ORIGINAL ARTICLE

Journal of Emergency Health Care. 2026;15(1): 25
https://doi.org/10.22034/jehc.15.1.25

Providing a Predictive Model for Traumatic Internet Use and Emotion Regulation with The Mediating Role of Perceived Parenting Styles

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Article history:

Received: 28 May 2026
Accepted: 1 Jul 2026
Available online: 6 Jul 2026

Keywords:

Emotion Regulation
Perceived Parenting Styles
Traumatic Internet Use

Abstract

Objective: The present study aims to provide a predictive model for traumatic internet use and emotion regulation, with the mediating role of perceived parenting styles.
Method: The research method is descriptive-correlational using Structural Equation Modeling (SEM). The statistical population consisted of all upper secondary school students in Tehran during the 2024-2025 academic year. The minimum required sample size was 200; therefore, to ensure reliability, 210 participants were selected. The sampling method was initially multi-stage cluster sampling. Data collection tools included: the Generalized Problematic Internet Use Scale (Caplan, 2010), the Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004), and the Perceived Parenting Styles Questionnaire (Baumrind, 1997).
Findings: Testing the final model indicated a desirable model fit, and the mediation of emotion regulation between parenting styles and traumatic internet use was partially established. In other words, emotion regulation influences traumatic use both directly and through parenting styles.
Conclusion: The results indicate that dysfunctional parenting styles can pave the way for adolescents' tendency toward excessive and unhealthy internet use by weakening emotion regulation abilities, whereas the authoritative style plays a protective role.

Cite this article as: Batani Y, Bahamin Gh. Providing a Predictive Model for Traumatic Internet Use and Emotion Regulation with The Mediating Role of Perceived Parenting Styles . J Emerg Health Care. 2026;15(1):25. https://doi.org/10.22034/jehc.15.1.25.

Introduction

With the dramatic expansion of digital technologies, the internet has become an inseparable part of adolescents' daily lives (1). While internet use can provide opportunities for learning, communication, and personal growth, its excessive and uncontrolled use may lead to serious psychological consequences (2). The concept of "traumatic internet use" refers to a behavioral pattern in which an individual repeatedly and uncontrollably engages in online activities, such that this behavior interferes with their academic performance, social relationships, and mental health (3). Research has shown that this type of use can be associated with increased levels of anxiety, depression, social isolation, and a decrease in emotion regulation skills (4).

Numerous factors influence the development of adolescent behavior and traumatic internet use. One of these factors is emotion regulation (5). Psychological adaptation and adjustment are largely dependent on the regulation of emotions. Most psychological disorders manifest through emotional disturbance, and these disturbances are fundamentally related to dysfunctional emotion regulation. In human life, the experience of

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negative emotions is inevitable (6). Emotion regulation encompasses a range of conscious and unconscious cognitive and behavioral strategies aimed at reducing, maintaining, or increasing an emotion (7). From Gross's perspective (1998), emotion regulation refers to the process of modulating one or more aspects of emotional experiences or responses. In fact, emotion regulation is a process through which individuals can influence which emotions they have, as well as when and how they experience and express those emotions (8). In the face of stressful events, individuals use different emotion regulation strategies to manage their emotions. One of the most common methods of emotion management is cognitive emotion regulation, which refers to the cognitive way of managing and manipulating emotion-evoking information. Emotion control involves creating thoughts and behaviors that provide individuals with awareness of what kind of emotion they have, when this emotion arises in them, and how they should express it. Disturbance in emotion regulation is intertwined with the onset of psychological disorders and impairments (9).

Factors predisposing emotion regulation in cyberspace dependency can be addressed at the individual, family, and society levels. In the family domain, one factor that can play a role in traumatic internet usage is parental parenting styles. Based on Bronfenbrenner's ecological systems theory, the family system as a whole can influence the cognitive aspects of children based on the interactive styles of parents with their children (10). According to studies, parenting styles are influential in the development of cognitive skills, and parenting practices such as monitoring and support can affect the abilities of adolescents (11). In this regard, studies show that the behavior and characteristics of parents in dealing with their children's issues can lead to different strategies, and these strategies can influence the thinking process of adolescents and how they interpret and construe information (12). Accordingly, if a family suffers from major psychological problems, it will cause significant issues for the adolescent due to the disintegration of the family system and the existence of defective and ambiguous communication. Baumrind introduces parenting style as a parental control function, which is divided into authoritarian, authoritative, and permissive styles. The authoritarian parenting style is associated with consequences of cyberspace addiction. On the other hand, the authoritative parenting style is related to positive developmental outcomes such as higher academic achievement, higher self-reliance, less delinquency, and better peer relationships (13). Finally, the permissive parenting style is also associated with cyberspace dependency and a decrease in cognitive skills due to the lack of supervision and the negligent nature of the parents (14).

Chamarro et al. (2024) conducted a study titled "Stress and Suicide Risk Among Adolescents: The Role of Problematic Internet Use, Gaming Disorder, and Emotional Regulation." In total, 34.2% of the adolescents (N = 147) were at risk for SR. The results also showed that 30.7% had experienced suicidal ideation at some point in their lives, 12.1% had at least one suicide plan, and 5.1% had attempted suicide. The findings indicate that stress is a primary risk factor for suicide, especially among adolescents with poor emotional regulation or problematic gaming (15).

Yildiz (2017) conducted a study titled "Emotion Regulation Strategies as Predictors of Internet Dependency and Smartphone Addiction in Adolescents." Based on the research findings, it was observed that dysfunctional external emotion regulation, dysfunctional internal emotion regulation, and functional internal emotion regulation significantly predict traumatic internet use and smartphone addiction. However, functional external emotion regulation does not predict either variable at significant levels. Emotion regulation strategies collectively explained 38% of the variance in traumatic internet use and 19% of the variance in smartphone addiction. The findings of the current study were discussed and interpreted, and suggestions for relevant researchers were included (16).

Role of Traumatic Internet Use in Adolescents." The results showed that the direct path of psychological needs and mindfulness to traumatic internet use and psychological well-being had a significant effect. Additionally, psychological needs and mindfulness had a significant indirect effect on psychological well-being through the mediation of traumatic internet use. Fit indices indicated that the default model possessed an appropriate fit (17).

Nouri (2020) conducted a study titled "The Relationship Between Attachment Styles and Problematic Use of Virtual Social Networks: The Mediating Role of Difficulty in Emotion Regulation." Correlation test results showed that anxious and avoidant attachment were equally capable (0.62) of predicting problematic use of social networks; however, when the mediating variable entered the relationship, the avoidant attachment style gained high predictive power (0.82). Furthermore, there was a significant negative relationship between secure attachment style (-0.50) and problematic use of virtual social networks. There was also a significant positive relationship between difficulty in emotion regulation (0.72) and problematic use of virtual social networks (18).

Despite the expansion of studies regarding traumatic internet use and its consequences in adolescents, gaps

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remain in understanding the psychological and familial mechanisms influencing this phenomenon. In fact, how adolescents perceive parental behaviors can play a significant role in the development of emotion regulation skills and, subsequently, the tendency toward traumatic internet use. Therefore, the present study is based on providing a predictive model for traumatic internet use and emotion regulation, with the mediating role of perceived parenting styles.

Research Method

In terms of data collection, the current research method is descriptive-correlational using Structural Equation Modeling (SEM). Regarding its objective, the study is applied; in terms of research philosophy, it falls within the positivist paradigm; and regarding its approach, it is considered quantitative. Furthermore, in terms of time horizon, the research is retrospective, but in terms of data collection timing, it is cross-sectional.

The statistical population for this study included all upper secondary school students in Tehran during the 2024-2025 academic year. The minimum required sample size must be 200 individuals; therefore, to ensure reliability, a sample size of 210 was considered. The sampling method was initially multi-stage cluster sampling, such that 7 districts were randomly selected from the 22 districts of Tehran, and then one secondary school was selected from each district. In the second stage, a convenience sampling method was employed, and 30 students were selected from each school based on availability. The research data collection tools include:

Generalized Problematic Internet Use Scale (GPIUS-2) by Caplan (2010): This questionnaire consists of 15 items and 5 components: Preference for Online Social Interaction, Mood Regulation, Cognitive Preoccupation, Compulsive Internet Use, and Negative Outcomes. It measures traumatic internet use based on a 7-point Likert scale with items such as "I prefer online social interaction over face-to-face communication." This scale was validated in Iran by Ahmadpour et al. (2018). The score range for this questionnaire is between 15 and 105. A higher score indicates a higher level of traumatic internet use and vice versa. In the study by Ahmadpour et al. (2018), the content, face, and criterion validity of this questionnaire were assessed as appropriate. The Cronbach's alpha calculated in their study was estimated to be above 0.7.

Difficulties in Emotion Regulation Scale (DERS) by Gratz and Roemer (2004): This scale includes 36 items and provides a total score as well as 6 specific scores in subscales related to various dimensions of difficulty in emotional regulation. Higher scores on this questionnaire indicate greater difficulties in emotional regulation. The items are arranged on a Likert scale ranging from "Strongly Agree" to "Strongly Disagree," and some items are reverse-scored. Gratz and Roemer (2004) examined the reliability and validity of this scale.

This scale demonstrated good internal consistency for the total score (Cronbach's alpha coefficient of 0.93) and across all subscales (alpha coefficients greater than 0.80). Additionally, its test-retest reliability over a 2–8 week period was reported as 0.88. The Iranian version of this test was validated by Khanzadeh et al. (2012). In examining the construct validity, they studied the factor structure of this scale and extracted 8 factors, 6 of which were consistent with the factors mentioned by the original developers; the other two factors were removed because only one item loaded onto each. These factors include: 1. Non-acceptance of emotional responses, 2. Difficulty engaging in goal-directed behavior, 3. Impulse control difficulties, 4. Lack of emotional clarity, 5. Lack of emotional awareness, and 6. Limited access to emotion regulation strategies. The overall internal reliability was 0.93, and for each subscale, it was 0.85, 0.89, 0.86, 0.80, 0.88, and 0.84, respectively. Higher scores indicate weaker emotion regulation.

Perceived Parenting Styles Questionnaire by Baumrind (1997): This questionnaire was developed by Baumrind (1997) to examine patterns of influence and parenting practices. The scale consists of 30 items, with 10 items related to the permissive style (laissez-faire), 10 items to the authoritarian style, and the other 10 items to the authoritative style of parenting. In this study, participants express their opinions on each item using a 5-point scale (Strongly Disagree, Disagree, Somewhat Disagree, Agree, and Strongly Agree), which is subsequently scored from 0 to 4. By summing the scores, three separate scores for the permissive, authoritarian, and authoritative styles are obtained for each participant.

In Iran, Esfandiari reported the test-retest reliability of this tool as 0.69 for the permissive style, 0.77 for the authoritarian style, and 0.73 for the authoritative style. Hosseini Dolatabadi and Saadat (2012) examined the construct validity of this questionnaire using exploratory factor analysis and confirmed its three-factor structure. Based on their study, the permissive parenting style explains 45.1%, the authoritarian style 41.7%, and the authoritative style 44.3% of the total variance of the parenting scale. Furthermore, the factor loadings of the items on each subscale were reported between 0.58 and 0.74, indicating the desirable validity of this tool. They also reported the overall reliability coefficient of this instrument as 0.71, with 0.62 for the permissive style, 0.62 for the authoritarian style, and 0.75 for the authoritative style.

To analyze the collected data, the current status of the study sample was first described using descriptive

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statistical techniques, such as frequency distribution tables and the calculation of measures of central tendency and dispersion. To test the hypotheses, the normality of the research variables was first assessed using the Kolmogorov-Smirnov test. Subsequently, Pearson correlation coefficient, Confirmatory Factor Analysis (CFA), Path Analysis, and Structural Equation Modeling (SEM) were conducted using SPSS and AMOS software.

Findings

The descriptive findings of the research are presented as follows:

Table 1. Descriptive findings of difficulties in emotion regulation and its components

Stretch	Skewness	Standard Deviation	Mean	Statistical indicator Microscale	Measure
0.07	0.14	3.20	14.95	Non-acceptance of emotional responses	Difficulty in Emotion Regulation
-0.03	-0.10	2.05	14.06	Difficulty engaging in goal-directed behavior	
0.61	0.25	1.93	11.88	Impulse control difficulties	
0.11	0.09	1.90	12.09	Lack of emotional awareness	
-0.15	0.19	1.87	11.61	Limited access to emotion regulation strategies	
0.87	0.13	2.94	18.40	Lack of emotional clarity	

Various subscales were examined, such as "Non-acceptance of emotional responses" with a mean of 14.95 and a standard deviation of 3.20, "Difficulty engaging in goal-directed behavior" with a mean of 14.06 and a standard deviation of 2.05, and "Lack of emotional clarity" with the highest mean (18.40) and a standard deviation of 2.94.

Table 2. Descriptive findings of the research subscales

Stretch	Skewness	Standard Deviation	Mean	Statistical indicator Microscale	Measure
-0.07	0.16	2.65	16.55	Preference for Online Social Interaction	Problematic Internet Use
0.18	-0.07	2.67	16.49	Mood Regulation	
0.57	0.22	2.58	15.47	Cognitive Preoccupation	
0.01	0.26	2.70	16.48	Compulsive Internet Use	
-0.03	-0.02	2.78	18.52	Negative Consequences	

The "Negative Outcomes" subscale has the highest value with a mean of 18.52 and a standard deviation of 2.78, while "Cognitive Preoccupation" shows the lowest mean in this section with a mean of 15.47.

Table 3. Results of the mean distribution of parenting styles among female high school adolescents in Tehran

Stretch	Skewness	Standard Deviation	Mean	Statistical indicator Microscale
-0.19	0.04	3.52	21.26	Authoritative Parenting Style
0.11	0.01	2.98	20.21	Authoritarian Parenting Style
-0.06	0.08	3.29	21.10	Parenting Style

The "Authoritative" style has the highest mean at 21.26 with a standard deviation of 3.52, while the "Authoritarian" style is lower with a mean of 20.21. Skewness and kurtosis values for all subscales are near zero, indicating a normal distribution of data, except for cases such as "Impulse control difficulties" and "Lack of emotional clarity," which show higher kurtosis. These results suggest that participants faced more challenges in certain dimensions of emotion regulation and internet use, while the authoritative parenting style was the most frequent.

To analyze the research hypotheses, the Pearson correlation coefficient and the results of the research model (main hypothesis) were utilized. The research hypotheses are examined below:

Hypothesis 1: There is a significant relationship between traumatic internet use and difficulties in emotion regulation among high school students.

The results show that the correlation between traumatic internet use and difficulties in emotion regulation among high school adolescents in Tehran is 0.433, with a test error less than the significance level of 0.05. Consequently, there is a significant relationship between traumatic internet use and difficulties in emotion regulation among high school adolescents in Tehran.

Hypothesis 2: There is a significant relationship between perceived parenting styles and difficulties in emotion regulation among high school students.

The results show that the correlation coefficients between permissive, authoritarian, and authoritative

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styles and difficulties in emotion regulation among high school adolescents in Tehran are 0.366, 0.503, and -0.418, respectively. The test error is less than the significance level of 0.05; therefore, there is a significant relationship between permissive, authoritarian, and authoritative styles and difficulties in emotion regulation among high school adolescents in Tehran.

Table 4. Results of Pearson correlation coefficient between traumatic internet use and difficulties in emotion regulation among high school students in Tehran

Problematic Internet Use				Variable
Result	P-value	Significance Level	Correlation	
Validated	0.05	<0.01	0.433**	Difficulty in Emotion Regulation

Table 5. Results of Pearson correlation coefficient between perceived parenting styles and difficulties in emotion regulation among high school adolescents in Tehran

Mothers' Resilience				Variable
Result	P-value	Significance Level	Correlation	
Validated	0.05	<0.01	0.366**	**Permissive**
Validated	0.05	<0.01	0.503**	**Authoritarian**
Validated	0.05	0.011	-0.418*	**Authoritative**

Table 6. Results of the mediating effects of perceived parenting styles in the relationship between traumatic internet use and emotion regulation among high school students in Tehran

Total Effect	Indirect Effect	Direct Effect	Estimate	Path		
				Dependent	Mediator	Independent
1.322	-0.543	-0.781	Unstandardized	Emotion Regulation	Authoritative Parenting	Problematic Internet Use
-0.401	-0.175	-0.226	Standardized			
-4.406	-2.351	-2.819	C.R.			
***	0.013	0.003	Sig.			
Partial Mediation		Result: Mediating Role				
1.076	0.596	0.480	Unstandardized	Emotion Regulation	Authoritarian Parenting	Problematic Internet Use
0.425	0.235	0.190	Standardized			
4.551	2.918	2.651	C.R.			
***	0.001	0.008	Sig.			
Partial Mediation		Result: Mediating Role				
0.923	0.625	0.540	Unstandardized	Emotion Regulation	Permissive Parenting	Problematic Internet Use
0.476	0.198	0.278	Standardized			
4.701	2.667	3.021	C.R.			
***	0.006	***	Sig.			
Partial Mediation		Result: Mediating Role				

Hypothesis 3: Perceived parenting styles play a mediating role in the relationship between traumatic internet use and difficulties in emotion regulation among high school students.

To determine the type of mediating role and the effect size of perceived parenting styles in the relationship between traumatic internet use and difficulties in emotion regulation among Tehran's adolescents, the results of the research model and Figure 1 from the main hypothesis were used. The results for direct, indirect, and total effects in unstandardized (B) and standardized (β) modes, along with their tests (C.R.), are reported in Table 6.

Table 6 indicates that the direct, indirect, and total effects in the relationship between traumatic internet use and difficulties in emotion regulation among high school adolescents in Tehran, mediated by perceived parenting styles, are significant at the 0.05 error level.

Furthermore, it is observed that the mediating role of perceived parenting styles in the standardized mode adds -0.175, 0.235, and 0.198 units to the total effects of the relationship. Consequently, the total effect values for

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the relationship between traumatic internet use and difficulties in emotion regulation with the mediation of authoritative, authoritarian, and permissive parenting styles in the standardized mode are -0.401, 0.425, and 0.476, respectively. Comparing these to the direct effect values (-0.226, 0.190, and 0.278) reveals a significant increase.

Table 7. Results of the goodness-of-fit indices for the predictive model

NFI	*CFI*	*GFI*	*RMSEA*	*χ2/ DF*	*DF*	*χ2*	**Model**
0.903	0.913	0.944	0.079	3.874	377	2741.652	Research Model

Table 8. Path coefficients and significance tests in the predictive model of traumatic internet use and emotion regulation with the mediating role of perceived parenting styles (P < 0.001)

P	**C.R.**	**β**	**B**	**path**
***	3.147	0.317	0.610	Difficulty in Emotion Regulation **=>** Permissive
***	4.186	0.425	0.670	Difficulty in Emotion Regulation **=>** Authoritarian
***	-3.443	-0.380	-0.430	Difficulty in Emotion Regulation **=>** Authoritative
***	7.729	0.551	0.890	Problematic Internet Use=> Difficulty in Emotion Regulation
0.003	2.899	0.236	0.770	Problematic Internet Use => Permissive
0.008	2.691	0.192	0.480	Problematic Internet Use => Authoritarian
***	-3.091	-0.279	0.530	Problematic Internet Use => Authoritative

In other words, the mediating variables of authoritative, authoritarian, and permissive parenting styles exert significant indirect effects of -0.175, 0.235, and 0.198 on the relationship. Given the significance of the direct, indirect, and total effects, it is concluded that these styles act as partial mediators. Therefore, the mediating role of parenting styles in the relationship between traumatic internet use and difficulties in emotion regulation is indirectly effective and confirmed.

Main Hypothesis: The predictive model for traumatic internet use and emotion regulation, with the mediating role of perceived parenting styles among high school students, possesses a favorable fit.

The results of the goodness-of-fit indices in Table 7 show that the value of the \chi^2/df ratio for the predictive model of traumatic internet use and emotion regulation, with the mediating role of perceived parenting styles, is below the desirable threshold and the acceptable value of 4. Furthermore, the RMSEA index in the model is below the significant and acceptable level of 0.08, indicating an appropriate and good fit for the model.

Similarly, the values for the fit indices GFI, CFI, and NFI for the model are all greater than 0.90, which are considered appropriate and desirable values. Therefore, the fit of the predictive model is supported by the research data at a suitable level according to the utilized theories and is considered appropriate for explaining the model. Additionally, Figure 1 displays the results of the estimated path coefficients and factor loadings for the model's fit using standardized estimation.

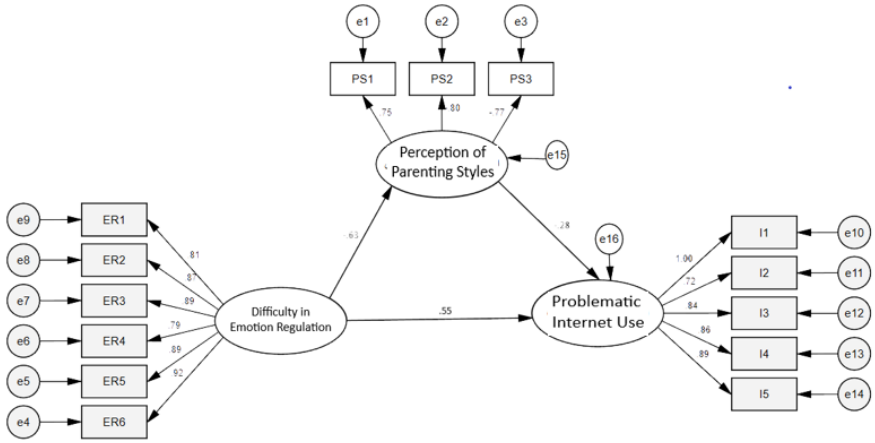

Figure 1. Path coefficients and factor loadings for the predictive model of traumatic internet use and emotion regulation with the mediating role of perceived parenting styles among high school students (Standardized Estimation)

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Figure 1 demonstrates that all factor loadings between items, dimensions, and their related variables for all components of the predictive model of traumatic internet use and emotion regulation, with the mediating role of perceived parenting styles among high school students, are greater than 0.30.

Consequently, the strength of the relationship and the explanatory power for each variable with its dimensions and items in the model are considered desirable and appropriate.

As shown, all path coefficients in predicting traumatic internet use and emotion regulation with the mediating role of perceived parenting styles are significant, as the C.R. (Critical Ratio) values fall outside the range of (-2, +2) . Furthermore, the significance of P-values is less than the 0.05 threshold.

Consequently, all items (questions) employed in this study possessed the required explanatory power for the proposed model. Given the results of the goodness-of-fit indices, reported Cronbach's alpha coefficients, factor loadings, path coefficients, and C.R. values, the data collection instrument for the model demonstrates very good and desirable technical properties (reliability and validity).

Discussion

Hypothesis 1: There is a significant relationship between pathological internet use and emotion regulation difficulties among high school students.

Based on the correlation coefficient of 0.433 and the standardized path coefficient of 0.551, it is concluded that the direct relationship between pathological internet use and emotion regulation difficulties among high school students in Tehran is significant at the 0.05 error level. This finding is consistent with previous research. Yildiz (2017) demonstrated that maladaptive emotion regulation (specifically inappropriate internal and external strategies) is a strong predictor of pathological internet use and mobile phone addiction (16). Furthermore, Nouri (2020) found that difficulties in emotion regulation have a significant positive relationship with problematic social media use (18). This alignment suggests that adolescents with poor emotional management skills are more prone to excessive and unhealthy internet use, likely as a coping mechanism to escape negative emotions or to fill emotional voids.

Hypothesis 2: There is a significant relationship between perceived parenting styles and emotion regulation difficulties among high school students.

Based on the reported correlation coefficients of 0.366, 0.503, and -0.418, respectively, and the estimated standardized path coefficients, the findings indicate that the relationship between permissive parenting and emotion regulation difficulties is positive and significant. Similarly, the relationship between authoritarian parenting and emotion regulation difficulties is positive and significant. Conversely, the relationship between authoritative parenting and emotion regulation difficulties is negative and significant. Theories of emotion regulation and parenting suggest that upbringing characterized by calm communication, emotional feedback, and the practice of emotion management within the family environment contributes to the enhancement of emotion regulation skills.

Hypothesis 3: Perceived parenting styles play a mediating role in the relationship between pathological internet use and emotion regulation difficulties among high school students.

The results of the data analysis confirmed the third hypothesis, indicating that pathological internet use, based on emotion regulation, is predicted through the mediation of perceived parenting styles in students. This finding is consistent with both domestic and international research. Hajizadeh et al. (2020) found that perceived parenting styles (particularly authoritarian and permissive styles) have a significant relationship with dependence on social networks (19). Similarly, Cho and Lee (2017) demonstrated that authoritative parenting styles (in contrast to permissive or authoritarian styles) are associated with a decrease in the tendency toward pathological internet use. This is because this style, combined with emotional support and logical supervision, helps adolescents learn more adaptive strategies for emotion regulation and time management (20).

Main Hypothesis: Main Hypothesis: The predictive model of pathological internet use and emotion regulation, mediated by perceived parenting styles among high school students, demonstrates an acceptable fit.

The results of the main hypothesis testing indicated that the structural equation model (SEM) has an appropriate fit ($\chi^2/df = 3.874 < 4$; RMSEA = 0.079; GFI = 0.944; CFI = 0.913; NFI = 0.903). Therefore, it can be stated that the model for predicting pathological internet use based on emotion regulation, mediated by perceived parenting styles, is supported at an acceptable level.

Regarding direct paths, permissive ($\beta = 0.236$, $p = 0.003$) and authoritarian ($\beta = 0.192$, $p = 0.008$) parenting styles were positive predictors of pathological internet use, whereas the authoritative style showed a significantly negative relationship ($\beta = -0.279$, $p < 0.01$). Furthermore, permissive and authoritarian styles led to an increase in emotion regulation difficulties ($\beta = 0.317$ and $\beta = 0.454$, respectively), while the authoritative style decreased them ($\beta = -0.380$). Most importantly,

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difficulty in emotion regulation was the strongest predictor of pathological internet use (β = 0.551).

These findings align with international studies. Wang et al. (2024) demonstrated that harsh parenting sequentially increases internet addiction through emotion regulation difficulties (21); a pattern that is consistent with the findings of the present study regarding the mediating role of emotion regulation.

Conclusion

Emotion regulation plays a pivotal role in preventing pathological internet use among high school students. Adolescents who struggle with managing their emotions often turn to the internet to escape unpleasant feelings such as stress, anxiety, loneliness, or boredom. As an accessible and immediate resource, the internet provides a temporary escape from reality and functions as a maladaptive coping mechanism. For instance, a student unable to tolerate frustration or academic failure might immerse themselves in social media or online gaming for hours to avoid confronting these negative emotions.

theoretical and conceptual explanations in the field of parenting and emotion regulation, aligned with the findings of this study, indicate that the permissive parenting style—an approach where parents encourage flexibility and active participation in decision-making—may lead to a complex mix of emotional experiences and regulation difficulties by increasing the child's independence without sufficient emotional guidance.

In contrast, the authoritarian style, characterized by intense parental pressure and strict monitoring, can exacerbate emotion regulation difficulties by creating emotional strain and a lack of effective regulation strategies in adolescents. Conversely, the authoritative style, which combines support with fair rules and collaborative decision-making, appears to be associated with a decrease in emotion regulation difficulties. This is explained by the provision of internal adaptive strategies and the enhancement of emotional management skills in adolescents (16, 20).

The relationship between emotion regulation, perceived parenting styles, and pathological internet use among high school students operates through a specific psychological mechanism. Adolescents struggling with emotion regulation difficulties naturally seek immediate strategies to manage negative emotional experiences. In this context, the internet serves as an accessible and instantaneous maladaptive emotion regulation mechanism.

However, the mediating role of perceived parenting styles moderates this relationship. Students who perceive their parents as having an authoritarian (controlling and low-warmth) or permissive (non-restrictive and low-demand) style are more likely to resort to excessive internet use when facing emotional challenges. This occurs for several reasons:

1. Ineffective parenting styles often deprive adolescents of the opportunity to learn adaptive emotion regulation skills.
2. These styles can transform the family environment into a space where the adolescent feels misunderstood or rejected, leading them to seek refuge in cyberspace as a substitute for fulfilling emotional needs.

In contrast, when adolescents perceive their parents as having an authoritative style (a combination of warmth and reasonable expectations), this dynamic functions differently. In such cases, even if a student faces emotion regulation difficulties, a supportive and responsive family environment enables the adolescent to learn and implement more adaptive strategies for managing their emotions.

Every research endeavor faces specific limitations. In the present study, since data were collected solely through self-report questionnaires, there is an increased potential for response bias (such as social desirability bias). Therefore, it is suggested that future research employ a mixed-methods approach (combining qualitative interviews and quantitative measures) to mitigate the inherent limitations of self-reporting.

Acknowledgment:

None

Funding:

None

Authors Contributions:

The author contributed to the data analysis. Drafting, revising and approving the article, responsible for all aspects of this work.

Ethical Consideration:

The research data and literature have not been copied from any worksauthor upon reasonable request.

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