The effect of social media use on women's appearance anxiety

--Take Little Red Book as an example

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Abstract

With the marketing and dissemination of aberrant aesthetics such as "white, young and thin", "A4 waist" and "BM style" on social media, women's appearance anxiety has become an increasingly common phenomenon. This study takes the social media APP "Xiaohongshu" as an example to explore the relationship between social media use and female appearance anxiety, as well as the role of self-objectification, internalization of ideal beauty and comparison of appearance in the mechanism, using the questionnaire survey method and structural equation modeling to analyze the questionnaire data of 207 female Xiaohongshu users. The empirical results showed that (1) social media use has a positive effect on female appearance anxiety; (2) social media use affects female appearance anxiety through the chain mediation of ideal beauty internalization and appearance comparison; and (3) the mediating role of self-objectification between social media use and female appearance anxiety is not significant. As a result, this study further refines the mechanism of social media use on female appearance anxiety and suggests that correct aesthetic standards should be established to respect appearance diversity and resist trafficking in appearance anxiety.

Keywords

Social media use, female appearance anxiety, self-objectification, ideal beauty internalization, appearance comparison.

1. Origin of the topic

With the pervasive marketing and dissemination of abnormal aesthetic standards such as "white, young and thin" on social media, women's appearance anxiety has become an increasingly common phenomenon. The 2019 Chinese Women's Confidence Report shows that 1 in 6 Chinese women feel anxious when looking in the mirror or taking photos; among the ways for women to improve their beauty quotient [1], learning to dress up (70.45%), reading books (51.95%), and changing their appearance (43.09%) top the list [2]. Among many social media, Xiaohongshu is a more typical life sharing platform where young women gather. According to the "2021 Xiaohongshu Active User Portrait Trend Report", the vast majority of Xiaohongshu active users are women (90.41%), and appearance-related areas such as beauty, dressing, and slimming are the focus of users' attention. When the exquisite and beautiful atmosphere created by the platform is compared with their own life status quo, many users say that Xiaohongshu has become an "anxiety trafficking machine"; in addition, Xiaohongshu's e-

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[1] The concept of beauty quotient, first defined by the professional medical beauty platform New Oxygen, mainly consists of perceiving beauty and creating beauty, which is a person's ability to understand and apply the aesthetics and sense of beauty, including a person's ability to control the voice, grooming, speech and behavior, etiquette, and other factors related to one’s personal outward appearance in social interaction.

commerce oriented business model may have contributed to the collusion between appearance anxiety and consumerism. Therefore, this paper proposes research question 1: Does the usage behavior of female users of Xiaohongshu lead to appearance anxiety?

In a sexually objectified environment or culture, women's physical appearance is given an important place. Not only are women measured more by their appearance [3], but they also face stricter social norms of appearance [4], such as a pretty face and slim figure. The media is believed to play an important role in constructing ideal beauty norms, and when women internalize such ideal beauty standards, they may develop a self-objectifying observer's perspective [5]. In cross-media comparisons, ideal beauty internalization is directly related to almost all types of media reports, and in that media exposure mediates the process of self-objectification [6]. It has been established that self-objectification leads to many negative behaviors and consequences, such as increased shame and anxiety about appearance and decreased perception of body state. In addition to the internalization of ideal beauty and self-objectification being strongly linked to social media, appearance comparison has been shown to be almost unavoidable during social media use [7], where upward appearance comparison leads to dissatisfaction with the self and the adoption of risky compensatory behaviors, such as dieting and plastic surgery [8]. Thus, the research question two to be explored in this paper is: the specific mechanism of action of social media use on appearance anxiety, i.e., the question of the mediating effects of ideal beauty internalization, self-objectification, and appearance comparison.

In summary, the aim of this paper is to explore the multidimensional relationship between social media use and appearance anxiety and to enrich the understanding of social media effects and their impact by placing the core on the specific mechanism of action between the two variables, i.e., exploring the mechanism of mediating effects of internalization of desirable beauty, self-objectification, and appearance comparison.

The theoretical significance of this study is to enrich the existing theoretical results and further refine the mechanism of social media use on women's appearance anxiety. The practical significance of this study is to help women correctly view the ideal beauty standards popularized by social media platforms at the individual level, so as to alleviate their appearance anxiety and reduce the potential risks of dieting and depression; at the level of social media, to call on the platforms to create a healthier and better life-sharing atmosphere; and at the social and cultural level, to guide the public to return to healthy and diversified aesthetics.

2. Literature review

2.1. Social Media Use and Appearance Anxiety

Social media is a kind of Internet application platform [9] based on mobile technology and Web technology, which carries online social relationship networks, and is a highly interactive cyberspace for people to create, share and exchange information and ideas. The concept of the beauty myth: How images of beauty are used against women. random house.


"social media usage" is based on the usage behavior of users on social media. Scholars define social media usage according to the different stages and levels of user behavior. From the motivation of social media use, Wang Saihua believes that social media use is an individual's willingness to satisfy his or her own needs through the media, such as the need for entertainment, socialization, and self-worth realization [10]. From the specific behavioral level of use, Yao Qi et al. argue that social media use is the behavior of users to engage in online social interactions through the use of services and functions on social media, such as updating personal homepages, posting statuses and photos, browsing aggregated information, and interacting with each other [11]. Thus, this study defines social media use as the behavior of individuals who register their personal information on social media to engage in the use of social media platform features.

One of the main features of social media is User Generated Content (UGC), but user-generated content is of varying quality, in which a lot of content about women's appearance with aberrant judgmental standards has appeared, which has had different impacts on women's psychology and behaviors [1], and appearance anxiety is a representative impact. Appearance anxiety is a kind of social evaluative anxiety directed toward appearance, in which the individual's concern about whether his or her appearance conforms to the aesthetic standard and the anticipation of a possible negative evaluation of his or her appearance may cause the individual to be in a state of worry, annoyance, nervousness, and uneasiness [12]. Women are socialized to be more concerned about their appearance than men [13], and also face stricter social norms [14] and are measured more by their appearance [15], e.g., women's appearance is associated with their popularity, dating experience, and job and marriage opportunities [16]. Therefore, when women fail to achieve their desired appearance, they may make negative self-evaluations [17], and develop anxiety.

Currently, research on social media use and appearance anxiety has received attention from many scholars at home and abroad. Marengo et al. believe that individuals who frequently use highly visualized types of social media will have significantly higher concerns about their own appearance and image than their peers who do not use social media [18]. Through their study, Bu Xiaohua and Gao Fengni found that the greater the intensity of social media use, the greater the internalization of ideal beauty and the tendency to make upward social comparisons, leading to a deeper level of anxiety about appearance [19]. Ying Xue et al. found through their study that the higher intensity of social media use means longer exposure to others' superior information, which is more likely to induce upward social comparisons in individuals, resulting in negative emotions such as depression and jealousy [20]. In a study of college students, Wu

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Yang et al. found that higher intensity of social media use induced more negative social comparison tendencies, and negative social comparison was the core mechanism of depression caused by social media use, and this mechanism was more significant for individuals with lower self-concept clarity [21]. Accordingly, the present study proposes the hypothesis: H1: Social media use has a positive effect on female appearance anxiety.

2.2. The mediating role of self-objectification

"Self-objectification" (self-objectification) refers to an individual's viewing and examining the self from the perspective of a third-person other, focusing on the external features of the body rather than on attribute features [22]. Self-objectification originally comes from the concept of sexual objectification. Sexual objectification refers to the separation of a woman's body, body parts, or sexual functions from herself, to the point where they become purely instrumental, or seen as representative of the individu.

Many scholars have studied the effects of self-objectification on appearance anxiety. Wen Chen and Linyu Tao found that self-objectification has a moderating role in the effect of social media use on appearance anxiety among female college students, and that higher levels of self-objectification make it easier to adopt the "other's" perspective and standards to view the self, thus making it easier to develop appearance anxiety [23]. According to Du Hongqin et al., self-objectification is positively correlated with appearance anxiety, and social media use increases the risk of self-objectification, leading to higher levels of appearance anxiety [24]. Tang Wenqing et al. found that college students' self-objectification was significantly positively correlated with appearance anxiety, and regression analyses showed that self-objectification significantly predicted their appearance anxiety, i.e., individuals with high levels of self-objectification had higher appearance anxiety [25]. Accordingly, this study proposed the hypothesis:

H2: Self-objectification mediates the relationship between social media use and female appearance anxiety.

2.3. Chain mediation of ideal beauty internalization and self-objectification

The internalization of beauty ideals refers to "a person's belief that social norms of body shape and appearance are appropriate standards for his or her own body shape and appearance" [26]. The concept initially appeared as "cultural body standards". The internalization of cultural body standards makes it seem that the achievement of these standards is a personal choice of women rather than a product of social pressure[27]. Research has revealed that the internalization of ideal beauty is a major factor in women’s negative emotions from different perspectives. Engeln et al. found that the ideal appearance promoted by women's magazines could be further internalized by women, and the higher the degree of internalization, the more significant the decrease in satisfaction with their own appearance [28]. From the perspective of socio-cultural
theory, Kwon Mann pointed out that the use of Jitterbug affects the internalization of female college students' "ideal beauty", and this "internalization of ideal beauty" leads to the creation of negative body images[29]. Kim found that the external socio-cultural environment can influence the internalization of ideal beauty through the use of social media, which is the most important factor for women's satisfaction with their appearance. Kim found that the external socio-cultural environment can mediate the internalization of ideal beauty to trigger depression in women, and the stronger the internalization, the higher the level of depression[30]. Durkin et al. pointed out that the longer adolescent females are exposed to social networking sites, the more they will internalize the image of perfection, the more they will monitor their own bodies, and the more objectified self-image they will construct in the network[31]. Yuxin Ma demonstrated by building an experimental model that the ideal beauty standard conveyed by social media is a key factor contributing to restrictive eating behaviors.[32]

Existing research supports the correlation between ideal beauty internalization and self-objectification. Huang et al. found that ideal beauty internalization is an important mechanism to trigger self-objectification in women[33], and that ideal beauty internalization plays a mediating role between the experience of self-objectification and the symptoms of body surveillance, body shame and eating disorders[34]. A number of scholars have investigated the correlation between ideal beauty internalization and self-objectification in different media imagery. Trekels et al. found that watching reality TV was associated with ideal beauty internalization and self-objectification of tanning and that there was a significant positive correlation between the internalization of the ideal of sun tanning and self-objectification in a cross-sectional study of 444 young Belgian women[35]. Through empirical research, Liangqi Deng found that the use of social media such as WeChat and QQ guided women's perception of their own bodies through multiple mediations of ideal beauty internalization and self-objectification [36]. Through serial mediation analysis, Yaqin Wang pointed out that ideal beauty internalization and self-objectification may play a chain mediating role between fashion media containing women's information and women's depression[37]. There are also studies that point out that internalization of ideal beauty is a prerequisite for the formation of female self-objectification[38], by internalizing the value of ideal beauty or valuing appearance, women will pay more attention to their own appearance and measure their own value in terms of their appearance, forming self-objectification. Based on the research of the above scholars, this study proposes the hypothesis:

H3: The use of social media can trigger women's self-objectification through ideal beauty internalization, which ultimately affects their appearance anxiety.

2.4. Chain mediation of ideal beauty internalization and appearance comparison

Appearance comparison is essentially a social comparison. The concept and theory of "social comparison" was first proposed by Festinger in 1954, which is known as the "classic theory of social comparison". The types of social comparisons mainly include parallel comparisons, upward comparisons and downward comparisons. Wheeler first put forward the idea of upward comparisons, which believes that individuals like to compare themselves with others who are higher in rank than themselves, in order to find gaps with others and achieve the purpose of self-improvement [39]. The use of social media prompts individuals to develop the idea of social comparison. Kong Lian [40] et al. confirmed that there is a positive correlation between the frequency of upward social comparisons made by an individual and the individual's maintenance of a lower sense of self-affirmation through an empirical investigation of college students' experience of activities in WeChat and their self-esteem. Xing Shufen [41] et al. made further explanations that after browsing others' dynamics through social media, individuals will induce negative psychology, self-esteem frustration easily and thus anxiety. Combined with the research of domestic and foreign scholars, it is found that upwardly mobile society is more likely to have an impact on the cognition and emotion of individuals.

Appearance comparison, as a dimension of social comparison, was considered by Jasmine Yu et al. Appearance social comparison (ASC) refers to the behavior of an individual comparing his or her own appearance with that of others [42]. In recent years, appearance comparison has been heavily used in the study of body image disorders. Stanley Liu et al. found that appearance comparison is almost unavoidable during the use of social networking sites, and that women can easily come into contact with other people's photos and unconsciously compare their appearance with their own in the process of browsing social networking sites. Appearance comparison is mainly categorized into two types: upward appearance comparison and downward appearance comparison, and this study focuses on upward appearance comparison, which is considered the process by which an individual compares his or her own appearance with the appearance of others who are superior to him or her.

Research has found a strong link between the internalization of ideal beauty and upward social comparisons. Myers noted [43] that individuals reinforced perceptions of shaping their self-image after comparing themselves with people who possessed a perfect image. Upward social comparisons are spontaneous in social platforms where users are exposed to information about users who are more perfect than they are. Lee [44] found that the number of comparative messages received by an individual is directly proportional to the frequency of comparative behaviors when studying user activities on Facebook. Anixiadis et al. [45] found that female users were susceptible to upward social comparisons as a result of viewing platforms displaying images of perfection that appear negative. This shows that ideal beauty internalization caters to social standards of beauty, lending to individuals comparing ideal beauty standards with themselves in terms of appearance. The present study proposes the

hypothesis that ideal beauty internalization and appearance comparison may play a chain mediating role between social media use and appearance anxiety:
H4: The use of social media can trigger women’s appearance comparisons and ultimately influence their appearance anxiety through the internalization of ideal beauty.

2.5. Research Gaps and Innovations
2.5.1. Research Gaps
First of all, through the combing of related literature, it can be found that the development of research related to social media on women’s appearance anxiety mainly centers around samples of women from European countries, and there is a relative lack of empirical research on this part in China, and there are fewer cross-cultural studies on contemporary Chinese women who heavily use social media.

Secondly, among the current studies on the impact of media on women, the choice of media forms includes both traditional media such as print magazines, photo networks, magazine pictures, social networking sites, and social media in the era of mobile new media such as WeChat, QQ, and Jieyin, but there is a gap in the impact of social platforms specifically targeting women’s information attributes, such as Xiaohongshu, on women’s appearance anxiety.

2.5.2. Research Innovation
First, considering the differences between the social and cultural contexts of China and the West, a more detailed local research program needs to be developed in the study of women’s appearance anxiety; therefore, this study attempts to explore, based on the Chinese cultural context, the influence of social media, represented by Xiaohongshu, on the running of appearance anxiety, and to further expand the cross-cultural study of appearance anxiety.

Secondly, in the choice of social media forms, we use the dynamic visual media presentation of Xiaohongshu, which is characterized by more obvious female attributes, to focus on the influence of the media on the construction of women’s body discourse in the era of mobile new media, and to perfect the empirical research plate of the complex interaction between women and media relations.

Third, existing studies have demonstrated the mediating roles of several different relationships, such as ideal beauty internalization, self-objectification, ideal beauty internalization and upward social comparison, and ideal beauty internalization and self-objectification, in the influence of media on women’s status and its mechanism of action, but there is no unanimous conclusion on how the use of social media affects women’s appearance anxiety. On the basis of the existing empirical studies, this paper adds the mediator variable "appearance comparison" to explore the specific paths of the three mediators: internalization of ideal beauty, self-objectification and appearance comparison, and to further improve the internal influence mechanism between social media and women’s appearance anxiety.

2.6. Summary
After collecting and collating the research results of domestic and international scholars on the role of social media use on women’s appearance anxiety, the role of ideal beauty internalization in the use of social media and women’s appearance anxiety, the role of self-objectification in the use of social media and women’s appearance anxiety, the role of appearance comparison in the use of social media and appearance anxiety, we set the use of social media as the independent variable, the internalization of ideal beauty, self-objectification, appearance comparison as the mediator variable, and appearance anxiety as the dependent variable, to find out whether women’s use of social media (taking Xiaohongshu as an example) generates ideal beauty internalization and self-objectification, and further triggers appearance anxiety through appearance comparison. The following hypotheses are proposed in this study:
H1: Social media use has a positive effect on female appearance anxiety.
H2: Self-objectification mediates the relationship between social media use and female appearance anxiety.
H3: The use of social media can trigger women's self-objectification through ideal beauty internalization, which ultimately affects their appearance anxiety.

H4: 

Figure 2-1 Diagram of the hypothetical model for this study

3. Research design

3.1. Research tools

3.1.1. Measures of Social Media Use Intensity, Media Exposure and Trust

For the measurement of social media use intensity, the Facebook Intensity of Use Scale developed by Ellison et al. (2007) is by far the most widely used scale for measuring the intensity of social media use, with a total of 8 question items, including 2 behavioral intensity items (number of social media friends, time spent on social media) and 6 affective intensity items on a 5-point scale, with 1 indicating a strong non-compliant and 5 indicating very compliant. The intensity of social media use is determined by the average score of the six items, with higher scores indicating higher intensity of social media use. The scale is simple and easy to use, and defines the intensity of social media use as the degree of life integration and emotional involvement of individuals in social media use. In this study, the theme was appropriately adapted to measure the intensity of individuals' use of Xiaohongshu, aiming to explore the degree of life integration and emotional engagement of Xiaohongshu to the survey sample. The scale is based on a 5-point Richter scale with good reliability and validity, and has been adopted by many related studies in China to study Chinese social media (Xiaohongshu, Weibo, Qzone, etc.), and has been tested to have good applicability.

Combined with the research of Jia Zhemin [46], this paper defines social media exposure as the frequency of media exposure related to beauty information on Xiaohongshu, and social media trust as the degree of reliance on the information about beauty on Xiaohongshu. The measurement of social media exposure mainly refers to the scale developed by Xue (2015), and this paper mainly focuses on the degree of exposure to beauty information through social media, designing question items from browsing and retrieving beauty information, with the options categorized as "never, seldom, occasional, often, and always," and assigning scores from 1-5, and the degree of social media exposure is the average of the scores of the three options, and the social media trust is the degree of reliance on the information about beauty on Xiaohongshu. The level of exposure to social media was the mean of the scores of the three options. The measurement of social media trust refers to the scale developed by Meyer (1988), which combines the core items of the scale, mainly from the three dimensions of credibility, accuracy, and reliability, and is used to measure the degree of trust of the respondents in the information.

in the social media, with five options, namely, strongly disagree, disagree, generally agree, agree, and strongly agree, which are measured using a five-point scale, with the scores assigned from 1-5 in order. The mean value of the five options is the social media trust score, the higher the score, the higher the respondents' trust in social media.

3.1.2. Measures of Appearance Anxiety
This study utilized the Social Appearance Anxiety Scale (SAAS) developed by Trevor and David (2008), developed by Trevor and David et al. The scale measures an individual's overall appearance anxiety, not an individual's anxiety about specific physical features (e.g., nose, eyes, etc.). The scale consists of 16 items, with each item being rated on a 5-point scale from 1 (not at all) to 5 (total very much in line), and the total mean score is used as the Appearance Anxiety Scale score. Higher scores represent higher levels of appearance anxiety and the scale has good retest reliability internal consistency reliability of 0.94 and structural validity (Trevor, David, Sarah, Christian & Richard, 2008). The Appearance Anxiety Scale (AAS), developed by Dion et al. (1990), consists of a full version (30 questions) and a short version (14 questions). The items are rated on a 5-point scale from 1 (not at all) to 5 (total very much in line), and the total mean score is used as the Appearance Anxiety Scale score.

3.1.3. Measurement of internalization of ideal beauty
The Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ), developed by researchers such as Heinberg, L.J. is one of the most widely used measures of ideal beauty internalization [47]. Among the subsequent revisions of the SATAQ, the SATAQ-3 is most frequently used to measure ideal beauty internalization. Liangqi Deng revised the SATAQ-3 scale from the West to extend the scope of traditional media to social media, which is more suitable for the current context[48]. Therefore, this study was mainly based on the internalization subscale of Deng Liangqi’s revised SATAQ-3 scale to measure the degree of ideal beauty internalization. Each question item was scored according to a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), and the higher the score after processing the reverse scoring item (question 4), the higher the degree of internalization of ideal beauty was indicated.

3.1.4. Self-Objectification Measurement
The Self-Objectification Questionnaire (hereafter SOQ) was developed by Noll and Fredrickson in 1998 based on objectification theory and was designed to rate the extent to which individuals view their bodies in an objectified, appearance-based manner. The questionnaire asks respondents to rank ten physical attributes in order of their ranked importance to their physical self-concept (10 = most important, 1 = least important). The ten physical attributes included five physical attributes based on appearance (sexual attractiveness, toned muscles, physical attractiveness, weight, body shape stature) and five physical attributes based on ability (health, strength, physical coordination, physical adaptability, energy level). After the ranks were sorted, the appearance-based sorts were added together to obtain a total score, and the ability-based ones were added together to obtain a second total score. Subtracting the ability-based rank total from the appearance-based rank total score yields a series of scores between 25 and -25. Higher scores reflect a greater emphasis on appearance and are interpreted as having a higher degree of self-objectification. (Fredrickson, Roberts, Noll, Quinn & Twenge, 1998; Noll & Fredrickson, 1998).

The problem of poor applicability of Fredrickson’s version in China has received attention from some researchers (Zhao Fang, 2011; Zhu Li, 2014). In a study conducted by Zhao Fang (2011) on the effects of mass media on women's self-objectification, the SOQ was revised by merging body size (H circumference) and physical attractiveness into body shape, adding features, skin,

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and height, and changing sexual attractiveness to sexiness. And the ability-related physical characteristics were body fitness (related to exercise), body coordination, physical ability, strength, and health.

3.1.5. Comparative external measurements
The present study used the Upward Physical Appearance Comparison Scale (UPAC)\[49\], developed by O'Bren, to assess the presence and degree of tendency of individuals to make upward physical appearance comparisons with those who are more outwardly attractive than themselves. The scale is a commonly used scale to measure individuals' tendency to engage in upward appearance comparisons, and has satisfactory internal consistency, stability over a two-week period, and construct validity. In this study, the scale was revised to take into account the specific study population and content, and five question items were obtained to measure three dimensions: whether individuals make upward or downward outward comparisons, whether they engage in upward outward comparison behaviors, and whether they have a tendency to make upward outward comparisons and the degree of that tendency. The scale is scored on a 5-point scale, with 1 being "strongly disagree" and 5 being "strongly agree," with higher scores reflecting more frequent upward appearance comparisons. Individuals' tendency to make upward externalizing comparisons was measured by assessing how often they made upward externalizing comparisons.

3.2. Research Methodology and Subjects
In this paper, the questionnaire method is adopted to collect the required data, the snowballing method is used to distribute the online questionnaire, and the quantitative analysis method is used to process the collected data. The research object of this paper is the group of young women who use Xiaohongshu.

3.3. Data collection and processing
In order to ensure that the questionnaire has good reliability and validity, we listened to the suggestions of the respondents in the pre-testing stage of the questionnaire, and focused on discussing and modifying the questions in the questionnaire that were not easy to express, similarly defined, and difficult to understand through meetings, and then distributed the questionnaire to female groups of different geographic regions, age groups, and education levels mainly through WeChat, microblogs, QQ groups, and other channels by means of snowballing, and the respondents on each platform also further diffused the questionnaire on the social media that they used. The respondents of each platform also further spread the questionnaire on the social media they used. Invalid questionnaires and questionnaires completed by the male population were then processed and filtered. The questionnaire was limited to gender, whether or not they use Xiaohongshu, and height and weight (BMI) at the beginning of the questionnaire, so that if they are female and use Xiaohongshu, they will continue to answer, while males or females who do not use Xiaohongshu will discontinue answering the questionnaire. This questionnaire was divided into five sections measuring social media (Xiaohongshu) exposure and use and trust strength, ideal beauty internalization, self-objectification, appearance comparison, and appearance anxiety. The middle three items were measured using a five-level Likert scale. A total of 302 questionnaires were finally recovered, and after excluding invalid data such as scale answers as uniform options and incomplete information, 207 valid samples were harvested, and the validity rate of the questionnaire was about 68.54%. In this study, SPSS was used to enter and analyze the acquired data and descriptive analysis of the samples, and AMOS was used for validation factor analysis and research hypothesis testing.

4. Findings and Conclusions

4.1. Descriptive analysis

Table 4-1 Descriptive Statistical Analysis of the Sample (N=207)

<table>
<thead>
<tr>
<th>variable name</th>
<th>Variable Values</th>
<th>number of people</th>
<th>Proportion (%)</th>
<th>variable name</th>
<th>Variable Values</th>
<th>number of people</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>distinguishing between the sexes</td>
<td>a male</td>
<td>0</td>
<td>0%</td>
<td>Whether or not you use Little Red Book</td>
<td>be</td>
<td>207</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>females</td>
<td>207</td>
<td>100%</td>
<td></td>
<td>clogged</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>(a person's) age</td>
<td>Under 18</td>
<td>1</td>
<td>0.4%</td>
<td>Number of bloggers followed on Little Red Book</td>
<td>0 to 25</td>
<td>115</td>
<td>55.5%</td>
</tr>
<tr>
<td></td>
<td>18-25 years old</td>
<td>193</td>
<td>93.2%</td>
<td></td>
<td>26 to 50</td>
<td>35</td>
<td>16.9%</td>
</tr>
<tr>
<td></td>
<td>26-35 years old</td>
<td>11</td>
<td>5.3%</td>
<td></td>
<td>51-100</td>
<td>29</td>
<td>14.0%</td>
</tr>
<tr>
<td></td>
<td>Over 35 years old</td>
<td>2</td>
<td>0.9%</td>
<td></td>
<td>101 to 150</td>
<td>9</td>
<td>4.3%</td>
</tr>
<tr>
<td>education attainment</td>
<td>Secondary/high school and below</td>
<td>2</td>
<td>0.9%</td>
<td>Frequency of using Little Red Book</td>
<td>Less than 1 time per day</td>
<td>71</td>
<td>34.2%</td>
</tr>
<tr>
<td></td>
<td>three-year college</td>
<td>11</td>
<td>5.3%</td>
<td></td>
<td>1 to 2 times a day</td>
<td>70</td>
<td>33.8%</td>
</tr>
<tr>
<td></td>
<td>university undergraduate course</td>
<td>80</td>
<td>38.6%</td>
<td></td>
<td>3 to 5 times a day</td>
<td>37</td>
<td>17.8%</td>
</tr>
<tr>
<td></td>
<td>Master's degree or above</td>
<td>114</td>
<td>55.0%</td>
<td></td>
<td>More than 10 times per day</td>
<td>10</td>
<td>4.8%</td>
</tr>
<tr>
<td>Time of day spent using Little Red Book</td>
<td>Less than 10 minutes</td>
<td>47</td>
<td>22.7%</td>
<td>Frequency of browsing other people's updates via Little Red Book</td>
<td>never</td>
<td>10</td>
<td>4.8%</td>
</tr>
<tr>
<td></td>
<td>10-30 minutes</td>
<td>94</td>
<td>45.4%</td>
<td></td>
<td>seldom</td>
<td>58</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>30-60 minutes</td>
<td>37</td>
<td>17.8%</td>
<td></td>
<td>infrequent</td>
<td>69</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>1 to 2 hours</td>
<td>23</td>
<td>11.1%</td>
<td></td>
<td>always</td>
<td>3</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>More than 2 hours</td>
<td>6</td>
<td>2.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of searching for topics of interest through Little Red Book</td>
<td>never</td>
<td>1</td>
<td>0.4%</td>
<td>Frequency of communicating with others (liking, commenting, private messaging, posting content) through Little Red Book</td>
<td>never</td>
<td>24</td>
<td>11.5%</td>
</tr>
<tr>
<td></td>
<td>seldom</td>
<td>29</td>
<td>14.0%</td>
<td></td>
<td>seldom</td>
<td>95</td>
<td>45.8%</td>
</tr>
<tr>
<td></td>
<td>infrequent</td>
<td>75</td>
<td>36.2%</td>
<td></td>
<td>infrequent</td>
<td>60</td>
<td>28.9%</td>
</tr>
<tr>
<td></td>
<td>non-recurrent</td>
<td>85</td>
<td>41.0%</td>
<td></td>
<td>non-recurrent</td>
<td>25</td>
<td>12.0%</td>
</tr>
<tr>
<td></td>
<td>always</td>
<td>17</td>
<td>8.2%</td>
<td></td>
<td>always</td>
<td>3</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

4.2. Correlation analysis

Table 2 demonstrates the correlation coefficients between social media use, ideal beauty internalization, appearance comparison, and appearance anxiety with each other. The results of analyzing the data showed that this study found a positive correlation between social media use and ideal beauty internalization (r=0.346), and a positive correlation between ideal beauty internalization and appearance anxiety (r=0.31); a significant positive correlation was found between ideal beauty internalization and appearance comparison (r=0.557), which was the strongest positive correlation. There was a significant positive correlation between appearance comparison and appearance anxiety (r=0.519); there was no significant correlation between
social media use and appearance anxiety ($r=0.123$); and the correlation between social media use and appearance comparison was not significant ($r=0.193$).

Table 4-2  Correlation coefficient matrix and square root of AVE values for each variable

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>Social media use</th>
<th>Internalization of ideal beauty</th>
<th>comparison of physical appearance</th>
<th>appearance anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media use</td>
<td>0.501</td>
<td>0.708</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalization of ideal beauty</td>
<td>0.593</td>
<td>0.346</td>
<td>0.770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>comparison of physical appearance</td>
<td>0.611</td>
<td>0.193</td>
<td>0.557</td>
<td>0.782</td>
<td></td>
</tr>
<tr>
<td>appearance anxiety</td>
<td>0.628</td>
<td>0.123</td>
<td>0.31</td>
<td>0.519</td>
<td>0.792</td>
</tr>
</tbody>
</table>

(Note: the value at the diagonal is the square root of the average variance extracted (AVE > 0.5). Distinguishing validity: variability between indicators; requirement: greater than the coefficient with other indicators)

4.3. Confidence interval analysis (CIA)

Reliability refers to the stability and consistency of a measurement. In this study, we need to measure the internal consistency of the sub-items in multiple scales, so we used Cronbach’s alpha (α) reliability coefficient to measure the reliability of the scales. The Cronbach’s alpha coefficient lies between 0 and 1, with larger values indicating higher reliability. Validity refers to the degree to which a measurement tool can accurately measure what it is intended to measure, and the closer the measurement results are to what is to be examined, the higher the validity. In this study, the structural validity of the scale was tested using the KMO test and the Bartlett spherical test. the closer the KMO is to 1, the greater the necessity of factor analysis; the Bartlett spherical test is somewhat similar to the KMO test, and when $p < 0.01$, it indicates that it is suitable for factor analysis.

The results of the reliability tests for each scale were as follows: the Cronbach’s alpha coefficient for social media use was 0.794, with a KMO value of 0.771 and a Bartlett’s spherical test $p<0.001$; the Cronbach’s alpha coefficient for appearance anxiety was 0.907, with a KMO value of 0.868 and a Bartlett’s spherical test $p<0.001$; the Cronbach’s internalization of ideal beauty Bach’s alpha coefficient was 0.741, KMO value was 0.783, Bartlett’s spherical test $p<0.001$; the clone Bach’s alpha coefficient of external appearance comparison was 0.921, KMO value was 0.861, Bartlett’s spherical test $p<0.001$.The results of reliability test for each scale were good and suitable for factor analysis.

Based on the rotated component matrix, a total of five components were analyzed as shown in the table below. Among them, item 5 on internalization of ideal beauty and item 8 on internalization of ideal beauty belong to the same factor as items 1-5 on comparison of appearance. Because the original scale of Ideal Beauty Internalization has components related to appearance comparison, for example, item 5 is "I would compare my body with people on the Internet and TV", and item 8 is "I would compare my appearance with celebrities or Internet celebrities". Therefore, these two items were categorized as appearance comparisons. Ideal beauty internalization items 1 and 4 did not exceed 0.5 on all factor loadings, so items 1 and 4 were deleted. item 1 read, "I consider the appearance of women appearing on television and in movies to be my goal," and item 4 read, "I don't want to look like a model in a magazine.". After the above manipulation, Ideal Beauty Internalization Item 7 did not belong to all the major components, so Ideal Beauty Internalization Item 7, which was "I want to look like a bathing
suit model," was deleted. The remaining items of Ideal Beauty Internalization all point to the content of "Thin Ideal Internalization".

Table 4-3 Component Matrix after Rotation

<table>
<thead>
<tr>
<th>ingredient</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison 5</td>
<td>.872</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison 2</td>
<td>.841</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison 4</td>
<td>.837</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison 3</td>
<td>.827</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison 1</td>
<td>.667</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalization 8</td>
<td>.555</td>
<td>.503</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Construct validity refers to the degree of isomorphism between the scale measurements and the desired assessment content. Based on the results of the EFA analysis, 207 questionnaires were imported into the application Amos 26.0 to apply the validated factor analysis, and the data in Table 4 were obtained, and the factor loadings of the items corresponding to the questions for each variable were greater than 0.5 and significant at the p<0.001 level. In addition, the mean variance extracted for all variables was greater than 0.5, indicating good discriminant validity of the variables. The combined reliability (CR value) of all variables was greater than 0.8, indicating that the variables in this study were measured with good reliability.

Table 4-4 Validation Factor Analysis (N=207)

<table>
<thead>
<tr>
<th>latent variable</th>
<th>Estimates of model parameters</th>
<th>convergent validity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized factor loadings</td>
<td>Standard Error S.E.</td>
</tr>
<tr>
<td>appearance anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>jl1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>jl2</td>
<td>1.666</td>
<td>0.224</td>
</tr>
<tr>
<td>jl3</td>
<td>1.921</td>
<td>0.242</td>
</tr>
<tr>
<td>jl4</td>
<td>1.894</td>
<td>0.248</td>
</tr>
<tr>
<td>jl5</td>
<td>2.039</td>
<td>0.256</td>
</tr>
<tr>
<td>jl6</td>
<td>1.991</td>
<td>0.256</td>
</tr>
<tr>
<td>comparison of physical appearance</td>
<td>1.518</td>
<td>0.146</td>
</tr>
<tr>
<td>bj5</td>
<td>1.612</td>
<td>0.151</td>
</tr>
<tr>
<td>bj4</td>
<td>1.524</td>
<td>0.145</td>
</tr>
<tr>
<td>bj3</td>
<td>1.447</td>
<td>0.146</td>
</tr>
<tr>
<td>bj2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>bj1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>bj6</td>
<td>1.022</td>
<td>0.132</td>
</tr>
<tr>
<td>bj7</td>
<td>1.113</td>
<td>0.139</td>
</tr>
</tbody>
</table>
4.4. Hypothesis testing

4.4.1. Model fit

This study aims to explore the mechanism of social media use on appearance anxiety and to verify the mediating role of self-objectification, ideal beauty internalization and appearance comparison in it. Therefore, this study used AMOS26.0 to establish structural equation modeling to test the path of action between social media use, self-objectification, ideal beauty internalization, appearance comparison and appearance anxiety, and to analyze the direct, total and mediating effects therein. As shown in Table 5, the ratio of the chi-square value to the degree of freedom of the structural equation model is less than 3; the IFI, TLI, and CFI are greater than 0.9; the GFI, AGFI, NFI, and RFI are greater than 0.8 but less than 0.9, which is within the acceptable range; and the Root Mean Square Error of Approximation (RMSEA) is less than 0.08, which indicates that the structural equation model fits the fitness of the fit is roughly within the acceptable range.

<table>
<thead>
<tr>
<th>Internalization of ideal beauty</th>
<th>nh1</th>
<th>1</th>
<th>0.711</th>
<th>0.494</th>
<th>0.813</th>
<th>0.593</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nh3</td>
<td>0.917</td>
<td>0.101</td>
<td>9.083</td>
<td>***</td>
<td>0.735</td>
</tr>
<tr>
<td></td>
<td>nh2</td>
<td>1.167</td>
<td>0.113</td>
<td>10.288</td>
<td>***</td>
<td>0.856</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social media use</th>
<th>sy1</th>
<th>1.468</th>
<th>0.183</th>
<th>8.035</th>
<th>***</th>
<th>0.795</th>
<th>0.632</th>
</tr>
</thead>
<tbody>
<tr>
<td>sy2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.594</td>
<td>0.353</td>
</tr>
<tr>
<td>sy3</td>
<td>0.963</td>
<td>0.136</td>
<td>7.058</td>
<td>***</td>
<td>0.665</td>
<td>0.442</td>
<td></td>
</tr>
<tr>
<td>sy4</td>
<td>1.367</td>
<td>0.183</td>
<td>7.463</td>
<td>***</td>
<td>0.76</td>
<td>0.578</td>
<td></td>
</tr>
</tbody>
</table>

The model is partially corrected according to the suggestions given by AMOS, and the model fitness is shown in Table 6. The ratio of the cardinality to the degrees of freedom of the structural equation model is less than 3; the GFI, NFI, IFI, TLI, and CFI are greater than 0.9, and the AGFI and RFI are close to 0.9; and the root-mean-square-error-of-approximation (RMSEA) is less than 0.05, which indicates that the corrected structural equation model fits well and has a good fitness. The matching degree is good.

<table>
<thead>
<tr>
<th>Table 4-5 Fit of structural equation model (N=207)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>reference standard</td>
</tr>
<tr>
<td>model of this paper</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4-6 Fit of the structural equation model - modified version (N=207)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN/DF</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>reference standard</td>
</tr>
<tr>
<td>model of this paper</td>
</tr>
</tbody>
</table>
4.4.2. Direct effect tests

According to the analysis of Figure 2 and Table 7, it can be seen that users’ social media use positively affects ideal beauty internalization ($\beta=0.346, p<0.001$), i.e., the more users use social media, the higher the degree of ideal beauty internalization; users’ ideal beauty internalization positively affects users' tendency to compare outward appearance ($\beta=0.557, p<0.001$), i.e., the higher the degree of ideal beauty internalization of users, the more pronounced the tendency to compare appearance; users' social media use positively affects self-objectification ($\beta=0.205, p<0.05$), i.e., the more users use social media, the higher the degree of self-objectification; users’ internalization of ideal beauty positively affects self-objectification ($\beta=0.277, p<0.001$), i.e., the higher the degree of users' internalization of the ideal beauty standard, the higher the degree of self-objectification; the higher; appearance comparison positively affects appearance anxiety ($\beta=0.502, p<0.001$), i.e., the more pronounced the user's tendency to compare appearance, the higher his or her degree of appearance anxiety. In addition, Table 3 shows that the value of the direct effect of self-objectification on appearance anxiety is small and insignificant (C.R.<1.96, p>0.05), which is consistent with the results of the previous correlation analysis, and an explanation will be given in the discussion section of this paper.

![Graphical representation of the structural equation model](image)

Figure 4-2 Graphical representation of the structural equation model

<table>
<thead>
<tr>
<th>Table 4-7 Path coefficients (N=207)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Table" /></td>
</tr>
</tbody>
</table>
4.4.3. Mediated effects test

Consider the effect of the independent variable X on the dependent variable Y. If X affects Y by influencing the variable M, M is said to be the mediating variable. Assuming that the variables have been centered or standardized, the relationship between the variables can be illustrated with the path diagram and corresponding equation shown in Figure 4. where c is the total effect of X on Y, ab is the mediating effect (mediating effect) through the mediating variable M, and c’ is the direct effect. The magnitude of the mediating effect is measured by \( c - c' = ab \).

\[
M = aX + e_1
\]

\[
Y = c'X + bM + e_2
\]

Figure 4-4 Variable path diagram and corresponding equations

Mediating effects are indirect effects and can be analyzed by structural equation modeling whether or not the variables involve latent variables. Previously, the main method to test the mediating effect was the stepwise method of Barron and Kenny, but Fritz believed that the testing power of this method was low. Later Sobel (Sobel) supplemented and improved Barron and Kenny's method, but there is also the defect that the mediation effect does not conform to the normal distribution.

McKinnon et al. suggested that the trust interval method using bootstrap is a more testable method of validation, and therefore this method was used in this study for the test of mediation effect. In this study, 5000 bootstrap samples were taken to estimate the trust interval for the mediation effect, and if it does not contain 0 between the upper and lower limits of the Percentile95% confidence interval and the Bias-Corrected95% confidence interval, it indicates that the mediation effect exists. If multiple mediating paths exist, the optimal path can be selected by comparing the differences between paths. The hypothesized paths in this study include:

**Path 1:** Social media use — self- objectification — appearance anxiety (1)

**Path 2:** Social media use — internalisation of ideal — appearance comparison — appearance anxiety (2)

**Path 3:** Social media use — Internalisation of ideal beauty — Self-objectification — Appearance anxiety (3)

<table>
<thead>
<tr>
<th>Path 1 standardization</th>
<th>SE</th>
<th>efficiency value</th>
<th>Bias-Corrected95%</th>
<th>Percentile95%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.02</td>
<td>0.018</td>
<td>-0.005</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.111</td>
<td></td>
</tr>
<tr>
<td>Path 2 Standardization</td>
<td>0.04</td>
<td>0.097</td>
<td>0.041</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>0.01</td>
<td>0.008</td>
<td>-0.002</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.091</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.003</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.164</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from the mediation effect report table in Table 8, only path 2 (social media use → ideal beauty internalization → appearance comparison → appearance anxiety) is significant, indicating that social media use can play a positive role in appearance anxiety, while ideal beauty internalization and appearance comparison play a mediating role in it, and hypotheses H1 and H4 are valid, and research question one is answered. And the two path effects related to self-objectification were not significant, and hypotheses H2 & H3 were not valid. Combining these two findings, research question two was responded to. There may be two reasons why
hypotheses H2 and H3 were not valid. Firstly, the part of the questionnaire that measures self-objectification is a ranked scale, which is more commonly used as an analytical method, such as frequency statistics, ANOVA, etc., and is not suitable to be used for items such as factor analysis. Secondly, due to the large number of ranked items (10 items), it is very easy for respondents to fill in the scale by making mistakes, omitting and resulting in limited reliability of this part of the data.

5. Talk over

This paper examined the relationship between social media use, ideal beauty internalization, self-objectification, appearance comparison, and appearance anxiety. It was found that the relationship between self-objectification and appearance anxiety was not significant. Social media use, internalization of ideal beauty, and appearance comparison all positively affect appearance anxiety, and internalization of ideal beauty and appearance comparison have a mediating role in this process; in the process of using social media, women internalize their ideal beauty, which in turn creates appearance comparison and ultimately affects their appearance anxiety.

First, this study confirmed that social media use has a positive effect on women's appearance anxiety and that social media use positively predicts women's level of appearance anxiety. Research hypothesis H1 was confirmed. This is consistent with sociocultural theory. This theory suggests that individuals receive socio-cultural influence and assimilation of their values and social standards, and use social standards as their code of conduct. In the shaping of social standards for women's image, social media shape women's image according to social and cultural expectations of female perfection, promoting "white, thin, and young" and directing people's attention to their appearance, creating "appearance supremacy", This creates a social trend of "appearance is supreme" and "face value is justice". The more time and energy women invest in social media, the more they will use the aesthetic standards on social media to examine themselves, and the more likely they are to be dissatisfied with their own appearance and other negative emotions [50]. Since then, many researchers have conducted empirical studies on this assertion and found that the "thin is beautiful" evaluation standard promoted by mass media is prone to produce negative body imagery [51], and that individuals who frequently use highly visualized types of social media are significantly more worried about their own appearance than their peers who do not use social media [1], and that social media use is significantly higher than that of non-social media users [2], and that individuals who use social media frequently are significantly more likely to be dissatisfied with their own appearance. [52], and an increase in social media use behavior leads to higher levels of appearance anxiety [53]. Therefore, it is necessary for social media to be self-reflective about the content and values they promote, and to take care to regulate the content and form of discourse construction in the information they publish.

Second, this study also confirmed that ideal beauty internalization and appearance comparison play a mediating role in the effect of social media use on women's appearance anxiety, and research hypothesis H4 was confirmed. Social cognitive theory suggests that generalization and inducement play an important role in imitation [54]. In the new media era, social media

platforms involve users in the field of harsh aesthetic standards with great exposure, and appearance dividends cause individuals to generate imitative thoughts and behaviors, and individuals internalize ideal beauty and hold themselves to the image of ideal beauty. Questioning their own appearance. Meanwhile, according to the social comparison theory, each individual, in the absence of objective standards, will utilize others as a yardstick of comparison for self-evaluation. Women’s perceived pressure from the media usually leads them to compare themselves with the highly attractive appearance communicated by the media (i.e., upward appearance comparisons), which exacerbates the feeling of dissatisfaction with their own appearance. Established empirical studies have separately confirmed the mediating role of both external appearance comparisons of ideal beauty internalization on appearance anxiety respectively: in an online survey of 1,287 Dutch women, Barelds et al. found that physical comparisons acted as a partially mediating variable in body image satisfaction [55], and Anixiadis found that female users, after viewing images of perfection displayed on social media platforms, were guided to internalize the ideal beauty, are prone to the idea of upward social comparisons and negative emotions [56], and some scholars have pointed out that social comparisons, as the basic motivation of individuals, related to appearance, especially upward appearance comparisons, will reduce the individual’s self-appraisal of appearance and elevate his or her dissatisfaction with body imagery [57]. The confirmation of this hypothesis is the innovative finding of this paper, based on previous studies, that Path 2 (social media use → ideal beauty internalization → appearance comparison → appearance anxiety) is significant, confirming the chain-mediated role played by ideal beauty internalization and self-objectification on appearance anxiety, and enriching the theoretical studies related to appearance anxiety.

The hypotheses of H2 and H3 were not confirmed in this study. According to the mediation effects reported in Table 1, this was mainly because the path effects between self-objectification and appearance anxiety in H2 and H3 were not significant. This is contrary to the findings of academic research on the effects of self-objectification on appearance anxiety. First, the theory of objectification itself implies that the experience of being objectified by women changes the inner cognition and ultimately produces anxiety about the body, as shown in Figure 5-1 below, where the female body is frequently observed and evaluated, i.e., the experience of encountered objectification, in social life, whereas women internalize the perspectives of others, evaluate themselves as objects, and monitor their bodies through self-objectification. This self-objectification and habitual surveillance of the body, in turn, leads to more body shyness and higher anxiety.

Secondly, in recent years, a large number of studies have verified that women with higher levels of self-objectification perceive themselves as being in an environment where they are noticed and evaluated by the public around them, and thus develop appearance anxiety [58]. Moreover, objectifying information can directly trigger women’s appearance anxiety, or it can trigger women’s appearance anxiety through the mediating role of self-objectification [59]. Domestic studies have also shown that self-objectification plays a mediating role in the path of female college students’ social media use on appearance anxiety [60]. According to Du Hongqin et al. concluded that self-objectification is positively related to appearance anxiety, and social media

use behaviors increase the risk of self-objectification, leading to higher levels of appearance anxiety [61]. Tang Wenqing et al. found that college students’ self-objectification was significantly positively correlated with appearance anxiety, and regression analyses showed that self-objectification significantly predicted their appearance anxiety, i.e., individuals with high levels of self-objectification had higher appearance anxiety [62]. This shows that the hypotheses about self-objectification and appearance anxiety in H2 and H3 have some theoretical basis, so the research hypotheses themselves are excluded.

![Figure 5-1 Theoretical Framework for Objectivization (Source: Fredrickson, Roberts, et al., 1998)](image)

Secondly, through the re-verification of the questionnaire entry data information and the repeated experiments of related data processing, it is found that the hypotheses of H2 and H3 are still not valid, so it is ruled out that the research data may be the cause of the error. Through consulting professionals and reviewing relevant literature, this paper believes that the hypotheses of H2 and H3 are not valid for the following three reasons: first, the sample size of the collected questionnaire is too small, and the obtained indexes are unstable, which are used to infer the overall accuracy is poor, and the due differences cannot be shown, which makes the results of the study unstable and it is difficult to get the correct results; second, the measurement scales of the questionnaire for the measurement of the objectification of self are partially ranked scales, and this kind of scale is not suitable for the measurement of self. Secondly, the part of the questionnaire for the measurement of self-objectification is a ranked scale, which is more commonly used in frequency statistics, ANOVA, etc., and is not suitable for factor analysis, so the accuracy of the results is low; thirdly, due to the fact that there are many ranked items in the measurement scale (10 items), it is very easy for the respondents to make mistakes, omissions or fill in the scale randomly, which leads to the limited credibility of the data in this part of the questionnaire.

As a result, the countermeasures include (1) increasing the sample size to improve the representativeness of the sample and the precision of the results; (2) modifying the existing scale of self-objectification and selecting a more mature scale with higher reliability and small du; (3) streamlining the scale questions as much as possible to shorten the questionnaire answering time and to reduce the respondent's fatigue and resistance to the questionnaire; (4) the future studies need to further improve the research design to further test the moderating effect of self-esteem.


Based on the above conclusions, this paper puts forward the following suggestions for women’s appearance anxiety: firstly, relevant national institutions and media should publicize and advocate the public to establish correct aesthetic concepts, emphasize the diversity of appearance and the concept of healthy beauty, and introduce relevant guiding documents; secondly, all kinds of social media should strengthen their own content orientation and screening, and crack down on the contents that excessively sell appearance anxiety and promote unhealthy aesthetic concepts; finally, every user on social media should start from themselves to change their aesthetic concepts, and resist the aesthetic tendency of "white, young and thin". Finally, every user on social media should start from themselves, change their aesthetic concepts, resist the "white, young and thin" aesthetic tendency, and respect the diversity of appearance. Only by linking users and users, and users and social media platforms, can we better change the wrong aesthetic tendencies in the Internet, alleviate women's excessive appearance anxiety that should not exist in the first place, so as to form a clean and positive Internet environment, and prevent the negative consequences and impacts caused by some women's excessive pursuit of ideal beauty.

Finally, there are some shortcomings in this study: first, 97% of the research subjects in this paper are female college students or graduate students, whose educational level is higher, their judgment ability is stronger, and they are younger, with basically good physical functions, and the degree of appearance anxiety may be lower compared with other ages, while the appearance anxiety of younger women due to the limitations of their vision and immature values, and the appearance anxiety of middle-aged women due to their age, production, etc., are also worthy of attention. Secondly, the questionnaire setup of this study still has some problems. The measurement of self-objectification was changed from an experimental method to a questionnaire, but it has more sorting items, which are likely to be filled in wrongly or omitted by the respondents when filling in the questionnaire, and it is impossible to use factor analysis, which results in limited reliability and validity, and fails to provide accurate support for the study. In addition, for the effect of social media use on appearance anxiety, this paper confirms a limited path of influence, and the complex process of its role needs to be further explored. In today's complex and changing social life, how to combine multiple disciplinary perspectives to more comprehensively and integrally straighten out the relationship and path of influence between social media use and appearance anxiety, and to land on the practical care in reality, is the direction of the next research to strive for.

References


