



Research Article/Özgün Araştırma

The relationship between digital game addiction, authoritarian parenting style, and nomophobia in adolescents: The mediating role of online social support

Ergenlerde dijital oyun bağımlılığı ve otoriter ebeveyn tutumunun nomofobi ile ilişkisi: Sanal sosyal desteğin aracılık rolü

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Abstract

Aim: This study examines the mediating role of online social support in the relationship between digital game addiction, perceived authoritarian parenting, and nomophobia among adolescents.

Materials and Methods: In this correlational survey study, the sample comprised 518 adolescents (E=56.6%; K=43.4%; age average=15.8). Data were collected using the Nomophobia, Digital Game Addiction, Online Social Support, and Parental Attitude scales. Data were analyzed using Structural Equation Modeling.

Results: In Model 1, digital game addiction predicted nomophobia and online social support; online social support also predicted nomophobia. The mediation effect was significant ($\beta=.11$, $p<0.001$; $R^2=.32$). In Model 2, authoritarian parenting predicted nomophobia and online social support; online social support also predicted nomophobia. The mediation effect was small but significant ($\beta=.04$, $p<0.05$; $R^2=.22$).

Conclusion: Adolescents with high game addiction and authoritarian parenting exhibited higher online social support and nomophobia. This suggests that meeting psychosocial needs online may be associated with nomophobia.

Keywords: Digital game addiction; Nomophobia; Online social support; Parenting style.

Öz

Amaç: Araştırmanın amacı, ergenlerde dijital oyun bağımlılığı, algılanan otoriter ebeveyn tutumu ve nomofobi arasındaki ilişkide çevrimiçi sosyal desteğin aracı rolünü incelemektir.

Gereç ve Yöntem: İlişkisel tarama desenindeki bu çalışmanın örneklemini 518 (E=%56,6;K=%43,4; yaş ort.=15,8) ergen oluşturmuştur. Veriler Nomofobi, Dijital Oyun Bağımlılığı, Çevrimiçi Sosyal Destek ve Ebeveyn Tutum Ölçeği ile toplanmıştır. Veriler Yapısal Eşitlik Modellemesi ile test edilmiştir.

Bulgular: Bulgulara göre Model 1’de dijital oyun bağımlılığı nomofobiyi ve çevrimiçi sosyal desteği yordarken; çevrimiçi sosyal destek de nomofobiyi yordamıştır. Aracılık etkisi anlamlı bulunmuştur ($\beta=.11$, $p<0.001$; $R^2=.32$). Model 2’de otoriter ebeveyn tutumu nomofobiyi ve çevrimiçi sosyal desteği yordarken; çevrimiçi sosyal destek de nomofobiyi yordamıştır. Aracılık etkisi küçük fakat anlamlıdır ($\beta=.04$, $p<0.05$; $R^2=.22$).

Sonuç: Dijital oyun bağımlılığı ve otoriter ebeveyn tutumu yüksek olan ergenlerin çevrimiçi sosyal destek ve nomofobi düzeylerinin daha yüksek olduğu görülmüştür. Bu bulgu, psikososyal ihtiyaçların çevrimiçi ortamlarda karşılanmasının nomofobiyle ilişkili olabileceğini göstermektedir.

Anahtar Kelimeler: Dijital oyun bağımlılığı; Nomofobi, Çevrimiçi sosyal destek; Ebeveyn tutumu.

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Introduction

In the contemporary digital age, rapid technological developments have substantially transformed daily life routines. At the center of this transformation are mobile devices and smartphones, which are reported to be widely used particularly among young people.¹ Smartphones provide multiple functions such as communication, socialization, entertainment, and access to information, leading adolescents to spend increasing amounts of time using these devices.² Indeed, previous research indicates that more than half of students report daily internet use of five to seven hours.³ However, beyond these facilitative functions, smartphone use has also been associated with a range of psychological and behavioral risks, which appear to be especially salient during adolescence—a developmental period characterized by identity formation, heightened peer sensitivity, and increased impulsivity.

Existing studies have shown that excessive smartphone use is related to ocular health problems,⁴ decreased academic achievement,⁵ social media addiction, depression, and anxiety.⁶⁻⁸ Against this background, the concept of nomophobia—defined as the fear or anxiety associated with not having access to a mobile phone has gained increasing attention. Nomophobia is characterized by maladaptive reactions such as insomnia, depressive mood, and anxiety when individuals are deprived of their mobile devices.⁹ In some individuals, even the thought of being without a phone may trigger intense anxiety or panic, and this pattern has been reported to be more pronounced among young adults aged 18–25.¹⁰⁻¹³

Findings regarding the etiology of nomophobia point to similarities with behavioral addictions. Features commonly observed in digital game addiction such as repetitive and difficult-to-control use, tolerance, withdrawal symptoms, and compulsive behaviors have also been reported in nomophobia.¹⁴⁻¹⁶ In particular, the instant gratification and socialization opportunities afforded by digital games have been associated with problematic technology engagement and with higher levels of nomophobia in

adolescents.^{17,18} Nomophobia may negatively affect daily functioning by impairing academic, social, and emotional adjustment.¹⁹ For this reason, nomophobia is commonly examined within the broader framework of digital addictions.

Digital addiction-related behaviors cannot be understood independently of the social context. The literature suggests that social support may function as a protective factor against problematic technology use.²⁰⁻²² Online environments, which enable anonymity, rapid feedback, and wide social reach, may serve as an important source of online social support.²³ Nevertheless, when face-to-face social support is inadequate, adolescents may increasingly turn to online sources of support, and this tendency may be linked with problematic technology use.²¹ For this reason, family dynamics and parenting styles also constitute an essential context for understanding nomophobia.

Parenting styles refer to the patterns of warmth, control, and expectations that parents display toward their children and play a decisive role in children's psychosocial development.^{13,24} According to Baumrind's framework, parenting styles are classified as authoritative, permissive, and authoritarian.²⁵ While authoritative parents combine warmth with moderate control, authoritarian parenting is characterized by strict control and a strong emphasis on obedience.²⁶ Previous research indicates that negative parenting interactions are associated with problematic technology use.²⁷⁻³⁰

Accordingly, adolescents raised in authoritarian family environments may be more likely to rely on online social support, and this pattern may be associated with higher levels of nomophobia. Although previous research has examined the relationships among nomophobia, digital game addiction, online social support, and parenting styles, the majority of these studies have focused on bivariate relations.^{31,32} There is still a lack of research testing the mediating role of online social support within a comprehensive model that simultaneously includes both a developmental antecedent (authoritarian

parenting) and a behavioral antecedent (digital game addiction).

The present study seeks to address this gap by examining whether online social support mediates the associations of digital game addiction and perceived authoritarian parenting with nomophobia among adolescents. In doing so, the study aims to contribute to a more integrated understanding of the psychosocial mechanisms underlying nomophobia and to inform prevention and intervention practices focusing on both technology use and supportive relational environments.

In this context, the present study aims to examine the mediating role of online social support in the effect of digital game addiction and perceived authoritarian parenting style on nomophobia in adolescents. The research hypotheses are formulated as follows:

H1. Online social support mediates the relationship between digital game addiction and nomophobia.

H2. Online social support mediates the relationship between perceived authoritarian parenting and nomophobia.

Materials and Methods

Research design

This study was conducted using a relational (quantitative) design to examine the relationships and indirect effects among variables. The relationships among nomophobia (dependent variable), digital game addiction and perceived authoritarian parenting style (independent variables), and online social support (mediating variable) were tested within a parallel mediation model framework. To test this model, Structural Equation Modeling (SEM) was used, which allows for the holistic analysis of direct and indirect effects between observed and latent variables in a single model. SEM is an advanced statistical technique that evaluates the extent to which a theoretical model proposed by the researcher is confirmed by the collected data, using goodness-of-fit indices (Figure 1).³³

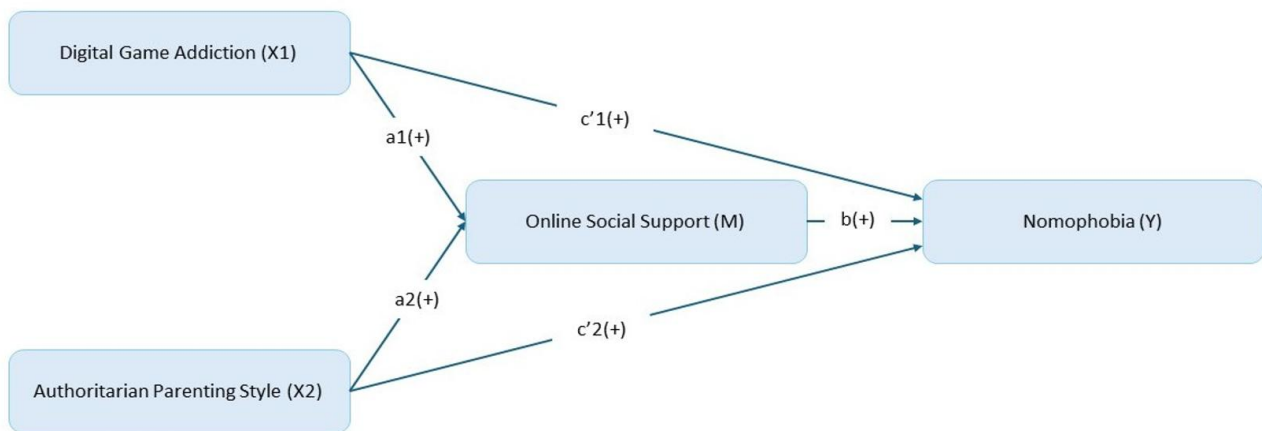


Figure 1. Mediating role of online social support in the relationship between digital game addiction, authoritarian parenting, and nomophobia.

Participants

The data for this study were collected from students attending various schools in Samsun during the 2023–2024 academic year. A non-probability sampling method, specifically convenience sampling, was employed. Convenience sampling involves collecting data from participants who are easily accessible and willing to volunteer. The main advantage of this method is its practicality and efficiency in terms of time and cost; however, its primary limitation is the low

representativeness of the sample, which restricts the generalizability of the results.³⁴ To mitigate this limitation and somewhat increase the sample's representativeness, data were collected from various schools representing different socioeconomic and geographical locations within the district, thereby aiming for sample diversity. Due to the reliance on self-report measures and convenience sampling, potential common method bias and limitations regarding the generalizability of the findings should be considered. Additionally, the high

number of participants (n=518) was intended to increase the statistical power and consistency of the findings. Initially, 528 students were reached. Following preliminary analyses, responses that were incomplete or filled out incorrectly were eliminated, and after data cleaning, a final sample size of 518 participants was achieved for the analyses.

The final sample consisted of 56.6% (n=293) female and 43.4% (n=225) male students. The ages of the adolescent participants ranged from 14 to 15 years. Regarding the educational level of the participants, 47.1% (n=244) were in middle school (grades 5–8), and 52.9% (n=274) were in high school (grades 9–12). When asked about their perceived income status, 25.8% reported being in the high-income group, 39.6% in the middle-income group, and 35.6% in the low-income group. While a significant portion of the students resided in the city/district center, 22.8% lived in villages, and 29.5% commuted from surrounding settlements to attend schools in the city/district center via shuttle services.

Data collection tools

Personal information form: Information was collected on participants' gender, grade level, perceived socioeconomic status, place of residence, daily gaming duration, gaming device (phone/computer/console), and most frequently preferred game genre.

Nomophobia questionnaire (NMP-Q): The scale was developed in 2015¹⁹ and was adapted to the Turkish culture in 2016.³⁵ The scale consists of 20 items on a 7-point Likert scale (1=Strongly disagree, 7=Strongly agree) and includes four sub-dimensions: not being able to access information, giving up convenience, not being able to communicate, and losing connectedness. The adaptation study reported a total internal consistency of $\alpha=.92$. In this study, a high score indicates a higher level of nomophobia. The consistency coefficient obtained for the scale in this study was calculated as .96.

Online social support scale: The scale was developed by Nick et al. in 2018³⁶, and its Turkish adaptation was done by Özdemir-Bişkin and Kocaayan in 2020.³⁷

The scale consists of 40 items and four sub-dimensions: emotional support, social companionship, informational support, and instrumental support. The adaptation study reported a total internal consistency of $\alpha=.96$. A high score indicates a higher level of online social support. The reliability coefficient obtained within this study was calculated as $\alpha=.85$.

Digital game addiction scale (Short form): The original form of the scale was developed by Lemmens et al., and the 7-item short form was adapted by Yalçın Irmak and Erdoğan.^{38,39} Scores on the 5-point Likert scale range from 7 to 35; a higher score indicates greater game addiction. The Cronbach's alpha reliability value in the adaptation study was .92. According to this study, the Cronbach's alpha reliability value is .87.

Parental attitude scale (PAS): To measure participants' perceptions of their parents' attitudes, the Parental Attitude Scale (PAS), developed by Kuzgun and Eldeleklioğlu was used.⁴⁰ The scale, consisting of 38 items on a 5-point Likert scale, includes three sub-dimensions measuring fundamental parental attitudes: Democratic (15 items), Authoritarian (10 items), and Protective-Demanding (15 items). In the original development study, the Cronbach's Alpha internal consistency coefficients for the sub-dimensions were reported as .89 for Democratic Attitude, .78 for Authoritarian Attitude, and .82 for Protective-Demanding Attitude. The internal consistency coefficient for the entire scale was stated as .94. In line with the hypotheses of this research, only the Authoritarian Attitude sub-dimension was used in the analyses. A high score on this sub-dimension indicates that the adolescent perceives their parent as more authoritarian. In the reliability analysis conducted for the present study, the internal consistency coefficient for the Authoritarian Attitude sub-dimension was found to be .75. The coefficients for the other sub-dimensions were calculated as .83 for Democratic Attitude, .80 for Protective-Demanding Attitude, and .88 for the entire scale. These findings indicate that the scale produced reliable measurements in the current sample.

Analysis

Before proceeding with data analysis, the dataset consisting of 520 participants was examined, and two unsuitable data points were excluded, with the analyses being conducted on 518 participants. The analyses were performed using SPSS 27.0 and Mplus 8.3 software packages. First, the assumption of normal distribution of the variables was assessed using skewness and kurtosis coefficients. It was determined that these values for all variables were within the ± 1.5 range, and the condition of normal distribution was considered met.⁴¹ Pearson Product-Moment Correlation analysis was conducted to

examine the relationships between variables. The analysis of the mediation model established to test the research hypotheses was performed using the bootstrap method (5000 resamples), which is preferred for its high power.⁴² In this analysis, the statistical significance of the indirect effects was taken as the primary criterion for testing the mediating role of online social support.⁴³ Within the scope of the analysis, along with the Chi-square goodness-of-fit index, other fit criteria such as IFI, CFI, RMSEA, GFI, and RMR were also considered.⁴⁴ Table 1 presents the ranges for the goodness-of-fit indices utilized in the study.

Table 1. Ranges of fit indices used in the study.

Fit Indices <i>x²/sd</i>	Excellent Fit ≤ 3	Acceptable Fit ≤ 5
RMSEA	$0 < RMSEA < 0.05$	$0.05 \leq RMSEA \leq 0.10$
RMR	$0 \leq SRMR < 0.05$	$0.05 \leq SRMR \leq 0.10$
SRMR	$0 \leq SRMR < 0.05$	$0.05 \leq SRMR \leq 0.10$
NFI	$0.95 \leq NFI \leq 1$	$0.90 \leq NFI \leq 0.95$
NNFI	$0.95 \leq NNFI \leq 1$	$0.90 \leq NNFI \leq 0.95$
CFI	$0.95 \leq CFI \leq 1$	$0.90 \leq CFI \leq 0.95$
GFI	$0.95 \leq GFI \leq 1$	$0.90 \leq GFI \leq 0.95$
AGFI	$0.90 \leq AGFI \leq 1$	$0.85 \leq AGFI \leq 0.90$

DG: Digital Gaming, SS: Social Support, NF: Nomophobia, SH: Standard Error

Ethics committee approval

To conduct the research, necessary permissions were first obtained from the developers of the scales used in the study via e-mail correspondence. Following the completion of the ethics approval process, the data collection phase began (Decision No: 2025/17, dated January 21, 2025). Following the completion of the ethical approval process, the data collection phase commenced. The study was conducted in accordance with the principles of the Declaration of Helsinki and relevant ethical guidelines, with particular attention paid to protecting the rights, safety, and dignity of the participants. Data were collected through two methods: online forms and face-to-face administration. In both

methods, a detailed information form was provided at the beginning of the questionnaire, explaining the purpose, content, estimated duration, and confidentiality principles of the study. Participants then provided written informed consent prior to participation. For the face-to-face applications, the researcher personally visited the schools where the students were enrolled and administered the forms in person.

Results

First, descriptive statistics regarding the study variables (e.g., correlation and mean values) were presented and subsequently, the hypotheses of the study were examined sequentially in the findings section (Table 2).

Table 2. Descriptive statistics for the study variables.

	n	\bar{x}	ss	1	2	3	4
1. Nomophobia	518	65.13	23.92	—			
2. Digital Game Addiction	518	15.21	5.70	.374**	—		
3. Online Social Supporting	518	63.12	38.50	.404**	.297**	—	
4. Authoritarian Parenting	518	20.70	6.10	.204**	.227**	.271**	—

Two separate structural models were tested to distinctly examine the mediating role of online social support within two different theoretical contexts: behavioral (digital game addiction) and developmental (authoritarian parenting). These models are presented sequentially below.

Model 1

The goodness-of-fit indices indicated that the model demonstrated an acceptable fit (Figure 2): $\chi^2(87)=228.038$, $p<.01$; RMSEA=.05; GFI=.95; AGFI=.93; CFI=.96; TLI=.95; SRMR=.04.

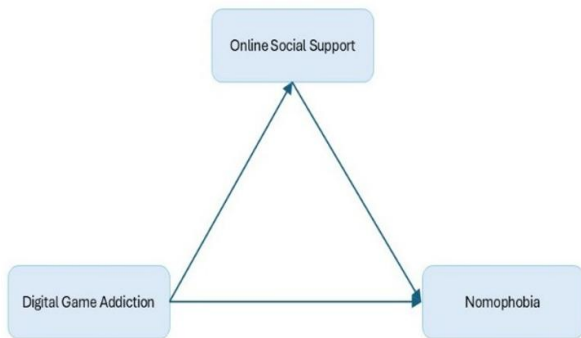


Figure 2.The hypothesized Model-1.

The proposed model explains 32 % of the variance in nomophobia and 12 % of the variance in online social support. The analysis results revealed that the direct paths were significant: from digital game addiction to nomophobia ($\beta=.37$, $SE=.06$, 95 % CI [.26, .48], $p<.001$), from digital game addiction to online social support ($\beta=.35$, $SE=.05$, 95 % CI [.25, .44], $p<.001$), and from online social support to nomophobia ($\beta=.32$, $SE=.06$, 95 % CI [.21, .43], $p<.001$).

The indirect effects were evaluated using the bootstrap method with 5,000 resamples. The results indicate that digital game addiction has a significant indirect effect on nomophobia through the mediation of online social support ($\beta=.11$, $SE=.03$, 95 % CI [.07, .17], $p<.001$). As shown in Table 3 (Model 1: Direct, Indirect, and Total Effect Coefficients from the Bootstrap Analysis) and Figure 3 (Structural Equation Model-1 Results), the direct and indirect path coefficients in the model, along with the bootstrap analysis results, are presented.

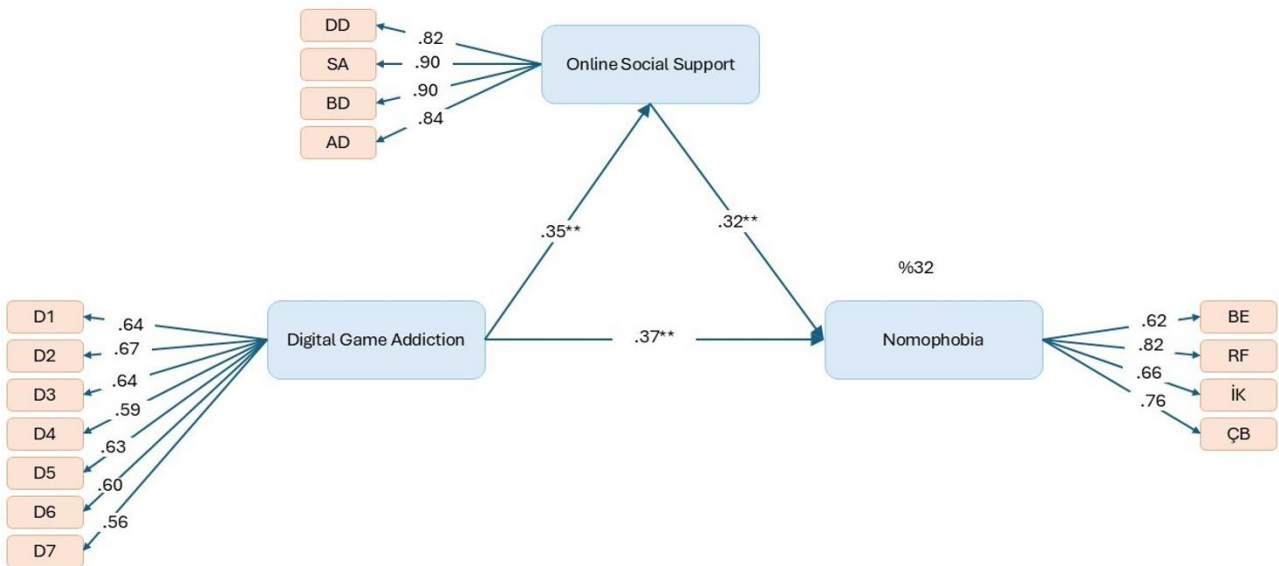


Figure 3. Structural equation Model-1 results.

Table 3. Model 1: Direct, indirect, and total effect coefficients from the bootstrap analysis.

Path	β	SH	95% Bootstrap Confidence Interval		p
Direct Effects					
DG→SS	.35	.05	.25	.44	<.001
SS→NF	.32	.06	.21	.43	<.001
DG→NF	.37	.06	.26	.48	<.001
Indirect Effects					
DG→NF (SS)	.11	.03	.07	.17	<.001
Sum Effects					
DGA→NF	.49	.05	.39	.57	<.001

DG: Digital Gaming, SS: Social Support, NF: Nomophobia, SH: Standard Error, AP: Authoritarian Parenting

Model 2

Item 36 was removed from the model as its factor loading (.13) was below the expected threshold (.40), and the measurement was subsequently re-evaluated. The fit indices for the final model indicated an acceptable level of goodness of fit (Figure 4): $\chi^2(33)=207.264$, $p<.01$; RMSEA=.05; GFI=.95; AGFI=.93; CFI=.96; TLI=.95; SRMR=.04.

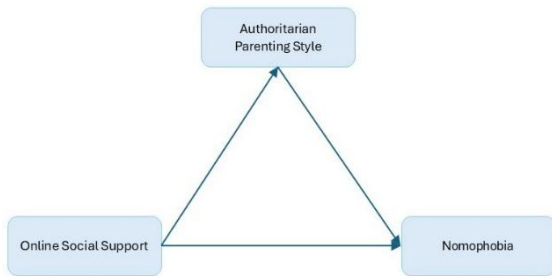


Figure 4. The hypothesized Model-2.

The established model explains 22 % of the variance in nomophobia and 9 % of the variance in online social support. The analysis results revealed that the direct paths were

significant: from online social support to nomophobia ($\beta=.41$, $SE=.06$, 95 % CI [.30, .52], $p<.001$), from online social support to authoritarian parenting style ($\beta=.29$, $SE=.06$, 95 % CI [.18, .41], $p<.001$), and from authoritarian parenting style to nomophobia ($\beta=.14$, $SE=.06$, 95 % CI [.03, .26], $p<.05$).

The indirect effects were evaluated using the bootstrap method with 5,000 resamples. The results indicate that online social support has a significant indirect effect on nomophobia through the mediation of authoritarian parenting style ($\beta=.04$, $SE=.02$, 95 % CI [.01, .09], $p<.05$). The values for the direct and indirect paths in the model and the results of the Bootstrap analysis are presented in Table 3.

As illustrated in Figure 5 (Structural Equation Model-2 Results) and summarized in Table 4 (Model 2: Direct, Indirect, and Total Effect Coefficients from the Bootstrap Analysis), the coefficients corresponding to the direct and indirect paths, together with the results of the bootstrap analysis, are reported.

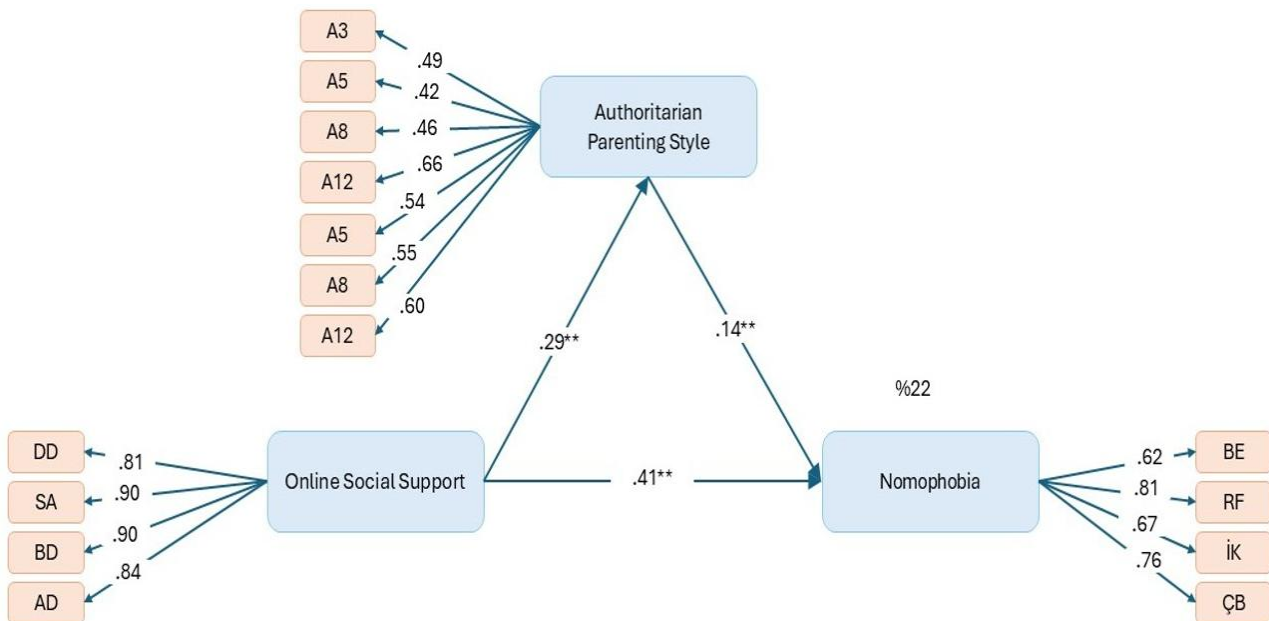


Figure 5. Structural equation Model-2 results.

Table 4. Model 2: Direct, indirect, and total effect coefficients from the bootstrap analysis.

Path	β	SH	Bootstrap confidence interval		p
Direct Effects					
SS→AP	.29	.06	.18	.41	<.001
AP→NF	.14	.06	.03	.26	<.05
SS→NF	.41	.06	.30	.52	<.001
Indirect Effects					
SS→NF (OT)	.04	.02	.01	.09	<.05
Sum Effects					
SS→NF	.45	.05	.35	.55	<.001

AP: Authoritarian Parenting SS: Social Support, Nomophobia, SH: Standard Error

Discussion

The findings of the present study indicate that online social support functions as a mediating mechanism in the relationship between digital game addiction and nomophobia. Digital gaming environments often enable individuals to communicate more easily and to establish or maintain social connections. In this respect, adolescents may use their smartphones more frequently in order to sustain these interactions and to avoid losing the online social support and engagement provided by gaming platforms.

Within online games, adolescents devote time not only to gaming activities but also to friendships formed in these environments. Being part of a virtual group may become a preferred way of fulfilling social needs, given that such interactions are typically easier, less risky, and more anonymous than face-to-face communication.⁴⁵ In line with these findings, Alptekin and Koçyiğit reported that smartphone addiction is higher among individuals with lower perceived social support,⁴⁶ while Ücan identified a negative relationship between perceived social support and digital game addiction.⁴⁷ Taken together, these findings suggest that when adolescents experience social support primarily within digital gaming environments rather than in face-to-face relationships, being separated from their phones may become a source of heightened anxiety.

These results are consistent with compensatory internet use and addiction theories,⁴⁸ which propose that individuals may turn to online environments to compensate for offline stressors, loneliness, or insufficient social support. In-game chat systems and clan structures facilitate rapid, low-risk and anonymous communication, which may lead smartphone access to be perceived as a signal of safety and social continuity. Consequently, the perceived threat of “losing connection” may be associated with elevated nomophobic anxiety among adolescents. Furthermore, problematic digital behaviors are understood to be reinforced through learned mechanisms involving emotion-regulation needs, expectations and reward sensitivity. The instant feedback and sense of group belonging

afforded by digital games may strengthen online social support, reinforcing expectations of being “constantly online” and thereby contributing to the development of nomophobia.⁴⁹ Research also suggests that adolescents with high social anxiety tend to prefer online to face-to-face interaction,⁵⁰ a finding that aligns with the present results. Although such preferences may enhance perceived social support, they may simultaneously increase the perceived risk associated with separation from the smartphone.

Belongingness is among the primary relational needs of adolescence.⁵¹ Empirical work demonstrates that online games and the virtual communities formed within them provide highly suitable environments for meeting fundamental psychological needs such as belonging, competence and relatedness.⁵² Thus, online communities may easily fulfil adolescents’ need for social connection. In this context, the smartphone may become symbolically coded as an “access point” to relational belonging. When the need for relatedness is not sufficiently met in offline contexts, this unmet need may be associated with heightened nomophobia. Moreover, social support has been proposed to function as a buffer against stress.⁵³ Within the context of the present study, while online social support may fulfil a stress-buffering role, it may paradoxically also increase adolescents’ dependence on the smartphone and, as a result, intensify anxiety related to separation from it. These interpretations are consistent with the mediation pattern observed in the current research.

In addition, the emphasis placed by Ng and Wiemer-Hastings on anonymity and accessibility as facilitators of socialization supports the idea that online gaming environments may serve as important sources of online social support.⁴⁵ Evidence indicating that problematic smartphone or gaming use is higher among individuals with low perceived social support⁴⁶ also strengthens the cultural validity of the mediation pathway obtained in the present study. Moreover, Billieux highlights the relevance of impulsivity, avoidance and relational needs in problematic

internet use⁵⁴, further supporting the interpretation that online social support plays a central mediating role. Overall, the results suggest that social connectedness arising from digital gaming may foster a phone-dependent sense of belonging via online social support, which in turn may contribute to higher levels of nomophobic anxiety.

Another important finding concerns the mediating role of online social support in the relationship between authoritarian parenting and nomophobia. Authoritarian parenting is typically characterized by rigid control, expectations of unconditional obedience and limited recognition of children's individuality.^{55,56} From the perspective of Self-Determination Theory⁵¹, such parenting practices may hinder the fulfilment of adolescents' psychological needs for autonomy and relatedness. Indeed, previous research has shown that authoritarian parent-child relationships are associated with lower self-esteem and weaker social skills.⁵⁷ In this context, adolescents who struggle in face-to-face relationships or do not receive sufficient emotional support may turn to online environments to compensate for these unmet needs. The anonymity, immediacy and relatively low risk of rejection offered by virtual communities make these platforms particularly appealing for adolescents experiencing social anxiety.²³⁻⁵⁸ However, this compensatory process may also create a cycle that contributes to the development of nomophobia.

The psychological mechanisms underlying this cycle may be explained through two major theoretical perspectives. First, within the framework of the I-PACE model,^{49,59} vulnerabilities associated with authoritarian family climates—such as heightened social anxiety—may increase adolescents' sensitivity to rewards in online interactions. This reinforcement process can strengthen the habit of remaining “constantly connected,” thereby making the possibility of disconnection increasingly anxiety-provoking. Second, in line with a contemporary interpretation of the Social Support Buffering Hypothesis,⁵³ while online social support may reduce stress, its reliance on a single technological channel the

smartphone may paradoxically transform loss of access to the device into a primary source of stress and separation anxiety. Thus, the findings suggest that adolescents' search for online social support within authoritarian family contexts may foster a device-dependent sense of belonging, which functions as a key mediating pathway associated with nomophobic anxiety. Strengthening adolescents' social skills and expanding face-to-face support networks (e.g., peer groups and mentoring programs) may therefore play a protective role by reducing reliance on online forms of support.^{60,61}

In conclusion, the present study examined the psychological mechanisms underlying nomophobia among adolescents by focusing on two antecedents: digital game addiction and perceived authoritarian parenting. The findings consistently demonstrate the critical mediating role of online social support in both models. Whether originating from the social appeal of digital gaming or the relational constraints imposed by authoritarian family dynamics, adolescents may increasingly turn to online platforms to compensate for unmet belonging and socialization needs. In this respect, the smartphone may be considered not merely a communication tool, but also a relational space in which social identity and belonging are maintained.

The key theoretical contribution of this study is that nomophobia may be conceptualized not only as the “fear of being without a mobile phone,” but also as anxiety linked to the potential loss of a device-dependent sense of belonging. These findings highlight the importance of strengthening adolescents' real-life social support networks, enhancing family communication and fostering healthy social-emotional skills, rather than focusing solely on restricting technology use. Furthermore, the study suggests that the support sought in virtual environments may reflect relational deprivations in real-world contexts, an insight that should be central to preventive mental-health and family-based interventions.

Finally, since the current study employed a cross-sectional design, causal inferences cannot be drawn. Future research employing

longitudinal designs and multi-center sampling strategies would be beneficial to validate the proposed model across different populations and to observe developmental changes over time.

Ethics Committee Approval

This study was conducted in accordance with the Declaration of Helsinki and relevant ethical principles. Ethical approval was obtained (Date: January 21, 2025; Decision No: 2025/17). The rights, safety, and dignity of all participants were respected, and informed consent was obtained prior to data collection.

Informed Consent

All participants were thoroughly informed about the purpose, procedures, and scope of the study. They were explicitly notified that their participation was entirely voluntary and that they retained the right to withdraw from the research at any stage without any consequences. Informed consent was obtained from all participants prior to data collection.

Author Contributions

Ş.Ç. contributed to the conception, design, supervision, analysis, data processing, and critical review. Y.S.B. contributed to the funding, data processing, and literature search. Both Ş.Ç. and Y.S.B. were involved in the data processing, literature search, and writing of the manuscript.

Conflict of Interest

The authors declare that there is no conflict of interest.

Financial Disclosure

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Peer-review

Externally peer-reviewed.

Statements

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