

ORIGINAL ARTICLE

The Mediating Role of Interpersonal Emotion Regulation in the Effect of Parasocial Relationships on Social Media Addiction and the Moderating Role of Death Anxiety: A Cross-Sectional Study

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Main Points

- The level of parasocial interaction increases social media addiction; parasocial relationships reduce social anxiety and loneliness, enhancing the sense of belonging, which in turn leads to social media addiction.
- There is a positive correlation between death anxiety and social media addiction; death anxiety is mitigated through the sense of digital immortality created by social media.
- Parasocial interactions on social media are used for emotion regulation, which further increases social media addiction. Additionally, death anxiety plays a moderating role in this relationship.

Abstract

This study examines the relationship between parasocial interactions and social media addiction, as well as the moderating effect of death anxiety and the mediating role of interpersonal emotion regulation. A sample of 400 university students who use Facebook, Instagram, and/or Twitter participated in this study. Data analysis software (SPSS 25.0, R-4.1.3, G*Power 3.1) was used to process all data. Social media addiction is significantly influenced by parasocial interactions, and interpersonal emotion regulation has a substantial impact on social media addiction. Through interpersonal emotion regulation, the indirect effect of parasocial interaction on social media addiction was found to be significant. Furthermore, when death anxiety is strong, the impact of parasocial interaction on social media addiction is reduced.

Keywords: Anxiety, death anxiety, emotion regulation, parasocial, social media

Introduction

Globally, the number of social media users has reached 5.04 billion, accounting for approximately 62.3% of the world's population (Information and Communication Technologies Authority, 2024). Social media has gained popularity due to its ability to provide social support, facilitate access to information, and enhance life satisfaction (Mitropoulou et al., 2022). However, despite its benefits, problematic social media use has emerged as a significant global concern. Social media addiction is

characterized by an uncontrollable urge that results in substantial time and effort expenditure, negatively impacting individuals' social, occupational, and functional domains, as well as their psychosocial well-being and interpersonal relationships (Cheng et al., 2021; Mitropoulou et al., 2022).

Theoretical Framework

Self-Determination Theory posits that three fundamental psychological needs—competence, relatedness, and autonomy—drive human motivation and

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behavior. Relatedness involves forming connections with others and fostering a sense of belonging. To satisfy these innate drives, individuals engage in parasocial interactions to fulfill their need for social connection and belonging (Akhtar & Islam, 2023; Chung & Cho, 2017). A parasocial relationship is a one-sided bond that an individual develops with a real or fictional media figure through media consumption. The satisfaction derived from parasocial relationships is comparable to that obtained from real friendships (de Bérail et al., 2019). Parasocial relationships formed on social media encompass feelings of closeness, trust, and identification with media figures, resembling elements of real interpersonal relationships (Yang et al., 2022). Individuals who derive social fulfillment from parasocial relationships may use social media more frequently to compensate for real-life loneliness, thereby fostering addictive behaviors (de Bérail et al., 2019).

Social media addiction is considered an escape mechanism for managing emotional dysregulation. Interpersonal emotion regulation refers to how individuals manage their emotional responses and states while interacting with others. This process occurs within sociological contexts, requiring individuals to engage in emotional involvement, expression, and regulation (Bintaş-Zörer & Yorulmaz, 2022). Social media fosters positive emotions and facilitates coping with unpleasant feelings by enabling interactions in a structure that mimics real-life, bidirectional relationships (Lotun, 2022). Moreover, parasocial interactions influence individuals' motivation, satisfaction, and social impact (Astarini & Sumardi, 2022; Aw & Labrecque, 2020; Chiu & Huang, 2015; Hasan et al., 2022). These factors lead individuals to rely on parasocial figures for emotional regulation (Marino et al., 2019). Consequently, forming a parasocial bond with a beloved fictional character facilitates emotional regulation and alleviates negative emotions. Both one-way and two-way interactions help individuals distance themselves from negative emotions, reinforcing social media use (Lotun, 2022). In summary, parasocial interactions shape individuals' emotional responses and regulation through interpersonal emotion regulation. Understanding the intricate relationship between addiction and interpersonal emotion control in parasocial interactions is crucial for comprehending social media addiction.

Death anxiety refers to the distress associated with individuals' awareness of their mortality (Kumpasoğlu et al., 2021). According to Terror Management Theory (TMT), individuals develop various psychological defenses, either consciously or unconsciously, to cope with death anxiety (Pyszczynski et al., 2021). The TMT suggests that individuals' pursuit of symbolic immortality leads them to construct digital immortality by integrating their unique identities and lifestyles into social media. Additionally, attachment motivation may facilitate the formation of parasocial relationships through social media, compensating for real-life relationships. Symbolic immortality and relational attachment serve to mitigate death anxiety (Kumpasoğlu et al., 2021). Belonging to a social community is perceived as a mechanism for controlling anxiety and coping with one's continued existence. Within this context, developing an attachment to social media and forming online relationships can help reduce death anxiety (Kumpasoğlu et al., 2021). However, the current literature lacks sufficient research exploring the causal link between parasocial relationship styles and death anxiety.

Objective and Significance of the Study

This study provides an innovative contribution to the literature by integrating psychological and behavioral mechanisms into a comprehensive model that examines the mediating role of interpersonal emotion regulation and the moderating role of death anxiety in the relationship between parasocial relationships and social media addiction. Previous research has primarily explored the link between parasocial relationships and social media addiction in the context of social interaction anxiety (Tatem & Ingram, 2022). However, this study expands the existing framework by investigating the effects of emotion regulation strategies and death anxiety on this relationship. Specifically, the concept of interpersonal emotion regulation has not been sufficiently examined in studies related to social media addiction (Liu & Ma, 2019). Therefore, this study focuses on understanding how interpersonal emotion regulation influences social media addiction.

Previous research on death anxiety has primarily examined this concept in relation to loneliness and empathy (Ahmadimajd, 2024). Additionally, studies have demonstrated that emotion regulation strategies can reduce death anxiety through social support (Chukwuorji et al., 2020). However, the specific relationship between death anxiety and social media addiction remains underexplored. Furthermore, death anxiety has been found to mediate the relationship between Machiavellianism and social media addiction (Kumpasoğlu et al., 2021). By examining the influence of death anxiety on social media addiction, this study seeks to fill a significant gap in the literature.

Similarly, research on difficulties in emotion regulation has established its association with social anxiety and problematic internet use (Sertbaş et al., 2020). However, limited studies have investigated how emotion regulation difficulties influence the relationship between parasocial relationships and social media addiction. This study contributes to the literature by elucidating how emotion regulation processes shape this relationship.

By incorporating parasocial relationships, interpersonal emotion regulation, and death anxiety into a unified model, this study aims to provide a holistic understanding of their impact on social media addiction. Understanding the moderating role of death anxiety and the mediating role of emotion regulation could help individuals manage their social media use more consciously. Additionally, by examining the effects of parasocial relationships on online social network addiction, this study contributes to the understanding how individuals meet their emotional regulation needs through digital interactions.

Accordingly, this study addresses the following research questions:

1. Do parasocial relationships influence social media addiction among university students?
2. Does death anxiety moderate the relationship between parasocial relationships and social media addiction among university students?
3. Does emotion regulation mediate the relationship between parasocial relationships and social media addiction among university students?

Material and Methods

Participants and Procedures

This cross-sectional study was conducted at a public university in Sakarya, Türkiye, involving a sample selected from a total of 1000 students enrolled in the midwifery and nursing departments. Young adults are among the most active social media users, making them a crucial demographic group for examining the psychological effects of social media use (Parija et al., 2020; Prybutok & Ryan, 2015). Therefore, the study focused on university students as the target population.

The sample size was determined using the population sampling formula with a 95% CI, establishing that a minimum of 278 participants would be sufficient. However, to account for potential dropouts, rejections, and incomplete responses, the final sample size was increased to 400 students. To assess the reliability of the results, a post hoc power analysis was conducted, indicating that the sample size was adequate for the study ($\alpha = 0.05$, 98% power, and a medium effect size) (Cohen, 2013).

The study received ethical approval from the Sakarya University Social and Human Sciences Ethics Committee (Approval No: E-61923333-050.99-242836, Date: 03/05/2023). Inclusion criteria required participants to be actively enrolled in nursing or midwifery programs and to have at least one active social media account (e.g., Facebook, Instagram, Twitter). Participants under the age of 18, or those who did not complete the survey in its entirety, were excluded from the study.

Between May 15, 2023, and January 5, 2024, students were informed about the purpose and scope of the study after their classes, and those interested in participating were identified. Before completing the survey, students provided written informed consent. Only fully completed surveys were considered valid for analysis.

Data Collection Instruments

Bergen Social Media Addiction Scale

This scale was developed by Andreassen et al. in 2012 (Andreassen et al., 2012) and was adapted into Turkish by Demirci in 2019 to assess social media addiction. The six-item scale measures six core criteria of addiction: preoccupation, mood modification, tolerance, withdrawal, conflict, and relapse. It is structured as a five-point Likert scale, ranging from 1 (very rarely) to 5 (very often). The total score ranges from 6 to 30, with higher scores indicating greater levels of social media addiction (Demirci, 2019). In this study, the Cronbach's alpha reliability coefficient was found to be 0.90.

Interpersonal Emotion Regulation Scale

Developed by Hofmann et al. in 2016 (Hofmann et al., 2016) and translated into Turkish by Gökdağ et al. in 2019, this scale evaluates individuals' emotion regulation strategies in social situations. It consists of four subdimensions: perspective-taking, soothing, enhancing positive emotions, and social modeling. The scale includes 20 items rated on a 5-point Likert scale ranging from 1 (not at all true) to 5 (completely true). The total score ranges from 20 to 100, with lower scores indicating a greater tendency to seek external support for emotion regulation. According

to Gökdağ et al. (2019), there are no reverse-coded items in the scale. In this study, the Cronbach's α reliability coefficient was found to be 0.95.

Thorson-Powell Death Anxiety Scale

This scale was revised by Thorson and Powell in 1992 (Thorson & Powell, 1992) and was adapted into Turkish by Karaca and Yıldız in 2001 to assess individuals' fear of death. It is a 25-item Likert-type scale, ranging from 0 (very positive) to 4 (very negative). Negative statements are reverse-scored to calculate the final score. Specifically, 17 items contain positive statements, while 8 items contain negative statements. The total score ranges from 0 to 100, with the following classifications: 0 – 25 (very low), 26 – 50 (mild), 51 – 75 (moderate), and 76 – 100 (very high) (Karaca & Yıldız, 2001). In this study, the Cronbach's α reliability coefficient was 0.94.

Parasocial Interaction Scale

Originally developed by Rubin et al. in 1985 (Rubin et al., 1985) and translated into Turkish by Arda in 2006, this 13-item scale measures parasocial interactions. It employs a 5-point Likert system, ranging from "strongly disagree" to "strongly agree." Higher scores indicate a higher degree of parasocial interaction. The total score ranges from 13 to 65 (Arda, 2006). In this study, the Cronbach's α reliability coefficient was found to be 0.93.

Data Analysis

In this study, various statistical methods were applied using SPSS-25 (IBM SPSS Corp.; Armonk, NY, USA) and R-4.1.3 software. The assumption of normality was tested using skewness and kurtosis scores in SPSS-25 to evaluate model suitability and minimize deviation effects. The skewness values ranged from -0.39 to -0.01 , and kurtosis values ranged from -0.94 to -0.81 , indicating that the data followed a normal distribution (Blanca et al., 2013). The assumption of linearity was assessed using scatterplots in SPSS-25, confirming the appropriateness of the model for linear regression analysis. Multicollinearity issues were examined using Pearson's Product-Moment Correlation, Variance Inflation Factor (VIF), tolerance values, and Condition Index (CI) analysis in SPSS-25. These procedures ensured the reliability of variable relationships and addressed potential model deviations. The results showed a tolerance level greater than 0.1, a VIF value below 2 (O'Brien, 2007), and CI values below 10 (Kim, 2019), confirming the absence of multicollinearity issues in the model.

Autocorrelation was tested using the Durbin-Watson test in SPSS-25 to assess the independence of error terms. This analysis is crucial for detecting dependencies among consecutive data points. The results indicated that the Durbin-Watson values ranged between 1.5 and 2.5, suggesting no autocorrelation in the model (White, 1992).

Mediation analysis was conducted to examine the effect of interpersonal emotion regulation in the relationship between parasocial interaction and social media addiction. This analysis was performed in R using Andrew F. Hayes' published R scripts. Path analysis was carried out using the "lavaan" package in R. Moderator analyses were conducted in SPSS using Hayes' Process macro to evaluate the effect of death anxiety. In both moderation and mediation analyses, the statistical significance

of relationships was assessed using the bootstrap technique, with 5000 resamples within a 95% CI.

Results

Overall, 80.8% ($n = 323$) of the participants were female, all were single, 91.8% ($n = 367$) reported no history of mental illness, and 62.5% ($n = 250$) perceived their income as equal to their expenses. The mean age of the sample was 19.63 ± 0.98 years (range: 18 – 21). Participants reported spending an average of 4.48 ± 2.45 hours per day on social media, with a range of 1 to 15 hours (Table 1).

The mean total scores for the study scales were as follows: 39.59 ± 13.38 for the Parasocial Interaction Scale, 53.52 ± 20.79 for the Thorson-Powell Death Anxiety Scale, 54.68 ± 15.74 for the Interpersonal Emotion Regulation Questionnaire, and 18.58 ± 5.96 for the Bergen Social Media Addiction Scale (Table 2).

According to the findings presented in Table 3, the total effect of the parasocial interaction variable on interpersonal emotion regulation was strong and significant (coefficient = 0.73, $p < .0000$). This model accounted for 38.57% of the variance in the Interpersonal Emotion Regulation Scale ($R^2 = 0.39$). The CI (LLCI = 0.64, ULCI = 0.82) supported the statistical significance of this relationship. Additionally, the direct effect of interpersonal emotion regulation on social media addiction was found

Table 1.
Demographic Characteristics of the Participants (n = 400)

Demographic Characteristics	n	%
Gender	Female	323 80.8
	Male	77 19.3
Marital status	Single	400 100
	Married	0 0
Perceived level of income	Income less than expenses	125 31.3
	Income equal to expenses	250 62.5
	Income more than expenses	25 6.3
The presence of mental illness	Yes	33 8.3
	No	367 91.8
$\bar{X} \pm SD$ (Min-Max)		
Age (years)	19.63 ± 0.98 (18 – 21)	
Time spent on social media (hours)	4.48 ± 2.45 (1 – 15)	

to be significant (coefficient = 0.10, $p < .0000$), with bootstrap CIs (LLCI = 0.06, ULCI = 0.13) confirming the stability of this effect. The effect of death anxiety on social media addiction was also statistically significant (coefficient = 4.74, $p = .0015$), and CIs (LLCI = 1.82, ULCI = 7.66) indicated the reliability of this relationship. Similarly, the direct effect of parasocial interaction

Table 2.
Scale Mean Scores of the Participants (n = 400)

	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Parasocial Interaction Scale	14.00	70.00	39.59	13.38	-0.08	-0.89
Thorson-Powell Death Anxiety Scale	.00	100.00	53.52	20.79	-0.03	-0.81
Interpersonal Emotion Regulation Questionnaire	18.00	90.00	54.68	15.74	-0.13	-0.89
Social modelling	6.00	30.00	18.42	5.61	-0.03	-0.86
Appeasement	4.00	20.00	11.85	3.84	-0.02	-0.88
Increasing positive emotions	4.00	20.00	13.27	4.19	-0.27	-0.93
Perspective taking	4.00	20.00	11.12	3.86	-0.01	-0.89
Bergen Social Media Addiction Scale	6.00	30.00	18.58	5.96	-0.39	-0.94

Table 3.
Direct Effects of Independent Variables on Dependent Variables

	Coefficient	R ²	SE	t	p	LLCI	ULCI	Durbin-Watson	VIF
Parasocial Interaction Scale → Interpersonal Emotion Regulation Questionnaire (Total Effect)	0.73	0.39	0.05	15.81	.0000	0.64	0.82	1.82	1.00
Interpersonal Emotion Regulation Questionnaire → Social Media Addiction Scale (Direct Effect)	0.10	0.54	0.02	5.52	.0000	0.06 (bootstrap)	0.13 (bootstrap)	1.65	1.00
Death Anxiety Scale → Social Media Addiction Scale (Direct Effect)	4.74	0.54	1.49	0.0015	.0015	1.82	7.66	1.54	1.00
Parasocial Interaction Scale → Social Media Addiction Scale (Direct Effect)	0.31	0.54	0.06	5.75	.0000	0.21 (bootstrap)	0.42 (bootstrap)	1.61	1.00

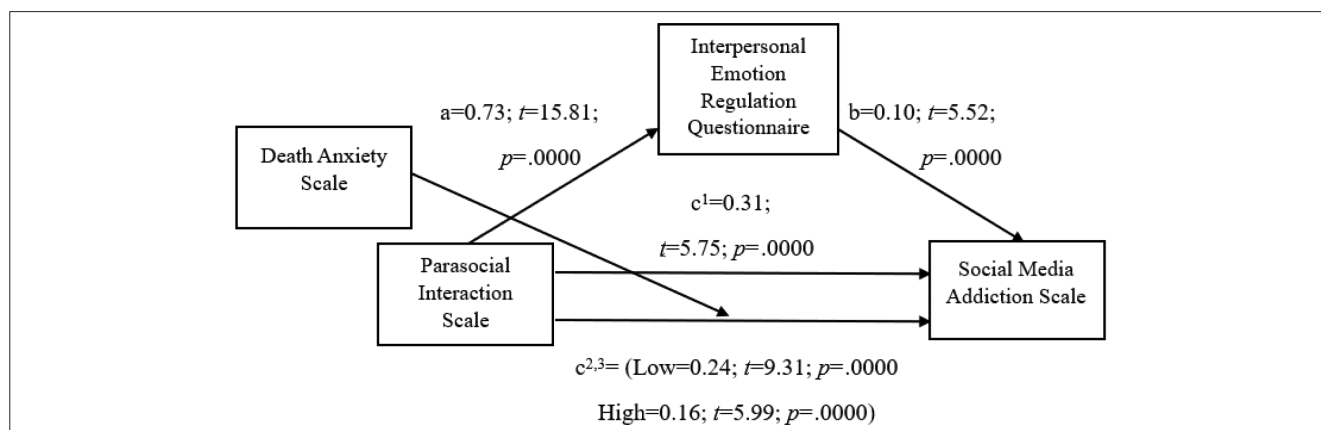


Figure 1. Representation of mediating and moderating roles in the relationship between parasocial interaction and social media addiction.

on social media addiction was significant (coefficient = 0.31, $p < .0000$), with bootstrap confidence intervals (LLCI = 0.21, ULCI = 0.42) further supporting this relationship (Table 3, Figure 1).

The findings presented in Table 4 illustrate the effects of mediating and moderating variables on social media addiction. The indirect effect of parasocial interaction on social media addiction through interpersonal emotion regulation was significant (coefficient = 0.07, Bootstrap LLCI = 0.04, ULCI = 0.10). Among individuals with low death anxiety, the effect of parasocial interaction on social media addiction was high (coefficient = 0.24, $p < .0000$, LLCI = 0.19, ULCI = 0.29), though this model explained only a small portion of the variance (R^2 change = 0.01). Conversely, among individuals with high death anxiety, the effect of parasocial interaction on social media addiction was weaker compared to those with low death anxiety (coefficient = 0.16, $p < .0000$, LLCI = 0.11, ULCI = 0.22). The moderating effect of death anxiety significantly influenced the relationship between parasocial interaction and social media addiction (coefficient = -0.08 , $p = .0321$, LLCI = -0.14 , ULCI = -0.00) (Table 4).

Furthermore, the findings presented Table 4 indicate that interpersonal emotion regulation mediates the relationship between

parasocial interaction and social media addiction. Additionally, death anxiety moderates this relationship. The interaction between parasocial interaction and death anxiety suggests that these two variables collectively have a significant impact on social media addiction. As death anxiety increases, the effect of parasocial interaction on social media addiction decreases. This finding provides key insights into how an individual's level of death anxiety may influence the relationship between parasocial interactions and social media addiction (Table 4, Figure 2).

Moreover, Figure 3 illustrates the distribution, interaction, and depth of the Parasocial Interaction Scale, the Bergen Social Media Addiction Scale, and the Interpersonal Emotion Regulation Questionnaire concerning the Thorson-Powell Death Anxiety Scale.

Discussion

This study examined the role of interpersonal emotion regulation in mediating the relationship between death anxiety, parasocial interaction, and social media addiction among university students. These findings were interpreted in light of the existing literature.

Table 4. Analysis Results Demonstrating the Effects of Mediating and Moderating Variables on the Social Media Addiction Scale

	Coefficient	R ²	SE	t	p	LLCI	ULCI	Durbin-Watson	VIF
Interpersonal Emotion Regulation Questionnaire → Social Media Addiction Scale (Indirect Effect)	0.07	-	0.02	-	-	0.04 (bootstrap)	0.10 (bootstrap)	1.65	1.00
Parasocial Interaction Scale*Death Anxiety Scale (Low) → Social Media Addiction Scale	0.24	(R ² -change 0.01)	0.03	9.31	.0000	0.19 (bootstrap)	0.29 (bootstrap)	1.61	1.00
Parasocial Interaction Scale*Death Anxiety Scale (High) → Social Media Addiction Scale	0.16	(R ² -change 0.01)	0.03	5.99	.0000	0.11 (bootstrap)	0.22 (bootstrap)	1.61	1.56
Parasocial Interaction Scale* Death Anxiety Scale → Social Media Addiction Scale (Interaction)	-0.08	0.54	0.04	-2.15	.0321	-0.14	-0.00	1.68	1.56

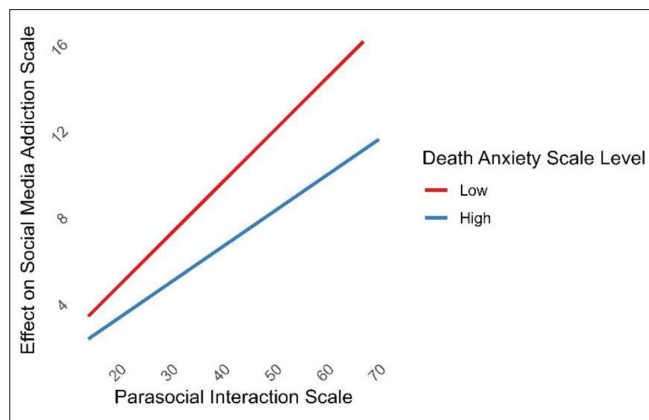


Figure 2. The effect of parasocial interaction on social media addiction according to death anxiety.

The results indicate a strong correlation between parasocial interaction and social media addiction. Social media addiction worsens as parasocial interaction increases. According to Baek et al. (2013), there is a positive correlation between trust in social networking sites and dependency on parasocial connections. Studies have De Bérail et al. (2019) found that the parasocial bond between university students and their preferred YouTubers exacerbates YouTube addiction. Similarly, Akhtar and Islam (2023) research indicates that parasocial relationships play a positive moderating role in the development of TikTok addiction among Chinese users. A meta-analysis conducted by researchers Tukachinsky et al. (2020) concluded that parasocial relationships are a significant predictor of media engagement. These findings align with the results of the present study. The existing literature

does not provide evidence of a non-existent or negative relationship between parasocial interaction and social media addiction. This positive association may be due to parasocial interactions serving as an alternative mechanism for fulfilling individuals' emotional and social needs. The fulfillment of emotional and social needs may reinforce social media use and trigger addictive behaviors (Jarzyna, 2020; Tukachinsky et al., 2020).

These findings indicate a strong correlation between death anxiety and social media addiction. Social media addiction worsens as death anxiety increases. According to Feng et al. (2023), smartphone addiction was positively and directly associated with fear of death among university students. Partouche-Sebban (2016) found a positive relationship between death anxiety and Facebook use, as the platform serves as a means of constructing a valuable self-image and gaining social recognition. The existing literature does not provide evidence of a non-existent or negative relationship between death anxiety and social media addiction. Individuals may use social media more frequently to cope with death anxiety, attain a sense of digital immortality, and strengthen their online social connections (Kumpasoğlu et al., 2021).

The findings suggest a connection between social media addiction and interpersonal emotion regulation. Social media addiction increases as interpersonal emotion regulation intensifies. Previous research published in the international literature supports a significant relationship between social media addiction and interpersonal emotion regulation (Marino et al., 2020; Pontes et al., 2018). Peker and Yıldız (2022) found that adolescents who struggle with emotion regulation are more likely to exhibit problematic social media use. Liu and Ma (2019) demonstrated that

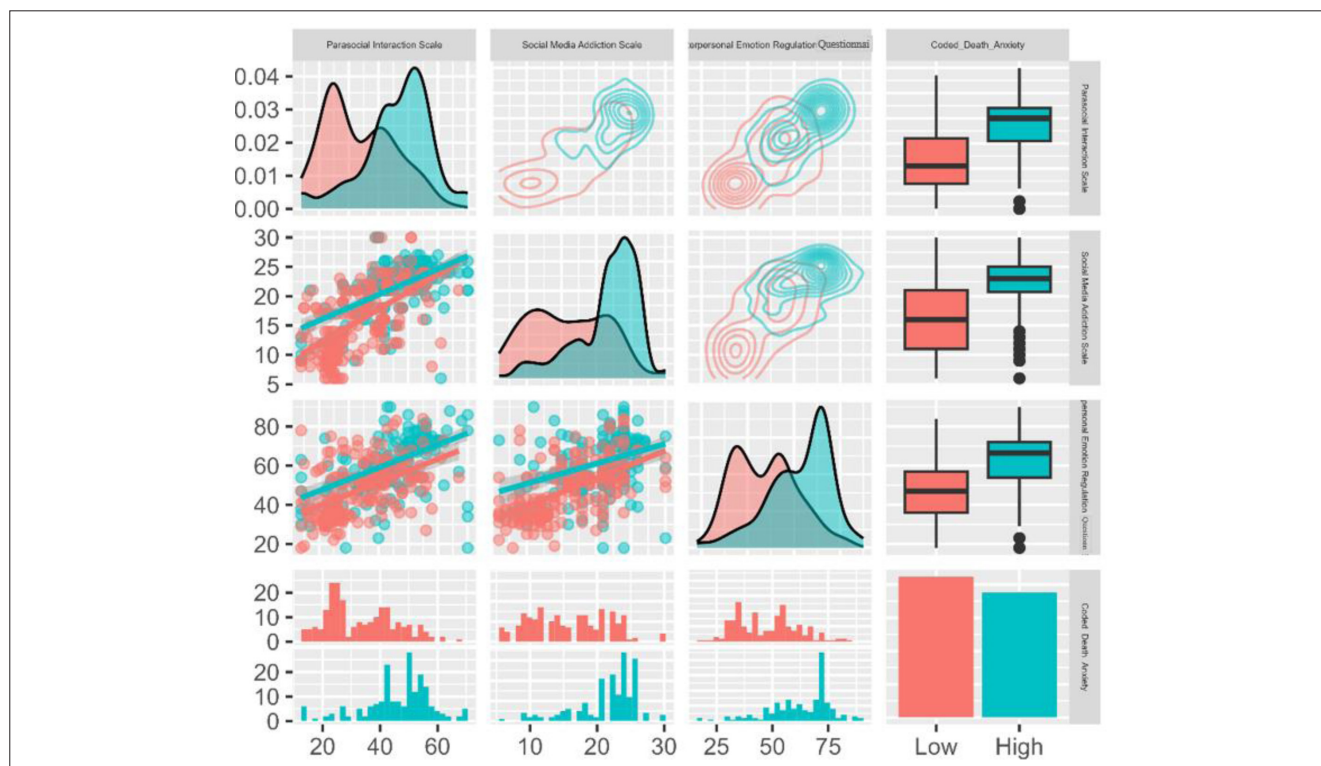


Figure 3. Distribution, interaction, and intensity of parasocial interaction scale, Bergen social media addiction scale, and interpersonal emotion regulation questionnaire according to categorical Thorson-Powell death anxiety scale variable.

attachment anxiety predicts difficulties in emotion regulation, which, in turn predicts social network addiction. Additionally, Hormes et al. (2014) observed significant difficulties in emotion regulation among individuals who reported problematic use of online social media platforms. These findings align with the results of the present study. Individuals who experience difficulties in emotion regulation may turn to social media platforms to avoid or regulate negative emotions, creating a reinforcing cycle that contributes to social media addiction (Drach et al., 2020).

The findings indicate that an increase in parasocial interaction leads to an increase in interpersonal emotion regulation. Parasocial interactions may serve as an effective mechanism for fulfilling individuals' emotional needs, positively impacting interpersonal emotion regulation skills. A meta-analysis conducted by Tukachinsky et al. (2020) demonstrated that parasocial interactions support interpersonal emotion regulation strategies, such as developing empathy and emotional sharing with media figures. Similarly, Schiappa et al. (2005) noted that parasocial interactions help alleviate loneliness and emotional burdens, assisting individuals in maintaining emotional balance. De Bérail et al. (2019) found that parasocial bonds function as a coping mechanism for university students facing stressful situations, providing emotional relief through engagement with media figures. Additionally, Rimé (2009) emphasized that sharing emotions in a social context can alleviate emotional burdens, suggesting that a similar process may occur through parasocial bonds. These findings support the results of this study. Parasocial interactions contribute to interpersonal emotion regulation through mechanisms such as emotional support, empathy, stress reduction, and modeling emotion regulation strategies via media figures (Peng et al., 2024; Shao et al., 2021).

Interpersonal emotion regulation was found to mediate the relationship between parasocial interaction and social media addiction. While direct evidence of this mediation role is scarce in the international literature, supporting findings exist. Research has Liu and Ma (2019) demonstrated that difficulties in emotion regulation influence social media addiction, highlighting how these processes may be reinforced through interpersonal relationships. Similarly, studies have Quaglieri et al. (2021) found a strong association between emotional dysfunction and social media addiction, suggesting that parasocial bonds may play a regulatory role in mitigating these dysfunctions. Additionally, Zsido et al. (2021) examined the relationship between social anxiety and social media addiction, concluding that maladaptive emotion regulation strategies could exacerbate addiction. Bond (2021) found that during the COVID-19 pandemic, social isolation amplified the role of parasocial interactions in interpersonal emotion regulation, contributing to social media addiction. These findings suggest that social and parasocial interactions influence individuals' emotional responses and regulation through interpersonal emotion regulation. Understanding the complex relationship between parasocial interactions, interpersonal emotion control, and addiction is critical to comprehending the mechanisms underlying social media addiction.

The role of parasocial interaction in social media addiction and the moderating function of death anxiety were confirmed. A study involving 1483 Chinese university students found a positive

and direct relationship between fear of death and smartphone addiction (Feng et al., 2023). This result suggests that death anxiety may be a fundamental psychological factor shaping individuals' technology and social media usage patterns. Additionally, a study conducted during the COVID-19 pandemic with 400 participants identified a correlation between the degree of social media use and death anxiety (Sheck et al., 2022). These findings suggest that uncertainty and fear of death during the pandemic may have driven individuals to use social media more frequently. Taken together, these results indicate that parasocial interactions play a crucial role in how individuals cope with death anxiety and develop social media addiction.

This study presents several innovative contributions to the existing literature on the relationship between parasocial interaction and social media addiction (Baek et al., 2013; De Bérail et al., 2019; Tukachinsky et al., 2020). By identifying the mediating role of interpersonal emotion regulation in the effect of parasocial interactions on social media addiction, this study introduces a multi-step causal process that has not been previously tested experimentally, offering significant insights into addiction and media psychology.

Additionally, the study reveals that death anxiety serves as a moderating factor in the relationship between parasocial interaction and social media addiction. Individuals with higher levels of death anxiety were found to form stronger parasocial bonds and exhibit a greater tendency toward social media addiction, suggesting that social media consumption may function as a coping mechanism for existential fears.

Moreover, this study highlights the connection between social media addiction and the pursuit of digital immortality, demonstrating that individuals use social media not merely as a form of entertainment but also as a means to manage their fear of death. While prior research has largely focused on the coping functions of social media (Karim & Kwan, 2024; Tandoc & Takahashi, 2016), this study introduces a novel existential perspective on the direct relationship between parasocial interactions and addiction.

Limitations and Directions for Future Research

Given certain limitations, the findings of this study should be interpreted with caution. A significant limitation is the overrepresentation of female participants in the sample compared to males. Additionally, as this study is cross-sectional, causality should not be inferred. The study focuses exclusively on young adults, limiting its generalizability to other age groups. Furthermore, how individuals allocate their time online is an important factor that was not thoroughly addressed; incorporating this variable could have provided more robust findings.

In conclusion, death anxiety, interpersonal emotion regulation, and parasocial interactions are predictors of social media addiction among young individuals. This study has contributed to understanding how students use social media and the motivations underlying their usage. To raise awareness of the factors contributing to social media addiction among young people, digital awareness programs should be developed, promoting time management skills and healthy digital habits. To strengthen interpersonal emotion regulation strategies, interventions such as mindfulness and emotional intelligence training should be

encouraged to enhance psychological resilience. Expanding psychosocial support services is essential, particularly by offering individual and group therapy to address difficulties in emotional regulation and coping with death anxiety. Additionally, encouraging participation in meaningful offline activities such as sports, arts, and volunteer programs can help young individuals engage in alternative, fulfilling experiences beyond social media.

Data Availability Statement: The data that support the findings of this study are available on request from the corresponding author.

Ethics Committee Approval: This study was approved by the Ethics Committee of Sakarya University (Approval No: E-61923333-050-99-242836; Date: 03/05/2023).

Informed Consent: Written informed consent was obtained from the participants who agreed to take part in the study.

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