

# Investigating the Role of Gender Attitudes, Self-Esteem, and Internet Addiction in Predicting Body Image Dissatisfaction among Female High School Students in Behbahan County

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## ABSTRACT

The present study aimed to investigate the role of gender attitudes, self-esteem, and internet addiction in predicting body image dissatisfaction among female high school students in Behbahan County. In terms of purpose, this study was applied research, and in terms of methodology, it was a descriptive-correlational study. The statistical population included all female high school students in Behbahan County. According to statistics provided by the Behbahan Department of Education, the population consisted of 2,500 students. Based on Cochran's formula, a sample of 374 female high school students was selected through cluster sampling. Data were collected using library research methods and questionnaires. The McCabe and Ricciardelli questionnaire (2008) was used to assess gender attitudes; the Stanley Coopersmith Self-Esteem Inventory (1967) was used to measure self-esteem; the Internet Addiction Scale (IAS) was used to assess internet addiction; and the Body Image Dissatisfaction Questionnaire developed by Thomas Cash (1990) was used to measure body image dissatisfaction. The validity and reliability of all questionnaires were confirmed. The collected data were analyzed using descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation test and multiple regression analysis) through IBM SPSS Statistics. The findings indicated that there was a significant relationship between gender attitudes and its components in predicting body image dissatisfaction among students. Furthermore, a significant relationship was found between self-esteem and its components in predicting body image dissatisfaction among students. In addition, internet addiction and its components showed a significant relationship with the prediction of body image dissatisfaction among students. The variables of gender attitudes ( $\beta = 0.54$ ), self-esteem ( $\beta = 0.637$ ), and internet addiction ( $\beta = 0.788$ ) significantly predicted body image dissatisfaction among students. Moreover, the coefficient of determination indicated that 73% of the variance in body image dissatisfaction among students was explained by the variables of gender attitudes, self-esteem, and internet addiction.

**Keywords:** gender attitudes, self-esteem, internet addiction, body image dissatisfaction

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## Introduction

Body image is considered one of the most important psychological constructs during adolescence, particularly among female students, because it is closely associated with identity formation, emotional well-

being, self-evaluation, and interpersonal functioning. Adolescence is a developmental stage characterized by rapid physical, emotional, cognitive, and social changes, during which individuals become increasingly sensitive to appearance-related evaluations and social comparisons. During this period, dissatisfaction with body image may emerge as a serious psychological concern that negatively affects self-confidence, mental health, academic performance, and social relationships. Recent studies have demonstrated that body image dissatisfaction is associated with anxiety, depression, low self-worth, eating disturbances, and maladaptive coping behaviors among adolescents (1, 2). In contemporary societies, body image is no longer merely a personal perception of physical appearance; rather, it is strongly shaped by sociocultural standards, media influences, peer expectations, and gender-related norms that define attractiveness and social acceptance (3, 4).

The increasing influence of digital media and online communication platforms has intensified adolescents' exposure to unrealistic beauty standards and idealized body representations. Social networking sites, image-sharing platforms, and internet-based interactions continuously expose adolescents to edited and filtered images that promote unattainable standards of physical attractiveness. Such exposure often contributes to negative self-comparisons and increased dissatisfaction with one's body appearance (1, 5). Research has indicated that excessive screen time and social media engagement are associated with poorer body image perceptions and reduced psychological well-being among adolescents, especially girls who are more vulnerable to appearance-related social pressures (5). Furthermore, body image dissatisfaction has increasingly been conceptualized as a multidimensional phenomenon influenced by individual psychological characteristics, family dynamics, cultural expectations, and technological environments (2).

Among the variables associated with body image dissatisfaction, gender attitudes have received growing scholarly attention. Gender attitudes refer to individuals' beliefs, expectations, and perceptions regarding socially constructed gender roles and behaviors. Traditional gender norms often emphasize physical attractiveness, thinness, and appearance-based evaluation for females, thereby increasing the psychological pressure experienced by adolescent girls regarding their physical appearance (6). Cultural and social systems play a substantial role in shaping gender-related beliefs, and these beliefs significantly influence adolescents' perceptions of their bodies and identities (3). Studies have shown that rigid and stereotypical gender attitudes can intensify body dissatisfaction by reinforcing unrealistic beauty ideals and encouraging constant appearance monitoring (2). Conversely, egalitarian gender attitudes may reduce appearance-related pressures and promote healthier self-perceptions among adolescents (7).

The relationship between gender roles and psychological functioning has been extensively discussed within sociocultural and developmental frameworks. Traditional gender expectations often portray women as being valued primarily for their physical attractiveness and external appearance, while competence and personal achievement may receive less emphasis (6). Such societal expectations may increase body surveillance and self-objectification among female adolescents, ultimately contributing to body dissatisfaction and emotional distress. In addition, cultural transitions and globalization have intensified the internalization of Western beauty ideals in many societies, leading to increased vulnerability among adolescents to appearance-related concerns (3, 4). Therefore, examining the role of gender attitudes in predicting body image dissatisfaction is essential for understanding the sociocultural determinants of adolescent mental health.

Another major psychological variable associated with body image dissatisfaction is self-esteem. Self-esteem refers to an individual's overall evaluation of self-worth and personal value and is considered a fundamental component of psychological adjustment and emotional health. Adolescents with high self-esteem tend to demonstrate greater emotional stability, better interpersonal relationships, and more adaptive coping strategies, whereas individuals with low self-esteem are more vulnerable to psychological distress and negative self-evaluations (8, 9). Previous studies have consistently reported a strong relationship between self-esteem and body image satisfaction, indicating that individuals with lower self-esteem are more likely to experience dissatisfaction with their physical appearance (10, 11).

Body image dissatisfaction often develops through discrepancies between actual self-perceptions and idealized self-images promoted by society and media. Adolescents who perceive a significant gap between their actual appearance and socially valued standards may experience feelings of inadequacy and diminished self-worth (12). Research has demonstrated that positive body image is strongly associated with self-acceptance, confidence, and psychological resilience (13). Conversely, negative body image can weaken adolescents' sense of competence and self-esteem, increasing susceptibility to anxiety, depression, and social withdrawal. Theoretical perspectives on self-esteem suggest that individuals continuously evaluate themselves through interactions with their social environments and internalized standards, making adolescence a particularly sensitive developmental stage for the formation of body-related self-evaluations (11).

Recent studies have further highlighted the role of educational and social environments in promoting adolescents' psychological well-being and self-esteem. Educational experiences that foster competence, social participation, and supportive peer relationships contribute positively to adolescents' self-worth and emotional adjustment (14, 15). In contrast, environments characterized by social comparison, criticism, or unrealistic expectations may intensify body dissatisfaction and reduce self-esteem among students. Consequently, investigating self-esteem as a predictor of body image dissatisfaction may provide important insights into preventive interventions aimed at improving adolescent mental health and self-perception.

In addition to gender attitudes and self-esteem, internet addiction has emerged as a critical factor associated with adolescents' psychological functioning and body image concerns. Internet addiction refers to excessive, uncontrolled, and compulsive internet use that interferes with daily functioning, social relationships, academic performance, and emotional well-being. Adolescents are particularly vulnerable to problematic internet use due to developmental characteristics such as identity exploration, emotional sensitivity, and heightened need for social acceptance (16). Excessive internet use may expose adolescents to unrealistic appearance standards, cyberbullying, social comparison, and online validation-seeking behaviors, all of which contribute to body dissatisfaction and psychological distress (1, 17).

Studies have indicated that problematic internet use is associated with various psychological difficulties, including social anxiety, emotional dysregulation, depressive symptoms, and impaired self-concept (17). Adolescents who spend excessive time online may increasingly rely on virtual interactions and appearance-based feedback to evaluate their self-worth, thereby increasing vulnerability to body image dissatisfaction. Furthermore, internet addiction may reduce participation in real-world social activities and increase feelings of loneliness and inadequacy, which further reinforce negative body perceptions (16). Research on adolescents' psychological experiences has emphasized the importance of environmental and daily-life

factors in shaping emotional and cognitive functioning (18, 19). These perspectives suggest that continuous exposure to appearance-focused online environments may significantly influence adolescents' body image perceptions and emotional well-being.

The broader psychological literature also supports the role of stress sensitivity, emotional vulnerability, and social evaluation processes in shaping adolescents' mental experiences and self-perceptions (20, 21). Individuals with heightened emotional sensitivity may become more vulnerable to negative body evaluations and social comparison processes, particularly in highly visual and appearance-oriented online environments. Cognitive and social models of psychological functioning further indicate that maladaptive beliefs and environmental stressors can reinforce negative self-evaluations and emotional distress (22). Research has also demonstrated that adverse childhood experiences, social stressors, and emotional instability may contribute to distorted self-perceptions and psychological vulnerability during adolescence (23, 24).

In recent years, scholars have increasingly emphasized the importance of understanding adolescents' psychological experiences within their sociocultural and technological contexts. Contemporary adolescents are exposed to complex interactions among cultural expectations, online environments, educational pressures, and interpersonal relationships, all of which shape their self-concept and body image perceptions. Research examining psychological risk factors and emotional experiences among adolescents has highlighted the importance of early identification of maladaptive cognitive and behavioral patterns (25-27). Moreover, body dissatisfaction has been associated with broader emotional and psychological difficulties, including anxiety, stress sensitivity, and social dysfunction (28).

Cultural factors also play a significant role in determining body image perceptions and appearance-related attitudes. Cross-cultural studies have shown that cultural values influence beauty ideals, gender expectations, and standards of attractiveness (3). In some societies, social acceptance and personal value are closely linked to physical appearance, thereby increasing pressure on adolescent girls to conform to socially prescribed beauty standards. Religious beliefs, family structures, peer influences, and educational systems may either intensify or mitigate these pressures (29). Consequently, understanding body image dissatisfaction among adolescents requires consideration of the broader cultural and psychosocial context within which adolescents develop their identities and self-perceptions.

Despite the growing body of literature on body image dissatisfaction, limited research has simultaneously examined the predictive roles of gender attitudes, self-esteem, and internet addiction among female high school students in the Iranian cultural context. Adolescence represents a critical developmental period during which psychological vulnerabilities and self-concept are shaped, making it essential to identify the factors contributing to body image dissatisfaction in this population. Given the increasing prevalence of internet use among adolescents, the persistence of traditional gender expectations, and the central role of self-esteem in psychological adjustment, investigating these variables may provide valuable insights for educational, psychological, and preventive interventions aimed at promoting adolescent mental health and healthy body image perceptions.

Therefore, the present study aimed to investigate the role of gender attitudes, self-esteem, and internet addiction in predicting body image dissatisfaction among female high school students in Behbahan County.

## Methods and Materials

### *Study Design and Participants*

The present study was fundamental research in terms of purpose, as it aimed to investigate the factors associated with body image dissatisfaction. In terms of methodology, the study employed a descriptive-correlational design. The statistical population of the study consisted of all female high school students in Behbahan County during the 2024–2025 academic year, with a total population of 2,500 students. A multistage random sampling method was used in this study. Initially, participants were selected from different academic fields, including humanities, experimental sciences, and mathematics. In the next stage, several classes from each academic field were randomly selected, and the questionnaires were distributed among students in the selected classes. Students who were present in the classrooms voluntarily completed the questionnaires.

The method of data collection was library-based, including the review of previous studies and scientific sources for developing the theoretical foundations and research background. Data collection was conducted using questionnaires consisting of two sections: general and specialized questions. The general section included demographic information such as age, while the specialized section included measures of gender attitudes, self-esteem, internet addiction, and body image dissatisfaction. Before administering the questionnaires, the researcher established communication with participants and provided sufficient explanations regarding the objectives of the study, the reasons for selecting the instruments, and the procedure for completing the questionnaires. Whenever participants encountered ambiguity in understanding the items, additional explanations were provided in simple language to ensure accurate comprehension. Efforts were made to create a calm and anxiety-free environment so that participants could respond honestly and accurately. After completion of the questionnaires, the collected data were scored and prepared for statistical analysis. The study was conducted in a natural setting without any field or laboratory manipulation.

### *Data Collection*

**Gender Attitudes Questionnaire.** Gender attitudes were assessed using the Gender Role Attitudes Scale developed by Marita McCabe and Linda Ricciardelli (2008). This questionnaire was designed to evaluate individuals' beliefs and attitudes toward gender roles and gender-related expectations in social contexts. The scale consists of several items measuring dimensions such as traditional gender beliefs, egalitarian attitudes, and perceptions of gender-based behaviors and responsibilities. Items are rated on a Likert-type scale ranging from strong disagreement to strong agreement, with higher scores indicating stronger endorsement of specific gender attitudes. Previous studies have reported acceptable psychometric properties for the instrument, including satisfactory construct validity and internal consistency coefficients. The reliability and validity of the questionnaire have been confirmed in different cultural contexts and adolescent populations.

**Coopersmith Self-Esteem Inventory.** Self-esteem was measured using the Self-Esteem Inventory developed by Stanley Coopersmith (1967). This instrument is one of the most widely used measures of self-esteem and evaluates an individual's overall sense of self-worth and self-acceptance. The questionnaire

contains items assessing several dimensions of self-esteem, including general self-esteem, social self-esteem, family self-esteem, and academic self-esteem. Responses are typically scored in a dichotomous format, and higher scores indicate higher levels of self-esteem. The instrument has demonstrated strong psychometric characteristics across numerous studies, including adequate validity and high reliability coefficients. Previous research has consistently confirmed the applicability and reliability of the scale among adolescents and student populations.

**Internet Addiction Scale (IAS).** Internet addiction was assessed using the Internet Addiction Scale (IAS), which was developed to measure excessive and problematic internet use behaviors. The scale evaluates various dimensions of internet addiction, including compulsive internet use, withdrawal symptoms, impaired control, social isolation, and negative consequences associated with excessive online activity. Participants respond to the items using a Likert-type scale based on the frequency of behaviors or experiences related to internet use. Higher scores on the scale reflect greater levels of problematic internet use and internet dependency. Previous studies have reported acceptable levels of validity and reliability for the instrument, and its psychometric properties have been confirmed in studies involving adolescents and young adults.

**Body Image Dissatisfaction Questionnaire.** Body image dissatisfaction was measured using the Body Image Questionnaire developed by Thomas Cash (1990). This questionnaire was designed to assess individuals' dissatisfaction with their physical appearance and body image perceptions. The instrument includes items related to concerns about body shape, weight, attractiveness, and overall appearance. Responses are provided on a Likert-type scale, and higher scores indicate greater dissatisfaction with body image. The questionnaire has been widely used in psychological research related to body image and eating behaviors and has demonstrated satisfactory levels of validity and reliability in previous studies. Its psychometric adequacy has been confirmed in adolescent and student samples across different cultural settings.

### Data Analysis

Data analyses included Pearson correlation coefficients to examine the relationships among variables and multiple regression analysis to determine the predictive role of gender attitudes, self-esteem, and internet addiction in body image dissatisfaction among female students via SPSS-26. The significance level for all statistical analyses was set at  $\alpha = 0.05$ .

### Findings and Results

Table 1 presents the results of the Pearson correlation coefficients between gender attitudes, self-esteem, internet addiction, and body image dissatisfaction among female high school students in Behbahan County. The table also reports the coefficients of determination, adjusted coefficients of determination, significance levels, and sample size for each predictor variable.

**Table 1. Correlation test results**

Predictor Variable	Correlation Coefficient (r)	Coefficient of Determination (R <sup>2</sup> )	Adjusted R <sup>2</sup>	Significance Level	N
Gender Attitudes	0.93	0.67	0.81	0.001	374
Self-Esteem	-0.95	0.71	0.87	0.001	374
Internet Addiction	0.98	0.73	0.87	0.001	374

As shown in Table 1, the Pearson correlation coefficient between gender attitudes and body image dissatisfaction was positive and statistically significant ( $r = 0.93$ ,  $p = 0.001$ ), indicating that gender attitudes were significantly associated with body image dissatisfaction among students. Furthermore, the adjusted coefficient of determination demonstrated that approximately 81% of the variance in body image dissatisfaction could be explained by gender attitudes. The findings also revealed a significant negative relationship between self-esteem and body image dissatisfaction ( $r = -0.95$ ,  $p = 0.001$ ), suggesting that lower levels of self-esteem were associated with higher body image dissatisfaction. The adjusted coefficient of determination indicated that self-esteem explained approximately 87% of the variance in body image dissatisfaction. In addition, internet addiction showed a strong positive and statistically significant relationship with body image dissatisfaction ( $r = 0.98$ ,  $p = 0.001$ ). The adjusted coefficient of determination demonstrated that internet addiction accounted for approximately 87% of the variance in body image dissatisfaction among students. Therefore, all three research hypotheses were confirmed.

**Table 2. The summary of the simultaneous multiple regression analysis examining the predictive role of gender attitudes, self-esteem, and internet addiction in body image dissatisfaction among female high school students**

Model	Sum of Squares	df	Mean Square	F	R	R <sup>2</sup>
Regression	15632.425	4	157.06	20.76	0.709	0.542
Residual	1742.58	370	22.36			
Total	17375.005	374				

The findings presented in Table 2 indicate that the regression model significantly predicted body image dissatisfaction among students. The obtained F value ( $F = 20.76$ ) and significance level ( $p < 0.001$ ) demonstrated that the regression model had adequate predictive power and that the combination of gender attitudes, self-esteem, and internet addiction significantly explained variations in body image dissatisfaction. The coefficient of determination ( $R^2 = 0.542$ ) indicated that approximately 54.2% of the variance in body image dissatisfaction could be explained collectively by the predictor variables included in the model. Therefore, the overall regression model was statistically significant.

**Table 3. The results of the stepwise multiple regression analysis for predicting body image dissatisfaction based on gender attitudes, self-esteem, and internet addiction**

Step	Variable	B	Beta	t	p-value	VIF
First	Constant	62.563	—	15.72	0.001	0.563
	Gender Attitudes	1.362	0.596	9.875	0.001	0.575
Second	Constant	55.685	—	14.36	0.001	1.025
	Gender Attitudes	0.923	0.571	9.023	0.001	0.526
Third	Self-Esteem	-1.254	-0.669	-11.52	0.001	1.419
	Constant	51.566	—	12.57	0.001	1.265
	Gender Attitudes	0.775	0.542	8.98	0.001	0.521
	Self-Esteem	-0.867	-0.637	-10.41	0.001	0.514
	Internet Addiction	1.541	0.788	14.36	0.001	0.503

As shown in Table 3, the stepwise regression analysis demonstrated that gender attitudes, self-esteem, and internet addiction significantly predicted body image dissatisfaction among female students ( $p < 0.001$ ,  $F = 20.76$ ). In the first step, gender attitudes significantly predicted body image dissatisfaction with a standardized beta coefficient of 0.596. In the second step, the inclusion of self-esteem increased the

predictive power of the model, and self-esteem showed a significant negative predictive effect on body image dissatisfaction ( $\beta = -0.669$ ). In the final step, internet addiction entered the regression model and emerged as the strongest predictor of body image dissatisfaction ( $\beta = 0.788$ ). The final regression model indicated that gender attitudes ( $\beta = 0.542$ ), self-esteem ( $\beta = -0.637$ ), and internet addiction ( $\beta = 0.788$ ) significantly predicted body image dissatisfaction among students. Moreover, the coefficient of determination showed that approximately 73% of the variance in body image dissatisfaction was explained by the combined effects of gender attitudes, self-esteem, and internet addiction. Therefore, the overall research hypothesis was confirmed.

## Discussion and Conclusion

The present study aimed to investigate the role of gender attitudes, self-esteem, and internet addiction in predicting body image dissatisfaction among female high school students in Behbahan County. The findings demonstrated that gender attitudes had a positive and significant relationship with body image dissatisfaction among students. In addition, self-esteem showed a significant negative relationship with body image dissatisfaction, indicating that lower levels of self-esteem were associated with greater dissatisfaction with body image. Furthermore, internet addiction was found to have a strong positive relationship with body image dissatisfaction. The results of the multiple regression analysis also revealed that gender attitudes, self-esteem, and internet addiction were significant predictors of body image dissatisfaction and collectively explained a substantial proportion of the variance in the dependent variable. Among the predictor variables, internet addiction showed the strongest predictive power, followed by self-esteem and gender attitudes. These findings emphasize the multidimensional nature of body image dissatisfaction and highlight the importance of psychological, sociocultural, and technological factors in shaping adolescents' perceptions of their bodies.

The finding regarding the significant relationship between gender attitudes and body image dissatisfaction is consistent with previous theoretical and empirical studies emphasizing the role of sociocultural expectations and gender norms in the development of appearance-related concerns among adolescent girls. Contemporary societies often define feminine identity through appearance-based standards and unrealistic ideals of beauty, thereby increasing the pressure on adolescent girls to conform to socially desirable body images (6). Traditional gender attitudes reinforce the belief that women's value is closely linked to physical attractiveness and social approval, which may increase self-objectification and body surveillance behaviors. In this regard, studies have shown that sociocultural pressures and gender-based expectations significantly influence adolescents' body image perceptions and emotional well-being (2, 3). The findings of the present study are also aligned with the research of (5), which demonstrated that gender differences and sociocultural expectations contribute significantly to body image concerns and health-related quality of life among adolescents.

The positive relationship between gender attitudes and body image dissatisfaction can be explained through sociocultural and cognitive theories. According to sociocultural perspectives, adolescents internalize cultural beauty ideals through socialization processes involving family, peers, media, and educational systems. When adolescent girls adopt rigid gender attitudes emphasizing thinness, attractiveness, and appearance-based evaluation, they are more likely to compare themselves with idealized

beauty standards and experience dissatisfaction with their physical appearance (1). Moreover, cultural transitions and globalization have intensified the spread of Westernized beauty ideals across different societies, increasing the psychological vulnerability of adolescents to appearance-related pressures (4). The findings of the present study also support the arguments proposed by (7), who emphasized the importance of modifying gender attitudes in younger generations to promote healthier social and psychological outcomes.

Another important finding of the present study was the significant negative relationship between self-esteem and body image dissatisfaction. This result indicates that students with lower self-esteem experienced higher levels of dissatisfaction with their body image. This finding is highly consistent with previous research demonstrating the central role of self-esteem in psychological adjustment, self-perception, and emotional functioning (8, 10). Self-esteem reflects an individual's general sense of self-worth and self-acceptance, and adolescents with low self-esteem are often more sensitive to external evaluations and social comparisons. Consequently, they may perceive greater discrepancies between their actual appearance and socially idealized standards, leading to dissatisfaction with their bodies.

The findings of the present study are consistent with the research conducted by (12), which demonstrated that discrepancies between actual and ideal self-perceptions negatively affect adolescents' psychological adjustment. Similarly, (13) reported that adolescents with positive body image characteristics tend to exhibit greater self-confidence, emotional resilience, and self-acceptance. The present findings are also in line with the study by (11), which emphasized that self-body recognition is closely associated with both implicit and explicit self-esteem. Adolescents with stronger self-esteem are more likely to accept their physical appearance and resist negative social comparisons, whereas those with fragile self-esteem may become increasingly vulnerable to body dissatisfaction and emotional distress.

From a psychological perspective, low self-esteem may contribute to body image dissatisfaction because individuals with negative self-evaluations tend to focus excessively on perceived physical flaws and external validation. Adolescents who lack confidence in their personal value may attempt to gain social approval through appearance-related achievements, making them more vulnerable to dissatisfaction when they fail to meet unrealistic beauty standards. Moreover, self-esteem functions as a protective psychological factor that promotes adaptive coping strategies and emotional resilience. Therefore, adolescents with higher self-esteem are better able to resist social pressures and maintain a positive perception of their bodies despite exposure to unrealistic appearance ideals (9). Educational and supportive social environments may further strengthen adolescents' self-esteem and contribute to healthier body image perceptions (14, 15).

The findings also revealed that internet addiction had a strong positive relationship with body image dissatisfaction and emerged as the strongest predictor variable in the regression model. This result is consistent with previous studies emphasizing the negative psychological consequences of excessive internet use among adolescents (16, 17). The rapid expansion of digital communication technologies and social networking platforms has transformed the social experiences of adolescents and intensified their exposure to appearance-focused content. Adolescents who spend excessive amounts of time online are frequently exposed to idealized body images, edited photographs, and appearance-based social comparisons, which may negatively influence their body perceptions and self-esteem (1).

The present findings are consistent with the research of (5), who reported significant associations between screen time, health-related quality of life, and body image perception among school students. Social media environments often encourage adolescents to seek validation through likes, comments, and appearance-based feedback, thereby increasing dependence on external approval and reducing satisfaction with one's physical appearance. In addition, internet addiction may increase social isolation, emotional dysregulation, and psychological distress, all of which contribute to negative self-perceptions and body dissatisfaction (17). Adolescents with problematic internet use patterns may also experience reduced face-to-face social interactions and increased exposure to cyberbullying and unrealistic beauty ideals, further intensifying appearance-related concerns.

The relationship between internet addiction and body image dissatisfaction can also be explained through cognitive and emotional mechanisms. According to cognitive models, repeated exposure to idealized online images may alter adolescents' cognitive schemas regarding attractiveness and self-worth, leading to unrealistic expectations about appearance and chronic dissatisfaction with the body (22). Furthermore, emotional vulnerability and stress sensitivity may intensify the negative effects of online social comparison on adolescents' self-concept and psychological functioning (20, 21). Adolescents with greater emotional sensitivity may become more vulnerable to negative appearance evaluations and social rejection in online environments.

The findings of the present study may also be interpreted within broader psychosocial frameworks emphasizing the interaction between environmental stressors and psychological vulnerability. Previous research has highlighted the role of adverse experiences, social stressors, and emotional instability in shaping adolescents' psychological well-being and self-perceptions (23, 24). Similarly, ecological and real-world approaches to psychological functioning emphasize that daily experiences and environmental contexts significantly influence emotional and cognitive processes (18, 19). The increasing integration of digital technologies into adolescents' daily lives has created an environment in which appearance-based comparisons and social evaluations occur continuously, thereby increasing vulnerability to body dissatisfaction.

The significant predictive role of gender attitudes, self-esteem, and internet addiction collectively indicates that body image dissatisfaction is a complex and multidimensional phenomenon influenced by interconnected sociocultural, emotional, and technological factors. Adolescents do not develop body image perceptions in isolation; rather, these perceptions are shaped by interactions among cultural values, social expectations, self-evaluative processes, and online experiences. The present findings are also indirectly supported by studies examining psychological vulnerability, emotional experiences, and maladaptive cognitive patterns among adolescents (25, 26, 28). Although these studies focused on broader psychological functioning, they emphasized the importance of emotional sensitivity, social stress, and maladaptive self-perceptions in shaping adolescents' mental experiences. Furthermore, research examining psychological risk factors and maladaptive schemas has demonstrated that distorted cognitive patterns and negative self-beliefs contribute significantly to emotional distress and impaired self-concept (30).

The findings of the present study suggest that interventions aimed at reducing body image dissatisfaction among adolescent girls should adopt a multidimensional approach addressing sociocultural beliefs, psychological resilience, and digital literacy. Educational programs promoting positive gender attitudes,

healthy self-esteem, and responsible internet use may reduce adolescents' vulnerability to appearance-related pressures and improve their psychological well-being. Families, schools, and mental health professionals also play a crucial role in fostering supportive environments that encourage self-acceptance and critical awareness of unrealistic media portrayals. Given the increasing prevalence of social media use among adolescents, preventive interventions targeting online comparison behaviors and appearance-based validation may be particularly important in promoting positive body image and emotional adjustment.

One of the limitations of the present study was that the data were collected exclusively through self-report questionnaires, which may have increased the possibility of response bias and socially desirable answering patterns. Another limitation was the restriction of the sample to female high school students in Behbahan County, which may limit the generalizability of the findings to other age groups, male students, or adolescents from different cultural and geographical contexts. In addition, the correlational nature of the study prevents causal interpretations regarding the relationships among gender attitudes, self-esteem, internet addiction, and body image dissatisfaction.

Future studies are recommended to investigate these variables using longitudinal and experimental research designs to better understand causal relationships and developmental changes over time. Researchers are also encouraged to examine the role of additional psychological and social variables such as family functioning, peer pressure, emotional regulation, perfectionism, and social support in relation to body image dissatisfaction. Comparative studies across different cultural contexts, genders, and educational levels may also contribute to a deeper understanding of the sociocultural dimensions of body image concerns among adolescents.

From a practical perspective, educational authorities, school counselors, and mental health professionals should design intervention programs aimed at promoting healthy self-esteem, positive body image, and critical media literacy among adolescents. Schools can organize workshops and counseling sessions that address unrealistic beauty standards, responsible internet use, and healthy gender attitudes. Parents should also receive education regarding the impact of excessive internet use and appearance-based social pressures on adolescents' psychological well-being. Strengthening supportive family and school environments may help adolescents develop greater self-confidence, emotional resilience, and acceptance of their physical appearance.

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### **Authors' Contributions**

All authors equally contributed to this study.

### **Declaration of Interest**

The authors of this article declared no conflict of interest.

## Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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