WeChat Impact of Body Images on Self-esteem among Young Women

Zewen Li

University of Miami

WeChat Impact of Body Images on Self-esteem among Young Women

As of June 30, 2018, the number of Chinese mobile Internet users reached 788 million, and 98.3% of them use mobile phones to access the Internet. Instant messaging (IM) tools, represented by WeChat, meet the social needs of users' communication and interaction, and the usage rate is around 90% (CNNIC, 2018). The growing popularity of social media affects personal life and work (Gan, 2017), and deeply changes interpersonal communication (Lien & Cao, 2014).

In particular, this study focuses on the influences of the most popular IM in China, WeChat on self-esteem. WeChat (Weixin or 微信 in Chinese), is a multi-purpose messaging, social media and mobile payment application developed by Tencent in 2011. WeChat users could share their feelings with others by releasing texts or pictures in their friend space, Moment (Gan, 2017).

The usage of Social Networking Site (SNS) and IM applications has been a popular research topic in new media research (Mao, 2014). The previous researches have focused on the influences of SNS such as Facebook and Instagram on self-esteem (Ahadzadeh, Pahlevan Sharif & Ong, 2017; Chou & Edge, 2012; Fardouly, Diedrichs, Vartanian & Halliwell, 2014; Valkenburg, Peter & Schouten, 2006; De Vries & Kühne, 2015). On the other hand, a number of researchers have paid attention to the impact of media body images on self-esteem (Richins, 1991; Wilcox & Laird, 2000; Xiao et al., 2016) However, instead of Facebook and Instagram, more Chinese choose to use WeChat. In addition, a variety of prior studies about WeChat have paid particular attention to the influences of SNS on self-presentation (Gan, 2017; Lien & Cao, 2014; Mao, 2014; Shu, Hu, Zhang, Ma & Chen, 2017; Tu, 2016; Wang et al., 2018), less attention has been paid to the influences of body images on self-esteem. Thus, this study

investigated the impact of body images when using WeChat on viewers' self-esteem.

# Impact of SNS on Self-esteem

There is a variety of research about the impact of using SNS on self-esteem, and majority of them claim that the impact is indirectly negative (Ahadzadeh et al., 2017; Chou & Edge, 2012; De Vries & Kühne, 2015; Fardouly et al., 2014; Meier, & Gray, 2014; Saslow, Muise, Impett, & Dubin, 2013; Smith, Hames, & Joiner, 2013; Valkenburg et al., 2006). Some of the research places emphasis on the feedback that individuals received on their profiles (Valkenburg et al., 2006). Some of the research states that the more time individuals spent on SNS, the unhappier feelings they will get (Ahadzadeh et al., 2017; Chou & Edge, 2012), and the reason might be negative social comparison (De Vries & Kühne, 2015; Fardouly et al., 2014).

The research conducted by Valkenburg et al. (2006) is the first research to show the consequences of using SNS for users' self-esteem and well-being, however, different with other research, this research focused on the feedback that users received on their profiles. This research emphasized that users initiatively post profiles, some comments or pictures, on their SNS, then users received some feedbacks. Valkenburg et al. (2006) had a view that self-esteem was solely affected by the feedbacks that users received on their profiles. Positive feedback improved users' self-esteem, while negative feedback decreased users' self-esteem.

Chou and Edge (2012) presented using Facebook has influence on people's perceptions of others. They used availability heuristic to manage online social networks which means people could base judgement on something that they could recall easily. People who use Facebook more often have more available examples from Facebook, so they are more likely to have a distorted perception. Chou and Edge (2012) used an online questionnaire are included three perceptions with 425 undergraduate students responding. The result shows that people who have used

Facebook longer will have stronger belief that others are happier than themselves, and less agreed that life is fair.

From the results of prior studies, De Vries and Kühne (2015) discuss the reason why the more time the users spend, the less happiness they get. De Vries and Kühne (2015) found that using Facebook stimulates negative social comparison, then has negative influence on youth's well-being, also negatively generates self-perception, especially among individuals who already have unhappy feelings.

Fardouly et al. (2014) also claim that social comparison is the reason why using SNS has negative impact on an individuals' satisfaction. However, different from De Vries and Kühne (2015), Fardouly et al. (2014) only focused on the impact of Facebook on young women's body image, concerns and mood. The researchers compared the usage of Facebook and appearance-neutral website, and found that the more comparison individuals made, the greater the dissatisfaction they felt. The research also presented three aspect of dissatisfaction: face, hair and skin-related dissatisfaction.

The research conducted by Ahadzadeh et al. (2017) also focused on the impact of using SNS on body satisfaction. The research shows that using Instagram has negative effect on young adults' body image satisfaction. From this study, it is clear that people who spent more time on Instagram will be more likely to internalize thin ideal, body surveillance and drive for thinness. Young adults tend to compare themselves with others to evaluate and define themselves. Individuals who have low self-esteem are more likely to experience discomfort with their body and experience.

#### **Impact of Media Body Images on Self-esteem**

The impact of media images has been studied for long time since 1937 (Richins, 1991).

Recent years, the researchers paid more attention to one specific area, the impact of media body images (Ata, Thompson, & Small, 2013; Boyce, & Kuijer, 2014; Grabe, Ward, & Hyde, 2008; Richins, 1991; Tiggemann, & McGill, 2004; Wilcox & Laird, 2000; Xiao et al., 2016).

Richins (1991) stated that after the exposure to idealized advertising images, people would change their standards for comparison with idealized images, then got lower satisfactions. Richins (1991) pointed out the reason that average women were rated less attractive after people viewing idealized models. In addition, he emphasized that negative feeling, dissatisfaction with appearance, about self were due to viewing highly attractive images, and the dissatisfaction was not temporary one that could eventually be transformed into satisfaction.

Wilcox & Laird (2000) conducted further research on the impact of idealized media images on women's self-esteem. The research showed that after viewing images of idealized models, women participants had two different feelings. A group of women who were more responsive to personal cues, in other word, women who cared more about their own real weight and used the information from the images to compare themselves would feel unhappy, and become more concerned about their own weight after the exposure to idealized images of models. On the contrary, the women who were less responsible to personal cues would feel somewhat better after viewing the idealized images of models.

One recent research conducted by Xiao et al. (2016) indicated a new way to found impact of body images on self-esteem. They showed two images to participants, fat and thin images, and different with previous studies, the overweight people were investigated. The results showed that overweight young women had different feelings with average weight young women. Overweight females had more self-reflection and body dissatisfaction, while average weight females seemed less likely to have self-reflection and body dissatisfaction.

# **WeChat Using**

As WeChat was developed by Tencent in 2011, the research about the impact of using WeChat is not so many as much research about Facebook and Instagram. The majority of research about WeChat focused on the impact on users who sent message (Deluca, Brunner, & Sun, 2016; Gan, 2017; Lien & Cao, 2014; Mao, 2014; Wang et al., 2018; Xin, Lai, & Chen, 2016), but not users who received information from the sent messages.

Mao (2014) focused on the key factors of undergraduate WeChat using, friends and relaxation. Mao pointed that using WeChat could let undergraduate students release their pressure and maintain relationships between friends by sharing something on WeChat. Lien and Cao (2014) agreed with Mao (2014), and they further explained that social interaction was a major motivation of users in China adopting WeChat because sociality had positive effect on users' attitudes.

Gan (2017) and Wang et al. (2018) paid attention to "Like" behavior in the impact of using WeChat. Gan (2017) stated that using frequency and received likes are positively related to self-esteem, and the involvement of WeChat Moment could increase the sense of social capital and then promote self-esteem. However, Wang et al. (2018), who further explored the motivation of "Like" behavior, claimed that using time has no influence on "Like" behavior, and the possible reason Wang et al. (2018) gave was users may not click "Like" button randomly when they are bored and have nothing to do but read posts in WeChat Moment. Wang et al. (2018) gave three motivations of "Like" behavior: enjoyment, social support and information seeking.

In summary, prior research about the impact of using SNS on self-esteem are all focused on Facebook or Instagram, which Chinese youth do not use frequently, and majority of them claim that the impact is indirectly negative. Fardouly et al. (2014) stated one reason that more

comparison with the body images, more negative feelings would get. Chou and Edge (2012) and De Vries and Kühne (2015) discussed the reason why the more time the users spend, the less happiness they get. Ahadzadeh et al. (2017) put two reasons, comparison and time, together to illustrate. Research about WeChat, which Chinese youth use most, is not about viewers' self-esteem. Research about the impact of idealized media body images on self-esteem are more focusing on young women group. Xiao et al. (2016) indicated overweight females had more self-reflection and body dissatisfaction, while average weight females seemed less likely to have self-reflection and body dissatisfaction. Based on the literature review, the following hypothesis is proposed:

H1: Women who are more involved with using WeChat are more likely to have negative feelings and low self-esteem.

H2: Overweight women have more negative feelings and lower self-esteem scores than average weight women after viewing body images in WeChat.

Thus, this study will focus on the SNS or IM application that Chinese use daily, WeChat, and explore the impact of body images when people use WeChat on viewers' self-esteem of Chinese young women.

#### Method

#### **Participants**

Participants (N=68) were female students and company employees aged between 18 and  $28 \ (M_{age} = 21.7)$  from Beijing, Shanghai, Guangzhou in China, and they were recruited via a Chinese online survey website (<a href="https://www.wjx.cn/">https://www.wjx.cn/</a>). Participants would receive no compensation for this research. This study aims to explore the impact of body images in using WeChat on self-esteem. Data in this study will be collected from university students in Beijing,

China through an online survey. Gan (2017) pointed that university students and young adults are the largest part of social media users, so this sample of study will be appropriate. The number of participants were chosen to have additional interview was six. Participant A is a 22-year-old, average weight, using WeChat less than one hour a day, junior in a university in Guangzhou. Participant B is a 28-year-old, average weight, using WeChat less than one hour a day, English teacher in Beijing. Participant C is a 19-year-old, overweight, using WeChat over one hour a day, freshman in a university in Beijing. Participant D is a 25-year-old, overweight, using WeChat over one hour a day, employee in an advertising company in Shanghai. Participant E is a 22-year-old, average weight, using WeChat over one hour a day, sophomore in a university in Shanghai. Participant F is a 27-year-old, overweight, using WeChat less than one hour a day, employee in bank in Guangzhou. Six participants for the interviews after doing the online questionnaire.

## **Procedure**

In order to investigate the impact of using WeChat on self-esteem, this study will use a set of online questionnaires including demographic characteristics, WeChat usage and activities related to WeChat photos, and self-esteem. This study also employed qualitative one-on-one interview for specific data. All the interviews were conducted online, using an online-chat application Facetime.

As for questionnaire, in demographic characteristics, participants with BMI between 22.00-27.99 were considered as overweight participants, and participants with BMI between 18.00-21.99 were considered as average weight participants. This research used Rosenberg Self-Esteem Scale (Rosenberg, 1965). 10-item scale measures global self-worth by measuring both positive and negative feelings about self. A sample item was "I feel that I'm a person of

worth, at least on an equal plane with others." All items will be measured with a four-point selfesteem scale, ranging from strongly disagree (1) to strongly agree (4).

The questionnaire on this website was presented in Chinese version. The English scale was translated into Chinese, following guidelines for cross-cultural adaptation of self-measures. (Beaton, Bombardier, Guillemin, & Ferraz, 2000). All the questionnaires are written in Chinese. An English translated version of the questionnaires is attached as Appendix A.

Table 1 shows the demographic profile of the participants. The sample consisted of 8 (11.8%) freshman, 13 (19.1%) sophomore, 17 (25%) junior, 9 (13.2%) senior, and 21 (30.9%) company employees. Majority of the participants are in Beijing. Only 9 (13.2) participants are overweight.

WeChat activities of the participants are reported in Table 2. As high as 94% of the participants spend more than one hour a day on WeChat. The participants usually saw pictures of friends (76.5%) and parties (72.1%) on their WeChat. This study considered the time of WeChat usage more than one hour as the one who were more involved in WeChat.

All of the interviews are in Chinese. All the participants are encouraged to answer the questions based on their usage of WeChat after they finish the questionnaire.

Table 1

Demographic profiles of participants.

	n (%)
Occupation	
Student-Freshman	8 (11.8%)
Student-Sophomore	13 (19.1%)
Student-Junior	17 (25%)
Student-Senior	9 (13.2%)
Company employee	21 (30.9%)
City	
Beijing	39 (57.4%)
Shanghai	12 (17.6%)
Guangzhou	17 (25%)
BMI	
18.00 - 21.99	59 (86.8%)
22.00 – 27.99	9 (13.2%)

Table 2

Summary of participants' WeChat activities.	
	n (%)
WeChat Usage	
< 10m	0 (0%)
10 - 30 m	1 (1.5%)
30-60m	3 (4.5%)
1h-2h	26 (38.2%)
2h-3h	19 (27.9%)
> 3h	19 (27.9%)
Pictures on Participants' WeChat	
Pets	11 (16.2%)
Scenery	41 (60.3%)
Arts	18 (26.5%)
Family	16 (23.5%)
Friends	52 (76.5%)
Parties	49 (72.1%)
Favorite idols	39 (57.4%)
Sports events	9 (13.2%)
Others	17 (25%)

#### Results

This study showed different results with previous researches. Firstly, Figure 1 introduced the scores of each group of WeChat users. The groups of WeChat users were divided by the data of using time of WeChat from questionnaire. Group one indicates using WeChat less than ten minutes a day; group two indicates using WeChat between ten and 30 minutes a day; group three indicates using WeChat between 30 minutes and one hour a day; group four indicates using WeChat between one hour and two hours a day; group five indicates using WeChat between two hours and three hours a day; group six indicates using WeChat over three hours a day. Figure 1 showed that there was no significant difference of scores among groups: group one scores zero because there was no one in group one; group two scores 30.1; group three scores 30.7; group four scores31.1; group five scores 30.9; group six scores30.5 (average 30.8). The results did not support H1.

Secondly, there were another two groups assigned by BMI, group A and Group B. Group A indicated participants' BMI between 18.00 and 21.99, which means participants have average weight, while group B indicated participants' BMI between 22.00 and 27.99, which means participants are overweight. The score of group A was 28.3 (- 2.5 on average), while the score of group B is 31.4 (+ 0.6 on average). According to Rosenberg (1965), high score means high self-esteem, H2 was supported.

The interviews showed more interesting results, and some possible reasons for the change of self-esteem. The participants were chosen for different BMI and different time of using WeChat. However, opposite to H1, there were two participants, participant C and E, saying they were much happier, and got high scores after viewing body images in WeChat. Participant C is an overweight student who use WeChat more than one hour a day, which means this participant were more involved in WeChat. Participants E is a student with average weight who

also use WeChat more than one hour a day. The score of participant C was 31.7 (+ 0.9 on average), and the score of participant E was 31.4 (+ 0.6 on average). The reason giving by participant C was that she did not compare herself with the body images and she thought viewing the body images giving her confidence to because the body images is a reminder for her to remember there were such beautiful female in her acquaintance. Participant E gave another reason for her high self-esteem score and happy feeling after viewing. She had a thought that the body images her saw was a signal to show positive attitude towards life of the one who post the body images. Participant E added that she could be infected by the positive attitude, and got some motivations to be a better women from the body images, so she felt happier and got a high score in self-esteem scale.

Participant A and B have average weight and use WeChat less than one hour a day. Although they got high scores (both + 0.7 over average) in self-esteem scale that seems support H1, during the interviews, participant A and B expressed their thought. Participant A thought that there was no self-esteem change after viewing the body images, and the change of feeling depends on her mood at that time. If participant A is happy when she sees the body images, she will be happier after seeing the images. However, if she is unhappy when she sees the body images, she will feel annoyed and change unhappy feeling to angry feeling. Participant B held a similar thought that her self-esteem would no change after viewing body images in WeChat, but she thought her feeling would not change because according to her answer, participant B was too busy for work every day, so she did not care about what others do in WeChat.

Different with the four participants mentioned above, participant D and F, who are overweight, got low scores in self-esteem scale (- 0.4, - 0.5 on average). Both participant D and F admitted that viewing body images in WeChat did have some negative impact to their feelings. Participant D said that because of heavy work, there was little time for her to meet friends,

however, the pictures of her friends would cause her deep missing about her friends and the memories of old days. In addition, the memories sometimes might cause her dissatisfaction with present life. Participant F also thought that body images would case her dissatisfaction of present life but with another reason. The reason participant F gave was that after viewing the body images of others, participant F was dissatisfied with her body. Because her work was so busy, there was no time for her to exercise and keep a regular life. Then the dissatisfaction turned from her body to her life.

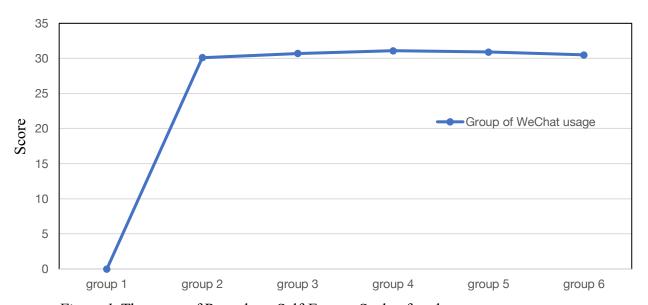


Figure 1. The score of Rosenberg Self-Esteem Scale of each group.

## **Discussion**

Results of this study show that the time of WeChat usage has no significant impact on negative feelings and low self-esteem scores (H1). Both the data collected from online questionnaire and one-on-one interviews of this study can not provide sufficient support to H1, though similar research about Facebook supported that the more time people use Facebook, the

less happiness people will get (Chou and Edge, 2012). The possible reason for this inconsistency in the results is that different with Facebook, WeChat is also an IM product that people always have discussion and basic conversation here. Posting pictures and comments is only one function among a number of functions of WeChat. In addition, the usage of WeChat is a little different with Facebook. People can follow anyone on Facebook, while when using WeChat, firstly, people submit the admission to become friend with others, and then when the person who got the admission pass it, people can view the picture or comments that the person post. People can follow celebrities when use Facebook, however, they can not do so when use WeChat.

Another main contribution of this study lies in testing if overweight women will get more negative feelings and lower scores in self-esteem scale (H2). This study found some important evidence to support H2. Therefore, this study was a response to the previous scholars' research, which indicated overweight females had more self-reflection and body dissatisfaction, while average weight females seemed less likely to have self-reflection and body dissatisfaction (Xiao et al., 2016). In this study, the data collected from online questionnaire and one-on-one interviews support overweight women tended to have more negative feelings and lower selfesteem scores. However, reasons for negative feelings and low scores in self-esteem scale concluded from the interviews are different with the reasons found in the previous research. In previous research, people who have negative feelings about themselves and got low scores in self-esteem scale because they compare themselves to the body images. However, similar reason had not been found in this study. During the interview, one of the interviewers clearly pointed out that she did not compare herself with body images. The reason this participant gave is that she remembered the old days by the body images and compared present life to the old days, then became unhappy about present life. This study came out new reason for explanation the cause of negative feelings and low scores in self-esteem scale.

In addition, according to the interview, this study provides some possible reasons for the time of usage WeChat did not have significant impact on negative feelings and low self-esteem scores. The first possible reason is that people do not compare themselves to the body images. The previous study conducted by Richins (1991) shows that comparison with the body images will have negative impact on people's satisfaction about themselves. However, most interviewers of this study (five of six) tend to not compare themselves with the body images. Moreover, the emotion, happy or unhappy feelings, before viewing the body images may be another possible reason for the time of usage WeChat did not have significant impact on negative feelings and low self-esteem scores. Two of total six interviewers pointed out the importance of the emotions before viewing the body images. They stated that if they were happy before viewing the body images, the would be happier after viewing. However, if they are unhappy before, they will be angry or annoyed after viewing the body images. The second possible reason has not been mentioned in the previous studies, so the future study can take this element, emotions before viewing the body images, into consideration.

Last but not least, this study also provides a new possible reason for negative feelings and low self-esteem scores after viewing the body images. The previous studies have given a number of reasons for these. Fardouly et al. (2014) stated one reason that more comparison with the body images, more negative feelings would get. Chou and Edge (2012) and De Vries and Kühne (2015) discuss the reason why the more time the users spend, the less happiness they get. Ahadzadeh et al. (2017) put two reasons, comparison and time, together to illustrate. However, such reasons were not found or partially supported in this study. The new possible reason found in this study is that the body images will remind people about the old days and lead to comparison of present to the old days of people who viewed the body images, and then result in dissatisfaction about the present life. The dissatisfaction about present life will cause the negative

feelings and low self-esteem scores.

A few limitations in this study shall be taken into consideration. The most obvious flaw of this study lies in the sample. First, the definition of young women is not clear. This study focuses on WeChat Impact of Body Images on Self-esteem among Young Women. This study chose participants aging from 18 to 28, which age is whether considered as young. Also there may be any ages could be considered as young but not involved in this study. Second, the locations of participants are particular. This study chose participants living in Beijing, Shanghai, or Guangzhou, which are all modern city in China. In other words, these three cities are the so wealthy, fashion, advanced that other cities in China can not compared with. The background of these three cities may provide other variables that are not involved in this study.

Secondly, the variables this study choose is not much appropriate. This study chose to use two variables, time of WeChat usage and BMI of users, which testing Facebook in previous studies to test the usage of WeChat. This choice is not so appropriate because WeChat is not totally similar as Facebook. Facebook is an SNS that people can post their comments or pictures on it, while WeChat is more than that. Posting comments and pictures is only one function of WeChat, and the main function of WeChat is more like an IM product. The other functions of WeChat may have impact on the results and other variables that not existed in the previous Facebook research. Also the new findings of this study may not suitable for other research about Facebook.

There are few researchers conducting studies the relationship between WeChat usage and self-esteem. Future research in this area may consider the following directions. First, future research should consider emotions before viewing the body images as a new variable and test whether this variable has impact on the viewers' self-esteem. Second, future research should consider other cities in China, and test whether there are any differences between modern cities

and remote areas. In addition, future study should focus on wide range of people. For example, is there the same findings in all age women, or is there any differences between men and women in the impact of WeChat usage.

#### References

- Ahadzadeh, A. S., Pahlevan Sharif, S., & Ong, F. S. (2017). Self-schema and self-discrepancy mediate the influence of Instagram usage on body image satisfaction among youth.

  \*Computers in Human Behavior, 68, 8-16. doi:10.1016/j.chb.2016.11.011
- Ata, R. N., Thompson, J. K., & Small, B. J. (2013). Effects of exposure to thin-ideal media images on body dissatisfaction: Testing the inclusion of a disclaimer versus warning label. *Body Image*, 10(4), 472e480.
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. (2000). Guidelines for the Process of Cross-Cultural Adaptation of Self-Report Measures. *Spine*, *25*(24), 3186-3191.
- Boyce, J. A., & Kuijer, R. G. (2014). Focusing on media body ideal images triggers food intake among restrained eaters: A test of restraint theory and the elaboration likelihood model. *Eating Behaviors*, 15(2), 262e270.
- Chou, H.-T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior and Social Networking*, 15(2), 117. doi:10.1089/cyber.2011.0324
- CNNIC. (2018). 42 statistical report on Internet development in China. Retrived 2018-08-20, from: http://www.cnnic.net.cn/hlwfzyj/hlwxzbg/201808/t20180820\_70488.htm
- Deluca, K., Brunner, E., & Sun, Y. (2016). Weibo, WeChat, and the transformative events of environmental activism on China's wild public screens. *International Journal of Communication*, 10, 321e339.
- De Vries, D. A., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences*, 86, 217-221. doi:10.1016/j.paid.2015.05.029

- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, *13*, 38-45. doi:10.1016/j.bodyim.2014.12.002
- Gan, C. (2017). Understanding WeChat users' liking behavior: An empirical study in China. *Computers in Human Behavior, 68*, 30-39. doi:10.1016/j.chb.2016.11.002
- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134(3), 460e476.
- Lien, C. H., & Cao, Y. (2014). Examining WeChat users' motivations, trust, attitudes, and positive word-of-mouth: Evidence from China. *Computers in Human Behavior, 41*, 104-111. doi:10.1016/j.chb.2014.08.013
- Mao, C. (2014). Friends and Relaxation: Key factors of undergraduate students' WeChat using. *Creative Education*, 05(08), 636-640. doi:10.4236/ce.2014.58075
- Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking*, 17(4), 199e206.
- Richins, M. L. (1991). Social comparison and the idealized images of advertising. *Journal of Consumer Research*, 18(1), 71. doi:10.1086/209242
- Rosenberg, M. (1965). The measurement of self-esteem. In M. Rosenberg (Ed.). *Society and the Adolescent Self Image* (pp. 297–307). New York: Princeton University Press.
- Saslow, L. R., Muise, A., Impett, E. A., & Dubin, M. (2013). Can you see how happy we are? Facebook images and relationship satisfaction. *Social Psychological and Science*, 4(4), 411e418.

- Shu, C., Hu, N., Zhang, X., Ma, Y., & Chen, X. (2017). Adult attachment and profile images on Chinese social networking sites: A comparative analysis of Sina Weibo and WeChat.

  \*Computers in Human Behavior, 77, 266-273. doi:10.1016/j.chb.2017.09.014
- Smith, A. R., Hames, J. L., & Joiner, T. E.(2013). Status update: Maladaptive Facebook usage predicts increases in body dissatisfaction and bulimic symptoms. *Journal of Affective Disorders*, 49, 235–241. http://dx.doi.org/10.1016/j.jad.2013.01.032
- Tiggemann, M., & McGill, B. (2004). The role of social comparison in the effect of magazine advertisements on women's mood and body dissatisfaction. *Journal of Social and Clinical Psychology*, 23, 23–44. http://dx.doi.org/10.1521/jscp.23.1.23.26991
- Tu, F. (2016). WeChat and civil society in China. *Communication and the Public, 1*(3), 343-350. doi:10.1177/2057047316667518
- Valkenburg, P. M., Peter, J., & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society, 9*(5), 584. doi:10.1089/cpb.2006.9.584
- Wang, Y., Apos, Nan, Nie, R., Li, Z., & Zhou, N. (2018). WeChat Moments use and self-esteem among Chinese adults: The mediating roles of personal power and social acceptance and the moderating roles of gender and age. *Personality and Individual Differences*, *131*, 31-37. doi:10.1016/j.paid.2018.04.012
- Wilcox, K., & Laird, J. D. (2000). The Impact of Media Images of Super-Slender Women on Women's Self- Esteem: Identification, Social Comparison, and Self-Perception. *Journal of Research in Personality*, 34(2), 278-286. doi:10.1006/jrpe.1999.2281

- Xiao, G., Xiao, D., Xin, W., Ying, S., Petra Corianne, V., & Hong, C. (2016). My Body Looks
  Like That Girl's: Body Mass Index Modulates Brain Activity during Body Image SelfReflection among Young Women. *PLoS ONE, 11*(10), e0164450.
  doi:10.1371/journal.pone.0164450
- Xin, W., Lai, H., & Chen, X. (2016). Motivation and strategy of college students image management in social networks: Using WeChat circle of friends as an example. *Journal of Intelligence*, 3, 190e194.

# Appendix A

#### Part 1:

1, What is your current occupation?

Freshman Sophomore Junior Senior Company Employee

2, Which city do you live in?

Beijing Shanghai Guangzhou

## Part 2:

1, How much time do you spend on WeChat during a day?

< 10m 10m - 30m 30m - 60m 1h - 2h 2h - 3h > 3h

2, What kinds of pictures have you always see in WeChat?

Pets Scenery Arts Family Friends Parties Favorite Idols

Sports Events Others

Part 3: Imaging your feelings that had a view of the body images in your WeChat, then finish the following questions.

Instruction: Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

Strongly Agree Agree Disagree Strongly Disagree

2. At times I think I am no good at all.

Strongly Agree Agree Disagree Strongly Disagree

3. I feel that I have a number of good qualities.

Strongly Agree Agree Disagree Strongly Disagree

4. I am able to do things as well as most other people.

Strongly Agree Agree Disagree Strongly Disagree

5. I feel I do not have much to be proud of.

Strongly Agree Agree Disagree Strongly Disagree

6. I certainly feel useless at times.

Strongly Agree Agree Disagree Strongly Disagree

7. I feel that I'm a person of worth, at least on an equal plane with others.

Strongly Agree Agree Disagree Strongly Disagree

8. I wish I could have more respect for myself.

Strongly Agree Agree Disagree Strongly Disagree

9. All in all, I am inclined to feel that I am a failure.

Strongly Agree Agree Disagree Strongly Disagree

10. I take a positive attitude toward myself.

Strongly Agree Agree Disagree Strongly Disagree

# Appendix B

# List of Questions Asked during the Interviews

- 1, How much time do you spend on WeChat during a day? Over one hour a day, or less than one hour a day?
  - 2, How often can you see body images in your WeChat?
- 3, If you saw some body images in your WeChat, do you think the body images are attractive or not?
  - 4, How do you feel about the body images that you saw?
  - 5, Do you compare your body to the body images you saw?
  - 6, Do you have happy or unhappy feelings after viewing the body images? Why?
- 7, Do you think you will change your evaluation of self-esteem after viewing the body images?