Research Square

Preprints are preliminary reports that have not undergone peer review.
They should not be considered conclusive, used to inform clinical practice,
or referenced by the media as validated information.

Passive Social Media Use and Anorexia Nervosa Risk in Contemporary China: A Feminist- Informed Sequential Mediation Model of Thin-Ideal Internalization and Body Dissatisfaction

Si Yuan WANG

siyuanwang2@ln.hk

Lingnan University

Miu Chi LUN

Lingnan University

Research Article

Keywords: Anorexia nervosa, Passive social media use, Thin-ideal internalization, Body dissatisfaction, Socioeconomic status, Chinese young women, Feminist perspective, Sequential mediation

Posted Date: November 19th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-11581739/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License.
Read Full License

Additional Declarations: No competing interests reported.

Passive Social Media Use and Anorexia Nervosa Risk in Contemporary China: A Feminist-Informed Sequential Mediation Model of Thin-Ideal Internalization and Body Dissatisfaction

Authors:

Si Yuan WANG

Lingnan University, Hong Kong, China

Miu Chi LUN

Department of Psychology, Lingnan University, Hong Kong, China

Corresponding author: *Si Yuan WANG*

Email: *siyuanwang2@ln.hk*

Institutional address: *Lingnan University, 8 Castle Peak Road, Tuen Mun, Hong Kong*

Abstract

Background: Anorexia nervosa is a serious mental disorder whose global prevalence has increased in recent decades, disproportionately affecting young women. In China, a "pale, young and slim" beauty standard dominates social media, shaped by state gender politics, patriarchal micro-power, backlash against Maoist gender ideology, and market-driven neo-postfeminist narratives. Passive social media use—browsing without direct interaction—may increase anorexia nervosa risk by promoting internalization of this beauty standard and subsequent body dissatisfaction. This study tested whether thin-ideal internalization and body dissatisfaction sequentially mediate the association between passive social media use and anorexia nervosa risk among Chinese young women.

Methods: A total of 152 Chinese young women aged 18–25 years (M = 21.42, SD = 2.41) completed validated self-report measures of these variables. We tested a sequential mediation model and a post hoc moderation analysis, controlling for body mass index and socioeconomic status.

Results: Passive social media use was associated with anorexia nervosa risk through thin-ideal internalization and body dissatisfaction, and the model explained 43.6% of the variance in anorexia nervosa risk. These effects remained robust after controlling for body mass index and socioeconomic status. Contrary to expectation, passive social media use did not directly predict body dissatisfaction. However, a post hoc moderation analysis revealed that socioeconomic status significantly moderated this pathway: passive social media use predicted body dissatisfaction only among women with lower socioeconomic status.

Conclusions: From a feminist perspective, internalized patriarchal beauty standards may be a key psychological pathway linking passive social media use to anorexia nervosa risk, and this linkage is stratified by socioeconomic status. These findings highlight the importance of targeting thin-ideal internalization in class-sensitive prevention efforts.

Keywords:

Anorexia nervosa; Passive social media use; Thin-ideal internalization; Body dissatisfaction; Socioeconomic status; Chinese young women; Feminist perspective; Sequential mediation

Plain English Summary

Social media is full of images promoting a "pale, young, and slim" beauty standard, especially in China. Our study looked at 152 young Chinese women to see how just scrolling through social media—without liking or commenting—might affect their risk of developing an eating disorder like anorexia nervosa. We found that passive scrolling can lead young women to accept these thin beauty ideals as their own. When their real bodies do not match this ideal, they may feel unhappy with their bodies, which increases their risk of disordered eating. Importantly, we found that this harmful effect mostly impacted women from lower-income or lower social class backgrounds. Women with higher social status seemed less affected, possibly because they have more resources to protect their self-esteem. This suggests that to help prevent eating disorders, we need to teach young women to challenge harmful online beauty standards. Support programs should be especially focused on helping young women from lower-income backgrounds, who may be more vulnerable to these pressures.

How Passive Social Media Use Fuels Anorexia Nervosa Risk in the Chinese Context: Sequential Mediation by Thin-Ideal Internalization and Body Dissatisfaction

Background

Anorexia nervosa (AN) is one of the top lethal psychological diseases (mortality rate of 10%), and is one of the most difficult psychiatric disorders to manage clinically (Steinglass et al., 2010). It is characterized by a psychological distortion of one's own body image, extremely underweight alongside the intense fear of gaining weight. Treatment outcomes are frequently poor, characterized by a high dropout rate, modest recovery rate, and high relapse rate (Spix et al., 2023). The prevalence of AN has escalated even faster in recent years, and the common onset age of AN has decreased, with children as young as 8 being diagnosed (Ayrolles et al., 2024; James et al., 2021). Given the severe clinical outcomes and treatment challenges, primary prevention is paramount. AN is affecting individuals of all ages, gender, sexual orientation, and cultures. Notably, epidemiological studies have underscored that young girls are particularly susceptible (James et al., 2021). Specifically, incidence and prevalence of AN among young girls in China showed an upward trend from 1992 to 2021 (Tian et al., 2025).

Social media has an extraordinary persuasive influence on Gen Z in attitude, cognition, and behavior (Williams et al., 2010). Studies suggested that the frequent exposure of young women to social media content highlighting risky behaviors (e.g., extreme weight loss) had significant associations with developing eating-related pathologies (Purba et al., 2023; Mustapic et al., 2015; Thompson & Smolak, 2001). Accordingly, empirical studies have demonstrated a clear positive relationship between social media use (SMU) and the risk of developing AN (see, e.g., Ismail, 2024; Logrieco et al., 2021; Wincana et al., 2022).

To better understand the underlying mechanisms of translating social media usage into the onset of AN among young girls, we look into the psychological explanation of a sequence of thin-ideal internalization and body dissatisfaction in Chinese samples. Hoping for providing insights on developing effective intervention strategies preventing AN onset.

The theory section is structured as follows. First, we review existing literature on beauty standards in the Chinese context. Second, we review literature on social media use to identify the problematic usage pattern. Finally, we analyze the underlying psychological factors relating to internalization and body dissatisfaction, and offer an integrated psychological perspective on why social media use can relate to risk of AN.

1. Literature Review

1.1 What Affects Anorexia Nervosa?

From a sociocultural perspective, Western cultural norms that emphasize thinness, coupled with acculturative stress among immigrant populations, have been identified as risk factors for AN onset. Although the idealization of thinness was initially regarded as a feminine aesthetic standard within Western cultures, the advance of Westernization and modernization has largely eroded cross-cultural distinctions, turning it into a global ideal of body image (Swami, 2013). Consistent with this cultural convergence, restrictive eating practices are becoming increasingly prevalent among young women in China (Li et al., 2021; Wang et al., 2024). Families with higher socioeconomic status (SES) often place a premium on aesthetic achievements, thereby potentially intensifying their intention to pursue an "ideal body type" and increasing their risk of AN development (Lindberg & Hjern, 2003).

In the psychosocial aspect, self-esteem, life satisfaction, and maladaptive perfectionism is associated with AN (Dahlenburg et al., 2019; Halvorsen & Heyerdahl, 2006). Additionally, biological factors of parental psychiatric disorder may lead to genetic vulnerability and perinatal complications such as prematurity or birth trauma may disrupt neurodevelopment, causing emotional dysregulation or impulse control issues, indirectly increasing AN vulnerability (Lindberg & Hjern, 2003).

1.2 How Is Chinese Context Different?

Lee et al. (1989) noted that AN is viewed as a mental disorder that exhibits clear geographic variation, with its frequency differing across sociocultural environments. Therefore, it is essential to identify how contemporary Chinese social and media environments may uniquely shape the risk factors associated with AN in our study.

In recent years, Chinese social media platforms have increasingly been characterized by a highly appearance-oriented environment (K. Li, 2018). Early feminist scholars criticized the media for reinforcing gender stereotypes and the ideologies of feminine inferiority. While social media is a different story, it allows diverse representations of femininities underrepresented in the traditional media (Shao, 2023). Paradoxically, the dominant beauty standard of "pale, young and slim" on Chinese social media is still male-oriented, crushing other unique traits. This aesthetic can be interpreted as a complex interplay of state gender politics, patriarchal gender norms, backlash against the Maoist gender ideology, and the neo post-feminist "agentic" narratives fueled by the market economy. For example, women edit their photos to appear thinner and whiter, claiming they do it as means for self-expression or self-pleasing. Those actions, however, are consistent with the patriarchal beauty standard of female fragility, showing the micro-physics of patriarchal power on women's bodies (Bartky, 1988/2020). Young

women develop a contradictory self-representation that simultaneously articulates self-emancipation and self-objectification, leading them to internalize the male gaze and consumer culture and thus becoming a docile body (Liu & Li, 2023). This internalization involves women in constant self-surveillance and self-regulation of their body shape.

Despite emerging feminist emphasizing self-empowerment and challenging objectification, consumer culture may co-opt such empowerment narratives, contributing to an intensified focus on appearance and an increasingly commodified landscape. Consequently, body becomes a never-completed, ongoing project that fosters persistent self-monitoring, emotional labor, and appearance-related anxiety (K. Li, 2018; Zhao et al., 2025).

Furthermore, research indicated that Chinese values are significantly reshaped by social media platforms toward immediacy and gratification, promoting a "live in the moment" mindset (Duan & Dholakia, 2015), which may reduce individual's sensitivity to long-term health consequences. Superimposing on the background of chronic body surveillance, therefore, young women are more likely to engage in extreme dieting behaviours, a well-established pathway for AN.

1.3 Passive Social Media Use Can Be More Problematic to Anorexia Nervosa

Emerging evidence suggests that high intensity of social media use (SMU) may increase susceptibility to various psychological issues, including anorexia nervosa. Smith and Anderson (2019) pointed out that college students, aged between 18 and 25, are the demographic that uses social media the most. SMU is categorized as passive use and active use (Valkenburg et al., 2021). Passive social media use (PSMU) describes the pattern of social media engagement limited to the passive browsing or monitoring others' content without direct interaction with

others (e.g., browsing newsfeeds without liking or commenting on anything) while active use usually include active online social interaction. A meta-analytic study has indicated that PSMU is not only more prevalent than active use but is also commonly associated with poorer subjective well-being compared to active use (Verduyn et al., 2017). This association is thought to arise because PSMU encourages constant self-and-other evaluation, upward social comparison and envy (Tuck & Thompson, 2023; Verduyn et al., 2017). Within this context, women may be particularly vulnerable as they culturally tend to engage more frequently in upward comparison (Fitzsimmons-Craft, 2017; Laker & Waller, 2022). Such upward social comparison has been pervasively found to be positively related to eating disorder symptoms such as restricted eating, which is one of the characteristics of AN (see, e.g., Bonfanti et al., 2024; Fitzsimmons-Craft, 2017; Turk et al., 2026).While restricted eating alone does not suffice for a diagnosis of AN, it is a necessary behavioral component that significantly increases the risk of developing the full disorder.

Thus, we hypothesize that PSMU will be positively related to AN risk.

Hypothesis 1 *PSMU intensity will be positively associated with the risk of developing anorexia nervosa*

1.4 Potential Mediators between PSMU and Risk of Developing AN

The relationship of PSMU and risk of developing AN may be explained by a sequential mediation pathway involving internalization of the thin-ideal standard and body dissatisfaction.

1.4.1 Thin-ideal internalization

Thin-ideal internalization refers to the extent to which individuals accept the socioculturally defined ideal concept of "thinness as beauty" and incorporate it into their own values. Thin-ideal internalization has been widely proven to be one of the causal risk factors for disturbed eating pattern (Austin & Smith, 2008; Van Diest & Perez, 2012), a clinically significant eating pathology can be predicted by even moderate levels of thin-ideal internalization (Schaefer et al., 2018). Thus, we hypothesized that internalization of the thin-ideal standard is positively associated with the risk of developing AN.

Hypothesis 2 *Thin-ideal internalization will be positively associated with the risk of developing AN*

Thompson et al.'s Tripartite Influence model (1999) posits three primary sources of formative influences -- family, peers, and media. With the evolution of media forms, social media has been integrated and is now recognized as a dominant modern contributor to appearance pressure (Roberts et al., 2022). The pervasive presence of slender, highly idealized models on social media who get substantial engagement through likes and commendations makes female users being particularly susceptible to engage in upward body-related social comparisons (Sanzari et al., 2023; Vandenbosch & Eggermont, 2012). Such comparisons reinforce the belief that "thin is equaled with beauty," occasionally in its most extreme manifestations, and consequently drive the internalization of thinness into one's ideal self-concept (Vandenbosch & Eggermont, 2012).

Moreover, social media platforms are often characterized by information overload, which exhibits a significant positive correlation with shifts in attitudinal dispositions (Fu et al.,

2020; Wang et al., 2021). One key driver of such attitudinal shifts is algorithmic bias. Van Bavel et al. (2024) stated that personalized algorithms, which aim to capture users' attention, lead to exaggerated belief content instead of reality, which in turn reinforces these attitudinal dispositions. In other words, the more an individual is exposed to thin-ideal posts, the more she internalizes the objectified beauty norm, even if she may not have a pre-existing predisposition towards thin-ideal internalization. Exposure to substantial thin female bodies can foster conformity, which may over time escalate into obedience. The greater the pressure a woman feels to fulfill the "duty to be thin," the more likely she is to internalize thinness as an aesthetic standard (Wu et al., 2021).

This hyperfocus on physical appearance and internalizations of others' evaluations on one's own body perpetuates self-objectification (Moradi & Huang, 2008), leading individuals to reduce their own bodies to merely aesthetic objects to be evaluated, which ultimately translates into diminished psychological well-being, as posited by Fredrickson and Roberts' (1997) objectification theory. Accordingly, we hypothesized that passive social media use positively correlates with internalization of the thin-ideal standard.

Hypothesis 3 *PSMU intensity will be positively correlated with thin-ideal internalization*

According to Higgins's (1987) self-discrepancy theory (SDT), self-concept is structured around three core dimensions: the actual self (perceived bodily reality), the ideal self (the ideal body image), and the ought self (the body image that one believes should be achieved). Among these dimensions, the ideal self is closely linked to the internalization of thin-ideal standards. Exposure to idealized media images (e.g., thin models on social media) can activate self-discrepancies and widen the perceived gaps between these self-identities (Vartanian, 2012). When a discernible discrepancy emerges between one's actual self and this internalized ideal

self, psychological distress frequently manifests as body dissatisfaction. Thus, we hypothesize that internalization of the thin-ideal standard is positively correlated with body dissatisfaction. A study conducted by Keery et al. (2004) provided evidence consistent with this assumption, showing that internalization serves as a partial mediator of the association between media influence and body dissatisfaction.

Hypothesis 4 *Thin-ideal internalization will be positively correlated with body dissatisfaction*

1.4.2 Body dissatisfaction

Body dissatisfaction — negative attitudes toward one's own body shape — is widely understood to arise primarily from a perceived disparity between one's ideal body image and actual physical appearance (Heider et al., 2018; Quittkat et al., 2019). Social media platforms intensify body comparison to an unprecedented degree by exposing users to an unprecedented volume of other users' appearance-focused content. Such comparisons frequently give rise to an actual–ideal discrepancy, which is consistently linked to heightened body dissatisfaction across women of all ages (Quittkat et al., 2019; Sanzari et al., 2023; Vartanian, 2012). Vartanian (2012) found that, within the Tripartite Influence Model (Thompson et al., 1999), chronic exposure to social media most greatly intensifies body dissatisfaction specifically among young women with high actual-ideal discrepancy.

In addition, Spix et al. (2023) highlight the role of operant conditioning in the development and maintenance of anorectic food restriction, wherein avoidance behaviors are reinforced through dual pathways: positive reinforcement (e.g., receiving social compliments for a thin physique) and negative reinforcement (e.g., evading criticism by adhering to restrictive diets). Within this context, social media can function as both a positive and a negative

reinforcing agent. On the one hand, social media platforms confer a distinct glorification and visibility upon slimness, framing the attainment of thinness as a marker of personal success, a core component of thin-ideal internalization. Posts showcasing culturally idealized bodies get tons of compliments, reinforcing the individual's effort to maintain her body size in order to stick to these standards. On the other hand, in the current social climate, individuals with larger bodies face pervasive societal disdain, with dominant attitudes ranging from perceptions of ethical failure to overt political discrimination (Afful & Ricciardelli, 2015). Consequently, those whose online self-presentations deviate from socioculturally prescribed "ideal body" standards risk becoming targets of online hostility, including harassment and cyberbullying, particularly among younger users (Sobkin & Fedotova, 2021). Females with similar body size who are exposed to such content may internalize those sharp criticisms into their own body shapes, increasing their body dissatisfaction. Therefore, passive social media use is hypothesized to be positively associated with body dissatisfaction.

Hypothesis 5 *PSMU will be positively linked to body dissatisfaction*

Body dissatisfaction is widely regarded as an important causal factor of developing AN (see, e.g., Cash & Brown, 1987; Cash & Deagle, 1997; Friederich et al., 2010; Lantz et al., 2018). A study conducted by Van Den Berg et al. (2007) suggested that body comparison through media significantly predicted females' body dissatisfaction, with significant direct effects of depressive mood and low self-esteem. Moreover, thin-ideal internalization reinforces the ideal self (pursuing thinness), while social pressure heightens ought self (should be thin) which may lead to a blurred distinction of ideal self and ought self such that 'being thin' becomes both a personal aspiration and a social obligation. Under such vague conditions, the distinction between actual-ideal discrepancy and actual-ought discrepancy becomes less

meaningful. When the discrepancy occurs, it will trigger an individual's agitation-related emotions (e.g., shame), intensify body dissatisfaction and adopt maladaptive eating behaviors, which ultimately heighten the risk of developing AN (Vartanian, 2012). An 8-year longitudinal study found that girls in the top quartile of body dissatisfaction showed a fourfold increase in the incidence of eating disorder onset, which underscores the strong predictive power of high body dissatisfaction on risk of developing eating pathology (Stice et al., 2011). Thus, we assume that body dissatisfaction will be positively related to the risk of developing AN.

Hypothesis 6 *Body dissatisfaction will be positively related to the risk of developing AN*

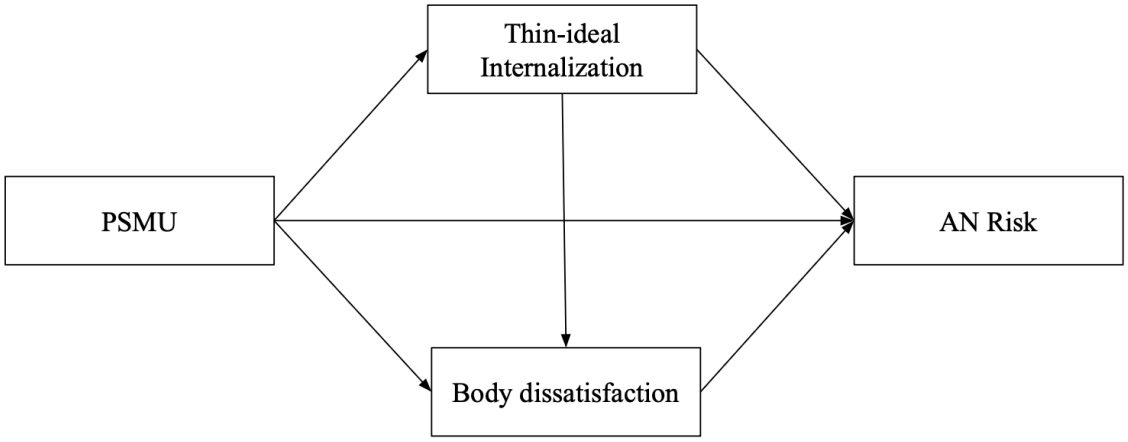
1.5 Proposed Model

This study is situated in the Chinese social media environment and cultural context. To reduce confounding from cross-border cultural exposure and acculturation associated with long-term overseas residence, we restricted the sample to Chinese residents living in mainland China and excluded Chinese nationals with long-term overseas residence. It seeks to investigate the underlying pathways of AN development and offers actionable insights for designing targeted prevention strategies for high-risk populations (i.e., Chinese females aged from 18-25). This study hypothesized a mediated pathway whereby intensive social media engagement cultivates internalization of societal thin ideals, subsequently exacerbating body image dissatisfaction, thereby increasing vulnerability to AN development.

Hypothesis 7 *Thin-ideal internalization and body dissatisfaction sequentially mediates the relationship between passive social media use intensity and risk of developing AN*

Figure 1

The proposed model of sequential mediation effects of thin-ideal internalization and body dissatisfaction on the relationship between PSMU and AN risk



Note. PSMU = Passive Social Media Usage; AN = Anorexia Nervosa.

2. Method

2.1 Study aim, design, and setting

This study aimed to test whether thin-ideal internalization and body dissatisfaction sequentially mediate the association between passive social media use and anorexia nervosa risk among Chinese young women. A cross-sectional survey design was employed. The study was conducted online in mainland China between 31 December 2025 and 21 January 2026, with participants recruited through WeChat and WhatsApp chat groups.

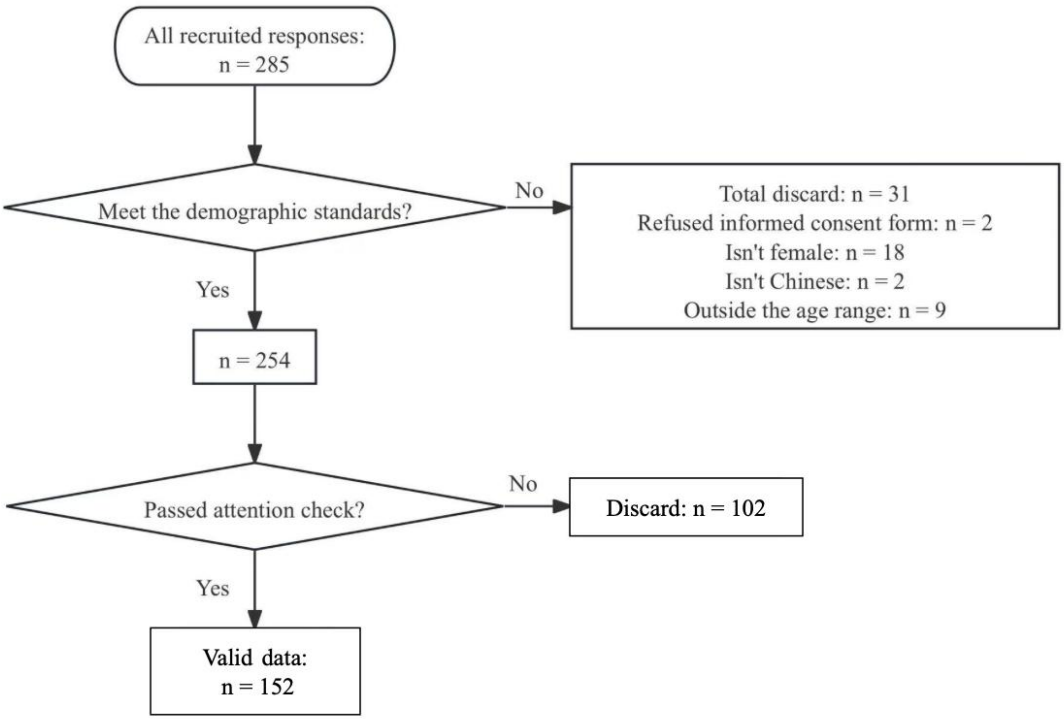
2.2 Participants and Procedures

*The participants were recruited through different chat groups on WeChat and WhatsApp, with snowball sampling. The participants were young Chinese females aged from 18 to 24. This age range was selected as it represents a critical period for AN formation and high engagement with social media. The Qualtrics survey link was posted in the chat groups on WhatsApp and WeChat. Before commencing the survey, participants were required to complete an electronic informed consent form, informing them of their data confidentiality, anonymity, and their unconditional right to withdraw at any time. One attention checking item (i.e., "Select strongly agree for this item") was embedded in the survey to guarantee the data fidelity. Participants were excluded if they were Chinese nationals with long-term overseas residence, failed the embedded attention check, or provided incomplete or invalid responses. Upon completion, participants received a unique completion code to claim their result and a debriefing. The survey was conducted from 31 December 2025 to 21 January 2026. Using G*Power 3.1.9.6 (F tests, linear multiple regression: R^2 deviation from zero) and considering five predictors (three variables and two covariates), a significance level of 0.05, a power level of 0.8, and an effect size of 0.1, a minimum sample size of 134 was required.*

After rigorous data screening, 152 valid data points out of 285 total responses entered the final analysis, exceeding the sample size threshold of 134, ensuring sufficient statistical power. The average age of the participants was 21.42 (SD = 2.41; range = 18-24). The average Body Mass Index (BMI) was 20.47 (SD = 2.39; range = 15.98-36.85). The average SES was 5.72 (SD = 1.34; range = 3-9). None of the participants was from an immigrant family.

Figure 2

Sample recruitment, screening, and exclusion process



2.3 Measures

All survey items were translated from English into Chinese. A translation–back-translation procedure was employed, and ambiguous expressions were revised during translation, to ensure semantic equivalence between the original and Chinese versions. All variables were assessed using self-report questionnaires.

2.3.1 Family Socioeconomic Status

Subjective family SES was assessed using the MacArthur Scale of Subjective Social Status (MacArthur SSS; Adler et al., 2000). After viewing a drawing of a ten-rung ladder and

learning that it depicts a person's position in society, participants estimated their own standing on the ladder. The score ranges from 1 to 10, where the higher scores represent higher SES they view themselves.

2.3.2 Passive social media use intensity

PSMU intensity was assessed using the Passive Active Use Measure - Passive Subscale (PAUM-P; Gerson et al., 2017). The original scale measured the frequency of activity on Facebook. We adapted the items to a more general "social media" construct and listed examples of widely used Chinese platforms (i.e., Rednotes, Weibo, and Wechat Moments). A sample item is "How often do you check someone is up to when you are on social media?". The participants rated their frequency of engagement on social media activities on a four-item five-point Likert scale (1 = Never, 5 = Very frequently). A higher score refers to a higher frequency of passive social media use (e.g., scrolling). This subscale demonstrated acceptable internal consistency given the scale length, with an average Cronbach's alpha value of .67, supporting its reliability for capturing passive SMU patterns.

2.3.3 Thin-ideal internalization

The Internalization - Thin/Low body fat subscale from the Sociocultural Attitudes Toward Appearance Questionnaire-4-Revised (Female Version) (SATAQ-4R-F) was employed to measure the level of internalizing the thin-ideal standard. A sample item is " I want my body to look very thin". This subscale comprises four items rated on a five-point Likert scale, ranging from 1 = definitely disagree to 5 = definitely agree. Higher scores reflect stronger endorsement of thin-ideal internalization. It showed good internal consistency with Cronbach's alpha =.86.

2.3.4 Body dissatisfaction

The Eating Disorder Inventory-3-Body Dissatisfaction subscale (EDI-3-BD; Garner, 2004) was used to measure an individual's dissatisfaction with their overall body size and specific body parts that eating disorder sufferers find particularly problematic (i.e., stomach, hips, thighs, buttocks). A sample item is "I think my stomach is too big". Participants answered this 10-item 6-point scale ranging from 1 = always to 6 = never, where higher scores represent lower levels of body dissatisfaction. Reverse scoring was adopted so that a higher score indicates higher body dissatisfaction. The Cronbach's alpha was .91 in this study, showing an excellent internal consistency.

2.3.5 Risk of developing AN

The Eating Disorder Examination Questionnaire - Short (EDE-QS; Fairburn & Beglin, 1994), which is derived from EDE-Q, was administered to screen the risk of developing AN. A sample item is " Have you been deliberately trying to limit the amount of food you eat to influence your weight or shape (whether or not you have succeeded?)" It is a twelve-item four-point scale testing the risky eating disorder features occurring in the past 7 days, ranging from 0 = no days to 3 = 6-7 days, with 4 factors of restraint, eating concern, shape concern, and weight concern. Higher scores indicate more severe disordered eating patterns. It demonstrated an excellent internal consistency with Cronbach's alpha = .91.

2.4 Statistical analyses

First, confirmatory factor analysis (CFA) was conducted to assess the construct validity of the measurement model. Descriptive statistics, reliability (Cronbach's α), and Pearson

correlations were then calculated. To test the hypothesized sequential mediation model, structural equation modeling (SEM) was performed using Jamovi (version 2.6.26). Item parceling was used to simplify the model and improve model fit, which is particularly suitable for small-sample SEM (Matsunaga, 2008). The factorial algorithm was used to parcel items (Rogers & Schmitt, 2004). Multicollinearity was assessed using the variance inflation factor (VIF). Due to the limited sample size, a separate path analysis was conducted to examine the effects of BMI and SES on AN risk. Indirect effects were tested using 5,000 adjusted bias-corrected bootstrap samples. Finally, an exploratory post hoc moderation analysis was conducted to examine whether SES moderated the association between PSMU and body dissatisfaction. Statistical significance was set at $p < .05$.

3. Results

3.1 Normality and Multicollinearity Checks

Data assumptions were checked to justify the use of parametric tests. The Shapiro–Wilk test results did not violate the assumption of normality (Shapiro–Wilk W = .99, p = .386). To assess multicollinearity, variance inflation factor (VIF) values were examined, which ranged from 1.160 to 1.661, far below the rule of thumb of 10 (O'brien, 2007).

3.2 Confirmatory Factor Analysis, Reliability Analysis, and Correlation Analysis

Before testing the hypotheses, a confirmatory factor analysis (CFA) was conducted to assess the construct validity of the scales. The measurement model is acceptable at the margin: $\chi^2(371) = 698.83$, $p < .001$, comparative fit index (CFI) =.88, Tucker-Lewis index (TLI) =.86, root mean square error of approximation (RMSEA) = .074, standardized root mean square residual (SRMR) = .074. Even if TLI and CFI values were slightly under the conventional threshold of .90, χ^2/df ratio was far below 3, and both RMSEA and SRMR were within the acceptable range (< .08), indicating that the measurement model fit was basically acceptable (Marsh et al., 2004). All factor loadings exceeded the recommended threshold of .50 (Hu & Bentler, 1999), ranging from .53 to .85.

Passive social media use was significantly positively correlated with internalization of the thin-ideal standard, body dissatisfaction, and risk of developing AN ($r = .27$, $p < .001$; $r = .29$, $p < .001$; $r = .34$, $p < .001$). Internalization of the thin-ideal standard positively predicted body dissatisfaction and risk of developing AN ($r=.51$, $p<.001$; $r=.47$, $p<.001$). Body dissatisfaction positively relates to AN risk ($r= .65$, $p<.001$). These relationships offer

preliminary support for some of our hypotheses and justify a basis for further mediation analysis.

Table 1

Descriptives, Reliability and Correlation Among Variables (N = 152)

Variable	*M*	*SD*	*1*	*2*	*3*	*4*
1. Passive social media use	*3.05*	*0.66*	*(.67)*			
2. Thin-ideal internalization	*3.40*	*1.08*	*.27****	*(.86)*		
3. Body dissatisfaction	*3.15*	*0.87*	*.29****	*.51****	*(.91)*	
4. AN risk	*24.97*	*7.76*	*.34****	*.47****	*.65****	*(.91)*

*Note. Values in the diagonal parentheses are Cronbach's alpha. *** p < .001.*

3.3 Examination of the Sequential Mediation Model

Based on the provided structural equation model (SEM) output from Jamovi (interactive), a structural equation model was specified with passive social media use as the latent exogenous variable, thin-ideal internalization as the first latent endogenous variable, body dissatisfaction as the second latent endogenous variable, and AN risk as the third endogenous variable. The model demonstrated excellent model fit: $\chi^2(21) = 24.763$, $p = .258$, CFI = .995, TLI = .992, RMSEA = .034, SRMR = .024 (Hu & Bentler, 1999).

As presented in Table 2, PSMU intensity significantly predicted risk of developing AN ($\beta = .201$, $p < .05$). Similarly, internalization of the thin-ideal standard positively predicted AN risk ($\beta = .248$, $p < .05$). PSMU intensity significantly predicted internalization of the thin-ideal standard ($\beta = .408$, $p < .001$), which in turn predicted greater body dissatisfaction ($\beta = .464$, p

< .001). Body dissatisfaction further significantly predicts AN risk (β = .375, p < .001), providing support to H1, H2, H3, H4 and H6.

Contrary to our expectations, PSMU intensity did not significantly predict body dissatisfaction, indicating that its effect may operate indirectly via thin-ideal internalization, H5 was not supported. These findings may suggest there's a sequential mediation model in which thin-ideal internalization and body dissatisfaction link PSMU to AN risk.

Table 2

Sequential mediation analysis (N = 152)

Regression		*Coefficients*	
Dependent Variable	*Independent Variable*	*B*	*β*
Internalization of thin-ideal standard	*Passive use of social media*	*0.896****	*0.408****
Body dissatisfaction	*Passive use of social media*	*0.338*	*0.172*
	Internalization of thin-ideal standard	*0.415****	*0.464****
AN risk	*Passive use of social media*	*0.310**	*0.201**
	Internalization of thin-ideal standard	*0.174**	*0.248**
	Body dissatisfaction	*0.295****	*0.375****

*Note. B = Path coefficients. β = Standardized coefficients. *** p < .001, * p < .05*

3.4 Bootstrap Test of Sequential Mediation Model

A bootstrap analysis utilizing 5000 adjusted bias-corrected bootstrap samples was conducted to measure the statistical significance of the indirect effects. As demonstrated in Table 3, PSMU intensity influenced AN risk through a significant sequential mediation pathway involving thin-ideal internalization and body dissatisfaction (β = .096, p < .05). The direct

influence of PSMU intensity on AN risk was significant, indicating thin-ideal internalization and body dissatisfaction serve as partial mediators, partially supporting H7. This sequential mediation model accounted for 43.6% of the variance in the risk of developing AN in Chinese young adult girls. The sequential mediation model is illustrated in Figure 3.

In addition, body dissatisfaction is found to mediate the relationship between internalization and AN risk (β = .206, p < .05).

Table 3

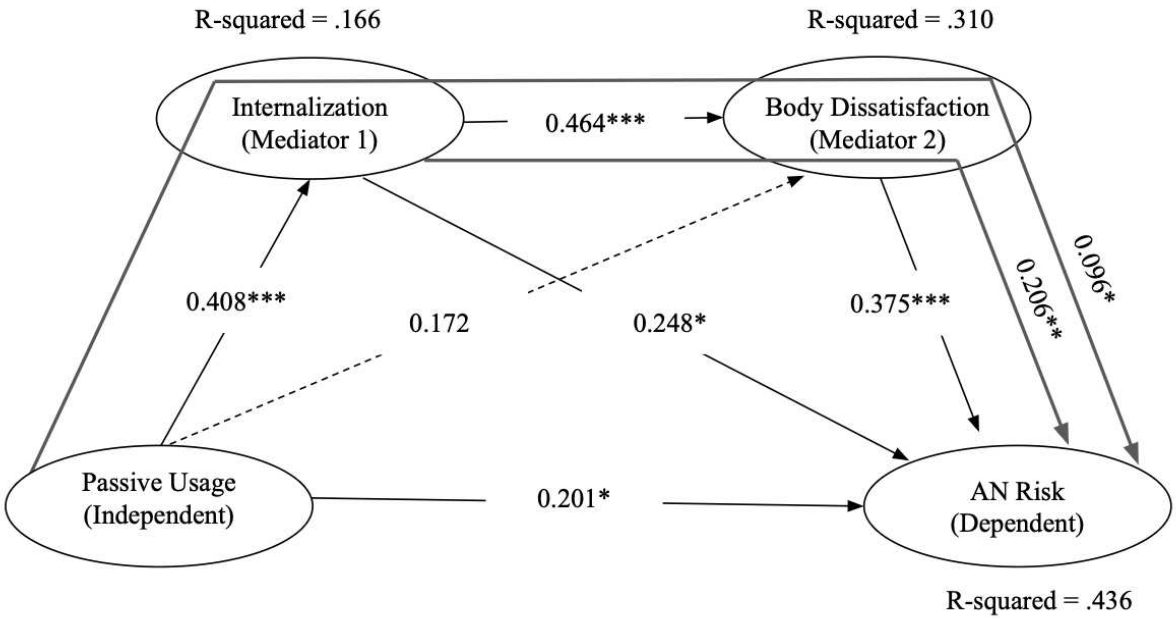
Indirect effect of passive social media use on risk of AN via internalization and body dissatisfaction

Path	*B*	*β*	*SE*	*95% CI*
Passive use of social media → Internalization → AN risk	*0.152*	*0.084*	*0.105*	*[-0.018, 0.409]*
Passive use of social media → Body dissatisfaction → AN risk	*0.033*	*0.018*	*0.110*	*[-0.258, 0.183]*
Internalization → Body dissatisfaction → AN risk	*0.138***	*0.206***	*0.048*	*[0.068, 0.278]*
Passive use of social media → Internalization → Body dissatisfaction → AN risk	*0.173**	*0.096**	*0.084*	*[0.060, 0.457]*

*Note. Internalization = internalization of the thin-ideal standard, AN = Anorexia Nervosa. Bootstrap sample size = 5000. B = Unstandardized indirect path coefficient (estimate), β = Standardized indirect path coefficient, SE = Standard Error (bootstrap), 95% CI: 95% Confidence Interval (bias-corrected bootstrap; intervals that do not include zero indicate statistical significance). **p < .01, *p < .05.*

Figure 3

Mediating effects of internalization of thin-ideal and body dissatisfaction on the relationship between passive usage of social media and AN risk



*Note. Bold arrows represent statistically significant mediation paths. Solid arrows represent statistically significant regression effects on each variable. Dashed arrows represent non-significant paths. ***p<.001, **p < .01, *p < .05.*

3.5 Covariates Effect on the Current Model

Due to the limited sample size, the main SEM could not include all covariates simultaneously. Therefore, a separate path analysis was conducted to specifically examine the potential influence of BMI and SES on the AN risk and two proposed mediators (internalization of the thin-ideal standard and body dissatisfaction). Both BMI and subjective perceived SES

showed a significant direct effect on AN risk (β =.165, p <.01; β =.177, p <.01). Body dissatisfaction mediated the relationship between BMI and risk of AN (β = .037, p < .01), as well as the relationship between SES and risk of AN (β = −.057, p < .01), suggesting that higher BMI and lower SES may increase AN risk through elevated body dissatisfaction. After considering the covariates, the sequential indirect effect of internalization of the thin-ideal standard and body dissatisfaction on the relationship between PSMU and risk of AN was still significant (β = .063, p < .01). The results basically aligned with SEM results, demonstrating the stability of the model after accounting for SES and BMI as covariates.

Table 4

Indirect effect of SES and BMI on the sequential mediation model

Path		*B*	*β*	*SE*	*CI*
Total	*PSMU → AN risk*	*0.381****	*0.333****	*0.082*	*[0.220, 0.543]*
Direct	*SES → AN risk*	*0.092***	*0.165***	*0.033*	*[0.028, 0.156]*
	BMI → AN risk	*0.055***	*0.177***	*0.018*	*[0.020, 0.091]*
	PSMU → AN risk	*0.156**	*0.136**	*0.068*	*[0.022, 0.290]*
Indirect	*BMl → body dissatisfaction → AN risk*	*0.037***	*0.117***	*0.012*	*[0.014, 0.059]*
	SES → body dissatisfaction → AN risk	*-0.057***	*-0.102***	*0.020*	*[-0.097,-0.017]*
	PSMU → Internalization → body dissatisfaction → AN risk	*0.072***	*0.063***	*0.026*	*[0.021, 0.123]*

*Note. PSMU = Passive social media use, AN = Anorexia nervosa, Internalization = thin-ideal internalization, 95% CI: 95% Confidence Interval (intervals that do not include zero indicate statistical significance). ***p<.001, **p < .01, *p < .05.*

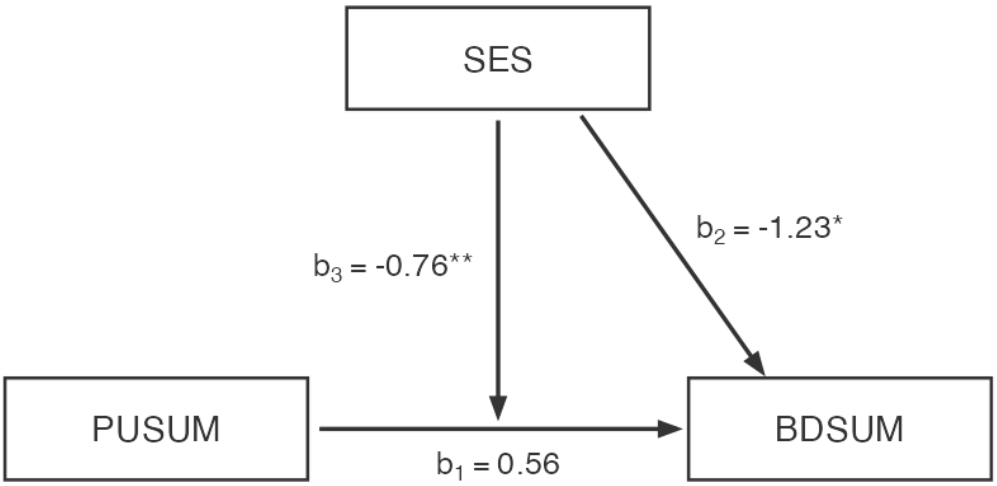
3.6 Exploratory Post Hoc Analysis: The Moderating Role of SES

Although H5 (the direct effect of PSMU on body dissatisfaction) was not supported in the main SEM model, we conducted a separate exploratory post hoc analysis to further probe the unexpected null direct effect with SES as the moderator. Before assessing the interaction effect, multicollinearity was re-examined, and the VIF values for the testing variables (i.e., SES, body dissatisfaction and PSMU), ranged from 1.013 to 1.165, indicating no multicollinearity concerns.

Results revealed a significant interaction effect between PSMU and SES on body dissatisfaction ($b = -0.76$, $SE = 0.274$, $p < .01$; see Figure 4 for path diagram). Simple slope analyses indicated that the positive association between PSMU and body dissatisfaction was highly significant among women with lower SES (i.e., -1 SD) ($b = 1.575$, $SE = 0.685$, $p < .01$), but non-significant among women with higher SES (i.e., +1 SD) ($b = -0.461$, $SE = 0.631$, $p = .367$). This suggests that the detrimental impact of PSMU on body image is primarily concentrated among lower-SES women.

Figure 4

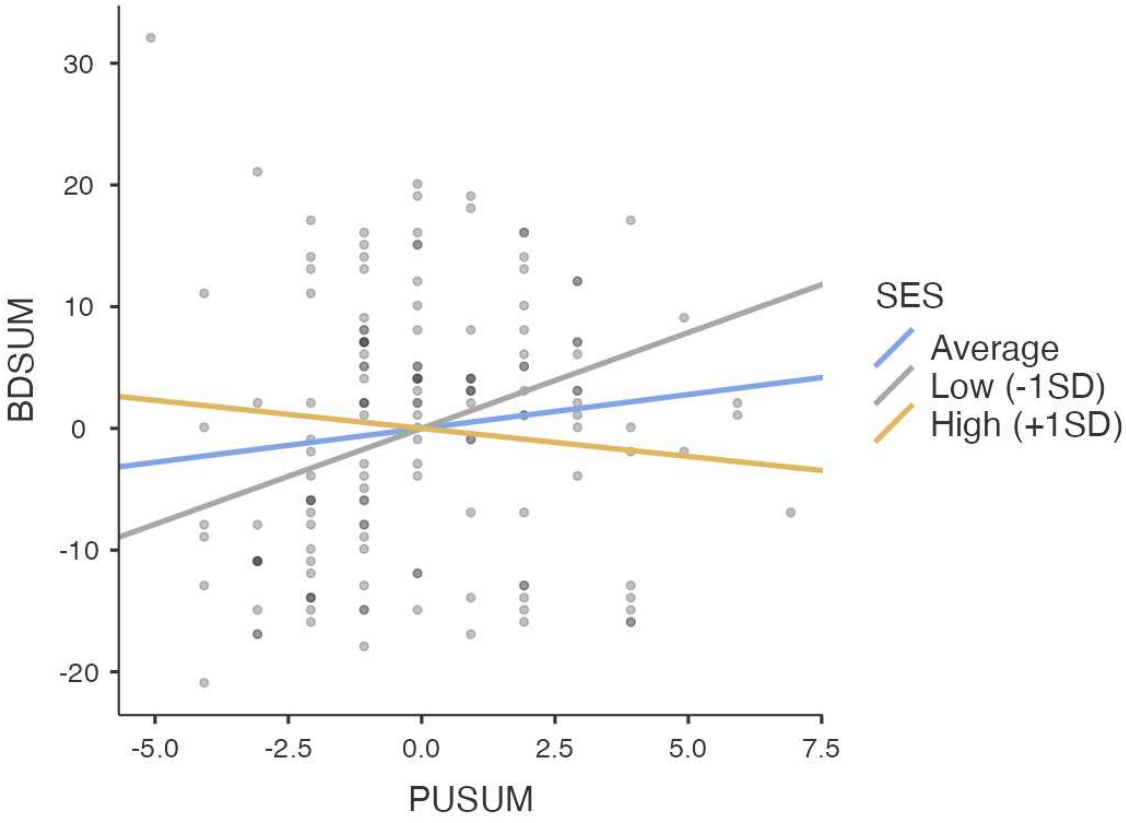
Moderation effect of SES on the relationship between Passive Social Media Use and Body Dissatisfaction



*Note. PUSUM = passive social media use; BDSUM = Body dissatisfaction. **p < .01, *p < .05*

Figure 5

Simple slopes for the moderating effect of SES on the relationship between Passive Social Media Use (PSMU) and Body Dissatisfaction. The positive effect of PSMU on body dissatisfaction is only significant for women with lower SES.


30
20
10
0
-10
-20
BDSUM
-5.0
-2.5
0.0
2.5
5.0
7.5
PUSUM
SES
Average
Low (-1SD)
High (+1SD)

4. Discussion

The study supported our psychological perspective on the association between passive social media usage and AN risk. Analyzing a survey of 152 Chinese young women aged from 18 to 24 from social media platforms, we found that thin-ideal internalization and body dissatisfaction sequentially explain this relationship. The proposed model explained 43.6% of the variance in AN risk, indicating substantial explanatory power while also suggesting the presence of other potential factors left unexamined. Body mass index (BMI) and socioeconomic status (SES) showed a significant direct effect on risk of developing anorexia, the path analysis result suggested that the proposed model remains robust after accounting for these variables. Importantly, the results suggested that the influence of social media on eating pathology did not operate through immediate emotional responses, as PSMU did not significantly predict body dissatisfaction (H5 was not supported). Instead, its effects were better explained by a gradual psychological process in which repeated exposure reinforced internalized ideals and promoted maladaptive self-evaluation processes. In addition, body dissatisfaction mediated the relationship between internalization of the thin-ideal standard and AN risk, highlighting its critical role in the development of eating pathology. These findings extend existing literature by clarifying the psychological mechanisms underlying the association between passive social media use pattern and eating pathology in the Chinese context.

4.1 Theoretical Contributions

The current study makes three main theoretical contributions. First, we contribute to cultural psychology from a feminist theoretical perspective by identifying the unique aesthetic environment of the contemporary Chinese context, which may heighten AN risk. In this context, beauty ideals are shaped by multiple sources, including both Western and East Asian influences

(e.g., Japan and South Korea), as well as China's unique historical trajectory, state gender politics, and the manifestation of patriarchal micro-power on women's bodies (Liu & Li, 2024; Shao, 2023).

Secondly, although a wealth of literature has examined social media use and AN as well as social media use patterns and mental illness, few studies have investigated the relationship between social media use patterns and AN. We extend this literature by surveying the PSMU intensity and AN risk among Chinese young women. The results revealed that PSMU showed a positive association with AN risk. The more frequently young girls use social media passively, the more risk they are exposed to developing AN.

Crucially, we discovered that body dissatisfaction did not come directly from PSMU. Rather, its effect was fully mediated by thin-ideal internalization. In other words, only among girls predisposed to thin-ideal internalization can PSMU be identified as a risk factor. For girls without this predisposition, the operant conditioning mechanism may not be activated, wherein thinness is socially rewarded and larger bodies are stigmatized (Spix et al., 2023). This finding further suggests that patriarchal aesthetics are not imposed on girls through explicit force, but are instead disseminated via algorithmic curation, leading women to 'voluntarily' internalize these standards and subsequently giving rise to body dissatisfaction. Moreover, PSMU directly predicts AN risk but not body dissatisfaction, suggesting that PSMU may influence AN risk through other mediators (e.g., depressive emotions; Escobar-Viera et al., 2018).

The finding that thin-ideal internalization predicts body dissatisfaction aligns with self-discrepancy theory (Higgins, 1987), which posits that perceived discrepancies between ideal body shape and actual body shape lead to increased body dissatisfaction, suggesting that the internalization of thin-ideal standards could amplify the perceived discrepancy, thereby

contributing to negative body evaluations. Our finding of the mediation role of thin-ideal internalization and body dissatisfaction between passive social media usage and AN risk aligns with the recent finding that social media content relates to higher internalization of current beauty standards and higher body dissatisfaction (Blackburn & Hogg, 2024).

Thirdly, BMI and SES were found to have significant influences within the current model. Specifically, BMI was positively associated with body dissatisfaction, which is consistent with prior research indicating that higher body weight is linked to more negative body evaluations as they may have a greater ideal-actual gap (Vartanian, 2012). In contrast, SES was found to negatively predict body dissatisfaction. This finding is inconsistent with our initial prediction that higher SES would be associated with greater body dissatisfaction due to elevated aesthetic pursuit (Lindberg & Hjern, 2003). One possible explanation for this inconsistency lies in the protective role of self-esteem associated with higher SES (Raymore et al., 1994; Von Soest et al., 2017). Higher self-esteem is also found to have a reciprocal relationship with better mental health outcomes, thus providing a buffering effect (Moksnes & Reidunsdatter, 2019). This relationship appears to be greatest among adolescent girls (Bolognini et al., 1996; Moksnes & Reidunsdatter, 2019). This buffering effect may help explain the negative association observed between SES and body dissatisfaction in the present study.

Our post hoc analysis further provides evidence for this assumption. The crossover interaction depicted in Figure 5 offers a sociological insight that the detrimental impact of PSMU on body image is not universal, but is strongly stratified by SES. For lower-SES women, who often lack the psychological resources (e.g., self-esteem) and critical media literacy to resist algorithmically curated patriarchal beauty standards, passive scrolling directly translates into body dissatisfaction. Conversely, higher-SES women appear immune to this translation, which

could be attributed to greater access to protective resources, such as a stronger sense of self-worth independent of appearance, or the ability to curate their social media feeds to align with their social standing (Mond et al., 2010). The null main effect (H5) in the original model was thus a statistical artifact, an averaging of the severe harm experienced by lower-SES women and the relative resilience of higher-SES women. This intersection of class and gender highlights the need for class-sensitive prevention programs.

4.2 Practical implications

The current study has practical implications at both individual and educational prevention levels. By clarifying these underlying mechanisms, we call on young women to engage with social media in an adaptive way to protect their mental health, as the mediator, body dissatisfaction, not only functions as a proximal risk factor for anorexia nervosa but is also associated with broader adverse psychological outcomes, including low self-esteem and reduced well-being (Moksnes & Reidunsdatter, 2019). Schools and mental health institutions may launch mental health education programs targeting at-risk groups, thereby facilitating primary prevention.

In a broader sense, our study sheds light on the question: How can Chinese young women protect themselves from patriarchal beauty standards? Longitudinal evidence indicates that greater time spent on social media predicts increased internalization over time (Riehm et al., 2019), suggesting that reduced exposure may attenuate this process and, in turn, lower body dissatisfaction. Young women may also engage with alternative content, such as feminist-oriented media that de-emphasizes appearance-based evaluation and encourages girls to

compare with their past selves. This may help counteract self-objectification and buffer against upward social comparison (Moradi & Huang, 2008).

4.3 Limitations and Directions for Future Research

Several limitations of the study should be acknowledged. First, passive social media use was assessed using a 5-point Likert scale that captures the intensity (or frequency) of passive use but does not account for the specific content participants were exposed to. Prior research has raised concerns regarding the validity of existing measures that capture passive social media use (PSMU; Valkenburg et al., 2021). Future studies could adopt more precise assessment methods, such as diary or experience sampling methods, to collect more detailed data, including the proportion and nature of viewed content (e.g., idealized body images) during passive social media use.

Second, although BMI and SES were found to directly predict AN risk, they were not included in the main structural equation model due to the limited sample size. As a result, the extent to which these variables may influence the proposed model remains unclear. This highlights the importance of controlling for these variables in future studies with larger sample sizes. Future studies could be conducted on larger and more diverse samples from other sources to verify external validity. Further research could also conduct sensitivity analyses to determine whether the observed effects are stronger or weaker across different levels of BMI and SES.

Moreover, because of the limited sample size, an item parceling method was employed, which may result in biased parameter estimates and an insufficient understanding of the underlying relationships (Bandalos, 2002; Bandalos & Finney, 2001). While the use of item parceling and separate path analysis served as a methodologically sound approach, future

studies should employ larger samples (e.g., N > 300) to test a full latent variable SEM incorporating covariates, thereby verifying the robustness of the current findings..

Third, the cross-sectional design of this study limits the ability to draw causal inferences. Although a sequential mediation model was proposed, the temporal ordering of variables cannot be established. Future longitudinal research could verify the directionality of the proposed pathways.

5. Conclusions

This study provides empirical evidence for a sequential mediation pathway linking passive social media use to anorexia nervosa risk among Chinese young women, via thin-ideal internalization and body dissatisfaction. Notably, the effect of passive social media use on body dissatisfaction was stratified by socioeconomic status, with lower-SES women being particularly vulnerable to the detrimental impact of algorithmically curated patriarchal beauty standards. These findings hold both theoretical and practical significance. Theoretically, they integrate feminist perspectives with psychological mechanisms, illuminating how societal beauty ideals are internalized at the individual level. Practically, they highlight the urgent need for class-sensitive and gender-informed prevention programs that target thin-ideal internalization and promote critical media literacy, thereby mitigating AN risk among young women in contemporary China.

List of Abbreviations

AN: Anorexia nervosa

BMI: Body mass index

CFA: Confirmatory factor analysis

CFI: Comparative fit index

CI: Confidence interval

EDE-QS: Eating Disorder Examination Questionnaire – Short

EDI-3-BD: Eating Disorder Inventory-3 – Body Dissatisfaction subscale

PAUM-P: Passive Active Use Measure – Passive Subscale

PSMU: Passive social media use

RMSEA: Root mean square error of approximation

SATAQ-4R-F: Sociocultural Attitudes Toward Appearance Questionnaire-4-Revised (Female Version)

SD: Standard deviation

SDT: Self-discrepancy theory

SE: Standard error

SEM: Structural equation model

SES: Socioeconomic status

SMU: Social media use

SRMR: Standardized root mean square residual

TLI: Tucker-Lewis index

VIF: Variance inflation factor

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with the Declaration of Helsinki. The research protocol was reviewed and approved by the research ethics review process of Lingnan University (approved by the Chief Supervisor, Prof. Vivian Lun, on 10 December 2025). Electronic informed consent to participate was obtained from all individual participants included in the study prior to their participation. Participants were informed of the purpose of the study, data confidentiality, anonymity, and their unconditional right to withdraw at any time.

Consent for publication

Not applicable. This study does not contain any individual person's data in any form that would require consent for publication.

Availability of data and materials

The datasets generated and analyzed during the current study are not publicly available due to participant privacy and ethical restrictions, but are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Authors' contributions

S.Y.W. and M.C.L. conceptualized and designed the study. S.Y.W. conducted the survey, performed the statistical analyses, and drafted the manuscript. M.C.L. provided critical revisions and supervised the project. All authors read and approved the final manuscript.

Acknowledgements

We would like to thank Prof. Jay Xu Jie for his generous guidance on interpreting the data.

References

Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. Health Psychology, 19(6), 586-592.

Afful, A. A., & Ricciardelli, R. (2015). Shaping the online fat acceptance movement: talking about body image and beauty standards. Journal of Gender Studies, 24(4), 453–472. https://doi.org/10.1080/09589236.2015.1028523

Austin, J. L., & Smith, J. E. (2008). Thin ideal internalization in Mexican girls: A test of the sociocultural model of eating disorders. International Journal of Eating Disorders, 41(5), 448–457. https://doi.org/10.1002/eat.20529

Ayrolles, A., Clarke, J., Godart, N., André-Carletti, C., Barbe, C., Bargiacchi, A., Blanchet, C., Bergametti, F., Bertrand, V., Caldagues, E., Caquard, M., Castellotti, D., Delorme, R., Dreno, L., Landou, D. F., Gerardin, P., Guessoum, S., Gicquel, L., Léger, J., . . . Stordeur, C. (2024). Early-onset anorexia nervosa: a scoping review and management guidelines. Journal of Eating Disorders, 12(1), 182. https://doi.org/10.1186/s40337-024-01130-9

Bandalos, D. L. (2002). The effects of item parceling on Goodness-of-Fit and parameter estimate bias in structural equation modeling. Structural Equation Modeling a Multidisciplinary Journal, 9(1), 78–102. https://doi.org/10.1207/s15328007sem0901_5

Bandalos, D. L., & Finney, S. J. (2001). Item parceling issues in structural equation modeling. In Psychology Press eBooks (pp. 289–316). https://doi.org/10.4324/9781410601858-15

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of

Personality and Social Psychology, 51(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Bartky, S. L. (2020b). Foucault, Femininity, and the modernization of patriarchal power. In Routledge eBooks (pp. 342–352). https://doi.org/10.4324/9781003001201-41

Bolognini, M., Plancherel, B., Bettschart, W., & Halfon, O. (1996). Self-esteem and mental health in early adolescence: development and gender differences. Journal of Adolescence, 19(3), 233–245. https://doi.org/10.1006/jado.1996.0022

Bonfanti, R. C., Melchiori, F., Teti, A., Albano, G., Raffard, S., Rodgers, R., & Lo Coco, G. (2024). The association between social comparison in social media, body image concerns and eating disorder symptoms: A systematic review and meta-analysis. Body Image, 52, 101841. https://doi.org/10.1016/j.bodyim.2024.101841

Cash, T. F., & Brown, T. A. (1987). Body image in anorexia nervosa and bulimia nervosa. Behavior Modification, 11(4), 487–521. https://doi.org/10.1177/01454455870114005

Cash, T. F., & Deagle, E. A. (1997). The nature and extent of body-image disturbances in anorexia nervosa and bulimia nervosa: A meta-analysis. International Journal of Eating Disorders, 22(2), 107–126. https://doi.org/10.1002/(sici)1098-108x(199709)22:2

Dahlenburg, S. C., Gleaves, D. H., & Hutchinson, A. D. (2019). Anorexia nervosa and perfectionism: A meta-analysis. International Journal of Eating Disorders, 52(3), 219–229. https://doi.org/10.1002/eat.23009

Duan, J., & Dholakia, N. (2015). The reshaping of Chinese consumer values in the social media era. Qualitative Market Research an International Journal, 18(4), 409–426. https://doi.org/10.1108/qmr-07-2014-0058

Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. Science,

196(4286), 129–136. https://doi.org/10.1126/science.847460

Escobar-Viera, C. G., Shensa, A., Bowman, N. D., Sidani, J. E., Knight, J., James, A. E., & Primack, B. A. (2018). Passive and active social media use and depressive symptoms among United States adults. Cyberpsychology, Behavior, and Social Networking, 21(7), 437–443. https://doi.org/10.1089/cyber.2017.0668

Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire? International Journal of Eating Disorders, 16(4), 363-370.

Fitzsimmons-Craft, E. E. (2017). Eating disorder-related social comparison in college women's everyday lives. International Journal of Eating Disorders, 50(8), 893–905. https://doi.org/10.1002/eat.22725

Fredrickson, B. L., & Roberts, T. (1997). Objectification Theory: toward understanding women's lived experiences and mental health risks. Psychology of Women Quarterly, 21(2), 173–206. https://doi.org/10.1111/j.1471-6402.1997.tb00108.x

Friederich, H., Brooks, S., Uher, R., Campbell, I. C., Giampietro, V., Brammer, M., Williams, S. C., Herzog, W., & Treasure, J. (2010). Neural correlates of body dissatisfaction in anorexia nervosa. Neuropsychologia, 48(10), 2878–2885. https://doi.org/10.1016/j.neuropsychologia.2010.04.036

Fu, S., Li, H., Liu, Y., Pirkkalainen, H., & Salo, M. (2020). Social media overload, exhaustion, and use discontinuance: Examining the effects of information overload, system feature overload, and social overload. Information Processing & Management, 57(6), 102307. https://doi.org/10.1016/j.ipm.2020.102307

García-Grau, E., Fusté, A., Mas, N., Gómez, J., Bados, A., & Saldaña, C. (2010). Dimensionality of three versions of the eating disorder inventory in adolescent girls. European Eating Disorders Review, 18(4), 318–327. https://doi.org/10.1002/erv.995

Garner, D. M. (2004). The eating disorder inventory-3 professional manual. Odessa, FL: Psychological Assessment Resources Inc.

Gerson, J., Plagnol, A. C., & Corr, P. J. (2017). Passive and active Facebook use measure (PAUM): Validation and relationship to the Reinforcement Sensitivity Theory. Personality and Individual Differences, 117, 81–90. https://doi.org/10.1016/j.paid.2017.05.034

Halvorsen, I., & Heyerdahl, S. (2006). Girls with anorexia nervosa as young adults: Personality, self-esteem, and life satisfaction. International Journal of Eating Disorders, 39(4), 285–293. https://doi.org/10.1002/eat.20248

Heider, N., Spruyt, A., & De Houwer, J. (2018). Body Dissatisfaction Revisited: On the Importance of Implicit Beliefs about Actual and Ideal Body Image. Psychological Belgica, 57(4), 158. https://doi.org/10.5334/pb.362

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. Psychological Review, 94(3), 319–340. https://doi.org/10.1037/0033-295x.94.3.319

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling a Multidisciplinary Journal, 6(1), 1–55. https://doi.org/10.1080/10705519909540118

Ismail, A. (2024). Observational study on the relationship between social media usage and Anorexia Nervosa; Insights from Karachi, Pakistan. Journal of the National Medical Association, 116(4), 421–422. https://doi.org/10.1016/j.jnma.2024.07.026

James N. Butcher, Jill M. Hooley, Susan Mineka & Matthew K. Nock (2021). Abnormal psychology (18th ed.).

Keery, H., Van Den Berg, P., & Thompson, J. (2004). An evaluation of the Tripartite Influence Model of body dissatisfaction and eating disturbance with adolescent girls. Body Image, 1(3), 237–251. https://doi.org/10.1016/j.bodyim.2004.03.001

Laker, V., & Waller, G. (2022). Experimental analysis of the impact of body comparison on non-clinical women. Journal of Behavior Therapy and Experimental Psychiatry, 76, 101725. https://doi.org/10.1016/j.jbtep.2022.101725

Lantz, E. L., Gaspar, M. E., DiTore, R., Piers, A. D., & Schaumberg, K. (2018). Conceptualizing body dissatisfaction in eating disorders within a self-discrepancy framework: a review of evidence. Eating and Weight Disorders - Studies on Anorexia Bulimia and Obesity, 23(3), 275–291. https://doi.org/10.1007/s40519-018-0483-4

Lee, S., Chiu, H. F. K., & Chen, C. (1989). Anorexia nervosa in Hong Kong. The British Journal of Psychiatry, 154(5), 683–688. https://doi.org/10.1192/bjp.154.5.683

Lindberg, L., & Hjern, A. (2003). Risk factors for anorexia nervosa: A national cohort study. International Journal of Eating Disorders, 34(4), 397–408. https://doi.org/10.1002/eat.10221

Li, K. (2018). Capitalization of feminine beauty on Chinese social media. Data Archiving and Networked Services (DANS). https://research.tilburguniversity.edu/en/publications/53845fed-6144-4497-9cd5-8b97c72d5340

Li, Z., Wang, L., Guan, H., Han, C., Cui, P., Liu, A., & Li, Y. (2021). Burden of eating disorders in China, 1990-2019: An Updated Systematic Analysis of the Global Burden of Disease

Study 2019. Frontiers in Psychiatry, 12, 632418. https://doi.org/10.3389/fpsyt.2021.632418

Liu, Y., & Li, X. (2023). "Pale, Young, and Slim" girls on red: a study of young femininities on social media in post-socialist China. Feminist Media Studies, 24(4), 744–759. https://doi.org/10.1080/14680777.2023.2226830

Logrieco, G., Marchili, M. R., Roversi, M., & Villani, A. (2021). The Paradox of Tik Tok Anti-Pro-Anorexia videos: How social media can promote Non-Suicidal Self-Injury and Anorexia. International Journal of Environmental Research and Public Health, 18(3), 1041. https://doi.org/10.3390/ijerph18031041

Marsh, H. W., Hau, K., & Wen, Z. (2004). In search of golden rules: Comment on Hypothesis-Testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. Structural Equation Modeling a Multidisciplinary Journal, 11(3), 320–341. https://doi.org/10.1207/s15328007sem1103_2

Martin M. A., Roberts S. (2010). Jackknife-after-bootstrap regression influence diagnostics. Journal of Nonparametric Statistics, 22, 257–269.

Matsunaga, M. (2008). Item Parceling in Structural Equation Modeling: A primer. Communication Methods and Measures, 2(4), 260–293. https://doi.org/10.1080/19312450802458935

Moksnes, U. K., & Reidunsdatter, R. J. (2019). Self-esteem and mental health in adolescents – level and stability during a school year. Norsk Epidemiologi, 28(1–2). https://doi.org/10.5324/nje.v28i1-2.3052

Mond, J., Van Den Berg, P., Boutelle, K., Hannan, P., & Neumark-Sztainer, D. (2010). Obesity, Body Dissatisfaction, and Emotional Well-Being in Early and Late Adolescence:

Findings from the Project EAT Study. Journal of Adolescent Health, 48(4), 373–378. https://doi.org/10.1016/j.jadohealth.2010.07.022

Moradi, B., & Huang, Y. (2008). Objectification Theory and Psychology of Women: A Decade of Advances and Future Directions. Psychology of Women Quarterly, 32(4), 377–398. https://doi.org/10.1111/j.1471-6402.2008.00452.x

Mustapic, J., Marcinko, D., & Vargek, P. (2015). Eating behaviours in adolescent girls: the role of body shame and body dissatisfaction. Eating and Weight Disorders - Studies on Anorexia Bulimia and Obesity, 20(3), 329–335. https://doi.org/10.1007/s40519-015-0183-2

O'brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. Quality & Quantity, 41(5), 673–690. https://doi.org/10.1007/s11135-006-9018-6

Orben, A. (2020). Teenagers, screens and social media: a narrative review of reviews and key studies. Social Psychiatry and Psychiatric Epidemiology, 55(4), 407–414. https://doi.org/10.1007/s00127-019-01825-4

Purba, A. K., Thomson, R. M., Henery, P. M., Pearce, A., Henderson, M., & Katikireddi, S. V. (2023). Social media use and health risk behaviours in young people: systematic review and meta-analysis. BMJ, e073552. https://doi.org/10.1136/bmj-2022-073552

Quittkat, H. L., Hartmann, A. S., Düsing, R., Buhlmann, U., & Vocks, S. (2019). Body dissatisfaction, importance of appearance, and body appreciation in men and women over the lifespan. Frontiers in Psychiatry, 10, 864. https://doi.org/10.3389/fpsyt.2019.00864

Raymore, L. A., Godbey, G. C., & Crawford, D. W. (1994). Self-Esteem, gender, and socioeconomic status: their relation to perceptions of constraint on leisure among

adolescents. Journal of Leisure Research, 26(2), 99–118. https://doi.org/10.1080/00222216.1994.11969948

Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A. S., Green, K. M., Pacek, L. R., La Flair, L. N., & Mojtabai, R. (2019). Associations between time spent using social media and internalizing and externalizing problems among US youth. JAMA Psychiatry, 76(12), 1266. https://doi.org/10.1001/jamapsychiatry.2019.2325

Roberts, S. R., Maheux, A. J., Hunt, R. A., Ladd, B. A., & Choukas-Bradley, S. (2022). Incorporating social media and muscular ideal internalization into the tripartite influence model of body image: Towards a modern understanding of adolescent girls' body dissatisfaction. Body Image, 41, 239–247. https://doi.org/10.1016/j.bodyim.2022.03.002

Rogers, W. M., & Schmitt, N. (2004). Parameter recovery and model fit using multidimensional composites: a comparison of four empirical parceling algorithms. Multivariate Behavioral Research, 39(3), 379–412. https://doi.org/10.1207/s15327906mbr3903_1

Sanzari, C. M., Gorrell, S., Anderson, L. M., Reilly, E. E., Niemiec, M. A., Orloff, N. C., Anderson, D. A., & Hormes, J. M. (2023). The impact of social media use on body image and disordered eating behaviors: Content matters more than duration of exposure. Eating Behaviors, 49, 101722. https://doi.org/10.1016/j.eatbeh.2023.101722

Schaefer, L. M., Burke, N. L., & Thompson, J. K. (2018). Thin-ideal internalization: How much is too much? Eating and Weight Disorders - Studies on Anorexia Bulimia and Obesity, 24(5), 933–937. https://doi.org/10.1007/s40519-018-0498-x

Shao, L. (2023). The techno-beauty myth: the self-representations of young Chinese women on social media. Journal of Gender Studies, 32(8), 964–976. https://doi.org/10.1080/09589236.2023.2207001

Smith, A., & Anderson, M. (2018, March 1). Social Media Use in 2018. Pew Research Center. https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/

Sobkin, V. S., & Fedotova, A. V. (2021). Adolescents on social media: Aggression and cyberbullying. Psychology in Russia State of Art, 14(4), 186–201. https://doi.org/10.11621/pir.2021.0412

Spix, M., Schutzeichel, F., & Jansen, A. (2023). Can you learn to starve yourself? Inducing food avoidance in the laboratory. Behaviour Research and Therapy, 166, 104340. https://doi.org/10.1016/j.brat.2023.104340

Steinglass, J. E., Sysko, R., Glasofer, D., Albano, A. M., Simpson, H. B., & Walsh, B. T. (2010). Rationale for the application of exposure and response prevention to the treatment of anorexia nervosa. International Journal of Eating Disorders, 44(2), 134–141. https://doi.org/10.1002/eat.20784

Stice, E., Marti, C. N., & Durant, S. (2011). Risk factors for onset of eating disorders: Evidence of multiple risk pathways from an 8-year prospective study. Behaviour Research and Therapy, 49(10), 622–627. https://doi.org/10.1016/j.brat.2011.06.009

Swami, V. (2013). Cultural influences on body size ideals. European Psychologist, 20(1), 44–51. https://doi.org/10.1027/1016-9040/a000150

Tian, J., He, Y., Chen, Y., Tang, Z., & Zhou, Y. (2025). Trends in the prevalence of anorexia nervosa among individuals under 45 years in China, 1992–2021: an age-period-cohort analysis. Frontiers in Public Health, 13, 1634147. https://doi.org/10.3389/fpubh.2025.1634147

Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). Exacting beauty: Theory, assessment, and treatment of body image disturbance. American

Psychological Association eBooks. https://doi.org/10.1037/10312-000

Thompson, J. K., & Smolak, L. (2001). Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment. American Psychological Association eBooks. https://doi.org/10.1037/10404-000

Turk, F., Bozdogan, A., Hughes, R., Longhurst, P., Chilvers, M., & Fitzsimmons-Craft, E. E. (2026). Social Comparison and Its Association with Disordered Eating Symptoms: A Systematic Review and Meta-Analysis. International Journal of Eating Disorders. https://doi.org/10.1002/eat.70058

Van Bavel, J. J., J., Robertson, C. E., E., Del Rosario, K., Rasmussen, J., Steve Rathje, Department of Psychology, New York University, New York, NY, USA, Department of Strategy and Management, Norwegian School of Economics, Bergen, Norway, & Department of Political Science, Aarhus University, Aarhus, Denmark. (2024). Social media and morality. In Annual Review of Psychology (Vols. 75–75, pp. 311–340) [Journal-article]. https://doi.org/10.1146/annurev-psych-022123-110258

Van Den Berg, P., Paxton, S. J., Keery, H., Wall, M., Guo, J., & Neumark-Sztainer, D. (2007). Body dissatisfaction and body comparison with media images in males and females. Body Image, 4(3), 257–268. https://doi.org/10.1016/j.bodyim.2007.04.003

Vandenbosch, L., & Eggermont, S. (2012). Understanding Sexual Objectification: a comprehensive approach toward media exposure and girls' internalization of beauty ideals, Self-Objectification, and body surveillance. Journal of Communication, 62(5), 869–887. https://doi.org/10.1111/j.1460-2466.2012.01667.x

Van Den Eijnden, R., Koning, I., Doornwaard, S., Van Gurp, F., & Ter Bogt, T. (2018). The impact of heavy and disordered use of games and social media on adolescents'

psychological, social, and school functioning. Journal of Behavioral Addictions, 7(3), 697–706. https://doi.org/10.1556/2006.7.2018.65

Van Diest, A. M. K., & Perez, M. (2012). Exploring the integration of thin-ideal internalization and self-objectification in the prevention of eating disorders. Body Image, 10(1), 16–25. https://doi.org/10.1016/j.bodyim.2012.10.004

Vartanian, L. (2012). Self-Discrepancy theory and body image. Elsevier eBooks, 11(2), 711–717. https://doi.org/10.1016/b978-0-12-384925-0.00112-7

Von Soest, T., Wagner, J., Hansen, T., & Gerstorf, D. (2017). Self-esteem across the second half of life: The role of socioeconomic status, physical health, social relationships, and personality factors. Journal of Personality and Social Psychology, 114(6), 945–958. https://doi.org/10.1037/pspp0000123

Wang, J.-L., Gaskin, J., Rost, D. H., & Gentile, D. A. (2018). The reciprocal relationship between passive social networking site (SNS) usage and users' subjective well-being. Social Science Computer Review, 36(5), 511–522. https://doi.org/10.1177/0894439317721981

Wang, Y., Dai, Y., Li, H., & Song, L. (2021). Social media and attitude change: Information booming promote or resist persuasion? Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.596071

Williams, K. C., Page, R. A., Petrosky, A. R., & Hernandez, E. H. (2010). Multi-Generational Marketing: Descriptions, Characteristics, Lifestyles, and Attitudes. Journal of Applied Business and Economics, 11(2).

Wincana, G., Rahmat, W., & Tatalia, R. G. (2022). Linguistic tendencies of anorexia nervosa on social media users facebook (Pragmatic study). Journal of Pragmatics and Discourse Research, 2(1), 1–9. https://doi.org/10.51817/jpdr.v2i1.185

Wu, H. X., Ching, B. H., He, C. C., & Li, Y. (2021). "Thinness is beauty": Predictors of anti-fat attitudes among young Chinese women. Current Psychology, 42(8), 6834–6845. https://doi.org/10.1007/s12144-021-02021-x

Zhu, X., & Bao, Z. (2018). Why people use social networking sites passively: An empirical study integrating impression management concern, privacy concern, and SNS fatigue. Aslib Journal of Information Management, 70(2), 158–175. https://doi.org/10.1108/AJIM-12-2017-0270