of the mediating variable significantly increased the social media addiction scores (β = .52, SE = .05, t(393)= 9.389, p < .001).

Table 5

Direct and indirect effects of avoidant attachment style on social media addiction

			Boost 95 % CI	
	Effect	Boost SE	Lower Limit	Upper Limit
Total Effect of AVOA on SMAS	.431	.181	.076	.786
Direct Effect of AVOA on SMAS	.272	.164	-.052	.595
Indirect Effect of AVOA on SMAS via DERS AVOA → DERS → SMAS	.159	.081	.002	.326

Note. AVOA = Avoidant Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

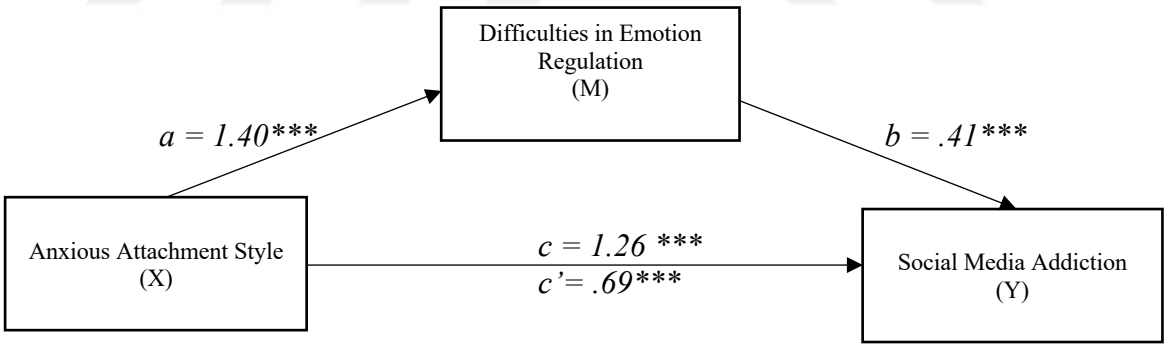
Furthermore, as shown in Table 5, the total effect of avoidant attachment on social media addiction was statistically significant (*b* = .431, *SE* = .181, 95% BCa CI [.076, .786]). Yet, the direct effect of avoidant attachment on social media addiction was not statistically significant (*b* = .272, *SE* = .164, 95% BCa CI [-.052, .595]). Besides, avoidant attachment indirectly shaped social media addiction via difficulties in emotion regulation (*b* = .159, *SE* = .081, 95% BCa CI [.002, .326]), as the confidence intervals contain no zero value.

4.2.2.3. The Mediating Role of ER Difficulties in the Relationship between Anxious Attachment Style and Social Media Addiction

Mediation analysis was employed to investigate the role of ER difficulties in the relationship between anxious attachment and SMA. The results are shown in Figure 4 and Table 6.

Figure 4

The results of the suggested model concerning the anxious attachment style



Note. The model shows the non-standardized regression coefficients, *β*. The bold lines represent significant relations. ***p<.001, **p<.01, *p<.05

In Figure 4, anxious attachment scores significantly increased the scores of difficulties in emotion regulation (*β* = 1.40, *SE* = .12, *t*(393)= 11.505, *p* < .001). However, the scores of the mediating variable significantly increased the social media addiction scores (*β* = .41, *SE* = .06, *t*(393)= 6.459, *p* < .001).

Table 6

Direct and indirect effects of anxious attachment style on social media addiction

			Boost 95 % CI	
	Effect	Boost SE	Lower Limit	Upper Limit
Total Effect of ANXA on SMAS	1.258	.159	.946	1.570
Direct Effect of ANXA on SMAS	.692	.175	.349	1.035
Indirect Effect of ANXA on SMAS via DERS ANXA → DERS → SMAS	.566	.103	.365	.767

Note. ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

Besides, as shown in Table 6, the total effect of anxious attachment on social media addiction was statistically significant (*b* = 1.258, *SE* = .159, 95% BCa CI [.946, 1.570]). In addition, the direct impact of anxious attachment on social media addiction was statistically significant (*b* = .692, *SE* = .175, 95% BCa CI [.349, 1.035]). Anxious attachment indirectly shaped social media addiction via difficulties in emotion regulation (*b* = .566, *SE* = .10, 95% BCa CI [.365, .767]), as the confidence intervals include no zero value.

4.3. Results about Socio-Demographic Variables

4.3.1. Examination of Levels of Attachment Styles, ER Difficulties, and SMA Concerning Gender of the Participants

Independent samples t-test was employed to determine gender differences in attachment styles, difficulties in ER, and SMA scores. The results of the independent samples t-test are given in Table 7.

Table 7

Consequences of Independent samples t-test associated with the variations observed between study variables concerning gender

Measure	Group	*N*	*Mean*	*SD*	*df*	*t*	*p*
SECA	Female	292	19.92	2.63	393	1.55	0.123

Table 7 (continue)

	Male	103	19.46	2.67			
AVOA	Female	292	13.76	4.50	393	-4.26	0.001***
	Male	103	15.97	4.59			
ANXA	Female	292	14.67	4.94	393	1.49	0.137
	Male	103	13.83	4.85			
DERS	Female	292	47.44	13.54	393	2.71	0.007**
	Male	103	43.22	13.68			
SMAS	Female	292	68.92	16.29	393	2.21	0.028*
	Male	103	64.72	17.45			

Note. ***p<.001, **p<.01, *p<.05, SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

As demonstrated in Table 7, the results revealed statistically significant gender differences in three main areas. Firstly, when participants' scores from the avoidant attachment subscale ($t(393) = -4.26$, $p < .001$) were compared by gender, a significant difference was detected. Secondly, a significant difference was observed in participants' emotion regulation difficulties levels ($t(393) = 2.71$, $p < .01$). Additionally, their social media addiction scores differed with respect to gender ($t(393) = 2.21$, $p < .05$). On the other hand, there was no statistically significant difference between male and female participants in terms of secure attachment styles, and anxious attachment styles concerning gender (respectively, $t(393) = 1.55$, $p > .05$; $t(393) = 1.49$, $p > .05$).

When the average scores obtained from the avoidant attachment subscale were evaluated, it was observed that men ($M = 15.97$, $SD = 4.59$) had higher scores than women ($M = 13.76$, $SD = 4.50$). In terms of DERS scale, with females exhibiting higher levels of emotion regulation difficulties ($M = 47.44$, $SD = 13.54$), compared to males ($M = 43.22$, $SD = 13.68$). Finally, females' social media addiction scores ($M = 68.92$, $SD = 16.29$) were higher than males' social media addiction scores ($M = 64.72$, $SD = 17.45$).

4.3.2. Examination of Levels of Attachment Styles, ER Difficulties, and SMA Concerning Age of the Participants

One-way ANOVA was used to examine if there were differences in the levels of attachment styles, difficulties in ER, and SMA concerning the age of the participants. Before conducting the ANOVA, the homogeneity of variances across groups was assessed using Levene's test to meet the assumption for ANOVA. The results indicated that the variances for avoidant attachment styles (Levene's statistic = 1.377, *df1* = 2, *df2* = 392, *p* = .254), emotion regulation difficulties (Levene's statistic = 1.146, *df1* = 2, *df2* = 392, *p* = .319), and social media addiction (Levene's statistic = .705, *df1* = 2, *df2* = 392, *p* = .495) were homogeneous across age. Conversely, the variances for secure (Levene's statistic = 6.921, *df1* = 2, *df2* = 392, *p* = .001) and anxious (Levene's statistic = 3.741, *df1* = 2, *df2* = 392, *p* = .025) attachment style were not homogeneous across age. Therefore, in Table 8, the One-way ANOVA analysis of the variances whose homogeneity is achieved and the Welch test result of the variances whose homogeneity condition is not met are presented.

Table 8

Consequences of One-way ANOVA associated with the variations observed between study variables concerning age

Measure	Group	N	*Mean*	*SD*	*F*	*df1 / df2*	*p*
SECA	ages 18-20	143	19.88	2.57	0.11	2 / 392	0.888
	ages 21-23	211	19.75	2.50			
	ages 24-25	41	19.73	3.53			
AVOA	ages 18-20	143	14.41	4.45	0.03	2 / 392	0.962
	ages 21-23	211	14.27	4.64			
	ages 24-25	41	14.34	5.14			
ANXA	ages 18-20	143	15.04	5.38	1.54	2 / 392	0.218
	ages 21-23	211	14.08	4.59			
	ages 24-25	41	14.31	4.81			

Table 8 (continue)

DERS	ages 18-20	143	48.30	14.09	2.75	2 / 392	0.065
	ages 21-23	211	45.57	13.02			
	ages 24-25	41	43.41	14.92			
SMAS	ages 18-20	143	70.52	16.97	3.02	2 / 392	0.055
	ages 21-23	211	66.43	16.53			
	ages 24-25	41	65.53	15.52			

Note. SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

Looking at the One-way ANOVA results in Table 8, it is observed that the levels of attachment styles —whether secure, avoidant, or anxious—(respectively, $F(2,392) = 0.11$, $p > .05$; $F(2,392) = 0.03$, $p > .05$; $F(2,392) = 1.54$, $p > .05$), difficulties in emotion regulation ($F(2,392) = 2.75$, $p > .05$), and social media addiction ($F(2,392) = 3.02$, $p > .05$) did not differ according to the age of the participants.

4.3.3. Examination of Levels of Attachment Styles, ER Difficulties, and SMA Concerning Grade Levels of the Participants

Kruskal Wallis-H was used to examine whether there was a difference in the levels of attachment styles, difficulties in ER, and SMA with respect to the grade level of the participants. The results of Kruskal Wallis-H are given in Table 9.

Table 9

Consequences of Kruskal Wallis- H related to the difference among study variables concerning grade levels

Measure	Group	N	*Mean*	*SD*	*Kruskal-Wallis H*	*df*	*p*	*Difference*
SECA	(1) Preparatory class	12	19.42	2.78	6.41	4	0.171	-
	(2) 1st grade	128	19.98	2.40				
	(3) 2nd grade	51	18.84	2.85				
	(4) 3rd grade	106	20.03	2.52				
	(5) 4th grade and above	98	19.88	2.90				
AVOA	(1) Preparatory class	12	13.67	5.10	2.72	4	0.605	-
	(2) 1st grade	128	14.39	4.63				
	(3) 2nd grade	51	14.78	4.42				
	(4) 3rd grade	106	13.85	4.58				
	(5) 4th grade and above	98	14.64	4.74				
ANX	(1) Preparatory class	12	15.50	6.80	7.94	4	0.094	-
	(2) 1st grade	128	15.08	5.04				
	(3) 2nd grade	51	15.31	5.46				
	(4) 3rd grade	106	13.35	4.55				

Table 9 (continue)

	(5) 4th grade and above	98	14.27	4.45				
DERS	(1) Preparatory class	12	53.33	15.41	5.70	4	0.223	-
	(2) 1st grade	128	47.27	14.19				
	(3) 2nd grade	51	47.14	13.19				
	(4) 3rd grade	106	45.44	12.65				
	(5) 4th grade and above	98	44.83	14.00				
SMAS	(1) Preparatory class	12	66.75	20.74	1.64	4	0.802	-
	(2) 1st grade	128	68.95	15.84				
	(3) 2nd grade	51	66.84	16.70				
	(4) 3rd grade	106	67.76	18.18				
	(5) 4th grade and above	98	67.05	15.76				

Note. ***p<.001, **p<.01, *p<.05, SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

After analyzing the research findings, no significant grade level differences between participants were detected when comparing the scores obtained from attachment styles—whether secure, avoidant, or anxious—, difficulties in ER, and SMA scales (p > .05).

4.3.4. Examination of Levels of Attachment Styles, ER Difficulties, and SMA depending on the Presence of a Diagnosed Psychiatric or Psychological Disorder of the Participants

Independent samples t-test was applied to explore if there were differences in the scores of attachment styles, difficulties in ER, and SMA depending on the presence of a diagnosed psychiatric or psychological disorder of the participants. Results of the Independent samples t-test are given in Table 10.

Table 10

Consequences of Independent samples t-test related to the difference among study variables depending on the presence of a diagnosed psychiatric or psychological disorder

Measure	Group	*N*	*Mean*	*SD*	*df*	*t*	*p*
SECA	Yes	326	19.30	2.67	393	-1.72	0.086
	No	69	19.91	2.64			
AVOA	Yes	326	13.94	4.57	393	-0.78	0.435
	No	69	14.42	2.64			
ANXA	Yes	326	15.14	4.52	393	1.28	0.201
	No	69	14.31	5.00			
DERS	Yes	326	52.81	13.19	393	4.43	0.000***
	No	69	44.97	13.41			
SMAS	Yes	326	72.90	16.74	393	2.81	0.005**
	No	69	66.75	16.50			

Note. ***p<.001, **p<.01, *p<.05, SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

The results of this study demonstrated significant differences in certain psychological constructs among undergraduate students based on the presence or absence of diagnosed

psychological disorders. When the emotional regulation difficulty and social media addiction scores were examined, significant differences appeared (respectively, $t(383) = -4.327$, $p < .05$; $t(383) = -2.259$, $p < .05$). In contrast, attachment styles—whether secure, avoidant, or anxious—do not demonstrate significant variations based on the presence or absence of diagnosed psychiatric or psychological disorders ($p > .05$).

Specifically, in terms of social media addiction individuals with a mental disorder reported higher levels of addiction, with a mean score of 72.00 (*SD* = 18.25), compared to those without a disorder, who had a mean score of 66.93 (*SD* = 16.46). This finding indicated a variance in social media use patterns between the two groups. In addition, emotion regulation difficulties were significantly higher among individuals with a mental disorder. Their mean scores were 52.24 (*SD* = 12.97) compared to 44.68 (*SD* = 13.10) for those without a disorder. This result suggested that emotion regulation may indeed differ between these groups.

4.3.5. Examination of Levels of Attachment Styles, ER Difficulties, and SMA Concerning Perceived Economic Status of the Participants

One-way ANOVA was applied to evaluate whether there were perceived economic status differences among participants in the levels of attachment styles, difficulties in ER, and SMA. Before conducting ANOVA, Levene's test was used to assess the homogeneity of variances across groups to ensure that the assumption for ANOVA was met. The results indicated that the variances for secure attachment style (Levene's statistic = 1.394, *df1* = 2, *df2* = 392, $p = 0.249$), avoidant attachment style (Levene's statistic = 0.133, *df1*= 2, *df2* = 392, $p = 0.876$), anxious attachment style (Levene's statistic = 1.970, *df1*= 2, *df2* = 392, $p = 0.141$), difficulties in emotion regulation (Levene's statistic = 1.431, *df1*= 2, *df2* = 392, $p = 0.240$), and social media addiction (Levene's statistic = 0.388, *df1*= 2, *df2* = 392, $p = 0.679$) were homogeneous across perceived economic status. Results of the One-way ANOVA are given in Table 11.

Table 11

Consequences of One-way ANOVA related to the difference among study variables concerning perceived economic status

Measure	Group	N	*Mean*	*SD*	*F*	*df1 / df2*	*p*
SECA	Lower	34	19.18	3.10	1.67	2 / 392	0.190
	Middle	184	19.71	2.45			
	Upper	168	20.02	2.75			
AVOA	Lower	34	15.03	4.83	1.35	2 / 392	0.261
	Middle	184	13.95	4.72			
	Upper	168	14.61	4.46			
ANXA	Lower	34	15.74	4.81	2.25	2 / 392	0.107
	Middle	184	14.68	5.22			
	Upper	168	13.96	4.57			
DERS	Lower	34	15.74	13.72	1.23	2 / 392	0.294
	Middle	184	45.62	12.78			
	Upper	168	46.48	14.57			
SMAS	Lower	33	67.88	16.48	0.62	2 / 392	0.537
	Middle	184	66.87	16.97			
	Upper	168	68.83	16.44			

Note. ***p<.001, **p<.01, *p<.05, SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

Looking at the One-way ANOVA results in Table 11, it is seen that the levels of attachment styles —whether secure, avoidant, or anxious—(respectively, $F(2,392) = 1.67$, $p > .05$; $F(2,392) = 1.35$, $p > .05$; $F(2,392) = 2.25$, $p > .05$), difficulties in emotion regulation ($F(2,392) = 1.23$, $p > .05$), and social media addiction ($F(2,392) = 0.62$, $p > .05$) did not differ according to the perceived economic status of the participants. Thus, these results

suggest that individuals have comparable levels of the psychological constructs mentioned regardless of their perceived economic status.

4.3.6. Examination of Levels of Attachment Styles, ER Difficulties, and SMA based on the Duration of Daily Social Media Platform Usage

Kruskal Wallis-H was used to examine whether there was a difference in the levels of attachment styles, difficulties in emotion regulation, and social media addiction based on the average daily time spent on social media platforms of the participants. Results of the Kruskal Wallis-H are given in Table 12.

Table 12

Consequences of Kruskal Wallis-H related to the difference among study variables based on the duration of daily social media platform usage

Measure	Group	N	*Mean*	*SD*	*Kruskal-Wallis H*	*df*	*p*	*Difference*
SECA	(1) Less than 1 hour	20	19.60	2.52	6.95	4	0.139	-
	(2) 1-3 Hours	173	20.11	2.73				
	(3) 4-6 Hours	172	19.70	2.53				
	(4) 7-9 Hours	26	19.08	2.26				
	(5) More than 9 hours	4	16.75	4.86				
AVOA	(1) Less than 1 hour	20	13.45	4.02	13.01	4	0.011*	3>2
	(2) 1-3 Hours	173	13.67	4.58				
	(3) 4-6 Hours	172	15.20	4.65				
	(4) 7-9 Hours	26	14.27	4.52				

Table 12 (continue)

	(5) More than 9 hours	4	11.00	2.71				
ANX	(1) Less than 1 hour	20	12.50	4.98	23.67	4	0.000***	3,4,5>1 4>2,3
	(2) 1-3 Hours	173	13.69	4.53				
	(3) 4-6 Hours	172	14.73	4.76				
	(4) 7-9 Hours	26	18.42	5.45				
	(5) More than 9 hours	4	19.75	8.62				
DERS	(1) Less than 1 hour	20	37.40	11.07	26.41	4	0.000***	2,3,4>1 3,4>2
	(2) 1-3 Hours	173	43.87	13.79				
	(3) 4-6 Hours	172	48.87	13.15				
	(4) 7-9 Hours	26	52.38	12.39				
	(5) More than 9 hours	4	49.50	13.92				
SMAS	(1) Less than 1 hour	20	48.70	14.61	82.81	4	0.000***	2,3,4,5>1 3,4,5>2 4>3
	(2) 1-3 Hours	173	62.26	16.46				
	(3) 4-6 Hours	172	72.97	13.19				
	(4) 7-9 Hours	26	81.08	10.90				
	(5) More than 9 hours	4	96.50	19.69				

Note. ***p<.001, **p<.01, *p<.05, SECA = Secure Attachment, AVOA = Avoidant Attachment, ANXA = Anxious Attachment, DERS = Difficulties in Emotion Regulation, SMAS = Social Media Addiction.

As demonstrated in Table 12, when the scores obtained from the secure attachment sub-dimension ($x^2 = 6.95$, $p > .05$) were compared according to the average daily time spent on social media platforms, it was observed that there was no difference between the compared groups. These results suggest that secure attachment style did not differ significantly based on the amount of time spent on social media. On the other hand, a Kruskal-Wallis test revealed a statistically significant difference in avoidant attachment ($x^2 = 13.01$, $p < .05$), anxious attachment ($x^2 = 23.67$, $p < .001$), difficulties in emotion regulation ($x^2 = 26.41$, $p < .001$), and social media addiction ($x^2 = 82.81$, $p < .001$) with respect to the average daily time spent on social media platforms of the participants.

Regarding the results for the avoidant attachment style, the mean score for less than 1 hour of daily time spent on social media platforms was 13.45 (*SD* = 4.02), for 1-3 hours it was 13.67 (*SD* = 4.58), for 4-6 hours it was 15.20 (*SD* = 4.65), for 7-9 hours it was 14.27 (*SD* = 4.52), and for 9+ hours it was 11.00 (*SD* = 2.71). Post-hoc non-parametric independent samples test indicated significant differences between groups. When the averages of the groups were compared, it was observed that avoidant attachment levels were higher in the group with 4-6 hours spent on social media platforms in comparison to those with 1-3 hours spent on social media platforms.

When comparing the averages of the groups with anxious attachment styles, a significant difference was found across categories with post-hoc non-parametric independent samples. It was found that avoidant attachment scores were higher in the group with 4-6 hours (*M* = 14.73, *SD* = 4.76), 7-9 hours (*M* = 18.42, *SD* = 5.45), and more than 9 hours (*M* = 19.75, *SD* = 8.62) spent on social media platforms in comparison to those with less than 1 hour (*M* = 12.50, *SD* = 4.98) spent on social media platforms. It was also observed that participants who spent 7-9 hours (*M* = 18.42, *SD* = 5.45) on social media platforms had a higher score than those who spent 1-3 hours (*M* = 13.69, *SD* = 4.53) and 4-6 hours (*M* = 14.73, *SD* = 4.76).

Post-hoc non-parametric independent samples test revealed significant differences between several groups, indicating that emotion regulation difficulties varied significantly with different durations of social media use. The results for the difficulties in emotion regulation showed that participants who spent 1-3 hours (*M* = 43.87, *SD* = 13.79), 4-6 hours (*M* = 48.87, *SD* = 13.15) and 7-9 hours (*M* = 52.38, *SD* = 12.39) had higher scores in difficulties in emotion regulation in comparison to participants who spent less than 1 hour (*M* = 37.40, *SD* = 11.07). Furthermore, it was noted that individuals who spent 4-6 hours (*M*

= 48.87, *SD* = 13.15) and 7-9 hours (*M* = 52.38, *SD* = 12.39) on social media platforms obtained a higher score compared to those who spent 1-3 hours (*M* = 43.87, *SD* = 13.79).

In terms of the findings related to social media addiction, its scores were higher in the group with 1-3 hours (*M* = 62.26, *SD* = 16.46), 4-6 hours (*M* = 72.97, *SD* = 13.19), 7-9 hours (*M* = 81.08, *SD* = 10.90), and more than 9 hours (*M* = 96.50, *SD* = 19.69) spent on social media platforms in comparison to those with less than 1 hour (*M* = 48.70, *SD* = 14.61). Individuals who spend 4-6 hours (*M* = 72.97, *SD* = 13.19), 7-9 hours (*M* = 81.08, *SD* = 10.90), and more than 9 hours (*M* = 96.50, *SD* = 19.69) on social media platforms have higher scores compared to those who spend 1-3 hours (*M* = 62.26, *SD* = 16.46). Moreover, groups spending 7-9 hours (*M* = 81.08, *SD* = 10.90) on social media platforms exhibited higher scores compared to those spending 4-6 hours (*M* = 72.97, *SD* = 13.19). Post-hoc non-parametric independent samples test indicated significant differences between groups, suggesting that levels of social media addiction increase significantly with more time spent on social media.

5. DISCUSSION

This study aimed to examine whether there was a meaningful relationship between attachment styles, difficulties in emotion regulation (ER), and social media addiction (SMA) levels of undergraduate students aged between 18-25 years old living in Turkey. This research was also carried out to investigate the mediating role of difficulties in ER between attachment styles and SMA. Another objective of the relevant research involved examining whether there was a significant difference in the research variables based on the undergraduate students' gender, age, grade levels, the presence of a diagnosed psychiatric or psychological disorder, perceived economic status, and daily social media platforms usage duration. In this section, the results derived from the research were discussed and interpreted concerning previous studies. These discussions and interpretations were based on the sequence in which the sub-research questions were presented.

5.1. Examining the Results about the Mediating Role of ER Difficulties in the Relationship between Attachment Styles and SMA

5.1.1. The Mediating Role of ER Difficulties in the Relationship between Secure Attachment Style and SMA

Following scrutinizing the results of the present study, it was concluded that secure attachment type was significantly and negatively correlated with difficulties in emotion regulation (ER). In essence, as the secure attachment scores of undergraduates increased, their scores of difficulties in ER also decreased. Upon reviewing the pertinent literature, it was seen that attachment theory offers one of the most thorough frameworks for comprehending social and emotional development (Brumariu, 2015). Bowlby (1988) suggested that the successful regulation of emotions stems from secure attachment orientation. A parallel outcome to the findings of the present study may be noted in the research conducted by Shaver and Mikulincer (2007), which examined the relationship between attachment styles and ER, it was observed that individuals with secure attachment had better ER skills. Similarly, a comprehensive meta-analysis encompassing 100 studies and a total of 20.350 people found consistent evidence supporting the link between attachment style and difficulty in regulating emotions. Specifically, the analysis concluded

that individuals with secure attachments tended to have higher ER skills compared to those with insecure attachments (Pallini et al., 2018). Ceyhan et al. (2019) demonstrated that young adults with a secure attachment pattern had less difficulties in controlling their emotions than individuals with preoccupied and fearful attachment types in their research. In the study conducted by Mikulincer and Shaver (2016), the relationship between ER skills and adult attachment was examined in detail and the results support the findings of the current study. Because of the study, it was stated that secure attachment strongly influenced the improvement of ER skills. Other studies in the literature have also observed that the ER skills of people with a secure attachment pattern are positively affected (Lopez & Brennan, 2000; Wei et al., 2005; Wei et al., 2007). Consistent with findings from previous research, the results of the present study can be understood in the following manner: it appears that undergraduate students with more secure attachment styles tend to regulate and manage their emotional experiences more healthily. The relationships established within the family can be recognized as a factor that helps enhance one's capacity to cope with the stressors of life (Shaver & Mikulincer, 2007).

As another finding of the research, a significant and negative relationship between secure attachment style and social media addiction (SMA) levels of undergraduate students was obtained. In other words, as the secure attachment levels of undergraduate students increased, their levels of SMA also decreased. D'Arienzo et al. (2019) conducted a comprehensive review of the literature, revealing that attachment styles have the potential to function as both a risk factor and a predictor for addictive behaviors. When exploring the relevant literature, it was observed that numerous studies have demonstrated that not growing up in a well-functioning family environment and the inadequacy of families to forge emotional connections significantly influence the formation of addictive behavioral patterns (D'Arienzo et al., 2019; Estevez et al., 2017; Flores, 2004; Senormancı et al., 2014; Yousaf et al., 2021). Studies that examined the relationship between secure attachment style and Facebook addiction, or time spent on Facebook have revealed a negative association (Bashir et al., 2017; Rao & Madan 2012). This finding is in line with the study of Toqeer et al. (2021) on university students. The outcomes of this research indicated that there was a significant and negative association between secure attachment style and Facebook addiction in the sample of university students (Toqeer et al., 2021). Findings similar to the results of the current study were also seen in Monacis et al.'s (2017b) study, in which they investigated the relationship between secure attachment style and social networking site (SNS) addiction,

and Dilsiz and Kandemir's (2020) study, in which they investigated the connections between secure attachment style and SMA. Similar results were expressed in the studies of Monacis et al. (2017a) and Salehi et al. (2023), in which they revealed secure attachment patterns have a negative predictive effect on SMA. Given that attachment patterns retain their significance across the lifespan and guide individuals in multiple domains, it is assumed that attachment styles may influence the development of SMA in light of the findings mentioned above. Research results indicated that undergraduates with a secure attachment pattern are less likely to develop SMA and use social media (SM) platforms more positively.

One of the other results of this study is the detection of a significant positive relationship between ER difficulties and SMA. Simply put, as difficulties in ER levels of undergraduate students increased, their SMA levels also increased. Many studies have revealed that ER difficulties played a noteworthy role in the appearance and continuation of substance addiction or non-substance-related addictions such as gambling disorder, gaming addiction, internet addiction, problematic social networking site use (PSNSU), and SMA (Aldao et al., 2010; Estevez et al., 2019; Gogos, 2022; Peker & Yildiz, 2022; Quaglieri et al., 2021). It has also been shown that not being competent in ER skills makes it difficult to terminate addiction (Liu & Ma, 2019b). Concerning the theoretical associations between ER difficulties and SMA, the results of this study largely align with previous research. Prior research in the literature has uncovered a strong and positive correlation between ER difficulties and both of SNS addiction (Liu & Ma, 2019b) and SMA (Peker & Yildiz, 2022). As a similar finding, Lannattone et al. (2024) and Quaglieri et al. (2021) concluded in their study that emotion dysregulation is a predictor of problematic social media use (PSMU). Ozmen and Senay Guzel (2022) considered PSMU as an escape behavior in coping with emotional difficulties. Their research has revealed that individuals with more ER difficulties show more social media use (SMU), but this restricts their capacity to concentrate on their own life objectives (Ozmen & Senay Guzel, 2022). Moreover, the study findings of Lannattone et al. (2024) supported the current result and the finding of the current study by interpreting problematic SMU as a lack of ER. As a similar finding, researchers have found that people with poorer skills in ER tend to gravitate towards the use of SM platforms. The purpose of engaging in this behavior is to regulate one's emotional state (Liu & Ma, 2019b; Pettorruso et al., 2020; Taluy, 2020), reduce or prevent bad feelings (Estevez et al., 2019), divert attention from unpleasant emotions (Gioia et al., 2021; Pettorruso et al., 2020). When the aforementioned findings are examined, it can be said that individuals resort to using SM

as a coping mechanism for issues with ER. However, when the individual does not develop more functional coping methods, this use becomes repetitive and raises the likelihood of developing addiction (Dailey, 2020; Hussain et al., 2021). In consequence, the connection between these study variables (secure attachment, difficulties in ER, SMA) required for mediator analysis is shown by the study findings.

The primary objective of this study was also to examine the role of difficulties in ER in the relationship between attachment styles and SMA. The predictive effect of secure attachment on SMA did not continue as a result of including ER difficulties as a mediator variable in the model. In other words, ER difficulties played a mediating role in explaining the effect of secure attachment on SMA. When the literature was reviewed, Soh et al. (2014) mentioned that the emotional security provided by secure attachment with parents equips children with enhanced emotional regulation capabilities, reducing the likelihood of seeking escape routes. Namely, securely attached individuals coped better with the difficult emotions they encountered and therefore used social media more positively. Although insecure attachment has been examined with other study variables in the literature, no study has been found examining the mediation effect of ER difficulties in the relationship between secure attachment and SMA. Based on the discoveries of this study, it can be considered that ER difficulties may be a factor that prevents or weakens the impact of secure attachment on SMA levels of undergraduates. It can be asserted that secure orientation may operate as a protective factor for SMA by specifically bolstering emotion regulation. Therefore, undergraduates with secure attachment styles can be better at emotional regulation processes, making them utilize social media channels more effectively than others.

5.1.2. The Mediating Role of ER Difficulties in the Relationship between Avoidant Attachment Style and SMA

It was found that undergraduates having high scores in avoidant attachment style had more problems in regulating their emotions than others. That finding was in line with Mikulincer et al. (2003)'s model and Kotler et al. (1994)'s findings. Avoidant attachment style is characterized by deactivating emotional strategies which is one of these strategies (Mikulincer et al., 2003; Stevens, 2014). This strategy involves regulating emotions through suppressing them or rejecting emotional responses. So, individuals with avoidant attachment exhibit notable challenges in recognizing emotions (Liu & Ma, 2019b; Mikulincer & Shaver, 2019). Kotler et al. (1994) discovered a link between attachment avoidance and an

ineffective method of emotion regulation (ER) (i.e., suppression), which was connected to a coping style focused on emotions. Analogous outcomes can be noticed in the studies conducted by Ferraro and Taylor (2021), Liu and Ma (2019b), Pepping et al. (2013), and Steven (2004). All of them stated that there was a positive link between avoidant attachment style and ER difficulties. Ferraro and Taylor (2021) stated that anxious and avoidant adult attachment patterns were positively linked to problems in identifying and articulating emotions, as well as regulating negative emotions. Furthermore, Liu and Ma (2019b) did a study with Chinese college students aged 17–24, which yielded outcomes paralleling those of the present study. Yet, findings from Nielsen et al.'s (2017) investigation, involving 57 non-clinical volunteers, presented a discovery divergent from the current study's outcomes. According to this study result, avoidant attachment style did not show a correlation with emotion dysregulation (Nielsen et al., 2017). Consistent with the results of previous research, the pertinent conclusion of the present study can be understood in the following manner: people with an avoidant attachment orientation often struggle to regulate their emotions. This type of attachment is characterized by emotional insecurity and avoidance of emotional intimacy. Avoidance of emotional attachment can lead individuals to suppress or deny their feelings. According to Mikulincer and Shaver (2019), they believe that if they don't suppress their emotions, their emotion responses can reactivate the unwanted need for attachment. Therefore, they experience problems in creating an emotionally healthy life.

According to another finding of the current study, it was shown that there existed a significant and positive correlation between avoidant attachment style and social media addiction (SMA). In essence, increased levels of avoidant attachment style among undergraduate students were associated with heightened SMA levels. A resembling finding to the present investigation was detected in Bayraktar and Celik's (2023), Blackwell et al.'s (2017), Dilsiz and Kandemir 's (2020), and Monacis et al.'s (2017a) studies, in which they examined whether avoidant attachment style could be a predictor of SMA. All results indicated that it predicted SMA positively. Monacis et al. (2017b) noted a direct and positive correlation between avoidant attachment patterns and addiction to social networking sites (SNS). However, some studies revealed findings that contradict existing research findings, as avoidantly attached individuals preferred less social interaction. On the one hand, individuals who exhibit a pronounced avoidant attachment style as adults demonstrated a lower rate of using social networking sites (SNS), according to studies conducted by Chen (2019) and Liu and Ma (2019a). Additionally, these individuals also expressed less interest

in using Facebook compared to adults who have an anxious attachment style, as found by Hart et al. (2015) and Oldmeadow et al. (2013). According to Worsley et al. (2018), individuals with avoidant attachment orientation tended to use social media in a less problematic manner. On the other hand, some studies have not found a significant relationship between avoidant attachment style and time spent on Facebook (Lin, 2015) or between avoidant attachment style and SNS addiction (Liu & Ma, 2019b). Arikan et al. (2022) and Ozmen and Senay Guzel (2022) additionally asserted that avoidant attachment style is not a predictor of SMA. Since there was uncertainty in the literature about the relationship between these two variables, the results of this study provided additional evidence. In line with the findings of relevant research, the findings of the current study can be interpreted as follows: social media platforms appear to serve some basic needs. Although undergraduates with an avoidant attachment pattern are thought to stay away from closeness because they believe that they will live without needing others, it is thought that social media serves as a way for these individuals to keep others in their lives from a safe distance, and these undergraduates thus meet their attachment needs. Consequently, the study results demonstrated the necessary relation between the study variables (avoidant attachment, difficulties in ER, and SMA) for conducting mediator analysis.

According to the results of the mediating role analysis, when emotion regulation difficulty is included in the model as a mediating variable, the predictive effect of the avoidant attachment independent variable on SMA did not continue. The findings indicate that difficulties in ER mediated the impact of attachment avoidance on SMA. When the literature is examined, Liese et al. (2020) found that the connection between avoidant attachment style and DSM-5 symptoms of some addictive behaviors (i.e., alcohol, marijuana, and texting) was significantly mediated by emotion dysregulation. There are also studies revealing the mediating role of emotion regulation deficits in the relationship between insecure attachment and problematic internet use (PIU) (Gioia et al., 2021; Mottahedin et al., 2022). According to Gioia et al. (2021), the absence of social support and the absence of positive parent-adolescent interaction appears to have adverse effects on emotional regulation skills, consequently elevating the likelihood of developing PIU. However, there are both similar and different results regarding the current results in the literature. For instance, Liu and Ma's (2019b) study with university students revealed different results. The relationship between avoidant attachment and social networking site (SNS) addiction was not mediated by emotional dysregulation. Just as the relationship

between attachment avoidance and SMA is inconsistent in studies in the literature, the understanding of the mechanism behind this relationship does not seem to have been adequately examined. It is thought that the findings of the current study will expand the literature. Upon analyzing the aforementioned findings, it may be concluded that undergraduates exhibiting an avoidant attachment pattern often feel discomfort with emotional closeness and bonding, and they typically tend to avoid it when faced with emotional distress. At this juncture, social media platforms can serve as a form of distraction or soothing escape to cope with distressing emotions. Thus, social media platforms may replace real-life social relationships where they encounter difficulties. In short, they may become susceptible to SMA as a means to cope with all of these.

5.1.3. The Mediating Role of ER Difficulties in the Relationship between Anxious Attachment Style and SMA

According to the research results, there was a positive and significant relationship between anxious attachment style and difficulties in ER. In essence, heightened levels of anxious attachment style among undergraduate students corresponded to increased difficulties in regulating emotions. Consistent with this finding, previous studies have indicated that an insecure attachment leads to difficulties in interpreting and modulating emotions in emotionally challenging situations, and these difficulties might, in turn, lead to negative impacts on mental and physical well-being (Cassidy, 1994; Mikulincer et al. 2003; Waters et al. 2010). As a similar finding, Lewczuk et al. (2018) found that individuals with high levels of anxious attachment tended to experience more health symptoms as a result of overarching issues in regulating emotions. Furthermore, there is some evidence that more anxiously attached individuals tended to higher levels of catastrophizing (always expecting the worst to happen) and highlighting their adverse emotions in the literature (Liu & Ma, 2019b; Meredith et al., 2008; Mikulincer & Shaver, 2019). This result is in line with Mikulincer et al.'s (2003) model which describes strategies for an insecure attachment system. According to this model, hyperactivating which is one of these strategies is related to anxious attachment (Mikulincer et al., 2003). They dispose to exaggerate the seriousness of threats and respond excessively to negative occurrences in their lives in order to receive more attention and support from their environment (Liu & Ma, 2019b; Mikulincer & Shaver, 2019). This situation is characterized by the failure of individuals with anxious attachments to manage and regulate their emotional reactions (Mikulincer et al., 2003; Stevens, 2014).

Moreover, Liu and Ma (2019b) and Pepping et al. (2013) concluded in their study that there is a positive relationship between anxious attachment styles and emotion regulation difficulties. When considering the findings mentioned above, it can be said that individuals with anxious attachment often experience their emotions intensely and may struggle to regulate them, especially in stressful or uncertain situations. They can be oversensitive to any demanding situations in their lives. Controlling their emotions can become difficult for them. Moreover, they commonly harbor feelings of inadequacy or worthlessness, which can create a negative cycle, further complicating their efforts to express and manage their emotions. Some individuals with anxious attachment may find it challenging to articulate their feelings, leading to increased internal conflicts, and heightened emotional complexity.

A significant and positive correlation was also detected between anxious attachment style and social media addiction (SMA). This means that when the level of anxious attachment style among undergraduate students increased, their SMA levels increased. When studies comparing insecurely attached individuals with securely attached individuals were examined, similar results were found. Insecurely attached individuals are more prone to excessively using and becoming addicted to social media than securely attached individuals (Demircioglu & Kose, 2020; Yousaf et al., 2021). Individuals with high levels of attachment anxiety or a preoccupied attachment pattern have been using social media intensely and uncontrollably in order to meet their basic emotional needs (i.e., getting social approval, feeling a sense of belonging, relaxing by getting feedback, and managing the possibility of rejection), thus making themselves vulnerable to addiction risk (Andangsari et al. 2013; D'Arienzo et al., 2019; Hart et al., 2015; Monacis et al., 2017a; Monacis et al., 2017b; Oldmeadow et al., 2013; Rom & Alfasi, 2014; Savci & Aysan, 2016; Schimmenti et al., 2014; Worsley et al., 2018). Numerous research findings have indicated a direct and positive correlation between anxious attachment patterns and addiction to social networking sites (SNS) addiction (Liu et al., 2013; Liu & Ma, 2019b; Marino et al., 2023; Monacis et al., 2017b) and Facebook addiction (Eroglu, 2015; Hart et al., 2015; Jenkins-Guarnieri et al., 2012; Oldmeadow et al., 2013; Stănculescu & Griffith, 2021). The findings of Salehi et al.'s (2023) research that demonstrated insecure attachment styles were found to positively predict SMA support the current study's findings. In addition, many studies have revealed the positive relationship between anxious attachment and SMA (Arikan et al., 2022; Blackwell et al., 2017; Demircioglu & Kose, 2020; Monacis et al., 2017a; Ozmen & Senay Guzel, 2022; Worsley et al., 2018). Thus, consistent with previous findings, this

investigation confirmed the association between these two variables. Undergraduates having anxious attachment patterns can prefer using social media tools as a way of self-soothing strategy in their daily lives. They can distract their attention from any stressful and anger-provoking conditions via their social media platforms. In this case, SM use can be seen as a stress and anger regulation strategy. Therefore, they can have the potential to produce a kind of addiction as they repetitively choose to spend their time in these platforms. To sum up, the study results clearly showed the essential connection between the study variables (anxious attachment, difficulties in ER, and SMA) for conducting mediator analysis.

According to the mediating role analysis results, when difficulties in ER are included in the model as a mediating variable, anxious attachment continues to have a predictive effect on SMA. It is shown that emotion regulation difficulties played a partial mediating role in explaining the effect of anxious attachment on SMA. There are results similar to the current study in the literature. Marino et al. (2023) observed that insecure attachment patterns as a factor in fostering SMA through the impairment of emotional regulation abilities. Consistent with this finding, Ozmen and Senay Guzel (2022) have revealed that individuals characterized by anxious attachment patterns and encountering obstacles in managing their emotions are at a higher risk of succumbing to SMA. This finding is in line with the studies of Liu and Ma (2019b) on Chinese college students aged between 17-24 years. They demonstrated the mediating function of emotional regulation difficulties in linking anxious attachment to SNS addiction (Liu & Ma, 2019b). According to Arikan et al. (2022), considering that social media use is a method of regulating emotions, the study results regarding the predictive factor of young adults' anxious attachment to SMA can offer enhanced comprehension. Their research outcomes implied that hyperactiving strategies, the most frequently used emotion regulation strategy by individuals with anxious attachment, may serve as the fundamental cause of SMA and anxiety symptoms among individuals exhibiting high levels of anxious attachment (Arikan et al., 2022). When considering the results mentioned above, it can be assumed that anxiously attached individuals may turn to social media platforms to cope with negative emotions in real life. These platforms may provide a temporary escape from real-world problems and alleviate distressing emotions, but they are not a functional coping method, and they can increase the risk of addiction.

5.2. Examining the Results about the Attachment Styles, ER Difficulties, and SMA Levels based on Gender, Age, Grade Levels, the Presence of a Diagnosed Psychiatric or Psychological Disorder, Perceived Economic Status, and Duration of Daily Social Media Platform Usage

5.2.1. Gender

When the results of the given findings were examined, when secure attachment and anxious attachment subscales were compared by gender, no difference was detected between the averages of the compared groups. When their scores from the avoidant attachment subscale were compared by gender, a difference was detected between the averages of the compared groups. It was observed that men had higher scores than women. Liu and Ma (2019b) reported that there were no significant differences between men and women on scores of anxious and avoidant attachment scales. Contrary to this finding, Liese et al. (2020) have alleged that there are higher scores on the anxious attachment scale among females. Also, they revealed that avoidant attachment scores are at a higher level in men. Liu and Ma's (2019b) findings regarding anxious attachment and Liese et al.'s (2020) findings regarding avoidant attachment are consistent with the results of the current study. The results can be interpreted as follows: The attachment mechanism is universal, and men or women have similar needs. Therefore, there were no significant gender differences in secure and anxious. A significant difference in avoidant attachment may be related to cultural expectations and social norms regarding men. Because in society, men may be expected to be emotionally stronger and more independent. These expectations may cause men to avoid expressing their emotional needs and avoidant behavior in emotional connections.

When the scores of the difficulties in emotion regulation (ER) were compared by gender, a significant difference was revealed, and it was observed that women's scores were higher than men. Aldao et al. (2010) carried out a meta-analysis study that yielded similar results with the current findings. They founded that women experience more difficulty in regulating emotions (Aldao et al., 2010). Another study investigated the effects of gender and age on emotion regulation strategies. Researchers stated that women generally have more difficulty regulating their emotional experiences and therefore receive higher emotion regulation difficulty scores (Nolen-Hoeksema, & Aldao, 2011). On the other hand, Liese et al. (2020) found that there were no significant gender differences regarding emotion dysregulation. However, when another related study was examined, it was concluded that

males scored higher on difficulties in ER (Liu & Ma, 2019b). In addition, a study in the literature mentioned that males may experience greater difficulty than females in developing a positive, effective, or accepting mindset towards challenges that emerge in later stages of life, such as illness or loss. Additionally, the study mentioned found that in the group where this difficulty was observed, it was not associated with depressive symptoms (Schulz & Heckhausen, 1998; as cited in Nolen-Hoeksema, & Aldao, 2011). It has been noted that women use both adaptive and maladaptive coping strategies more frequently than men because they experience more stress (Tamres et al., 2002). Previous research has shown that women are more anxious compared to men (Bender et al., 2012) and that maladaptive strategies are strongly associated with depressive symptoms (Aldao et al., 2010). When the related finding is examined, it can be thought that females' tendency to employ maladaptive techniques at a higher rate than males expose them to a greater chance of experiencing distress, so they have more difficulty regulating negative emotions.

Another finding in the present study indicated a statistically significant difference in the social media addiction (SMA) levels among undergraduates based on gender. This current study finding, such as higher SMA scores in females, is consistent with the results of many studies (Andreassen et al., 2016; Arikan et al., 2022; Baloglu et al., 2020; Barker, 2009; Durkee et al., 2012; Kuss & Griffiths, 2011; Monacis et al., 2017b; Piko et al., 2024), but in contrast with other studies reporting contradictory findings such as higher SMA scores in males (Azizi et al., 2019; Cam & Isbulan, 2012; Liu & Ma, 2019b), or no significant difference between them (Aktan, 2018; Monacis et al., 2017a). When the relevant finding is examined, the reason for the high level of SMA in women, in general, can be explained that despite significant variations in the platforms and activities preferred by males and females, women worldwide are generally more inclined to share personal information and engage in conversations with friends (Piko et al., 2024). This tendency can increase their vulnerability to addiction.

5.2.2. Age

According to the results of the current study, no significant age differences are observed in attachment styles scores (secure, avoidant, and anxious). Similarly, an article reported that there were no significant age differences in scores of secure and avoidant attachments (Segal et al., 2009). Conversely, Segal et al. (2009) appeared that younger adults scored higher on anxious attachment style subscale, compared to older adults (Segal et al.,

2009). It can be stated that there are inconsistent results depending on age differences in attachment styles.

Additionally, when looking at the emotional regulation difficulty scores of undergraduate students, it was observed that there was no significant difference according to age. Contrary to this finding, it has been found that older adults have better emotion-regulation skills and master a wider range of emotion-regulation strategies (i.e., positive reappraisal, active problem-solving approaches) compared to younger adults (Lawton, 2001; John & Gross, 2004). However, studies mostly compare young (20s), middle-aged (40s) and elderly (60s) individuals. As stated before, the sample of this study represents a limited range of 18-25 years of age.

Similar to other results, there also was no difference in undergraduate students' social media addiction scores according to age. According to Marino et al., (2023) and Blackwell et al. (2017), being young is a risk factor for social media addiction. Monacis et al.'s (2017b) study concluded that young adults achieved higher marks in SMA. Young individuals tend to participate more actively on social media platforms, and this increased exposure has been linked to a higher risk of addiction (Dailey et al., 2020; Hong et al., 2014; Koc & Gulyagci, 2013). According to Marino et al., (2023) and Blackwell et al. (2017), being young is a risk factor for social media addiction. It can be mentioned that different results concerning on age differences in social media addiction can be related to the sample characteristics.

5.2.3. Grade Levels

Grade-level comparisons of the psychological constructs revealed no significant differences in attachment styles (secure, avoidant, and anxious attachment), emotion regulation difficulties, or social media addiction among undergraduates, suggesting that these aspects remain consistent across educational levels. A similar finding was seen in the studies of Sahin Kiralp and Serin (2017), concluding that there is no statistically significant difference among the subscales of attachment across different class levels. Undergraduate students generally come from similar age groups and undergo comparable developmental processes. Therefore, significant differences in emotion regulation difficulties might not have been observed across grade levels. Moreover, in parallel with the results of the current study in previous studies, it was revealed that social media addiction does not differ according to grade level (Bilgilier, 2018; Demircan et al., 2022; Guler, 2023; Ozdemir, 2019).

5.2.4. The Presence of a Diagnosed Psychiatric or Psychological Disorder

Examining differences based on the presence of a diagnosed psychiatric or psychological disorder revealed no significant differences in attachment styles subscales (secure, avoidant, and anxious) among undergraduates.

Conversely, a diagnosed psychiatric or psychological disorder showed a significant difference in emotion regulation difficulties scores. In D'Avanzato et al.'s (2013) study, a similar finding with the current study, it was concluded that several psychological disorders are identified by emotion regulation difficulties. In the mentioned study, the utilization of emotion regulation techniques was examined in individuals diagnosed with major depressive disorder (MDD) and social anxiety disorder (SAD), comparing it with individuals who did not receive such diagnoses. While individuals diagnosed with SAD mostly use the strategy of suppression, those diagnosed with MDD have increased rumination and decreased reappraisal levels (D'Avanzato et al., 2013). In addition, Mennin et al. (2007) found that difficulty accessing regulation strategies was unique predictor of GAD. Undergraduates diagnosed with psychiatric or psychological disorders often can experience difficulties in emotional awareness. Struggling to identify, understand, and express their emotions can adversely affect their ability to regulate emotions.

Similarly, a diagnosed psychiatric/psychological disorder showed a significant difference in social media addiction scores. Robinson et al.'s (2009) study concluded that individuals diagnosed with MDD exhibit notably elevated scores in social media addiction scale. Andreassen et al. (2016) showed parallelism with the current study, and they stated in their study that individuals with psychological disorders are more addicted to social media. In the light of the results mentioned above, it assumed that individuals diagnosed with psychiatric or psychological disorders often experience difficulties in emotional regulation, which can lead to social isolation. Social media usage can serve as both an escape to fulfill needs such as emotional relief and as a means to communicate and connect with others, which can increase the risk of addiction. Also, some psychological or psychiatric disorders may be associated with impulsivity and lack of control. This can increase social media use and lead to addiction.

5.2.5. Perceived Economic Status

Analysis by perceived economic status revealed no significant differences in attachment styles (secure, avoidant, and anxious) among undergraduates. Consistent with these results, Sahin Kiralp and Serin's (2017) study also observed that sub-scales of attachment styles did not differ significantly based on socio-economical level.

Similarly, there were not significant differences in emotion regulation difficulties among undergraduate students. When the literature about DERS is examined, a previous finding in the literature differs from this current research results. Singh and Shankar's (2013) study indicated that high socioeconomic status have been significantly and positively associated with the use of effective ER strategies and overall well-being, while it has been negatively associated with the use of ineffective ER strategies. According to Eisenberg et al. (2004), some studies indicate that the capacity for ER frequently shows no difference across different socioeconomic levels (as cited in Singh & Shankars, 2013). This finding is parallel with the research results. However, this may not always hold true, particularly when comparing individuals with very low socioeconomic status to those from other socioeconomic backgrounds (Singh & Shankars, 2013). Considering the sample of this study, most participants are from middle and high economic levels. Therefore, it is conceivable that the difficulty in emotion regulation is not significantly related to perceived economic status.

When looking at social media scores, economic level groups did not have a significant difference. When another related study on SMA which conducted on Chinese female university students were examined, it was concluded that SMA levels differ significantly based on economic status (He et al., 2021). According to these researchers, individuals growing up in families with lower socioeconomic levels have higher levels of SMA. This finding is incompatible with the current study result. Conversely, similar to the study results, Bilgilier (2018) found that university students' social media addiction levels did not vary according to their income level. Meanwhile, according to Masthi et al., (2017), today young people from all socio-economic backgrounds are exposed to electronic devices like smartphones at a much younger age, making them more susceptible to social media overuse or addiction. Therefore, it can be considered that the study result does not show a significant difference. Consequently, these results suggest that perceived economic status is

not related to the variables examined, or at least such a relationship was not observed in the sample of this study.

5.2.6. Duration of Daily Social Media Platform Usage

When the results were examined, there was no significant difference in the secure attachment subscale according to the average daily time spent on social media platforms, but there are significant differences in avoidant, and anxious attachment subscales. Specifically, increased daily time spent on social media platforms was associated with higher levels of avoidant and anxious attachment styles. In the literature, similar results were seen in this regard. Many studies have found a relationship between anxious attachment and time spent on social networking sites (Andangsari et al. 2013; Monacis et al., 2017a; Monacis et al., 2017b). In the research conducted by Hou et al. (2019), the effects of problematic use of social media were examined. It has been stated that people have a negative psychological structure as a result of SMA. Examining the pertinent results leads to the following interpretation: prolonged use of social media platforms can weaken people's emotional regulation skills over time and lead them to constantly seek validation through likes, comments, and followers. Additionally, by continually comparing themselves to others, this usage can result in feelings of inadequacy and low self-esteem, which can trigger anxious attachment patterns. In terms of avoidant attachment, increased social media usage can replace face-to-face interactions, leading to more screen-based communication. Negative comment or feedback on social media can cause individuals to avoid social relationships and reduce empathy and emotional bonding abilities, making it harder to form and maintain real-life social bonds. Consequently, the resulting social isolation can strengthen avoidant attachment patterns.

When looking at the levels of emotion regulation difficulties, there was a significant difference according to the duration of daily social media use. As undergraduate students' daily use of social media platforms increased, their emotion regulation difficulty scores also increased in parallel. In terms of ER difficulties, research has revealed that young adults' high social media platform participation leads they face a variety of stressors, so this usage negatively affects their mental health and subjective well-being (Bonnette et al., 2019; Kross et al., 2013). Similarly, Kemp and Childers (2021) found that high social media engagement in young adults presents emotional difficulties for them. Primack et al. (2017) also discovered a correlation between heavy social media use and heightened rates of depression,

anxiety, and social isolation in young adults. According to Kemp and Childers (2021), this phenomenon might be partly influenced by individuals comparing themselves to others. The results can be understood as follows: this comparison, especially by seeing profiles of people who present an idealized version of themselves on social media, can cause one to feel inadequate about their own lives and experience emotional difficulties such as low self-esteem or anxiety. Additionally, the increased use of social media is replacing face-to-face interactions with screen-based communication habits, potentially reducing empathy and emotional bonding abilities. This can impair the ability to accurately identify and express emotions.

Similarly, social media addiction scores also exhibited significant differences depending on the average daily duration of use of social media platforms. Social media addiction levels of undergraduate students who spent more daily time on social media platforms were found to be high. When the literature on SMA was investigated, in Bilgilier's (2018) study conducted with undergraduate and graduate students, a similar finding with the current study, it was concluded that SMA levels show a significant difference according to time spent on social media. Ozdemir (2019) also obtained the same result in him study on university students. It has been observed that SMA scores increase as the time spent active increases. In other studies, individuals who spent 4-6 hours and 7-9 hours on social media platforms were found to have higher SMA scores than individuals who spent less than 1 hour or 1-3 hours (Bozkurt & Bozkurt, 2021; Eksi et al., 2019). In parallel with the current study finding, social media addiction of people who spend less than 1 hour per day on social media platforms was found to be low (Bozkurt & Bozkurt, 2021). Considering the results, it comes to mind that one of the most important criteria of SMA is the desire to constantly stay online on social media networks (Andreassen & Pallesen, 2014). The current results were thought to be due to this.

5.3. Conclusion

1. It was concluded that there was a negative and significant relationship between undergraduates' secure attachment style and their difficulties in emotion regulation (ER). As the levels of secure attachment style of undergraduates increased, their difficulties in ER levels decreased.

2. There was a positive and significant relationship between the avoidant attachment style of undergraduates and their difficulties in ER. It was found that as the levels of secure attachment style among undergraduates increased their level of difficulties in ER increased.
3. A positive and significant relationship was found between the anxious attachment style of undergraduates and their difficulties in ER. It was observed that as the anxious attachment style levels of young adults increased, their difficulties in ER levels also increased.
4. It was concluded that there was a positive and significant relationship between undergraduates' difficulties in ER and social media addiction (SMA). As the levels of difficulties in emotion regulation of undergraduates increased, their SMA levels increased.
5. There was a negative and significant relationship between undergraduates' secure attachment style and their SMA. It was found that as the levels of secure attachment style among undergraduates increased their level of SMA decreased.
6. A positive and significant correlation was found between the avoidant attachment style of undergraduates and their SMA. It was demonstrated that as the avoidant attachment style levels in undergraduates increased, their levels of SMA also increased.
7. It was observed that there is a positive and significant association between the anxious attachment style of undergraduates and their SMA. As the anxious attachment style levels of undergraduates increased, their SMA levels also increased.
8. The relationship between undergraduates' secure attachment style and SMA was mediated by ER difficulties.
9. The relationship between avoidant attachment style and SMA of undergraduates was mediated by ER difficulties.
10. Difficulties in ER mediated the relationship between anxious attachment style and SMA in undergraduates.
11. Undergraduates' levels of secure and anxious attachment style did not show a significant difference in terms of gender. On the other hand, there was a significant difference in avoidant attachment style, difficulties in ER, and SMA levels of undergraduates in terms of gender. According to the results, avoidant attachment

style levels of male were higher than that of females. Females, on the other hand, had higher levels of difficulties in ER and levels of SMA than males.

12. There were no significant differences in the attachment styles (secure, anxious, and avoidant), difficulties in ER, and SMA levels among undergraduates based on their age.
13. Secure, anxious, and avoidant attachment styles, ER difficulties and SMA levels of undergraduates did not differ significantly regarding grade levels.
14. It was observed that there was no significant difference in the levels of undergraduates' secure, anxious, and avoidant attachment styles depending on the presence of a diagnosed psychiatric or psychological disorder. On the other hand, there was a significant difference in the levels of undergraduates' difficulties in ER and SMA depending on the presence of a diagnosed psychiatric or psychological disorder. When the results were examined, individuals with a diagnosed psychiatric or psychological disorder had a high level of both ER difficulties and SMA.
15. Undergraduates' levels of secure, anxious, and avoidant attachment style, ER difficulties, and SMA did not show a significant difference in terms of perceived economic status.
16. While there was no significant difference in secure attachment, there was significant difference in anxious, avoidant attachment style, ER difficulties and SMA. There was a significant difference in anxious and avoidant attachment style, ER difficulty and SMA levels of undergraduates regarding the average daily time spent on social media platforms. It was concluded that the avoidant attachment style levels of undergraduates who spend 4-6 hours and 7-9 hours daily on social media platforms were higher than those who spend less than 1 hour and 1-3 hours. It also was observed that SMA, ER difficulty, and anxious attachment levels of undergraduates who spend 4-6 hours, 7-9 hours, and more than 9 hours daily on social media platforms were higher than those who spend 1-3 hours.

5.4. Limitations of the Current Research and Suggestions

Upon reviewing the literature both domestically and internationally, no study encompassing all the variables investigated in our research was encountered. Hence, this study is believed to pave the way for future research in this area. These limitations and

suggestions which are presented below are intended to provide a roadmap for both researchers and practitioners to further explore and address the complex relationship between social media use, attachment styles, and emotion regulation. By focusing on these targeted areas, it is hoped that more effective strategies can be developed to mitigate the negative effects of social media addiction on undergraduate students.

5.4.1. Limitations of the Current Research and Suggestions for Researchers

1. Future studies should further examine emotion regulation as a mediator between attachment styles and social media addiction. This could include exploring specific emotion regulation strategies that are most effective in mitigating the risks of social media addiction.
2. Researchers should continue to explore the mechanisms underlying the relationship between attachment styles and social media addiction. Additional research is required to integrate other mediating and moderating factors such as perceived social support, romantic relationship quality or alexithymia into the models.
3. This study employed a cross-sectional research design. In future research, different methods, including longitudinal approaches, could be utilized to examine the relevant variables. Longitudinal studies could provide deeper insights into causal relationships and the potential for change in these dynamics over time.
4. The current study relied on self-report surveys to measure relevant variables. Although the psychometric measurements already in place are reliable and valid, self-reported data can still be affected by social desirability bias. Therefore, future research can be designed to include interviews, observations etc.
5. Latent factors like attachment are intricate phenomena that standard questionnaires struggle to capture accurately (Estevez et al., 2017). Employing complementary techniques to identify attachment orientations could enhance the results of future research.
6. The sample of the current study is limited to undergraduates between the ages of 18-25. Therefore, the results may not be generalizable to other individuals. Future research could be conducted on larger and more diverse samples, encompassing various demographic characteristics, while using the same variables.

7. It is recommended to include a larger and evenly distributed group in order to make the roles of some demographic variables in the current study more visible.
8. The university period is a critical time in which young individuals strive to become independent from their families and emphasize peer relationships. Considering the role of peer groups in meeting needs such as belongingness and emotional support, including peer support in future studies with relevant variables could contribute to the literature.
9. Research should be conducted on the effectiveness of various intervention strategies targeting emotion regulation and attachment styles. This may contain randomized controlled trials to assess the effects of cognitive-behavioral therapy, mindfulness-based interventions, and other therapeutic approaches on social media addiction and emotion regulation difficulties.
10. Researchers should be encouraged to explore the intersection of social media addiction, emotion regulation difficulties, and existing mental health disorders. Understanding how social media use exacerbates or interacts with mental health conditions could lead to more effective treatment and prevention strategies.
11. Researchers should assess whether participants use any psychotropic medication, as it could potentially impact participants' emotion regulation difficulties.

5.4.2. Limitations of the Current Research and Suggestions for Practitioners

1. Educational institutions and mental health professionals should integrate emotion regulation training into their programs, especially for individuals at risk for social media addiction. This training could focus on developing skills such as mindfulness, cognitive reappraisal, and effective coping strategies for negative emotions.
2. Programs aimed at fostering secure attachment should be developed, especially for younger populations. These could include parenting programs that emphasize responsive caregiving and emotional communication, and school-based programs that promote social and emotional learning.
3. Practitioners should consider developing tailored interventions for people with avoidant or anxious attachment styles who face a high risk for social media addiction

and emotion regulation difficulties. These interventions could prioritize building secure attachment patterns and enhancing interpersonal relationships.

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APPENDICES

APPENDIX A: Informed Consent Form

Sayın katılımcı,

Bu tez çalışması, Yeditepe Üniversitesi Klinik Psikoloji Yüksek Lisans öğrencisi Ahu Gök tarafından, Doç. Dr. Berke Kırıkkanat danışmanlığında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır. Çalışmaya katılmak tamamen gönüllülük esasına dayanmaktadır. Lütfen aşağıdaki bilgileri dikkatlice okumak için zaman ayırınız.

Araştırmanın amacı, sosyal medya kullanan üniversite öğrencilerinin içinde bulunduğu hayat şartlarını değerlendirme konularını incelemektedir.

Çalışmaya katılmanız durumunda literatüre bu konu hakkında destek sağlayarak veri eklememize yardımcı olacaksınız. Çalışmanın öngörülen bir riski yoktur. Ancak yine de çalışmaya katılmamakta veya çalışmadan istediğiniz zaman ayrılmakta özgürsünüz. Araştırmaya katılmayı kabul ederseniz sizden verilen formları doldurmanız istenecektir. Bu çalışmaya katılım yaklaşık 10 dakika sürmektedir.

Çalışma kapsamında sağladığınız veriler ve çalışma sonuçları bilimsel ve mesleki etik ilkeleri çerçevesinde korunacak, sonuçlar toplu olarak yorumlanıp yalnızca bilimsel yayın amacıyla toplu bilgiler halinde paylaşılacaktır.

Çalışma hakkında daha fazla bilgi almak için çalışma sahibi, Yeditepe Üniversitesi Klinik Psikoloji Yüksek Lisans öğrencisi Ahu Gök ile iletişim kurabilirsiniz.

( ) Yukarıdaki bilgilendirilmiş onam formunu okudum ve anladım. Bu araştırmaya tamamen gönüllü olarak katılıyorum.

APPENDIX B: Demographic Information Form

1. Cinsiyetiniz: Kadın ( ) Erkek ( ) Diğer ( )
2. Yaşınız (rakamla belirtiniz): …….
3. Üniversiteniz: Devlet ( ) Vakıf/Özel ( )
4. Sınıf Düzeyiniz: Hazırlık ( ) 1.Sınıf ( ) 2.Sınıf ( ) 3.Sınıf ( ) 4.Sınıf ( ) 5.Sınıf ( ) 6.Sınıf ( )
5. Okuduğunuz bölüm (belirtiniz):……..
6. Herhangi tanılı bir psikiyatrik ya da psikolojik rahatsızlığınız var mı? Evet ( ) Hayır ( )
7. Cevabınız evet ise lütfen belirtiniz:……
8. Ekonomik düzeyinizi en iyi tanımlayan ifade aşağıdakilerden hangisidir? Alt ( ) Alt-orta ( ) Orta ( ) Orta-üst ( ) Üst ( )
9. Sosyal medya kullanıyor musunuz? Evet ( ) Hayır ( )
10. Sosyal medya platformlarında geçirdiğiniz ortalama günlük süre (saat olarak) nedir? 1 saatten az ( ) 1-3 saat ( ) 4-6 saat ( ) 7-9 saat ( ) 9 saatten fazla ( )

APPENDIX C: Three-dimensional Attachment Style Scale (TDASS)

	Kesinlikle katılmıyorum	Katılmıyorum	Kısmen katılıyorum	Katılıyorum	Kesinlikle katılıyorum
1. Karşımdaki insanlar benim kadar değerli değiller.					
4. Sorunu olan birisini gördüğümde kendimi onun yerine koyabiliyorum.					
8. İnsanlardan uzak duruyorum çünkü bana acı çektirebilirler.					
12. Yalnızca kendime değer veririm.					
15. İnsanların görüşleri benim için önemsizdir.					
18. Başkaları çok da umurumda değildir.					

Note. Sample items from the scale have been provided.

APPENDIX D: Difficulties in Emotion Regulation Scale- Brief Form (DERS-16)

	Hemen hemen hiç (%0-%10)	Bazen (%11-%35)	Yaklaşık yarı yarıya (%36-%65)	Çoğu zaman (%66-%90)	Hemen hemen her zaman (%91-%100)
1. Duygularıma bir anlam vermekte zorlanırım.					
4. Kendimi kötü hissettiğimde kontrolden çıkarım.					
8. Kendimi kötü hissederken kontrolden çıktığım korkusu yaşarım.					
12. Kendimi kötü hissettiğimde daha iyi hissetmem için yapabileceğim hiçbir şey olmadığına inanırım.					
16. Kendimi kötü hissettiğimde duygularım dayanılmaz olur.					

Note. Sample items from the scale have been provided.

APPENDIX E: Social Media Addiction Scale (SMAS)

	Hiçbir zaman	Nadiren	Ara sıra	Sık sık	Her zaman
1. Sosyal medya hesaplarıma (Facebook, Twitter, Instagram vb.) giremediğim zaman kendimi gergin hissederim.	1	2	3	4	5
6. Sosyal medya hesaplarıma erişemediğim zaman (telefonumun şarjı bittiğinde ya da internet paketim dolduğunda) canım sıkılır.	1	2	3	4	5
11. Sosyal medyada gezinirken tahmin ettiğimden daha fazla vakit geçiririm.	1	2	3	4	5
16. Arkadaşlarım sosyal medya hesaplarında çok gezinmemden şikâyet eder.	1	2	3	4	5
21. Sosyal medya üzerinden paylaşılan videolar uzun süre zihnimi meşgul eder.	1	2	3	4	5
26. Sosyal medya üzerinden kendimi daha rahat ifade ederim.	1	2	3	4	5

Note. Sample items from the scale have been provided.

APPENDIX F: Debriefing Form

Katılım Sonrası Bilgilendirme Formu

Çalışmamız sona ermiştir. Katılımınız için teşekkür ederiz. Çalışmanın sağlıklı ilerleyebilmesi için çalışmaya katılacağını bildiğiniz diğer kişilerle çalışma ile ilgili detaylı bilgi paylaşımında bulunmamanızı dileriz. Katılımınızla ilgili bir problem yaşarsanız veya çalışmaya dair herhangi bir sorunuz olursa araştırmacıya ulaşabilirsiniz.

APPENDIX G: Ethics Committee Thesis Approval

T.C.
YEDİTEPE ÜNİVERSİTESİ REKTÖRLÜĞÜ
Avrupa Çalışmaları Enstitüsü Müdürlüğü

04.12.2023

Sayı : E.61350595-050.06-320
Konu : Ahu Gök'ün Etik Kurul Onayı Hk.

İLGİLİ MAKAMA

Üniversitemiz Sosyal Bilimler Enstitüsü Klinik Psikoloji Yüksek Lisans öğrencilerinden Ahu Gök'ün, Dr. Öğr. Üyesi Berke Kırıkkanat danışmanlığında gerçekleştireceği 'Üniversite Öğrencilerinin Bağlanma Stilleri ile Sosyal Medya Bağımlılığı: Duygu Düzenleme Güçlüğünün Aracı Rolü' başlıklı araştırmasının Beşeri Bilimler Etik standartlarına uygunluğuna ilişkin Yeditepe Üniversitesi Beşeri ve Sosyal Bilimler Bilimsel Araştırma ve Yayın Etik Kurulu onayı ekte sunulmuştur.

Gerekli iznin verilmesi hususunu bilgilerinize arz ve rica ederim.

Prof. Dr. Fatma Yeşim EKİNCİ
Rektör Yardımcısı

Ek: 28112023 Sosyal Bilimler Etik Kurul Kararları.pdf