

Social Media: Exploring the Relationship between Social Media Experience and Self-esteem on Chinese Youth

Yuchan Du

*School of Visual Arts, New York, 10010, USA
utugisaki@gmail.com*

Abstract: While social media allows users for distant socialites and intimacies, it is also a significant tool for social comparison, different individuals experience social media differently and cause varying impacts on self-esteem. This research aim to investigate the influence of pervasive exposure to social media-based information among young Chinese netizens. Through a conduction of an online survey (N=153) and follow-up interviews, the study reached the basic conclusion that the majority agree on their self-esteem were affected by bad experiences on social media most of the time. This discovery has significant theoretical and practical implications for further study on Chinese inherent environment.

Keywords: self-esteem, social media, social comparison, Chinese netizen, Internet, social media experience

1. Introduction

The quick expansion of social media popularity never slowed in this era and became integral to our society. According to the most recent figures from Global Social Media Stats, there were around 4.48 billion social media users globally in July 2021, accounting for 57% of the total global population. Among all the world's countries, China is the country with the largest number of netizens, reported by the China Internet Network Information Center [1, 2]. The accurate number is 989 million by the end of December 2020. The growth is rapid, particularly with adolescents, which has increased to 183 million by the end of 2020.

The Chinese Internet ecosystem is rather unique because of the existence of "the firewall." Thus the access for the Chinese netizens (especially mainland residents) are mostly limited compare to users from other regions. This has resulted in the majority of Chinese netizens gathering mainly on Chinese-speaking only social media platforms [3].

Though there have been many studies of users and their experiences on Facebook, Twitter, Instagram, etc., the studies about the Chinese social media platforms and their huge user bases are insufficient. WeChat (locally named Weixin) had more than 1.25 billion monthly active users 2021, and it is ranking at the sixth of active user number worldwide [4]; Sina Weibo, the China's second largest social media platform had over 516 million monthly active users and 230 million daily active users; Xiaohongshu (Translated as Little Red Book) is the lesser recognized Chinese social media platform which highlighted the "lifestyle sharing" and had one of the fastest user growth rate, of approximately 100 million active users and 37.2% were users aging from 25 to 34 years old [5]. The overwhelming growth significantly impacted the economy; however, the impact on its users' mental health or emotional well-being still remains unclear.

As the factors that affect the self-esteem of adolescents and youth are numerous and complex, because of the rapid growth and high penetration of social media in China's networking environment, this study will focus mainly on social media usage as the reference to verify the relationship with young Chinese users' self-esteem changes. This study aims to contribute the gap with the knowledge on experiences of young adults and adolescents who have a high frequency of these most popular Chinese social networking sites.

1.1. Young people's expectations of social media use, and the actual result

According to a report from Kantar, Chinese netizens' satisfaction with social media continues to drop from 2018 to date [6]. Despite the many benefits of social media such as self-presentation, relationship maintenance, and entertainment, numerous past research have revealed the negative impacts of social media usage [7, 8, 9]. It is not surprising to see an increasing number of people who felt uncomfortable or experienced social fatigue toward social media for various reasons, including compulsive use, data privacy concerns, false advertising, peer comparison, and more [10]. Several studies attributed the causes of these feelings to more profound factors, such as anxiety, insecurity, depression, self-esteem variable and satisfaction level with the real-life [11, 12].

Self-esteem is defined as a person's overall subjective sense of his/her value or worth, or the extent to which a person appreciates them [13]. In brief, it is the opinion an individual has about him/herself (NHS), and it is viewed as one of the essential behavioral characteristics of daily life [14]. Because the adolescence and the early half of youth are the periods when most individuals begin to establish their identity and be aware of their reflection on others, self-esteem may play a crucial role in self-evaluation during this time [15]. Some studies have concluded that young people who have a higher frequency on visiting social media also hold lower state self-esteem and higher depression rate. Chronic social media use may result in trait self-esteem negatively [16]. Also, the study that examines social media addiction pointed out that adolescents who rely on social media to improve their self-esteem and life contentment are more likely to have deteriorating self-esteem and life satisfaction [17].

Previous research has provided some insight that social media is highly addictive, especially for teenagers and young adults [18, 19, 20]. There's been suggested a link between low self-esteem and social media addiction [21, 22]. In a practical sense, social media engages the interest of users by providing them with personalized information and content, and ensures that they remain fresh for a relatively long time [23], this could be a preliminary explanation for the reason of the social media addiction. The Henriques and Patnaik study [24] indicated that because social media has a huge impact on many aspects such as beauty, health, fitness, lifestyle, etc., users tend to develop a "sense of belonging" when using social media to get information or find recognition in the community. Similarly, other studies have examined the main demands of users on social media: social interaction without meeting in person, fast information sharing, more diversified forms of entertainment, escape or reduction of real-life stress, and elimination of loneliness [25, 26, 27].

However, in actual use, regardless of the age and gender of the user, the impact of social media is far from the user's initial expectation, and mainly, in a negative way, because of the ubiquity of social comparison [28]. Appel, Grewal, Hadi, and A. T. Stephen [29] argued that social media should be viewed as where the most diverse set of behaviors, relationships, and intentions converge. Therefore, social media is also prevalent and culturally/politically relevant in our society. Due to the complexity of the information provided by social media, the experience users have when receiving this information is often mixed, and an unpleasant experience would be left a more profound impression on the user. In one survey conducted by the Aesthetic Surgery Journal, 76% of respondents agreed that social media is the main reason for their unnecessary pressure and stress. A study published in the journal Computers and Human Behavior revealed that people who used seven to eleven social media

platforms had three times worse general anxiety symptoms than those who used zero to two platforms [30]. Social media can easily aggravate one's inferiority complex by encouraging the user to have a competitive mentality through advertising, but the result for the user is usually negative. According to research conducted by Wang, Yang and Haigh [31], looking at others' selfies lowers people's self-esteem because users compare themselves to the individuals in photographs. Perloff [32] speculated on the impact of social media on young women's body image problems. Women's dissatisfaction with their bodies increased after they experienced the showcasing of thin-ideal media images. The study found that social media exacerbates women's perceptions and aspirations for the 'perfect body', resulting in self-esteem frustration for female users who do not achieve the perfection. Fardouly and Vartanian [33] conducted a similar but more focused study on young female Facebook users' body dissatisfaction. Young women who spend more time on Facebook have a higher level of body image concerns in comparison with friends, peers, social celebrities on Facebook.

Amedie [34] claimed the negative effects of social media, a set of evidence was provided to demonstrate his central concept: "Connections" between users and social media are — possibly — just an illusion. Cyber peers' shallow ties lead to emotional and psychological issues, antisocial behavior, and act as a source of motivation for criminals. The study also discussed how a lack of self-awareness can cause depression in some people, as well as a blurring of identity and, ultimately, self-destructive behaviors. Yilmaz, Ar, and Civan [35] studied the adolescent group, examined the connection between social anxiety and phone addiction. With the discovery that youth with high levels of social anxiety utilize social media platforms to express themselves more. This way of socializing without direct interviews gives them more security, but also creates an illusion of misplaced personality, or misalignment. The result of the misalignment may cause them to sense further disappointment and frustration in reality and induce a decrease in self-esteem.

2. Method

This study aimed to find the relationship between Chinese youth's social media experiences and changes in their self-esteem. 182 young Chinese Participants were requested to fill out a questionnaire about their experience with social media, covering questions such as duration of usage, platform preference, perceptions of use, interested areas etc. Answers from people who do not use social media were sifted out. A small portion of the participants was invited at random to be interviewed, where more detailed personal experiences and emotions were discussed.

All respondents who were present at the time of the investigation were asked to complete a two-part online survey. The first section of the survey asks respondents a series of questions to determine how they utilize social media. The questionnaire was processed in a confidential and anonymous manner.

- **Participants:** This survey collected responses from 182 online participants, 153 of them were considered valid. Respondents who considered themselves unfamiliar with Chinese social media platforms were filtered out, as well as those who took less than 8 minutes to complete the questionnaire. Among the valid responses, 52.94% were women, 35.95% of respondents were between the ages of 16 and 24.
- **Composition of the questionnaire:** The questionnaire was divided into two parts, the first with detailed questions about social media use and the second with a Rosenberg's Self-Esteem Scale (RSES) allow the respondents to rate their own self-esteem. In this session, all respondents were evaluated.
- **Interview:** Only very few of the respondents invited to conduct interviews were willing to participate in this session voluntarily, though participants were acknowledged that they would be

contributing answers and data in a completely anonymous form, most still expressed a preference for a transcript instead of a voice recording.

2.1. Finding

2.1.1. The questionnaire

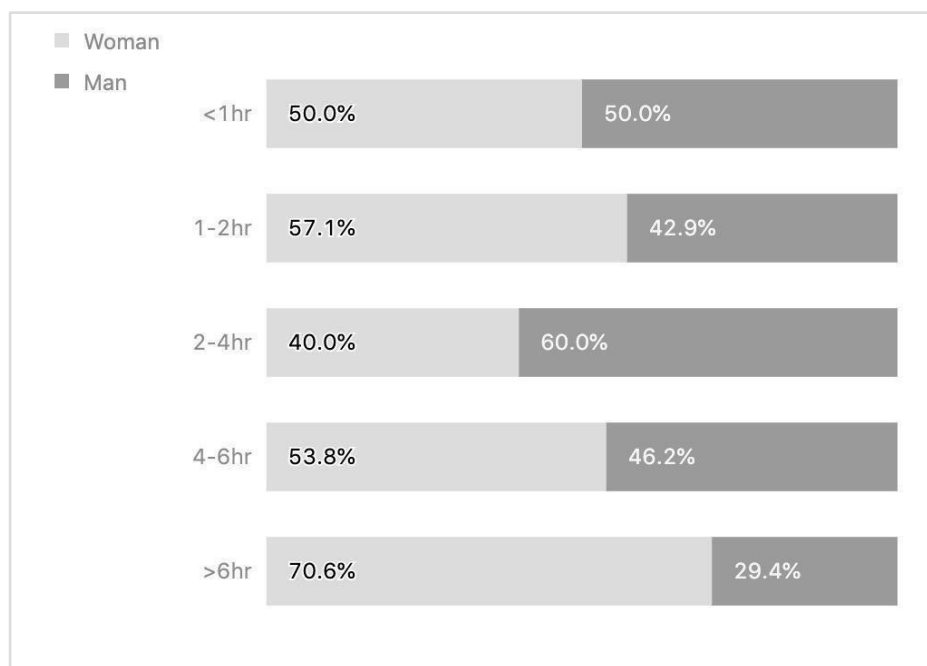


Figure 1: Daily social media usage and the gender segmentation

The valid answers to this questionnaire were 153, of which 52.94% were female. Young Chinese netizens between the ages of 16 and 24 were the main respondents to this questionnaire, accounting for 35.95% of the total number of participants. Users between the ages of 25 and 34 followed closely behind, accounting for 20.26%. In the multiple-choice Questions about the most frequently used social platforms, surprisingly, Xiaohongshu is the most frequently used social media in this sample, with 54.25% of respondents using it regularly. The second highest used platform is Weibo, which took 50.33%, then Tiktok at 45.1%, and WeChat, 35.95%. In connection with daily social media usage, 32.03% stated that spending 1-2 hours on social media is considered a normal and necessary need for their daily life. 16.99% claimed a usage time of less than 1 hour and 22.88% with 2-4 hours a day. People who spent more time on social media tend to use more platforms and hold multiple accounts on each platform. 48% of them reported having accounts on more than 2 major social media sites. As shown in Fig 1, the daily social media usage and the gender segmentation displayed the connection between gender groups and social media usage time. In Rosenberg's Self-Esteem Scale self-assessment, 56.86% of the respondents gave themselves a generally low self-esteem assessment (under the score of 15).

Participants were asked whether they deliberately presented a different persona on social media platforms. 34.64% of respondents denied the question but admitted to tinkering a little with the details of their lives, while 17% admitted to covering up some aspects that they felt inadequate and altered their shortcomings. In addition, 15.03% of the participants said they rarely actively post content on social media and only receive information as a viewer. The main reason for this tendency is to avoid disputes with other social media users. This is a common situation in China's social media environment, especially on Sina Weibo, where cursing battles between netizens are quite frequent and intense

[36]. The unique atmosphere has resulted in a particular group of "self-muted" users on the Chinese Internet.

Table 1. The correlation between social media experiences and the common anxiety triggers they experienced

Option	Positive (n=54)	Negative (n=99)	Total (N=153)
These influencers are fear-mongers who use it as strategy to gain popularity	20 (37.04)	40 (40.40)	60 (39.22)
The contents on social media creates social comparison	24 (44.44)	57 (57.58)	81 (52.94)
The contents on social media suppress users' self-esteem	27 (50.00)	54 (54.55)	81 (52.94)
The contents on social media triggers the anxiety then made users insecure	33 (61.11)	51 (51.52)	84 (54.90)
Other users share their problems then affected me	14 (25.93)	26 (26.26)	40 (26.14)
I don't know the reason but I felt upset	7 (12.96)	9 (9.09)	16 (10.46)

In the more detailed question on social media use, respondents were asked about the type and number of influencers they follow, with 32.68% of them reported 5-10 influencers of the "Internet celebrity/self-presenting/lifestyle" category. Only 8.5% said they had never followed such type of influencers. Of the respondents who followed this type of influencer, only four people out of ten would agree that the content brought by these influencers was helpful to them. While 42.48% thought that only a very small percentage of the content was valuable, and most of them, they just use social media as a tool to "kill time". Even though many believed they didn't get much useful content from social media, one respondent said she was still interested in different points of view and "most of the time, I swipe Weibo with the attitude of watching clowns." Among the respondents who found the content helpful, the largest proportion was 35.29% who found it "slightly helpful" to improve their taste and 26.14% who found it "very helpful" for their judgment mainly about beauty products.

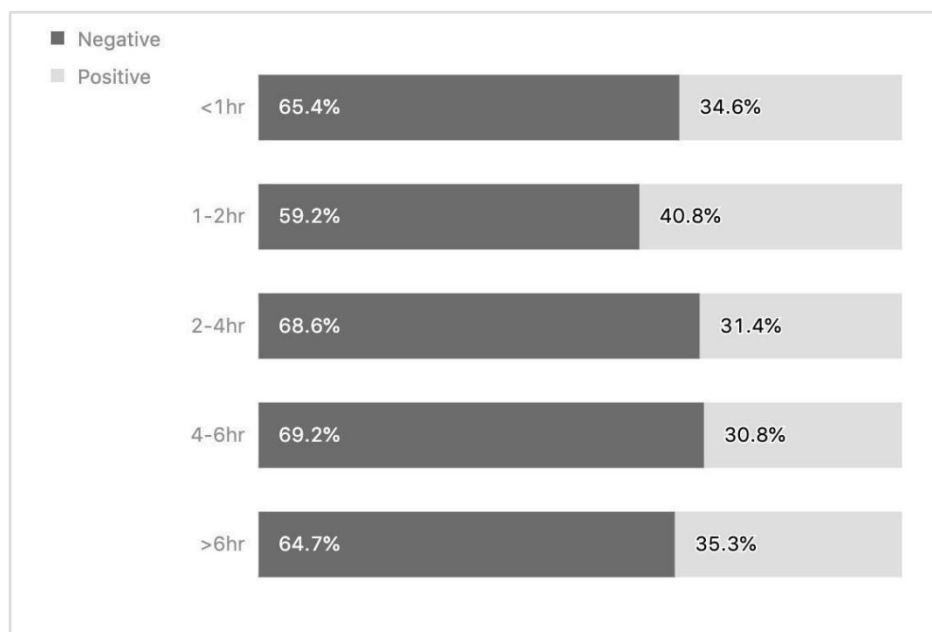


Figure 2: Daily social media usage and the experience

According to CBNDData, in 2019, 86.1% of Xiaohongshu users were female, while 83.7% were under 35. Thus, on this platform where women are the primary users, posting personal reviews and experiences with beauty products is common. Many brands and companies promote implant ads through popular influencers' posts as well. In the usage of social platforms, 89.54% of the respondents admitted that they had experienced disagreements with the influencer they follow, while 33.99% of them thought that this fact had affected their mood negatively to some extent, and 20.26% indicated that some information had caused them severe anxiety and distress. Of these respondents, 1/3 described the frequency of their anxiety triggered by social media usage as "occasionally anxious", 23.53% as "very often anxious," another 1/3 as "felt anxious once or twice a week", and lesser people thought they might never felt such feelings. When a multiple-choice question in the questionnaire inquired about what they thought caused anxiety, as shown in Table 1, more than half of the respondents claimed that content on social media is meant to suppress users' self-esteem. Also, 54.9% said they already had related distress and that the content made them feel insecure. 39.22% of respondents noted that even though they still follow the influencers, these influencers are more like fear-mongers who used anxiety to drive their followers to purchase more. Some people filled in the details of why their anxiety arose, "Others share an overly happy and wealthy life that makes me feel lacking in my own life." Overall, 64.71% of respondents of this questionnaire believed that they experienced more negative feelings from their social media use and that it affects their self-esteem to some extent. According to Fig 2, the user experience tends to be mostly negative regardless of the length of time spent on social media.

2.1.2. The interview

A total of 10 participants in this survey was voluntarily interviewed in this section. Excluding factors such as living abroad and more active on English social media platforms, using social media to keep a diary instead of reading other people's contents, etc., eventually, a small sample of 4 was considered to be valid. More in-depth discussions were conducted and these four interviewees provided insights into some issues mentioned above. This small sample consisted of three women and one man. Since interviews were conducted anonymously, the four interviewees were given code names: S, D, X, and W (aging from 18-26).

In data analysis, researchers found that overall user perceptions tended to be negative and were not precisely associated with the amount of time on social media. Even among the "less than 1 hr" group who used social media for the shortest amount of time, a higher percentage believed they had experienced unpleasant moments on the platform. The researcher consulted respondents on their views of Chinese social media platforms, and when asked what they considered to be the least friendly platforms, all participants emphasized Sina Weibo. As S, W & X indicated, they have all seen uncomfortable content on Weibo, whether it is a debate about gender equality or a disagreement about local government strategy. These arguments often end up with two parties disagreeing with each other and personally attacking one another. "Sometimes those words are so disgusting, some pathetic men behind the accounts deliberately degrade women and make fun of women who are victims of domestic violence! I was so angry, so I decided to quarrel with them. But when I look back, it's really quite pointless." One of them said.

Similar to Twitter, Weibo is also a platform where people discuss most topics on different aspects of society (political issues tend to be muted most of the time). Extreme disagreements often occur, variation in education levels directly results in the language's rudeness used in the debate [37]. By the end of 2020, among all the Chinese netizens, junior high school education accounted for the highest percentage, and less than 10% have a bachelor's degree or above [1, 2]. Precisely because of the uncontrolled problems of widespread hatred and rhetoric on Weibo, Interviewee D stated She had

quit Weibo and was mainly active on WeChat and Xiaohongshu. "WeChat is mainly used to communicate with people you know, so there is not much intentional posting of bad stuff on it. Everyone tries to be nice." She said, "As for Xiaohongshu, although the general atmosphere is much friendlier than Weibo, often I can still see the kind of inexplicable words in the comment section. Particularly those so-called lifestyle-sharing posts, such as income sources, education, overseas travel and so on, you know, some people just get salty when they see others are doing well."

Since Xiaohongshu has the highest percentage of use among all respondents, the researcher investigated the interviewees' opinions on it. One respondent expressed a clear preference for the platform and the community it has right now ("Even if it's slowly deteriorating," She stated.) The rest of the interviewees see it as a platform mainly for business promotion. One mentioned in the interview that she was a bit excited and curious after reading the posts on how to get a cosmetic procedure. However, soon she realized that these were just some sales tactics. The only male interviewee mentioned that although the advertisements on Xiaohongshu were everywhere and pops up all the time, perhaps he was not the target audience, so he did not find it that annoying or deceptive. Instead, he followed many foreigner accounts to learn different languages and found it is a very useful platform compare to Weibo. One interviewee is a freelance illustrator who constantly posts her works on Xiaohongshu as well as her other sharing posts; in return, it has won her a lot of attention and even commission requests. However, increasing in income did not increase her favor to the platform as much. She claimed that while many saw her works, some also took the images for other purposes without permission. Moreover, followers who came because of her illustrations would comment on her daily life posts and don't want to see the "Boring, mundane life posts."

On the issue of social media influencer- or content-induced anxiety, interviewees resonated unanimously. "A Lot of people don't realize that they're actually being tugged by anxiety," one of them said. "Or maybe they think that level of anxiety is too shallow to be taken seriously. But based on my personal experience, it is these little bits and pieces of feeling that affect me the most by the end of the day." Another interviewee commented that social media is a mechanism that constantly pushes content towards the user, sometimes the content is cute and delightful, but sometimes the content is mixed with some maliciousness, for example, after a period of searching about clothes, the platform she uses suddenly recommended her posts about weight loss, and 80% of them were written in a worrying tone about how painful it is to be over 60kg, and how happy a girl would be after losing weight. "But I actually have the problem of chronic malnutrition and an embarrassing teenager weight of 43kg as a grown woman, and all this content has made me even more anxious and depressed from the opposite direction—seeing so many girls with healthy bodies I dream of!" As she mentioned.

Contents thought to cause anxiety for a specific group may have the same effect on a different group. As shown in the "Causes of anxiety" question in the questionnaire section, many respondents said that once they saw other users experiencing anxious moments, they were also extremely vulnerable to the same emotions. The result is consistent with Tiggemann et al. study [38] as well. When referring to the RSES results, not surprisingly, most of these respondents also had RSES scores below 15. In the interview section, only one interviewee had an RSES score higher than 18, but this person also admitted having experienced many moments of self-questioning on social media.

When asked about the correlation of social experiences, anxiety and self-esteem, one interviewee said without hesitation, "Of course, the lower the self-esteem, the more likely the person to feel anxious." Then explained with "when a person's self-esteem is high enough, I think the outside is less likely to affect him or her. Like, the judgment from the outer world will become noise to this person." This comment of subjective feelings was also authenticated in the questionnaire results, where 81 participants reported experiencing the scenario of manipulating their self-esteem by social media influencers. The other interviewees expressed a similar view on self-esteem. They showed a high level of uniformity on this view, believing that people with low self-esteem are more likely to be troubled

on both real-life and social media, social media platforms have seized on this and intentionally utilize the fact to make users more attached. This intuitively driven view is partially consistent with the study by Jiang et al. (Jiang & Ngien, 2020)[39]. Because of the simple accessibility of social media and the widespread coverage of its content topics, many issues that are difficult to reach in real life became tidbits all over the place on social media. "Other people's lives" is one of the most exciting topics to explore and talk about, leading to social comparison. Discomfort with social comparison is the feeling of dissatisfaction and uneasiness arising from the difference between behavioral performance and the standard in the process of self-expression, which can eventually appear as a manifestation of low self-esteem [40]. When users' confidence is running low, social media is certainly a quicker and easier option than building courage and regaining hope in reality. But paradoxically, often is the contents on social media that cause them to experience the social comparison directly.

In the question about the overall social media experience, four interviewees expressed their pessimistic thoughts. "I don't think anyone would really feel happy scrolling through these social media feeds, even if we keep doing so." W said. And S remarked that it's easy to ruin someone's happy day, sometimes all a person has to do is rush to someone else's comments section and leave a nasty message, which so many people on the Internet are practicing these days. "It's all because they're having a poor life themselves in reality and they're not getting attention online as comfort, so they take pleasure in trolling others." D also mentioned the issue of social media feedback mechanisms, "I think we all have those moments when we don't notice we're feeling low, and then that's when some irritating bugs leave comments to remind you about that." Social media feedback can boost one's confidence; By the same token, it can easily diminish a person's self-esteem.

3. Conclusion

The findings suggest that there is a strong relationship between social media experience and the self-esteem of Chinese youth. The cause of lowered self-esteem is sophisticated, however, its association with social media usage is clear in this study. From the respondents' perspective, they had a strong agreement on social media tends to lead to a bad experience for its user. Based on the findings of this study, it can be concluded that a longer and higher frequency of social media usage leads to a greater possibility for users to experiencing unpleasant situations, which results in a rise of anxiety and disappointment, and ultimately affects their self-evaluation in terms of self-esteem. When using social media, it is very subtle for the user to actually feel the comparative behaviors he /she's performing. The upward comparisons mainly create a negative effect on any kind of user and their self-esteem (Vogel, Rose, Roberts & Eckles, 2014). Despite the negative feelings associated with social media experiences, when respondents were asked questions about their reasons for continuing to use social media platforms, most of them stated the concern or fear of disconnecting from the general surroundings / their peers. Although social media experience was mainly unpleasant, most respondents believed that access to social media has improved and regulated their mindset and reduced some stress from the anxious real-life. Moreover, if they take the real-life problem as a comparison, then the social media experience becomes bearable. Spontaneously downplaying the bad experience and the impact of social media is pervasive among young Chinese netizens. It appeared to be a vicious circle, the participants who addressed the idea believe that as long as they are still aware social media is just a virtual platform, they can quit anytime, thus the harm it generates would not be worth considering.

In conclusion, this study demonstrates the possible relationship between negative social media experience and the drop of self-esteem on Chinese young adult and adolescent netizens. Problematic social media usage and experience may cause a profound effect on users' mental health, yet it is difficult for users to react seriously as they react with challenges in real life.

3.1. Strength and Limitation

This study fills the gap in the same field of research on the Chinese youth with relatively detailed questions and answers, covering the mainstream social media platforms on the Chinese internet that have not been studied. It is worth noting that even though the researcher and most participants shared a consensus on the idea that social media affects self-esteem in a negative way, the participants' individual conditions may have affected their opinions and answers. The participants' background, finance, marriage, history of psychiatric disorders, education and definition of the word "self-esteem" were not included in this study. These mentioned factors may also be important in affecting one's self-esteem. Therefore, in future work, it might be more helpful for researchers to screen and limit the personal circumstances of the respondents.

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