The effect of sexual objectification experiences on social anxiety in female university students: The mediating role of internalisation of ideal beauty and self-objectification

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ABSTRACT

Objective: To explore the influence mechanism of sexual objectified experience on female college students' social anxiety. Methods: 341 female college students were investigated by interpersonal objectification scale, ideal beauty internalization scale, body monitoring scale and social anxiety scale. Result: (1) Interpersonal and self-objectification, rational beauty internalization, rational beauty internalization and self-objectification, social anxiety were significantly positively correlated. Self-objectification was positively correlated with social anxiety. (2) The mediating effect showed that sexual objectification experience had a significant direct effect on social anxiety, and the effect value was -0.16. Ideal beauty internalization and self-objectification played a chain mediating role in the relationship between sexual objectification experience and social anxiety. The mediating effect was a masking effect, and the mediating effect value was 0.02. Conclusion: Sexual objectification experience can directly inhibit social anxiety, and sexual objectification experience can also promote social anxiety through the internalization of ideal beauty and self-objectification.

KEYWORDS: *Internalisation of ideal beauty, Masking effect, Self-objectification, Sexual objectification experiences, Social anxiety.*

1.INTRODUCTION

Social anxiety is a state of tension and fear in social situations arising from concerns about the appraisal of others, often accompanied by nervousness, uneasiness, or fear [1]. It was found that social anxiety reduces the subjective well-being of college students [2] people with high social anxiety also face more challenges in establishing dating and friendship relationships [3]. For female university students, social anxiety may have a detrimental effect on their socialisation process as they are at this stage of development. Therefore, it is important to explore the causes of social anxiety in female college students to effectively address and mitigate this phenomenon.

Sexual objectification is the reduction of a woman's value to her body or sexual identity [4]. This experience of objectification may lead individuals to develop negative self-perceptions. Research has shown that there is a positive and significant association between negative self-evaluation and social anxiety, the higher the level of negative self-evaluation, the more severe the social anxiety symptoms are [5]. Therefore, the present study proposes Hypothesis 1: Sexual objectification predicts the level of social anxiety in female college students.

Frequent experiences of sexual objectification have led women to accept and internalize external systems of evaluation, and they have begun to see themselves as objects of observation in the eyes of others, a phenomenon known as self-objectification [4]. In the college student population, self-objectification was found to be a significant factor. In a college student population, self-objectification predicts social anxiety by enhancing feelings of body dissatisfaction [6]. Self-objectification causes individuals to be overly concerned about their outward appearance in social situations and worry about meeting others' expectations, and this self-monitoring and worrying may trigger anxiety. Therefore, this study proposes Hypothesis 2: Self-objectification may play a mediating role between sexual objectification and social anxiety among female college students.

Mass media often shape and disseminate ideal beauty standards for women through sexually objectified messages [7]. Internalisation of ideal beauty refers to an individual's cognitive acceptance of the body image promoted in the media. Research has indicated that the influence of mass media is positively associated with an individual's internalisation of ideal beauty standards, implying that experiences of sexual objectification may contribute to women's acceptance of these idealised body images, triggering dissatisfaction and anxiety about their appearance [8]. This dissatisfaction further affects social interactions and increases the risk of social anxiety [9]. Therefore, the present study proposes Hypothesis 3: Ideal beauty internalisation mediates the relationship between sexual objectification experiences and social anxiety among female college students.

Internalising ideal beauty is a key factor driving female self-objectification. Sexually objectifying messages trigger self-objectification only when individuals internalise these socio-cultural concepts of ideal beauty and incorporate them into their self-worth system [10], suggesting that the degree of self-objectification is influenced by the internalisation of ideal beauty. Therefore, this study proposes Hypothesis 4: Ideal beauty internalisation and self-objectification play a chain mediating role between sexual objectification experiences and social anxiety among female college students.

2. RESEARCH METHODOLOGY

2.1 Research objectives

This study adopted the convenience sampling method, and conducted a questionnaire survey on female college students nationwide through the online platform. A total of 387 questionnaires were distributed, and after screening, 46 questionnaires with too short response time and incorrect answers to polygraph questions were excluded, and 341 valid questionnaires were finally recovered and collated. The age range of the sample was 18-24 years old ($M = 20.81$, $SD = 1.05$).

2.2 Research tools

2.2.1 Sexual objectification scale

The Interpersonal Sexual Objectification Scale developed by Kozee et al. was used as an important indicator of the degree of sexual objectification [11]. The scale was designed with 15 questions covering two dimensions: somatic evaluation and explicit sexual attempts. Subjects were required to choose from a 5-point scale ranging from 1 (not at all) to 5 (almost every time) based on the description of each question. A higher score means a greater degree of sexual objectification perceived by the subject. The internal consistency alpha coefficient for the scale in this study was 0.92.

2.2.2 Internalisation of ideal beauty

An internalisation subscale of the Socio-Cultural External Beauty Questionnaire revised by Liu Daqing was used

to measure the degree of internalisation of ideal beauty [12]. This subscale was designed with seven items to explore in depth the extent to which individuals internalise ideal beauty. Subjects were required to choose from a 5-point scale ranging from 1 (I totally disagree) to 5 (I totally agree) based on the description of each item. The higher the score, the deeper the subject's internalisation of ideal beauty. In this study, the alpha coefficient of the scale was 0.82.

2.2.3 Physical Monitoring Scale

The Body Surveillance Scale has been revised by Xin Chen and Yanju Jiang into a Chinese version specifically designed to assess women's level of self-objectification [13]. The scale is designed with eight questions. The scale consists of 8 questions, and subjects are asked to choose from a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) based on the description of each question. A higher total score means that the individual has a higher level of self-objectification. The Cronbach's alpha coefficient for this scale is 0.77.

Table 1 Descriptive statistics and correlation analysis of variables

Note. $^{**}p < 0.01$, $^{***}p < 0.001$

	$M \pm SD$	1	2	3	4
1 Sexual objectification	2.75±0.66	1			
2 Internalisation of ideal beauty	2.97±0.60	0.20***	1		
3 Self-objectification	2.98±0.73	0.22***	0.52***	1	
4 Social Anxiety	1.75±0.54	-0.07	0.16**	0.22***	1

2.2.4 Social Anxiety Scale

The Social Anxiety Scale was developed by Fenigstein, Scheier, and Buss [14], which is designed to accurately assess an individual's level of social anxiety. This subscale is designed with six items, and subjects are asked to choose from a scale of 1 (extremely unconformable) to 4 (very conformable) based on the description of each question. A higher score means that the individual has a higher level of social anxiety. In this study, the alpha coefficient of the scale was 0.83.

Table 2 Regression analysis of variables in the model

Note. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Regression equation		Overall fit index			Significance of regression coefficients	
Outcome variable	Predictor variable	R	R^2	F	β	t
Internalisation of ideal beauty	Sexual objectification	0.20	0.04	14.51***	0.20	3.81***
Self-objectification	Sexual objectification	0.53	0.28	67.21***	0.12	2.65**
	Internalisation of ideal beauty				0.49	10.52***
Social anxiety	Sexual objectification	0.26	0.07	8.14***	-0.13	-2.40*
	Internalisation of ideal beauty				0.08	1.23
	Self-objectification				0.21	3.39***

2.3 Statistical methods

Descriptive statistics and Pearson's correlation analyses of the data results were carried out in this study using SPSS 24.0 and mediation effect tests were conducted through PROCESS procedure.

3. RESULTS

3.1 Descriptive statistics and correlation analysis of each variable

The variables were subjected to descriptive statistical analysis as well as correlation analysis and the results (Table 1) revealed a significant positive correlation between sexual objectification and self-objectification, rational-beautiful internalisation, and a significant positive correlation between rational-beautiful internalisation and self-objectification, social anxiety, and a significant positive correlation was shown between self-objectification and social anxiety. However, no significant correlation was found between sexual objectification and social anxiety.

3.2 Mediating effects test

Hayes' model 6 was chosen for statistical analysis, and the results (Table 2) indicated that when the mediating variables of ideal beauty internalization and self-objectification were added, sexual objectification was a significant positive predictor of ideal beauty internalization and self-objectification and a negative predictor of social anxiety; ideal beauty internalization positively predicted self-objectification; and self-objectification was a significant positive predictor of social anxiety.

Table 3 shows that sexual objectification has a significant direct effect on social anxiety; in terms of mediation, the effect of self-objectification as a single mediator is significant, while the single mediating effect of ideal beauty is not significant. However, in the relationship between sexual objectification and social anxiety, the chain mediation effect of ideal beauty internalisation and self-objectification together was significant, and their chain mediation was positive. The sign of the direct and chain mediation effects differed, indicating that their mediating effect was a masking effect, i.e., the chain mediating effect of ideal beauty internalisation and self-objectification somewhat suppressed and weakened the direct negative effect of sexual objectification on social anxiety.

Table 3 Analysis of intermediation effects

Effect	Trails	Efficiency value	Bootstrap Standard Error	Bootstrap 95 percent confidence interval	
				Lower limit	Upper limit
Direct effect		-0.13	0.07	-0.29	-0.03
	Ind1	0.01	0.01	-0.01	0.05
Intermediary effect	Ind2	0.03	0.01	0.01	0.05
	Ind3	0.02	0.01	0.01	0.04
Aggregate intermediary effect		0.06	0.02	0.03	0.10
Aggregate effect		-0.07	0.07	-0.21	0.05

DISCUSSION

4.1 There is no significant correlation between sexual objectification and social anxiety

The results of the correlation analysis showed that no significant correlation was presented between sexual objectification and social anxiety, which is different from our initial expectation. According to scholars such as Wen Zhonglin, this may be due to the existence of the masking effect. The masking effect, that is, in a multivariate relationship, the main effect of a variable may be masked by other variables, resulting in a non-significant direct association with the dependent variable [15].

The results of the regression analyses indicated that sexual objectification was a significant negative predictor of social anxiety, while ideal beauty internalisation and self-objectification were significant positive predictors of social anxiety after the introduction of these two variables. This phenomenon of an indirect effect opposite in sign to the direct effect further confirms the existence of a masking effect.

4.2 Sexual objectification directly affects social anxiety
Sexual objectification has a significant direct effect on social anxiety, i.e., sexual objectification can actually directly inhibit individuals' social anxiety. Therefore, the richer the sexual objectification experiences of female college students, the less likely they are to experience social anxiety, which is not consistent with previous research findings [10]. This is because the Sexual Objectification Scale used in this study is a scale developed by foreign scholars, and its expression and terminology reflect a specific cultural context that differs from Chinese culture. This cultural difference may have led to the low scores of Chinese female college students when they completed the scale. Therefore, the sexual objectification level of Chinese female college students observed in this study could not positively predict their social anxiety level.

4.3 Sexual objectification affects social anxiety through self-objectification
The results of the study show that sexual objectification has an impact on women's social anxiety, an impact that is largely due to the indirect role that self-objectification plays in it. Women are influenced by sexual objectification messages, view their external bodies through the lens of others, and give disproportionate attention to physical appearance and image [16]. This process makes their cognitive resources heavily consumed and triggers their social anxiety, making it difficult to fully engage in social activities [17].

4.4 Chain mediation of ideal beauty internalisation and self-objectification
The results of the present study suggest that the relationship between sexual objectification and social anxiety is mediated by a chain of internalisation of ideal beauty and self-objectification. First, sexual objectification experiences prompt individuals to internalise ideal beauty standards, which is consistent with previous research [10], suggesting that women are more inclined to compare their body image to societal standards of ideal beauty and accept these standards after experiencing sexual objectification, thus increasing the level of ideal beauty internalisation[18].

Second, it was found that ideal beauty internalisation positively predicted the degree of self-objectification, which is in line with past research findings [19]. Ideal beauty images portrayed on social media prompt individuals to focus on their appearance, creating a social climate that values appearance and leads individuals to examine their bodies from a third-person perspective. In order to conform to these ideal beauty standards, female college students may constantly monitor and adjust their bodies, thus contributing to the formation and development of self-objectification.

Finally, self-objectification positively predicted social anxiety, which is consistent with previous findings [20]. Female college students who experience more body gazing and appearance discussions are more likely to monitor their bodies frequently, which affects their willingness to build relationships with others, thus increasing the risk of social anxiety.

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