

The Impact of Social Media on Chinese High School Students' Body and Image Anxiety

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Abstract: This paper focuses on the impact of social media on the body and image anxiety of Chinese high school students. It identified that the impact of social media on the physical and image anxiety of Chinese high school students is significantly different in terms of gender, grade, origin and time. The impact of social media on the physical and image anxiety of Chinese female high school students is higher than that of Chinese male senior high school students. The impact of social media on the physical and image anxiety of high school students in China's first and second tier cities is higher than that of senior high school students in China's third and fourth tier cities, etc. Families and schools should strengthen the correct consciousness and aesthetics of senior high school students, and the society should also establish a social media intervention mechanism.

Keywords: Social media, Chinese high school students, Body and image anxiety, Solution.

1. Introduction

Body dissatisfaction is defined as having negative emotions or evaluations of one's own body [1]. Youth nowadays are the generations which grow with internet, and their life method and thinking method are deeply impact by the internet environment. Moreover, social media is gaining popularity globally as a new form of media, but people are not aware of the psychological impact that social media use can have to a great extent. Much information about ideal body shape is delivered to young people through social media [2]. High school students are more affected by social media than adults because their worldview, outlook on life, and physical development are still unfixed. Generally speaking, the impact of social media on the body and image anxiety of China high school students has obvious differences in the aspect of genders, grades, origins, and time spent, the impact of social media on the body and image anxiety of China female high school students is higher than it on China male high school students, the impact of social media on the body and image anxiety of China high school students of first and second-line cities is higher than it in China high school students of third and fourth-line cities, and the impact of social media on the body and image anxiety of China high school students who spent more time on social media is higher than it on China high school students who spend less time on social media. Accordingly, solutions are proposed for adjusting the impact of social media on China high school students, such as family and school should strengthen the correct aware and aesthetic view of high school students and society should establish the social media intervene mechanism as well.

2. Literature Review

2.1. Social Media Brings Unhealthy Looks and Physical Anxiety to High School Students

For adolescents, appearance is an important factor affecting self-worth, and they need to rely on the praise and appreciation of their peers to meet their inner psychological needs for self. Numerous recent studies have shown an association between social media and high school students' management of their bodies and images [3]. During pre-adolescence and teenage years, young men and women are aware of changes in their bodies and are concerned about how their bodies look and whether their peers approve of them. Social media that uses overly idealized models or celebrity bodies as a norm of beauty can cause teens to feel anxious about their bodies and images. Additionally, many studies over the past decade have found that the more frequently high school users use social media, the less satisfied they are with their bodies [4]. Adolescents may choose to diet to lose weight in order to achieve the ideal body shape seen on social media—behaviors that can lead to unhealthy behaviors and physical illness [5]. Research has shown that social media-induced body and image anxiety affects more women than men who care more about their physical development [6]. Yang et al. [4] also pointed out that in the 21st century, studies have demonstrated that social media has become an increasingly important factor affecting adolescents' perceptions of beauty standards. As a result, teens may develop low self-esteem or even depression about their bodies in order to achieve the body and image they seek. Over the past two decades, social media has played a vital role in the lives of teens and has had a positive impact on the body and image of high school students.

2.2. Concepts of the Physical Ego and Social Anxiety

The physical self refers to the perception and examination of one's own physical condition, including the perception and examination of one's own body and image, and the supervision of them. The physical ego is the first developed part of a person's self-awareness, and even a toddler has a physical ego that is a facilitator of individual behavioral motivation and mental health. Because under the influence of various factors, most of the time, people's perception of their own body and image is incorrect [7]. People can be too active or too passive when looking at their bodies and images, both of which can lead to body and image disorders. Social media can lead to the effect of “media internalization,” an ion that internalizes social attraction [8]. It is also known as ideal internalization, which refers to individuals accepting socially defined standards of attractiveness in recognition and directing themselves to come as close to those standards as possible. This internalization can cause individuals to compare their ideal standards with their actual physical condition, creating large gaps that make them feel anxious. Even when peers who post on social media promote an overly idealized and unrealistic body and image it can affect teens' pursuit of body and image and cause them unnecessary stress, especially for adolescent girl. After seeing pictures of their peers on social platforms, teens compare themselves to what they see. For example, images are often manipulated to make posters appear thinner and whiter on social media [9]. As most social media users upload beautiful selfies to the internet, and many photos that receive positive reviews are doctored, and teens are inundated with idealized images and become believable [6].

2.3. The Reason Adolescents Are Vulnerable to Social Media Beauty Standards Is Their Immature Bodies and Brains

For example, Vries et al. [10] pointed out that adolescents are psychologically immature when it comes to refuting prevailing beauty standards on online platforms. Thus, those unrealistic bodies and images of "beautiful" advertised on social media can in turn create cosmetic and physical anxiety for

the adolescents watching them, leaving them both dissatisfied with their appearance and psychologically unhappy. Several studies have shown that excessive daily use of social media software can negatively impact adolescents' physical self-esteem and cause them to lack confidence in their own personality [4]. Compared with adults, teenagers are not deeply involved in the world. Therefore, they lack judgment on beauty standards, and are prone to blind obedience and lack of self-aesthetics. Therefore, they are more likely to be misled and manipulated by the beauty standards promoted by social media, and thus fall into body and image anxiety.

Research Questions:

1. Does the body and image promoted on social media create body anxiety for high school students?
2. What factors contribute to high school students' body and image anxiety?
3. Is the amount of time spent using social media related to the development of body and image anxiety in high school students?
4. Are females more likely to have body and image anxiety than males?

3. Methodology

3.1. Survey

This study will use an online questionnaire distributed to high school students aged 15-18 attending international schools in China, from whom several will be selected for in-depth interviews. First, the questions on the questionnaire will focus on social media use and the extent to which they suffer from appearance anxiety. The inclusion criteria were high school students aged 15 to 18 years who use social media software. Data were collected from $N = 110$ individuals. The study sample consisted of $n = 67$ females and $n = 43$ males. Then, it will be distributed to 110 participants. All participants filled out a questionnaire about their use of social software, such as gender, age, most frequently used software, time spent using it, posting and viewing photos, and the emotions that would arise. Comparison and analysis of the collected data of variables are conducted based on SPSS analysis on the collected data.

3.2. Demographic Data

The main objective of this study was to examine the appearance and body anxiety faced by high school students in Chinese international schools in the context of social media. Most of the previously published articles on this topic have been quantitative surveys of specific populations. This study used a combination of quantitative questionnaires to identify the causes of appearance and body anxiety among high school students and determine the relationship between social media and anxiety. The quantitative data obtained from the survey will point to several possible causes of appearance anxiety among high school students.

4. Finding

4.1. The Gender Difference Test

From the following table 1, it can be perceived that female high school students' degree of body and image anxiety caused by social media is higher than male high school students.

Table 1: Variance test of male and female differences in body and image anxiety caused by social media of high school students.

Body and image anxiety	Gender category	Average (M)	Standard deviation (SD)	F value
	male	2.99	0.576	10.81**
	female	2.91	0.63	

Note: *p<0.05, **p<0.01, ***p<0.001

4.2. Difference of Student Origin

From table 2 it can be perceived that in the aspect of body and image anxiety, the effect of student origin is obvious. As for the multiple origins of students it can be perceived that compared to students from the first line and second line cities, students from the third-line and fourth-line cities have a lower score and the difference is obvious.

Table 2: body and image anxiety.

	Origin	Average (M)	standard deviation(SD)	F Value
body and image anxiety	First line cities	3.07	0.64	5.67***
	Second line cities	2.95	0.62	
	Third line cities	2.91	0.56	
	Fourth line cities	2.87	0.45	

Note: *p<0.05, **p<0.01, ***p<0.001

4.3. Time Difference Test

From the following table 3 it can be perceived that the body and image anxiety caused by the time amount spent on social media has an obvious difference. China high school students who spend more time on social media receive a higher degree of body and image anxiety impacted by social media than their peers who spend less time on social media.

Table 3: body and image anxiety caused by the spent time on social media.

	Time spent	Average(M)	standard deviation (SD)	F Value
body and image anxiety	More than 9hours	3.05	0.59	5.67***
	8-9	2.96	0.61	
	7-8	2.92	0.62	
	6-7	2.64	0.63	
	5-6	2.78	0.57	
	4-5	2.66	0.53	
	Less than 3 hours	2.51	0.46	

Note: *p<0.05, **p<0.01, ***p<0.001

5. Discussion

The relevance between social media and its impact on China high school students' body and image anxiety

5.1. Social Media Use Has the Relevance with the Body and Image Anxiety of China High School Students

From the above findings it can be perceived social media can cause China high school students' body and image anxiety. The reason may be because when individuals have generated negative perceptions on their bodies, they will allocate the attention resource to their bodies and images and show an over-attention, forming a negative body self. When exposed in the social context, individuals will pay attention to their bodies and images at any time, and may also make comparisons with others, which also bring negative experiences to individuals and generate the emotion of anxiety [11]. Individuals have the subjective image on their bodies and images, which is the ideal body self. In China, the ideal self of high school students is often cultivated by western standards, which means it hardly exists in the Asian world. Therefore, in reality, China high school students can hardly realize their ideal bodies and images. The big gap between the ideal body self and the body self of China high school students in real life promotes the generation of their body and image anxiety. This phenomenon matches the viewpoint of the self-difference theory. The self-difference in the aspect of body and image can generate negative emotions, and lead to the generation of body and image anxiety of China high school students.

Moreover, the negative body self of China high school students leads to their body and image anxiety via the negative comments of others. Therefore, China high school students who have a higher level of negative body self also have a higher level of social anxiety level and a high level of terror on the negative comment. Moreover, the attention on the negative body self of China high school students also impacts their attitude and preference on the negative comment of others, so as to enhance their social anxiety level as well. The social anxiety perception model and meta theory can explain this phenomenon [12]. Because in social contexts, the attention of individuals on the body self will make the individuals generate subjective imaginations, which may promote the generation of negative body self, assuming that others hold the same idea. In this way, the individual will fall into a situation of nervousness and anxiety. Moreover, the contents such as "selfies" posted by other social media users and the peers of China high school students also enhance their anxiety because they can lead to comparison and the expanded gap between the ideal body self and real body-self [13].

5.2. The Obvious Difference of the Various Variables in the Aspect of Male and Female High School Students

From table 1 it can be perceived that in the aspect of body and image anxiety caused by using social media, China female high school students have a higher score than China male high school students. This means that China female high school students have a larger impact by social media and the degree of internalized media ideal standards is deeper than China's male high school students. Therefore, compared to their practical body and image situation, they are easier to feel bad about their bodies and images. The cause may be that on social media there is more information about women than men. For instance, the majority of plastic hospital advertisements on social media use women as their representatives. And there are also the contents such as the comparison photos before and after the plastic operation in these advertisements [14]. Moreover, the modern beauty concept promoted by media including social media in China is westernized, which means the bodies used on the media including social media are under the aesthetic viewpoint of the west, such as big breasts, high and

straight noses, long legs, and big eyes. The media internalization thus can appear. The ideal bodies of China high school female students cultivated by the concepts of the body standards by social media will be generated. China high school female students thus are more tend to make the comparison between these ideal bodies and images with their bodies and images in reality [15]. Therefore, there is a big gap between the physical reality of China high school female students with the western beauties. This may be the reason that China high school female students pay more attention to their bodies and images and then negatively view their bodies and images and have anxiety.

5.3. The Obvious Differences of the Variables in the Aspect of the Students' Origins

From table 3 it can be perceived that in the aspect of the impact of social media on the body and image anxiety of China high school students, the body and image anxiety degree of China high school students from the third and fourth line cities are lower than the ones from the first and second-line cities. This result matches with practical life. Because the evolutionary process of third and fourth-line cities is slower than the first and second-line cities, and the living environment and cultural lives of the former are comparatively simple. China high school students from the third and fourth line cities do not have many opportunities to perceive the information of beauty and makeup, or their pursues are constrained by their economic situation, therefore, the impact of social media on the body and image anxiety of them is comparatively lower than on their peers in the first-line and second-line cities [16]. While students from the first and second line cities have received more impact of social-cultural and environmental impact because of the impact of their living environment, peers as well as families, therefore, they receive a comparatively deeper influence by social media on their body and image anxiety.

5.4. The Obvious Difference of the Variables in the Aspect of the Time Amount China High School Students Spend on Social Media

In the aspect of the impact of social media on the body and image anxiety of China high school students, the body and image anxiety degree of China high school students who spent a higher amount of time on social media is higher than the China high school students who spent a lower amount of time on social media [17]. Because the increased amount of time on social media will enhance the exposure time and frequency of China high school students to the ideal perfect body and image standards promoted by social media, so as to generate imaginations of more ideal body and image self, which thus expand the gap of their ideal self and reality self, so as enhance their body and image anxiety.

6. Conclusion

6.1. Conclusion

From the above analysis the following conclusion can be drawn:

1. The impact of social media on the body and image anxiety of China high school students has obvious differences in the aspect of genders, grades, origins, and time spent.
2. The impact of social media on the body and image anxiety of China female high school students is higher than it on China male high school students
3. The impact of social media on the body and image anxiety of China high school students of first and second-line cities is higher than it in China high school students of third and fourth-line cities.

4. The impact of social media on the body and image anxiety of China high school students who spent more time on social media is higher than it on China high school students who spend less time on social media.

6.2. Inspiration and Limitation

6.2.1. Inspiration

For China high school students' body and image anxiety caused by social media, schools should establish psychological health education courses as well as equipped professional psychological education teachers. High school is the key period of self-development, in which self-recognition development is very important. The reason that China high school students generate body and image anxiety by the impact of social media is often that they have less discrimination, and thus be misguided by the concepts of social media. The wrong recognition about body self in China high school students is popular. For instance, some high school students have obtained the wrong perception that only big breasts and long legs can be viewed as the perfect body [18]. Parents should correct such wrong concepts. Therefore, schools and parents should pay attention to the body and image anxiety of China high school students and correct their wrong perceptions about beauty which is cultivated by social media. Teachers and parents should help China high school students to correctly recognize themselves, be objective in reviewing themselves, as well as establish a correct aesthetic viewpoint and have a healthy recognition of their body, so as to release the body and image anxiety caused by the impact of social media.

6.2.2. Limitation

However, this research only researches China's high school students instead of the high school students in all the world. Therefore, the conclusions drawn based on the data of high school students from various countries may be different. In addition, the participants of this research are only 70 high school students. Because the sample number is too limited, hence, the objectiveness of this research is discounted. In the future, for researching this topic, it is necessary to research more samples to enhance the objectiveness of the result.

Reference

- [1] Grogan, S. (2016). *Body image*. Routledge. <http://dx.doi.org/10.4324/9781315681528>
- [2] Hosseini, S. A., & Padhy, R. K. (2021, September 9). *Body image distortion*. NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK546582/>
- [3] Charmaraman, L., Richer, A. M., Liu, C., Lynch, A. D., & Moreno, M. A. (2021). Early adolescent social media-related body dissatisfaction: Associations with depressive symptoms, social anxiety, peers, and celebrities. *Journal of Developmental and Behavioral Pediatrics*, 42(5), 401–407. <https://doi.org/10.1097/DBP.0000000000000911>
- [4] Yang, H., Wang, J. J., Tng, G. Y. Q., & Yang, S. (2020). Effects of social media and smartphone use on body esteem in female adolescents: Testing a cognitive and affective model. *Children*, 7(9), 148. <https://doi.org/10.3390/children7090148>
- [5] Jankauskiene, R., & Baceviciene, M. (2019). body and image concerns and body weight overestimation do not promote healthy behaviour: Evidence from adolescents in lithuania. *International Journal of Environmental Research and Public Health*, 16(5), 864. <https://doi.org/10.3390/ijerph16050864>
- [6] Kleemans, M., Daalmans, S., Carbaat, I., & Anschutz, D. (2016). Picture Perfect: The direct effect of manipulated instagram photos on body and image in adolescent girls. *Media Psychology*, 21(1), 93–110. <https://doi.org/10.1080/15213269.2016.1257392>
- [7] Brownell, C. A., Zerwas, S., & Ramani, G. B. (2007). So big: The development of body self-awareness in toddlers. *Child Development*, 78(5), 1426–1440. <https://doi.org/10.1111/j.1467-8624.2007.01075.x>

- [8] Rousseau, A., Laporte, H., Grundmann, F., & Eggermont, S. (2020). The role of pubertal timing and heterosocial involvement in early adolescents' media internalization: A moderated moderation analysis. *The Journal of Early Adolescence*, 40(8), 1167-1194. <https://doi.org/10.1177/0272431619899473>
- [9] Choukas-Bradley, S., Nesi, J., Widman, L., & Galla, B. M. (2020). The Appearance-Related Social Media Consciousness Scale: Development and validation with adolescents. *body and image*, 33, 164-174. <https://doi.org/10.1016/j.bodyim.2020.02.017>
- [10] Vries, de, Peter, Graaf, de, & Nikken. (2015). Adolescents' social network site use, peer appearance-related feedback, and body dissatisfaction: Testing a mediation model. *Journal of Youth and Adolescence*, 45(1), 211-224. <https://doi.org/10.1007/s10964-015-0266-4>
- [11] Hicks, S., & Brown, A. (2016). Higher facebook use predicts greater body and image dissatisfaction during pregnancy: The role of self-comparison. *Midwifery*, 40, 132-140. <https://doi.org/10.1016/j.midw.2016.06.018>
- [12] Choukas-Bradley, S., Nesi, J., Widman, L., & Galla, B. M. (2020). The Appearance-Related Social Media Consciousness Scale: Development and validation with adolescents. *body and image*, 33, 164-174. <https://doi.org/10.1016/j.bodyim.2020.02.017>
- [13] Mills, J. S., Musto, S., Williams, L., & Tiggemann, M. (2018). "Selfie" harm: Effects on mood and body and image in young women. *body and image*, 27, 86-92. <https://doi.org/10.1016/j.bodyim.2018.08.007>
- [14] Prichard, I., McLachlan, A. C., Lavis, T., & Tiggemann, M. (2017;2018;). The impact of different forms of #fitspiration imagery on body and image, mood, and self-objectification among young women. *Sex Roles*, 78(11-12), 789-798. <https://doi.org/10.1007/s11199-017-0830-3>
- [15] van den Brink, F., Smeets, M. A. M., Hessen, D. J., & Woertman, L. (2015;2016;). Positive body and image and sexual functioning in dutch female university students: The role of adult romantic attachment. *Archives of Sexual Behavior*, 45(5), 1217-1226. <https://doi.org/10.1007/s10508-015-0511-7>
- [16] Erliksson, O. J., Lindner, P., & Mörtberg, E. (2020). Measuring associations between social anxiety and use of different types of social media using the swedish social anxiety scale for social media users: A psychometric evaluation and cross-sectional study. *Scandinavian Journal of Psychology*, 61(6), 819-826. <https://doi.org/10.1111/sjop.12673>
- [17] Boursier, V., Gioia, F., & Griffiths, M. D. (2020). Do selfie-expectancies and social appearance anxiety predict adolescents' problematic social media use? *Computers in Human Behavior*, 110, 106395. <https://doi.org/10.1016/j.chb.2020.106395>
- [18] Meshi, D., & Ellithorpe, M. E. (2021). Problematic social media use and social support received in real-life versus on social media: Associations with depression, anxiety and social isolation. *Addictive Behaviors*, 119, 106949-106949. <https://doi.org/10.1016/j.addbeh.2021.106949>