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ORIGINAL ARTICLE

The importance of self-efficacy and health behaviors in adolescents' body mass index: the mediating roles of body esteem and problematic internet use

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BACKGROUND
The aim of the study was to investigate the relationship between personal characteristics and body mass index (BMI) and the role of problematic Instagram use and body esteem.

PARTICIPANTS AND PROCEDURE
The study included 695 adolescents aged 14-18 years (526 females, $M = 17.01$, $SD = 0.88$). The following measures were used: the General Self-Esteem Scale (GSES), the Distress Scale, the Problematic Instagram Use Questionnaire, the Health Behavior Inventory, the Body Esteem Scale for Adolescents and Adults (BESAA), and body mass index (BMI).

RESULTS
The results showed that problematic Instagram use mediated the relationship between distress and BMI. Additionally, body-esteem appearance and body-esteem weight mediated the relationships between distress, self-efficacy, and health behaviors and BMI. The mediating role of body-esteem attribution and problematic Instagram use was found in the relationships between distress, self-efficacy, and health behaviors and BMI.

CONCLUSIONS
The findings indicate that problematic Instagram use and the dimensions of body esteem play a key mediating role in the associations between distress, self-efficacy, health behaviors, and BMI. These results highlight the importance of addressing body image perceptions and social media use in interventions aimed at promoting healthy weight management and mitigating the negative impact of psychological distress on physical health. These findings can be used to develop workshops and educational programs on social networking sites for adolescents.

KEY WORDS
body mass index; distress; self-efficacy; body esteem; problematic Instagram use

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BACKGROUND

Adolescents widely use social media, with Instagram being one of the most popular platforms for self-presentation and interaction (Nagata et al., 2025). Despite its benefits, some users develop problematic Instagram use (PIU), characterized by loss of control and continued use despite negative consequences (Kırcaburun & Griffiths, 2019). PIU is commonly conceptualized as a form of problematic social media use or behavioral addiction (Griffiths, 2005).

Adolescence is a critical period for the development of self and body esteem, which are strongly shaped by social and media influences (Fardouly et al., 2015; Tiggemann et al., 2020). Exposure to appearance-focused content may contribute to body dissatisfaction, a common experience among young people (Bornioli et al., 2021). Given the visual nature of Instagram, it may intensify focus on appearance and negatively affect body esteem (Tiggemann & Anderberg, 2020).

The present study therefore examined the role of body esteem in the relationship between Instagram use and body mass index (BMI).

BODY ESTEEM AND PROBLEMATIC INSTAGRAM USE

Body esteem is defined as an individual's evaluation of their physical appearance, encompassing emotional, cognitive, and behavioral components (Curran, 2003). Previous studies have indicated that Instagram use is associated with lower body esteem (Abrante & Carballeira, 2023; Vartanian & Dey, 2013). In particular, engagement in appearance-focused activities, such as posting and viewing photos, increases attention to one's body, preference for thinness, and dissatisfaction with weight (Alluhidan et al., 2025).

These effects can be explained by social comparison processes (Vogel et al., 2014) and self-discrepancy mechanisms (Higgins, 1987). Frequent exposure to idealized images encourages comparisons with others and highlights discrepancies between actual and ideal body image, which may lead to negative self-evaluation and body dissatisfaction (Tiggemann et al., 2020; Bornioli et al., 2021). Self-esteem may further moderate these relationships (Agyapong-Opoku et al., 2025; Alluhidan et al., 2025; Vartanian & Dey, 2013). Problematic Instagram use has also been linked to distorted body perception and a higher risk of disordered eating (Kircaburun & Griffiths, 2019). Exposure to idealized body content, including "fitspiration" or "thinspiration," may influence both self-perception and BMI (Chansiri & Wongphothiphan, 2023).

Although direct associations between BMI and Instagram activity are inconsistent, evidence suggests indirect relationships via body image and appearance-related behaviors (Abrante & Carbelleira, 2023). Individuals with higher BMI are less likely to share body-focused content, whereas positive body image is associated with greater willingness to present one's body online (Pedalino & Camerini, 2022; Tuna & Engin, 2026). Additionally, frequent Instagram use has been associated with symptoms of orthorexia nervosa among young adults (Turner & Lefevre, 2017).

DISTRESS

Distress is a state of intense psychological discomfort associated with negative emotions such as anxiety, fear, or sadness (Shneidman, 1999). It reflects the interaction of psychobiological, cognitive, and social processes and may arise in response to stressors such as loss, trauma, or social threat (Matthews, 2016; Rushton et al., 2016). Distress is linked to impairments in functioning and cognitive processing and constitutes a key feature of many emotional disorders.

Studies (Henzel & Håkansson, 2021; Yurdagül et al., 2021) have revealed a positive relationship between the experience of mental distress and PIU. Moreover, individuals experiencing a higher level of mental distress more often had problems with BMI and appearance satisfaction (Yurdagül et al., 2021).

SELF-EFFICACY

Self-efficacy (Bandura, 2001) is the belief in one's ability to meet a particular challenge and achieve a goal. According to the literature, self-efficacy makes it possible to predict intentions and actions in various domains of human activity, including health behaviors (Schwarzer & Jerusalem, 1995). Self-efficacy also plays an important role in preventing behavioral addictions. Gürcan and Kaya (2025) found that self-efficacy in real life was negatively related to gaming addiction, while self-efficacy in cyber-life was positively related to it. Self-efficacy was negatively related to problematic Instagram use (Dalkıç & Kaya, 2021).

HEALTH BEHAVIOR

Health behavior issues have been gaining recognition due to their consequences for physical and mental health (Rezende et al., 2014). Research indicates that lifestyle plays an important role in the process of health development, especially the habitual pattern of behavior towards one's own body (Zhang et al., 2019). Health behavior is a term that refers to habits, practices, activities, and personal attributes that either improve or threaten overall functioning. Health behaviors can be divided into those aimed at maintaining or restoring health and those that are detri-

mental to it and cause immediate or distant damage to health in the emotional, physical, and psychosocial spheres (Conner & Norman, 2017; Rezende et al., 2014). Recent studies have indicated that problematic use of Instagram and other social networking platforms is associated with an unhealthy lifestyle, including poorer diet quality, lower levels of physical activity, sleep disturbances, and engagement in risky behaviors such as alcohol use and nighttime media consumption (Agyapong-Opoku et al., 2025; Lopez-Fernandez et al., 2023; Przepiórka et al., 2025).

PRESENT STUDY

The main aim of the study was to investigate the relationships between personal characteristics and BMI, as well as the role of PIU and body esteem in these associations. First, we examined whether the results were consistent with a mediating role of body esteem in the relationships between distress, self-efficacy, and health behaviors and BMI. Second, we tested the role of PIU as a mediator in the associations between distress and self-efficacy and BMI. Additionally, we examined whether a pattern consistent with double mediation emerged in the relationships between personal characteristics (distress, self-efficacy, health behaviors) and BMI via body esteem and PIU. The assumptions are presented in Figure 1.

We formulated the following hypotheses:

H1: Body esteem mediates the relationships between personal characteristics (self-efficacy, distress, health behaviors) and BMI.

H2: PIU mediates the relationships between personal characteristics (self-efficacy, distress, health behaviors) and BMI.

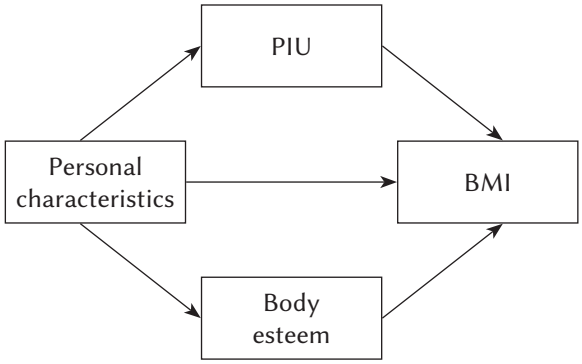
PARTICIPANTS AND PROCEDURE

PARTICIPANTS

The study included a sample of 696 individuals aged 14-18 years. However, one participant was excluded due to missing data. As a result, the final sample consisted of 695 participants (526 females, M = 17.01, SD = 0.88). All the participants had their own mobile phones. Data were collected from elementary and secondary school students. The research was conducted in several provinces: Świętokrzyskie, Mazowieckie, Wielkopolskie, Lubelskie, and Zachodniopomorskie. The study recruiters sent invitations to school principals with the information about the study, its requirements, and the inclusion criteria. Once the principals gave their consent to the study, they provided contact details for teachers from different classes. Because distance learning was implemented at the time of data collection, we used online questionnaires. The link to the study was shared with those teachers. The researcher contacted the teacher of each class and, after obtaining their consent, provided the link to the survey with instructions on how to complete it. The research was conducted online. Participation was voluntary and anonymous. Participants received no remuneration. In the case of underage students, parental consent for participation was required. The research was approved by the Ethics Committee at the authors' university (approval number: KEBN_16_2020).

Figure 1

Theoretical model with body esteem and PIU as mediators between personal characteristics (self-efficacy, distress, health behavior) and BMI



Note. PIU – problematic Instagram use; BMI – body mass index.

MEASURES

Self-efficacy. The General Self-Esteem Scale (GSES) as adapted into Polish by Juczyński (2001) consists of 10 items making up one factor. It measures the strength of individuals' general belief in their own ability to cope with difficult situations and obstacles. Respondents rate the items on a 4-point scale, from 1 (*no*) to 4 (*yes*). In the present study, Cronbach's α was .85.

Distress. The K-6 is a 6-item inventory rated on a 5-point Likert-type scale (Kessler et al., 2010). It is a truncated version of the K-10 and purpose serves as a global measure of distress based on depressive and anxiety-related symptoms. It measures distress over a period of four weeks prior to the administration of the test. In the current study, Cronbach's α was .82.

Problematic Instagram use. The Problematic Instagram Use Questionnaire (Elphinston & Noller, 2011) developed based on behavioral addiction components and the pathological mobile phone use scale. The original version of this measure is used to assess Facebook intrusion. For the purposes of the current research, the word "Facebook" was replaced with the word "Instagram." A similar procedure has been used before in other studies, yielding reliable results. The measure

consists of 8 items, which participants respond to on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The questionnaire has been used with Polish samples (e.g., Przepiórka et al., 2025). It showed good reliability in the present study (α = .84).

Health behavior. The Health Behavior Inventory by Juczyński (2001) is composed of 24 items describing various kinds of health-related behaviors. It yields an overall health behavior score and separate scores on specific categories of health behaviors (eating habits, preventive behaviors, positive mental attitudes, health practices). In the present study, Cronbach's α was .82.

Body esteem was measured using the Body-Esteem Scale for Adolescents and Adults (BESAA; Mendelson et al., 2001; Błachnio et al., 2023). The scale consists of 23 items rated on a 5-point Likert scale (0 – *never* to 4 – *always*), with higher scores indicating more positive body esteem. It includes three subscales: Body-Esteem Appearance, Body-Esteem Weight, and Body-Esteem Attribution. In the present study, reliability was satisfactory (α = .88, .89, and .77, respectively).

Body mass index was calculated using the following formula: (weight in kilograms)/(height in meters)^2. Body weight and height were self-reported by the participants.

STATISTICAL ANALYSIS

Descriptive statistics were computed as arithmetic means and standard deviations. Additionally, Spearman's rho correlations between the analyzed variables were calculated.

In order to analyze the relationships between self-efficacy, distress, PIU, body esteem (appearance, weight, attribution), health behaviors, and BMI, we performed path analysis using the maximum likelihood method. Taking into account previous research results (Kırcaburun & Griffiths, 2019), we developed a model with self-efficacy, distress, body esteem (appearance, weight, attribution), PIU, and health behaviors as predictors of BMI. Based on previous studies (Sagone et al., 2018), we included self-efficacy, distress, and body esteem (appearance, weight, attribution) as predictors of PIU. Moreover, taking into account earlier research results (Kleemans et al., 2018), we built a model with self-efficacy, distress, and health behaviors as predictors of body esteem (appearance, weight, attribution). The model also included covariates between body-esteem dimension residuals and between self-efficacy, distress, and health behaviors.

Path model fit was assessed using the following statistics: χ^2, root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), goodness-of-fit index (GFI), and Tucker-Lewis index (TLI; Hu & Bentler, 1999; Kline, 2023). The statistically non-significant (p > .05) chi-square value and the RMSEA and SRMR values lower than .08 suggest that the model showed an acceptable fit to the data. CFI, GFI, and TLI should be higher than .90 for an acceptable model fit, and optimally they should be lower than .05 (Hu & Bentler, 1999; Kline, 2023). Moreover, we used bootstrapping (5,000 samples) with the bias-corrected percentile method to estimate standardized regression weights, correlations, and *R*-squared values with 95% confidence intervals (CIs).

In order to examine mediation effects, we applied bootstrapping (5,000 bootstrap samples) with the bias-corrected percentile method to estimate indirect effects with 95% confidence intervals (Shrout & Bolger, 2002). IBM SPSS Statistics version 27 and AMOS 27 were used for data analysis.

RESULTS

Correlation analysis showed that PIU was positively associated with distress and body-esteem attribution. This type of problematic behavior was also negatively related to self-efficacy, body-esteem appearance, body-esteem weight, and BMI. Moreover, BMI was negatively associated with all body-esteem dimensions. Detailed results are presented in Table 1.

Path analysis results showed that the model fit the data well: $\chi^2_{(df = 1)} = 1.77$, $p = .183$, RMSEA = .033, SRMR = .007, CFI = .999, GFI = .999, TLI = .985. The results revealed statistically significant associations between health behaviors (β = .16, p = .001, [.09, .22]), distress (β = −.14, p < .001, [−.48, −.35]), and self-efficacy (β = .18, p < .001, [.11, .25]) and body-esteem appearance. Additionally, body-esteem weight was positively associated with health behaviors (β = .17, p < .001, [.09, .24]) and self-efficacy (β = .08, p = .043, [.01, .17]). There was also a negative relationship between distress and body-esteem weight (β = −.32, p < .001, [−.40, −.24]). Body-esteem attribution was positively associated with health behaviors (β = .25, p < .001, [.17, .33]) and self-efficacy (β = .15, p = .002, [.06, .24]). There was also a negative relationship between distress and body-esteem attribution (β = −.09, p = .036, [−.18, −.01]). The results showed a negative relationship between body-esteem appearance and PIU (β = −.13, p = .043, [−.27, −.01]) and positive relationships of distress (β = .12, p = .009, [.03, .22]) and body-esteem attribution (β = .29, p = .001, [.20, .37]) with PIU. Additionally, BMI was positively associated with body-esteem appearance (β = .14, p = .020, [.02, .25]). There were also negative associations of body-esteem weight (β = −.40, p < .001, [−.50, −.30]) and PIU (β = −.11, p = .007, [−.18, −.03]) with BMI.

The indirect effect analysis showed that there was a statistically significant indirect effect between distress and BMI via PIU. Considering the non-signif-

Table 1

Descriptive statistics and Spearman's ρ correlations between the analyzed variables (N = 695)

Variable	*M*	*SD*	[1]	[2]	[3]	[4]	[5]	[6]	[7]
[1] Problematic Instagram use	22.51	8.99							
[2] Self-efficacy	29.84	4.74	−.12***						
[3] Distress	16.36	5.20	.17***	−.35***					
[4] Health behavior	77.39	12.46	.01	.27***	−.31***				
[5] Body-esteem appearance	17.56	8.37	−.12**	.36***	−.51***	.31***			
[6] Body-esteem weight	15.90	7.71	−.08*	.25***	−.38***	.27***	.67***		
[7] Body-esteem attribution	10.06	4.28	.14***	.24***	−.20***	.30***	.48***	.44***	
[8] BMI	21.20	3.03	−.13***	.01	−.05	.02	−.09*	−.24***	−.12**

Note. $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$; BMI – body mass index.

icant direct effect between distress and BMI, it can be assumed that there was full mediation. Additionally, there were indirect effects of distress, self-efficacy, and health behavior on BMI via body-esteem appearance. Standardized indirect effects of distress, self-efficacy, and health behavior on BMI mediated by body-esteem weight were also found. Given the non-significant direct effects of distress, self-efficacy, and health behavior on BMI, it can be assumed that these were cases of full mediation. Moreover, the analysis revealed indirect effects of distress, self-efficacy, and health behavior on BMI via body-esteem appearance and PIU. We also found standardized indirect effects of distress, self-efficacy, and health behavior on BMI mediated by body-esteem attribution and PIU. Considering the non-significant direct effects of distress, self-efficacy, and health behavior on BMI, it can be assumed that, in these cases, mediation was full. The analysis revealed standardized indirect effects of distress, self-efficacy, and health behavior on PIU via body-esteem appearance. There were also significant indirect effects of distress, self-efficacy, and health behavior on PIU via body-esteem attribution. Detailed results are shown in Table 2. It is worth noting that despite the negative correlation between BMI and body-esteem appearance ($r = -.09$), the regression coefficient for this path in the path model was positive. This difference results from the fact that the path model estimates partial effects while controlling for the other variables.

DISCUSSION

The present study had several aims. First, we examined whether the results were consistent with a mediating role of body esteem in the relationships between distress, self-efficacy, and health behaviors and BMI. Second, we investigated whether the results were consistent with a mediating role of body esteem in the relationships between distress and self-efficacy and PIU. Third, we examined the role of PIU as a mediator in the associations between distress and BMI and between self-efficacy and BMI. Finally, we tested whether a pattern consistent with a double indirect effect emerged in the relationships between personality characteristics (distress, self-efficacy, health behavior) and BMI via body esteem and PIU.

The results showed that the hypothesis about the mediating role of body esteem in the relationships of distress, self-efficacy, and health behaviors and BMI was supported for two dimensions of body esteem, namely body-esteem appearance and body-esteem weight. Mediation was not found in the case of body-esteem attribution. This last factor, connected with other people's evaluation of the body, is less significant for body weight. The experience of distress was associated with increased BMI in many earlier studies (Munir & Dawood, 2021; Sepúlveda et al., 2020), but what is significant is not only the objective measurement of BMI. The key element is how satisfied a person is with their own body and weight. In the case of a high BMI, it is recommended to engage in more physical activities and health behaviors such as diet or prevention (Chansiri & Wongphothiphan, 2023). In the present study and in earlier ones (Sepúlveda et al., 2020), BMI was negatively related to health behavior. Positive body esteem not only protects a person from social stigma – for example, from difficulties in relations with peers, bullying by peers, and rejection by peers – but also motivates him or her to engage in health behaviors (Munir & Dawood, 2021). Also, in the case of self-efficacy, the presence of body esteem is positively associated with BMI (Sagone et al., 2018). It should be noted, however, that the positive association between body-esteem appearance and BMI observed in the path model differs from the negative zero-order correlation between

Table 2

Standardized indirect effects with 95% confidence intervals

Model pathway	Point estimate	Standard error	95% CI		*p*
			Lower	Upper	
Distress – PIU – BMI	**–0.013**	**0.007**	**–0.032**	**–0.003**	.007
Self-efficacy – PIU – BMI	0.005	0.005	–0.003	0.018	.204
Distress – Body-esteem appearance – BMI	**–0.058**	**0.025**	**–0.109**	**–0.010**	.019
Self-efficacy – Body-esteem appearance – BMI	**0.025**	**0.012**	**0.006**	**0.054**	.012
Health behavior – Body-esteem appearance – BMI	**0.021**	**0.010**	**0.005**	**0.044**	.013
Distress – Body-esteem weight – BMI	**0.128**	**0.023**	**0.087**	**0.179**	.001
Self-efficacy – Body-esteem weight – BMI	**–0.033**	**0.017**	**–0.071**	**–0.002**	.038
Health behavior – Body-esteem weight – BMI	**–0.066**	**0.018**	**–0.105**	**–0.034**	.001
Distress – Body-esteem attribution – BMI	0.006	0.005	–0.001	0.021	.104
Self-efficacy – Body-esteem attribution – BMI	–0.010	0.008	–0.030	0.002	.113
Health behavior – Body-esteem attribution – BMI	–0.017	0.012	–0.041	0.006	.140
Distress – Body-esteem appearance – PIU – BMI	**–0.006**	**0.004**	**–0.017**	**0.000**	.028
Self-efficacy – Body-esteem appearance – PIU – BMI	**0.003**	**0.002**	**0.000**	**0.008**	.027
Health behavior – Body-esteem appearance – PIU – BMI	**0.002**	**0.002**	**0.000**	**0.007**	.025
Distress – Body-esteem weight – PIU – BMI	–0.002	0.002	–0.007	0.002	.280
Self-efficacy – Body-esteem weight – PIU – BMI	0.000	0.001	0.000	0.003	.206
Health behavior – Body-esteem weight – PIU – BMI	0.001	0.001	–0.001	0.004	.245
Distress – Body-esteem attribution – PIU – BMI	**0.003**	**0.002**	**0.000**	**0.009**	.021
Self-efficacy – Body-esteem attribution – PIU – BMI	**–0.005**	**0.002**	**–0.011**	**–0.001**	.004
Health behavior – Body-esteem attribution – PIU – BMI	**–0.008**	**0.003**	**–0.016**	**–0.002**	.004
Distress – Body-esteem appearance – PIU	**0.056**	**0.028**	**0.002**	**0.117**	.042
Self-efficacy – Body-esteem appearance – PIU	**–0.024**	**0.013**	**–0.054**	**–0.002**	.035
Health behavior – Body-esteem appearance – PIU	**–0.021**	**0.011**	**–0.048**	**–0.002**	.029
Distress – Body-esteem weight – PIU	0.015	0.019	–0.019	0.053	.376
Self-efficacy – Body-esteem weight – PIU	–0.004	0.006	–0.020	0.004	.259
Health behavior – Body-esteem weight – PIU	–0.008	0.010	–0.029	0.010	.348
Distress – Body-esteem attribution – PIU	**–0.027**	**0.014**	**–0.058**	**–0.003**	.030
Self-efficacy – Body-esteem attribution – PIU	**0.044**	**0.015**	**0.017**	**0.077**	.001
Health behavior – Body-esteem attribution – PIU	**0.073**	**0.018**	**0.041**	**0.111**	.001

Note. Bold values indicate statistically significant indirect effects ($p < .05$). PIU – problematic Instagram use; BMI – body mass index.

these variables. This discrepancy likely reflects a suppression effect resulting from strong intercorrelations between different dimensions of body esteem (Kline, 2023; Thompson & Smolak, 2001). In particular, body-esteem appearance is highly correlated with body-esteem weight, which in turn shows a stronger negative association with BMI (Chansiri & Wongphothiphan, 2023). As a result, the zero-order correlation captures shared variance between these constructs, whereas the path model estimates the unique effect of appearance after controlling for other body-esteem dimensions (Kline, 2023; Tiggemann & Anderberg, 2020; Tuna & Engin, 2026).

Further analyses underscore the importance of body esteem – particularly appearance satisfaction and perceived evaluation by others – in the relation-

ships between distress, self-efficacy, health behaviors, and PIU. The findings suggest that PIU is more strongly associated with dissatisfaction with one's appearance and beliefs about how others evaluate it than with health behaviors per se, which is consistent with the appearance-focused and evaluative nature of Instagram use. Notably, negative self-evaluation appears to increase dependence on the platform (Ahadzadeh et al., 2017), potentially reinforcing dissatisfaction through exposure to idealized body images and increasing the risk of social exclusion or criticism (Kleemans et al., 2018). Importantly, dissatisfaction with one's appearance and perceived negative evaluation by others constitute a risk factor for PIU even among individuals with high self-efficacy (Sagone et al., 2018). Moreover, in individuals experiencing distress, body-esteem appearance and attribution substantially strengthen the association with PIU, accounting for a greater proportion of variance than distress alone (Sagone et al., 2018; Yurdagül et al., 2021). The inclusion of body-esteem appearance and body-esteem attribution in the model substantially accounts for variance in these associations.

The results were consistent with an indirect role of PIU in the association between distress and BMI (Hypothesis 2). As noted above, previous studies have shown that distress in children and adolescents is associated both with higher BMI (Munir & Dawood, 2021; Sepúlveda et al., 2020) and with a greater tendency for problematic social media use, including PIU (Yurdagül et al., 2021). PIU can be one of the escape strategies for coping with negative emotions that accompany distress (Henzel & Håkansson, 2021). Problems with BMI in children and adolescents are also more often related to various disorders affecting the emotional sphere (Sala et al., 2024). Moreover, PIU is often associated with a lower amount of physical activity, which directly translates into an unfavorable BMI (Dalkıç & Kaya, 2021).

Additionally, the results were consistent with a pattern of double mediation involving body-esteem appearance and body-esteem attribution in the associations between distress, self-efficacy, health behaviors, PIU, and BMI. Both dimensions of body esteem were significantly associated with these relationships, suggesting that how young people perceive their bodies and how they believe they are evaluated by others are closely linked to BMI, even when accounting for other psychological variables (Thompson & Smolak, 2001).

LIMITATIONS

The present study has several limitations. First, the results are based on self-report measures, including social media use and BMI, which may introduce bias. Second, the correlational design does not allow causal inferences. Additionally, the sample was predominantly female, which may reflect gender differences in social media use (Drążkowski et al., 2022; Nagata et al., 2025), but limits generalizability.

Future research should include objective indicators of Instagram activity (e.g., time spent, number of posts), distinguish between active and passive use, and examine the proposed relationships across different cultural contexts. Testing the model separately for girls and boys would also be valuable.

CONCLUSIONS

To sum up, the present research aimed to establish the factors associated with BMI. More precisely, we investigated whether body esteem could mediate the relationships between distress, self-efficacy, and health behavior and BMI. We also evaluated potential relationships between BMI and PIU. Research on a sample of adolescents indicated that the level of body esteem was significantly associated with BMI and PIU. The results of the present study may be useful in the development of training courses and educational programs for therapists, psychologists, teachers, and educators working with young people, whose activities largely take place on social networking sites.

Disclosures

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The study was approved by the Ethics Committee of the John Paul II Catholic University of Lublin (Approval No. KEBN_16_2020).
The authors declare no conflict of interest.

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