



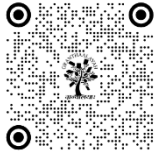


INVESTIGATION OF DIGITAL WELL-BEING AND INTOLERANCE TO UNCERTAINTY AS A PREDICTORS OF NARCISSISM IN SOCIAL MEDIA

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ABSTRACT

The digital age has created unprecedented opportunities for self-presentation and validation-seeking behaviors, fundamentally altering the landscape of narcissistic expression. Understanding how individuals navigate uncertainty while maintaining their digital well-being has become essential for comprehending modern psychological dynamics. The primary objective of this study is to investigate the relationship between digital well-being and intolerance of ambiguity as factors that can predict narcissistic behavior on social media platforms. This study utilized a relational screening model and employed a quantitative research method to investigate. The study's sample group consists of a total of 422 individuals aged 18 and above. The survey method was chosen as the preferred approach for gathering study data. The survey comprises the Demographic Information Form, Narcissism in Social Media Scale, Digital Well-Being Scale, and Intolerance of Uncertainty Scale. The data was analyzed using Correlation and Regression analysis. In the study, a positive correlation was found between social media narcissism and digital well-being. The correlation between narcissism on social media and digital well-being was found to be highly positive. The study revealed that the sub-dimension of intolerance of uncertainty, specifically future-oriented anxiety, has a positive and significant effect on narcissistic tendencies. These results show that social media narcissism is related to digital well-being and various psychological factors, and these relationships are mostly positive.

Keywords: Social Media, Narcissism, Digital Well-Being, Intolerance of Uncertainty

1. INTRODUCTION

The Digital Transformation of Human Behavior and Social Media's Psychological Impact

The rapid proliferation of digital technologies has fundamentally transformed human social behavior, creating unprecedented opportunities for self-expression and interpersonal connection through online platforms [Tana et al. \(2023\)](#). Social media networks, including Facebook, Instagram, and Twitter, now serve billions of

users worldwide, facilitating global communication and community formation. These platforms have evolved beyond mere communication tools to become primary venues for identity construction, social validation, and psychological need fulfillment [Yadav \(2025\)](#). However, this digital transformation has introduced complex psychological dynamics that warrant systematic investigation. Contemporary research indicates that social media environments can amplify certain personality traits, particularly narcissistic tendencies, while simultaneously affecting users' overall digital well-being and tolerance for uncertainty [Andreassen, et al. \(2017\)](#), [Hidayat et al. \(2024\)](#), [Gnambs and Appel \(2018\)](#). The intersection of these psychological factors represents a critical area of inquiry for understanding modern human behavior in digital contexts.

2. SOCIAL MEDIA NARCISSISM: CONCEPTUAL FRAMEWORK AND DIGITAL MANIFESTATIONS

Narcissism, traditionally characterized by grandiose self-regard, empathy deficits, and excessive need for admiration [Miller et al. \(2013\)](#), has found new expression in digital environments. Narcissistic personality defined features such as inflated self-importance, preoccupation with fantasies of success, belief in personal uniqueness, and exploitative interpersonal relationships [Brown et al. \(2009\)](#). Social media narcissism represents a distinct manifestation of these traits within digital contexts [Fegan and Bland \(2021\)](#). Unlike traditional narcissism, which primarily operates through face-to-face interactions, social media narcissism leverages quantifiable feedback mechanisms—likes, comments, shares, and follower counts—to satisfy validation needs [Buffardi and Campbell \(2008\)](#). This digital variant involves strategic self-presentation through curated content, selective disclosure, and attention-seeking behaviors designed to maximize online visibility and approval.

Research demonstrates that social media platforms provide ideal environments for narcissistic expression through several mechanisms [Buffardi and Campbell \(2008\)](#), [Gnambs and Appel \(2018\)](#), [Manchón and Dávila \(2022\)](#). Social media platforms enable selective self-presentation, provide constant validation through feedback systems, and facilitate social competition via comparative metrics [Mehdizadeh \(2010\)](#), [Tran and Diep \(2025\)](#). Empirical studies consistently document positive associations between narcissistic traits and intensive social media use, suggesting that these platforms both attract narcissistic individuals and potentially cultivate narcissistic behaviors through reinforcement processes [Andreassen et al. \(2017\)](#), [Gnambs and Appel \(2018\)](#).

3. DIGITAL WELL-BEING: PSYCHOLOGICAL FLOURISHING IN ONLINE ENVIRONMENTS

Digital well-being encompasses individuals' psychological health and adaptive functioning within technology-mediated environments. This construct extends beyond mere absence of digital harm to include positive aspects of online experience, such as meaningful social connections, creative expression, and productive technology use [Büchi \(2020\)](#), [Vanden Abeele \(2020\)](#). Digital well-being reflects how effectively individuals integrate digital technologies into their lives while maintaining psychological balance and authentic self-expression [Vanden Abeele \(2020\)](#). As [Gui et al. \(2017\)](#) note, the importance of well-being in digital contexts has become increasingly prominent as a result of technology's gradual integration into wide areas of modern life. [Öztürk \(2018\)](#) conceptualizes digital

well-being as comprising abilities to manage information overload, resist multitasking demands, and align technology use with personal values and goals. This multidimensional construct includes digital satisfaction (positive emotions from technology use), safe and responsible behavior (conscious and ethical online conduct), and digital welfare (overall quality of digital experiences).

The relationship between digital well-being and social media narcissism presents an intriguing paradox. While social media can facilitate genuine social connection, creative expression, and community building—all contributing to digital well-being [Hoffner and Bond \(2022\)](#)—it may simultaneously enable narcissistic behaviors that undermine authentic relationships and psychological health [Appel et al. \(2019\)](#). Research by [Nowland et al. \(2018\)](#) demonstrates that social media can increase online social connections and reduce loneliness, while [Maharani \(2024\)](#) highlights its role in information sharing and rapid access to current events. Additionally, [Mainsah \(2017\)](#) emphasizes social media's function as a creative expression platform through art, writing, photography, and video content.

Social media platforms play a decisive role in meeting psychological needs such as online self-presentation, social comparison tendencies, approval seeking, and sense of belonging [Valkenburg and Peter \(2009\)](#). Conscious and self-regulatory social media use enables individuals to establish more meaningful digital relationships, reduce dependence on external approval for self-worth, and support psychological resilience [Reinecke et al. \(2021\)](#). However, behaviors such as intense social comparison, idealized content consumption, and excessive approval seeking can weaken digital well-being, while supportive online relationships and freedom of expression can enhance it [Twenge and Campbell \(2019\)](#). Understanding this complex relationship requires examining how individual differences in personality and psychological functioning influence digital well-being outcomes.

4. INTOLERANCE OF UNCERTAINTY AND DIGITAL BEHAVIORAL PATTERNS

Intolerance of uncertainty (IU) represents a dispositional inability to tolerate uncertain situations, characterized by negative beliefs about uncertainty and its implications [Carleton et al. \(2007\)](#). [Budner \(1962\)](#) originally defined intolerance of uncertainty as "the tendency to perceive uncertain situations as sources of threat." Individuals high in IU perceive uncertain situations as threatening, unacceptable, and potentially harmful, leading to anxiety, avoidance, and control-seeking behaviors. [Dugas et al. \(2005\)](#) found that individuals with high levels of intolerance of uncertainty perceive uncertain situations as more worrying compared to those with low levels of intolerance of uncertainty. This construct comprises two distinct dimensions: prospective anxiety (worry about future uncertain events) and inhibitory anxiety [Berenbaum et al. \(2008\)](#). As [Carleton et al. \(2007\)](#) identified through their analyses, "prospective anxiety" relates to future worries about uncertainty, while "inhibitory anxiety" refers to emotional reactions that prevent or restrict action in uncertain situations.

Social media environments are inherently uncertain, characterized by unpredictable audience responses, algorithmic content distribution, and dynamic social feedback. Users cannot predict which posts will receive engagement, how content will be interpreted, or when social validation will occur [Dolan et al. \(2019\)](#). For individuals with high IU, this uncertainty may trigger compensatory behaviors aimed at increasing predictability and control. Research suggests that IU may influence social media use patterns in several ways. High-IU individuals may engage

in excessive posting to increase chances of positive feedback, seek validation through provocative content, or monitor their online presence obsessively to maintain control over their digital image [Baerg and Bruchmann \(2022\)](#), [Bottesi et al. \(2021\)](#). This can cause social media to become not only a communication platform but also a psychological safety area. These behaviors may overlap considerably with narcissistic social media use, suggesting potential synergistic effects between personality traits and uncertainty tolerance in predicting digital behavior patterns.

5. THEORETICAL INTEGRATION: UNDERSTANDING COMPLEX DIGITAL BEHAVIORS

Social Cognitive Theory provides a comprehensive framework for understanding these phenomena. According to [Bandura \(1988\)](#), behavior results from dynamic interactions between personal factors, environmental influences, and behavioral outcomes. In social media contexts, users observe others' posting strategies and engagement outcomes, developing expectations about which behaviors yield desired results. Narcissistic individuals may learn that self-promotional content generates attention, while high-IU individuals may discover that frequent posting provides anxiety relief through social feedback.

Self-Presentation Theory [Goffman \(1959\)](#) offers additional insight into digital identity management. Social media platforms function as stages for impression management, where users strategically construct and maintain desired public images. Narcissistic individuals may use these platforms to project grandiose self-images, while those high in IU may seek to minimize uncertainty through carefully controlled self-disclosure.

The Need for Control emerges as a central mechanism linking these constructs. Both narcissistic tendencies and uncertainty intolerance involve desires to control social environments and outcomes [Buffardi and Campbell \(2008\)](#). Social media platforms may appeal to these individuals because they offer unprecedented control over self-presentation, audience selection, and interaction timing [Gambo and Özad, \(2021\)](#). However, this apparent control may be largely illusory, potentially creating cycles of increasing dependency and maladaptive use patterns.

6. LITERATURE GAPS AND RESEARCH RATIONALE

Despite extensive research on individual constructs, significant gaps remain in understanding their interconnections. First, few studies have simultaneously examined social media narcissism, digital well-being, and intolerance of uncertainty, limiting understanding of their complex interrelationships. Second, existing research predominantly focuses on Western, educated populations, with limited representation of non-Western cultural contexts.

In the Turkish context, these gaps are particularly pronounced. Turkey represents a unique cultural setting, combining collectivistic values with rapid digital adoption and high social media engagement rates. Understanding how these cultural factors influence the relationships between personality traits and digital behaviors is crucial for developing culturally appropriate interventions and theoretical models.

Furthermore, most existing research adopts deficit-focused approaches, emphasizing problematic technology use rather than examining factors that promote healthy digital engagement. This study addresses this limitation by

incorporating digital well-being as both an outcome and potential protective factor in the relationships between personality traits and social media behavior.

7. RESEARCH OBJECTIVES AND SIGNIFICANCE

This study aims to examine digital well-being and intolerance of uncertainty as predictors of social media narcissism among Turkish adults. The research makes several important theoretical contributions. First, it provides the first comprehensive examination of these three constructs within a single theoretical model. Second, it extends existing theory by examining both adaptive (digital well-being) and maladaptive (narcissism) outcomes of social media use. Third, it contributes to cross-cultural psychology by testing Western-derived constructs in a non-Western context.

The practical implications are equally significant. Understanding predictors of social media narcissism can inform mental health interventions for individuals experiencing social media-related distress. Digital well-being research can guide development of healthier technology use practices and educational programs. Finally, examining uncertainty tolerance can inform strategies for helping individuals navigate the inherent unpredictability of digital environments more effectively.

7.1. RESEARCH QUESTIONS AND HYPOTHESES

This investigation addresses the primary research question: To what extent do digital well-being dimensions and intolerance of uncertainty predict social media narcissism? Based on theoretical considerations and existing research, we hypothesize that digital well-being dimensions will demonstrate differential predictive relationships with social media narcissism, with digital satisfaction and digital welfare positively predicting narcissistic behaviors.

8. METHOD

8.1. RESEARCH MODEL

In this study, a correlational design was used to examine the role of digital well-being and intolerance of uncertainty as predictors of narcissism in social media. The relational survey model is a design used in research aimed at determining the existence, direction, and strength of relationships between variables [Karasar \(2015\)](#). In this research, narcissism in social media was considered as the dependent variable, while digital well-being and intolerance of uncertainty were treated as independent variables. Within the scope of the research, the predictive power of the independent variables on the dependent variable was examined through multiple regression analysis.

8.2. STUDY GROUP

This research was conducted on a sample of 422 individuals consisting of adults aged 18 and over living in Turkey. The convenience sampling method was used in determining the participants. Convenience sampling is a non-probability sampling method in which the researcher includes participants who are easily accessible and voluntary [Karasar \(2015\)](#). While this method is advantageous in terms of time and cost, it is an approach that requires caution in generalizing the findings. The

demographic characteristics of the participants in this research are presented in the table below.

Table 1

Table 1 Demographic Characteristics of the Study Group			
Variables	Groups	N	%
Gender	Female	263	62.3
	Male	159	37.7
Age Group	18-25 years	111	26.3
	26-35 years	185	43.8
	36-45 years	72	17.1
	45 years and over	54	12.8
Education Level	Primary education	16	3.8
	High school	55	13
	Associate/Bachelor's	250	59.2
	Postgraduate	101	23.9
Relationship Status	In a relationship	87	20.6
	Single	149	35.3
	Married	186	44.1
Employment Status	Working	286	67.8
	Not working	136	32.2
Most Used Social Media Platform	Facebook	20	4.7
	Instagram	309	73.2
	Twitter	59	14
	TikTok	11	2.6
	I don't use any of these	23	5.5

The research sample consists of 422 individuals, with 62.3% of participants being female and 37.7% male. When examining the age distribution, young adults in the 26-35 age group constitute 43.8% of the sample. In terms of education level, 59.2% of participants are undergraduate/bachelor's degree graduates, and 23.9% are postgraduate degree holders. Regarding relationship status, 44.1% are married, 35.3% are single, and 20.6% are in a relationship. When employment status is examined, 67.8% are actively working. In social media usage, Instagram stands out as the most common platform with 73.2%.

9. DATA COLLECTION PROCESS AND INSTRUMENTS

Research data were collected through an online survey form created via Google Forms between January and March 2024. Prior to implementing the study, necessary approval was obtained from the Beykent University Social Sciences and Humanities Research Ethics Committee (Decision no: ..., Date: ...). Informed consent was obtained online from all participants before they participated in the research. The prepared survey form consisted of four sections: the first section included questions to determine demographic information, the second section included the Social Media Narcissism Scale, the third section included the Digital Well-Being Scale, and the final section included the Intolerance of Uncertainty Scale. Answering every question was mandatory, thus, no question was left blank. The survey took approximately 12-15 minutes to complete, and participants could stop completing the form at any point without providing a reason.

Demographic Information Form: The demographic information form included in the survey contained questions about participants' gender, age, educational status, relationship status, employment status, and most frequently used social media platform.

Social Media Narcissism Scale: The Social Media Narcissism Scale was developed by [Akdeniz et al. \(2022\)](#). The scale consists of 16 items and two sub-dimensions: "Narcissistic Admiration" and "Narcissistic Rivalry." Items 1, 3, 6, 9, 10, 11, 12, 15, and 16 constitute the Narcissistic Admiration dimension, while items 2, 4, 5, 7, 8, 13, and 14 constitute the Narcissistic Rivalry dimension. These items are structured as "1: Not suitable at all; 2: Not very suitable; 3: Undecided; 4: Suitable; 5: Completely suitable." Scores obtainable from the scale range between 16 and 80. Higher scores indicate higher levels of narcissism in social media. The scale contains no reverse items. According to reliability analysis results, Cronbach's alpha values were reported as 0.78 for the narcissistic admiration sub-dimension, 0.73 for the narcissistic rivalry sub-dimension, and 0.72 for the total scale [Akdeniz et al. \(2022\)](#).

Digital Well-Being Scale: The Digital Well-Being Scale developed by [Arslankara et al. \(2022\)](#) is used to measure the hedonic and eudaimonic happiness states of individuals who use digital environments and technologies while using these environments and resulting from these environments. The scale, consisting of a total of 12 items, comprises three sub-dimensions: "digital satisfaction," "safe and responsible behavior," and "digital welfare." The first sub-dimension consists of items 1, 2, 3, and 4; the second sub-dimension consists of items 5, 6, 7, and 8; and the third sub-dimension consists of items 9, 10, 11, and 12. These items are structured as a 5-point Likert scale: "1: Does not reflect at all; 2: Reflects little; 3: Reflects moderately; 4: Reflects much; 5: Reflects completely." Items 11 and 12 in the scale are reverse coded. Scores obtainable from the scale range between 12 and 60. The Cronbach's Alpha coefficient for the first dimension of the scale was found to be 0.81, while this value was 0.73 for the second dimension and 0.66 for the third dimension. The reliability coefficient for the entire scale was found to be 0.79 [Arslankara et al. \(2022\)](#).

Intolerance of Uncertainty Scale (IUS-12): The Intolerance of Uncertainty Scale (IUS-12) is a shortened version of the original 27-item scale reduced to 12 items. The original scale was developed by [Carleton et al. \(2007\)](#) and adapted to Turkish by [Sarıçam et al. in 2014](#). The scale, containing a total of 12 items, consists of two sub-dimensions: inhibitory anxiety (5 items) and prospective anxiety (7 items). Items in the scale are structured as a 5-point Likert scale: "1: Not suitable for me at all, 2: Very little suitable for me, 3: Somewhat suitable for me, 4: Very suitable for me, and 5: Completely suitable for me." Item 1 in the scale is reverse coded. The maximum score obtainable from the scale is 60, while the minimum score is 12. Higher scores indicate a high level of intolerance of uncertainty. As a result of the analysis conducted on the reliability level of the scale, the Cronbach's Alpha coefficient was found to be 0.88 for the entire scale, while this value was 0.84 for the first dimension and 0.77 for the second dimension [Sarıçam et al. \(2014\)](#).

9.1. DATA ANALYSIS

The data were analyzed using SPSS (v25) software, with participants' demographic characteristics presented through frequency and percentage distributions, descriptive statistics (mean, standard deviation, min-max values) calculated for scales and sub-dimensions, normality assessed via Kolmogorov-Smirnov and Shapiro-Wilk tests, Pearson correlation analysis conducted to explore variable relationships, and multiple linear regression (enter method) applied to

evaluate the predictive effects of digital well-being and intolerance of uncertainty on social media narcissism, after confirming assumptions of multicollinearity, normality, linearity, and variance homogeneity, with a significance level of $p < .05$ for all analyses.

10. FINDINGS

Table 2

Table 2 Descriptive Statistics for Scales Used in Research

Variable	N	M	SD	Min.	Max.	α
Social Media Narcissism	422	42.31	12.148	16	80	0.856
Narcissistic Admiration	422	29.66	8.671	9	45	0.841
Narcissistic Rivalry	422	12.65	5.353	7	35	0.755
Digital Well-Being	422	43.55	7.774	12	60	0.808
Digital Satisfaction	422	15.06	3.689	4	20	0.86
Safe and Responsible Behavior	422	16.74	3.033	4	20	0.734
Digital Welfare	422	11.75	3.792	4	20	0.71
Intolerance of Uncertainty	422	40.34	10.995	12	60	0.921
Prospective Anxiety	422	24.06	6.105	7	35	0.841
Inhibitory Anxiety	422	16.28	5.561	5	25	0.908

Note. N = sample size; M = mean; SD = standard deviation; Min. = minimum value; Max. = maximum value; α = Cronbach's Alpha reliability coefficient.

Descriptive statistics for the scales used in the research are presented in [Table 2](#). The mean score of the Social Media Narcissism Scale was found to be 42.31 (SD = 12.148). Scores obtained from the scale range between 16 and 80. The Cronbach's Alpha reliability coefficient of the scale was determined as .856. Among the sub-dimensions of the scale, the narcissistic admiration dimension has a mean of 29.66 (SD = 8.671), with scores ranging between 9 and 45 and a reliability coefficient of .841. The narcissistic rivalry dimension has a mean of 12.65 (SD = 5.353), with scores ranging between 7 and 35 and a reliability coefficient of .755.

The overall mean of the Digital Well-Being Scale was calculated as 43.55 (SD = 7.774). Scores obtained from the scale range between 12 and 60. The Cronbach's Alpha reliability coefficient of the scale is .808. When examining the sub-dimensions of the scale, the digital satisfaction dimension has a mean of 15.06 (SD = 3.689), with scores ranging between 4 and 20 and a reliability coefficient of .860. The safe and responsible behavior dimension has a mean of 16.74 (SD = 3.033), with scores ranging between 4 and 20 and a reliability coefficient of .734. The digital welfare dimension has a mean of 11.75 (SD = 3.792), with scores ranging between 4 and 20 and a reliability coefficient of .710.

The overall mean of the Intolerance of Uncertainty Scale was determined as 40.34 (SD = 10.995). Scores obtained from the scale range between 12 and 60. The Cronbach's Alpha reliability coefficient of the scale is .921. When examining the sub-dimensions, the prospective anxiety dimension has a mean of 24.06 (SD = 6.105), with scores ranging between 7 and 35 and a reliability coefficient of .841. The inhibitory anxiety dimension has a mean of 16.28 (SD = 5.561), with scores ranging between 5 and 25 and a reliability coefficient of .908.

Table 3**Table 3 Correlation Analysis Results Between Social Media Narcissism Scale Total Scores and Digital Well-Being and Intolerance of Uncertainty Scale Scores**

Variables	1	2	3	4	5	6	7	8	9	10
1= Social Media Narcissism	1	.921*	.777*	.552*	.357*	.224*	.607*	.261*	.263*	.228*
2= Narcissistic Admiration		1	.471*	.556*	.370*	.302*	.538*	.206*	.221*	.165*
3= Narcissistic Rivalry			1	.353*	.210*	0.019	.505*	.259*	.239*	.250*
4= Digital Well-Being				1	.798*	.708*	.708*	.358*	.382*	.288*
5= Digital Satisfaction					1	.459*	.296*	.199*	.237*	.133*
6= Safe and Responsible Behavior						1	.205*	.228*	.266*	.159*
7= Digital Welfare							1	.358*	.340*	.334*
8= Intolerance of Uncertainty								1	.948*	.937*
9= Prospective Anxiety									1	.776*
10= Inhibitory Anxiety										1

Note. **p < .01

Correlation coefficients between variables are presented in Table 3. A moderate positive relationship was found between narcissism in social media and digital well-being ($r = .552$, $p < .001$), and a strong positive relationship with digital welfare ($r = .607$, $p < .001$). The narcissistic admiration dimension showed moderate positive relationships with digital well-being ($r = .556$, $p < .001$) and digital welfare ($r = .538$, $p < .001$), while the narcissistic rivalry dimension exhibited a moderate positive relationship with digital welfare ($r = .505$, $p < .001$). The relationships between intolerance of uncertainty and its sub-dimensions with narcissism variables were found to be low-level (ranging from $r = .165$ to $.263$).

Table 4**Table 4 Results of Multiple Regression Analysis Examining the Effects of Digital Well-Being and Intolerance of Uncertainty on Social Media Narcissism**

Dependent Variable	Predictors	B	SE	β	t	p
Social Media Narcissism	Constant	10.126	2.948		3.434	0.001
	Digital Satisfaction	0.59	0.145	0.179	4.063	0
	Safe and Responsible Behavior	0.09	0.174	0.022	0.515	0.607
	Digital Welfare	1.727	0.134	0.539	12.872	0

Prospective Anxiety	0.078	0.124	0.039	0.632	0.528
Inhibitory Anxiety	-0.023	0.133	-0.011	-0.172	0.863
R= .635 R ² = .404 F(5,416) = 56.353 p= .000					

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; t = t-statistic; p = significance level.

Multiple regression analysis results regarding the prediction of narcissism in social media by digital well-being and intolerance of uncertainty are presented in Table 4. The established regression model is statistically significant ($F(5,416) = 56.333$, $p < .001$) and explains 40.4% of the total variance ($R^2 = .404$). According to the analysis results, digital welfare ($\beta = .539$, $p < .001$) and digital satisfaction ($\beta = .179$, $p < .05$) significantly predict narcissism in social media in a positive direction. Safe and responsible behavior, prospective anxiety, and inhibitory anxiety variables were found to have no significant predictive effect on narcissism in social media ($p > .05$).

Table 5

Table 5 Results of Multiple Regression Analysis Examining the Effects of Digital Well-Being and Intolerance of Uncertainty on Narcissistic Admiration

Dependent Variable	Predictors	B	SE	β	t	p
Narcissistic Admiration	Constant	5.239	2.193		2.39	0.017
	Digital Satisfaction	0.406	0.108	0.173	3.759	0
	Safe and Responsible Behavior	0.363	0.129	0.127	2.805	0.005
	Digital Welfare	1.076	0.1	0.47	10.78	0
	Prospective Anxiety	0.05	0.092	0.035	0.542	0.588
	Inhibitory Anxiety	-0.099	0.099	-0.063	-0.995	0.32
R= .594 R ² = .353 F(5,416) = 45.346 p= .000						

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; t = t-statistic; p = significance level.

Multiple regression analysis results regarding the predictive effect of digital well-being and intolerance of uncertainty on narcissistic admiration are presented in Table 5. The established regression model is statistically significant ($F(5,416) = 45.346$, $p < .001$) and explains 35.3% of the total variance ($R^2 = .353$). According to the analysis results, digital welfare ($\beta = .470$, $p < .001$), digital satisfaction ($\beta = .173$, $p < .001$), and safe and responsible behavior ($\beta = .127$, $p < .05$) significantly predict narcissistic admiration in a positive direction. These findings indicate that the digital welfare variable is the strongest predictor. Prospective anxiety and inhibitory anxiety variables were found to have no significant predictive effect on narcissistic admiration ($p > .05$).

Table 6

Table 6 Results of Multiple Regression Analysis Examining the Effects of Digital Well-Being and Intolerance of Uncertainty on Narcissistic Rivalry

Dependent Variable	Predictors	B	SE	β	t	p
Narcissistic Rivalry	Constant	4.886	1.424		3.432	0.001
	Digital Satisfaction	0.184	0.07	0.127	2.624	0.009

Safe and Responsible Behavior	-0.273	0.084	-0.155	-3.254	0.001
Digital Welfare	0.651	0.065	0.461	10.055	0
Prospective Anxiety	0.028	0.06	0.032	0.475	0.635
Inhibitory Anxiety	0.076	0.064	0.079	1.176	0.24
R= .533 R ² = .284 F(5,416) = 32.997 p= .000					

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; t = t-statistic; p = significance level.

Multiple regression analysis results regarding the predictive effect of digital well-being and intolerance of uncertainty on narcissistic rivalry are presented in [Table 6](#). The established regression model is statistically significant ($F(5,416) = 32.997, p < .001$) and explains 28.4% of the total variance ($R^2 = .284$). According to the analysis results, digital welfare ($\beta = .461, p < .001$) and digital satisfaction ($\beta = .127, p < .01$) significantly predict narcissistic rivalry in a positive direction. Safe and responsible behavior significantly predicts narcissistic rivalry in a negative direction ($\beta = -.155, p < .01$). These findings indicate that the digital welfare variable is the strongest predictor. Prospective anxiety and inhibitory anxiety variables were found to have no significant predictive effect on narcissistic rivalry ($p > .05$).

11. DISCUSSION

The findings of this study provide important insights into the effects of digital well-being and intolerance of uncertainty on narcissism in social media. The results reveal that digital welfare and digital satisfaction positively predict narcissism in social media, while intolerance of uncertainty variables, contrary to expectations, did not show significant predictive effects. These findings challenge existing theoretical assumptions and provide new insights into the complex dynamics of personality traits in digital environments. The regression models explained substantial variance in narcissistic behaviors (40.4% for total narcissism, 35.3% for narcissistic admiration, and 28.4% for narcissistic rivalry), indicating that digital well-being dimensions are powerful predictors of social media narcissism. Notably, the differential patterns between narcissistic admiration and rivalry suggest distinct psychological pathways underlying these narcissistic expressions.

11.1. DIGITAL WELL-BEING AS A DRIVER OF SOCIAL MEDIA NARCISSISM

The study found that digital welfare and digital satisfaction positively affect narcissism in social media. This result supports the research conducted by [Andreassen et al. \(2017\)](#), where the authors found that time spent on digital platforms and satisfaction derived from these platforms increase narcissistic tendencies in individuals. Similarly, [Meier and Reinecke \(2020\)](#) demonstrated that digital satisfaction reinforces narcissism.

From a theoretical perspective, these findings align with Social Cognitive Theory's emphasis on reciprocal determinism. Individuals who experience high digital satisfaction may develop expectations that social media provides reliable sources of validation and self-enhancement. This creates a reinforcement cycle where positive digital experiences motivate continued narcissistic behaviors, which in turn generate more digital satisfaction through likes, comments, and social approval.

The positive correlation found between the narcissistic admiration dimension and digital well-being is consistent with the findings of [Back et al. \(2013\)](#). This study found a positive relationship between safe and responsible behaviors and narcissistic admiration, related to narcissistic individuals exhibiting careful and controlled behavior in online environments. Narcissistic individuals behave more carefully in environments where they can express themselves better and receive more approval on digital platforms.

[Krizan and Herlache \(2018\)](#) stated that narcissistic individuals' desire to gain more likes and appreciation on digital platforms, due to viewing themselves as special and superior, positively affects their digital welfare. This finding suggests a paradoxical relationship where narcissistic behaviors, typically considered maladaptive, may actually contribute to subjective digital well-being in the short term. However, this apparent benefit may mask longer-term psychological costs, including increased dependence on external validation and potential difficulties in offline relationships.

11.2. THE UNEXPECTED ROLE OF INTOLERANCE OF UNCERTAINTY

Despite intolerance of uncertainty and its sub-dimensions showing low-level positive correlations with narcissism in social media, it is noteworthy that they did not show significant predictive effects in regression analyses. This unexpected finding requires careful theoretical consideration and represents one of the most intriguing results of this study.

In correlation analyses, intolerance of uncertainty and prospective anxiety were found to show low-level positive relationships with narcissism in social media. This finding is partially consistent with the findings of [Gui et al. \(2017\)](#) that intolerance of uncertainty is a factor that increases anxiety. The positive significant relationship found between inhibitory anxiety and narcissism in social media is consistent with findings by [Brailovskaia et al. \(2020\)](#) that both grandiose and vulnerable narcissism are positively related to social media addiction and anxiety symptoms.

Several theoretical explanations may account for the limited predictive power of uncertainty intolerance. First, social media platforms may provide sufficient structural certainty through algorithmic predictability and immediate feedback mechanisms, reducing the salience of individual uncertainty tolerance. Second, the Turkish cultural context, characterized by higher uncertainty avoidance compared to Western cultures, may normalize uncertainty-reducing behaviors, making individual differences less predictive. Third, the overwhelming influence of digital well-being dimensions may overshadow more subtle personality effects.

[Morriss et al. \(2021\)](#) demonstrate that intolerance of uncertainty plays an important role in the development and maintenance of anxiety disorders. Similarly, in a study conducted by [Arbona et al. \(2021\)](#) on university students, intolerance of uncertainty was found to be directly related to prospective anxiety and decision-making difficulties. Additionally, [Raines et al. \(2019\)](#) demonstrate that intolerance of uncertainty is related to anxiety disorders and post-traumatic stress disorder symptoms. However, the failure of these variables to show significant predictive effects in regression models contradicts some expectations in literature.

[Li et al. \(2020\)](#) found that intolerance of uncertainty is related to social anxiety and that this relationship is mediated by rumination. [Tanovic et al. \(2018\)](#) reported that perceiving uncertainty as a threat is related to anxiety and depression

symptoms. On the other hand, [Pepperdine et al. \(2018\)](#) state that intolerance of uncertainty is related not only to threatening situations but also to non-threatening situations. These differences may be a result of the methodologies used, sample characteristics, and cultural factors. Future research should explore whether cultural values moderate the relationship between uncertainty intolerance and digital behaviors.

11.3. DIFFERENTIAL PATTERNS IN NARCISSISTIC DIMENSIONS

The sub-dimensions of narcissism, narcissistic admiration and narcissistic rivalry, exhibited different patterns with digital variables. While digital welfare, digital satisfaction, and safe and responsible behaviors were all found to be positive predictors in the narcissistic admiration model, the negative predictive effect of safe and responsible behaviors in the narcissistic rivalry model is noteworthy.

This differential pattern suggests that narcissistic admiration and rivalry operate through distinct psychological mechanisms in digital environments. Narcissistic admiration appears to be associated with positive digital experiences and constructive online behaviors, while narcissistic rivalry shows a more complex pattern involving reduced safe and responsible behaviors.

A low-level positive correlation was found between the narcissistic rivalry dimension and digital well-being. This finding is consistent with the findings of [Özgenel and Çetin \(2017\)](#) that narcissistic rivalry characteristics on digital platforms may be related to individuals' perceptions of well-being. Research conducted by [Eşgi \(2013\)](#) shows that competitive narcissistic traits may not be directly related to safe and responsible internet use. [Polat \(2017\)](#) stated that the strong positive correlation between digital welfare and narcissistic rivalry indicates that competitive narcissistic traits can increase digital welfare perception.

This difference demonstrates that the two dimensions of narcissism operate through different psychological mechanisms. The negative effect of safe and responsible behaviors on narcissistic rivalry suggests that more conscious and ethical behaviors in social media use can reduce competitive narcissistic tendencies. [Miller et al. \(2017\)](#) suggested that inhibitory anxiety does not affect individuals' narcissistic tendencies, but other psychological factors may be more determinative. This finding emphasizes the importance of digital literacy and conscious social media use.

Additionally, [Hepper et al. \(2014\)](#) found that people behave less competitively and narcissistically in inhibitory anxiety situations. Furthermore, [Arslankara et al. \(2022\)](#) stated that digital welfare can strengthen narcissistic attitudes in social media.

From a Self-Presentation Theory perspective, these findings suggest that individuals high in narcissistic rivalry may engage in riskier online behaviors to maintain competitive advantages and social dominance. The negative relationship with safe and responsible behaviors may reflect a willingness to sacrifice digital safety for social gains, consistent with the aggressive and competitive nature of narcissistic rivalry.

11.4. CULTURAL AND CONTEXTUAL CONSIDERATIONS

The Turkish cultural context provides important insights into these findings. Turkey's position between Eastern collectivistic and Western individualistic values may create unique dynamics in social media behavior. The high prevalence of

Instagram use (73.2%) in this sample reflects broader Turkish social media patterns, where visual self-presentation is particularly valued.

A meta-analysis conducted by [Gnambs and Appel \(2018\)](#) revealed a small to moderate relationship between grandiose narcissism and social media usage intensity, and that this relationship is moderated by different social media platforms and cultural differences. This situation suggests that the cultural characteristics of the sample in the current study may have influenced the results.

The collectivistic aspects of Turkish culture may explain why uncertainty intolerance showed limited predictive effects. In collectivistic societies, social support systems and clear social hierarchies may buffer individuals against uncertainty-related distress. Additionally, the emphasis on social harmony may discourage overt competitive behaviors, potentially explaining the weaker effects for narcissistic rivalry.

11.5. CONFLICTING FINDINGS AND THEORETICAL IMPLICATIONS

The results obtained are consistent with some studies in literature while conflicting with others. The failure of safe and responsible behavior, prospective anxiety, and inhibitory anxiety to significantly predict narcissism in social media contradicts suggestions by [Campbell and Foster \(2007\)](#) that safer behaviors on social media could reduce narcissistic tendencies.

[Kircaburun and Griffiths \(2018\)](#) found that digital platforms increase narcissistic tendencies in individuals. [Nash et al. \(2019\)](#) demonstrated that digital satisfaction reinforces narcissistic tendencies. These findings support the positive relationships between digital welfare and digital satisfaction with narcissism in the current research.

These conflicting findings highlight the importance of considering cultural, technological, and methodological factors in cross-cultural research. The rapid evolution of social media platforms and changing user demographics may also contribute to inconsistent findings across studies conducted at different time points.

[Twenge and Campbell \(2009\)](#) stated that digital platforms increase narcissistic tendencies in young individuals and that this can negatively affect social relationships in the long term. On the other hand, Roberts and [David \(2016\)](#) suggested that digital well-being can positively affect individuals' self-esteem and general mental health. In a study conducted by [Carkaxhiu Bulut and Gokce \(2023\)](#), it was reported that prospective anxiety increases narcissistic admiration, but this finding contradicts the current research. These contradictory perspectives underscore the complexity of digital technology's psychological effects and the need for nuanced understanding that considers both benefits and risks.

11.6. PRACTICAL IMPLICATIONS AND CLINICAL APPLICATIONS

The findings have several important implications for mental health professionals, educators, and platform designers. First, the strong predictive power of digital well-being suggests that interventions should focus on promoting healthy digital experiences rather than simply restricting social media use. This positive psychology approach aligns with contemporary trends in digital wellness.

For clinical practice, these results suggest that therapists working with clients presenting narcissistic concerns should assess digital well-being dimensions.

Interventions might focus on helping clients derive satisfaction from social media through authentic self-expression rather than validation-seeking behaviors. Additionally, promoting safe and responsible online behaviors may be particularly important for individuals high in narcissistic rivalry.

Educational institutions should consider incorporating digital well-being curricula that emphasize the quality of digital experiences over quantity of use. Teaching students to recognize the difference between healthy digital satisfaction and narcissistic validation-seeking could prevent problematic patterns from developing.

12. LIMITATIONS AND FUTURE DIRECTIONS

The main limitations of this study are as follows: The use of convenience sampling limits the generalizability of the findings. Due to the cross-sectional design, causal inferences cannot be made. The collection of data solely through self-report measures increases the risk of social desirability bias. The rapidly changing nature of social media usage may affect the currency of the results. The specific effects of different social media platforms were not examined separately. It should be considered that the intolerance of uncertainty variable may function differently in the context of Turkish culture.

Several specific avenues for future research emerge from these findings. First, longitudinal studies are needed to establish causal relationships and examine how these associations develop over time. Second, experimental designs could test whether interventions targeting digital well-being effectively reduce narcissistic social media behaviors. Third, cross-cultural studies comparing individualistic and collectivistic societies could clarify the role of cultural values in moderating these relationships.

Fourth, qualitative research could provide deeper insights into the subjective experiences underlying these statistical relationships. Fifth, neuroimaging studies could examine the neural mechanisms linking digital satisfaction with narcissistic behaviors. Finally, intervention studies testing digital well-being programs in educational and clinical settings could provide practical guidance for promoting healthier social media use.

Future studies should examine causal relationships using longitudinal designs. Comparative research with samples from different cultural contexts is recommended. Mixed-method approaches should be used to support quantitative findings with qualitative data. Studies examining the specific effects of different social media platforms should be conducted. The effectiveness of digital interventions should be tested through experimental designs.

13. CONCLUSIONS

This research reveals the strong effect of digital well-being on narcissism in social media while showing that the role of intolerance of uncertainty in this relationship is limited. These findings challenge existing theoretical models and highlight the importance of positive digital experiences in shaping online behavior.

The differential effects on narcissistic admiration versus rivalry dimensions suggest that interventions should be tailored to specific narcissistic presentations. The unexpected limited role of uncertainty intolerance opens new questions about personality-environment interactions in digital contexts.

Ultimately, these findings suggest that promoting digital well-being—rather than simply preventing digital harm—may be the most effective approach to fostering healthy social media use. This positive psychology perspective offers hope for leveraging technology's benefits while minimizing its risks for psychological health.

Based on the findings, awareness programs on social media use and digital well-being should be developed. Ethical usage guidelines for social media platforms should be prepared. Digital literacy curricula in educational institutions should be updated regarding the psychological effects of social media. Specialized programs on digital narcissism should be created for mental health professionals. Policy recommendations should be developed for social media companies to consider psychological effects in their platform designs.

CONFLICT OF INTERESTS

None.

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