



Social Media and Body Image Among High School Students: A Research Proposal

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Abstract. In recent years, teenagers are using social media more and more frequently. Simultaneously, an increasing number of adolescents tend to develop problematic body image spontaneously. Thus, this study focuses on the correlation between social media and body image among adolescents by evaluating adolescents' body through two scales, namely "Body Self-objectification Beliefs and Behavior" and "Dresden Body Image Questionnaire." This cross-cultural study examines the use of social media (including Instagram, Facebook, TikTok, YouTube shorts, Red, WeChat, and Kakao) among high school students from China, USA Norway, Britain, and South Korea. I have several major hypotheses: 1. The more frequently adolescents use social media, the more negative their body image they will be. 2. The longer they use social media, the higher their degree of self-objectification; 3. The frequency of using visual-based social media is associated with negative body image and a high degree of self-objectification. This study also assumes that culture and gender to be influential factors in this process. By emphasizing the effect of culture on the relationship between social media use and body image, this study fills a gap in current social media and adolescence studies. Moreover, this study analyzes the root causes of adolescents' growing anxiety about their bodies.

Keywords: Social media · body image · body shame · self-objectification

1 Introduction

Teenagers spend a large amount of time on social media. In recent years, the types of social media that they use are also changing. Several years ago, they favor Facebook. In recent years, they begin to focus on using Instagram. While some teenagers try to become more muscular, other favor an over skinny body image. These negative body images will lead to some unhealthy behaviors, such as over excising, starvation diet and eating disorder. This study points out whether the using of social media is closely related to body image and self-objectification or not. Our study aims to analyze the related data collected from 200 participants who are high schoolers from different countries. Because of the COVID pandemic, the time frame of the research and the budget, this proposed study will not be conducted at this moment. This study once conducted will shed light on current scholarship on social media and body image and brings positive impact to adolescents' development.

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2 Literature Review

2.1 Social Media

The use of social media has a huge impact on the formation of people's perceptions [1]. Researchers discovered that people's use of social media is always accompanied by active engagement [2].

Boyd and Ellison emphasize that social networking sites engage individuals in the following ways. According to them, social media can let individuals to "(1) construct a public or semipublic profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and travers their list of connection and those made by others within the system." [2].

Teenagers form their attitudes towards their physical appearance during their puberty, which has a significant impact on their self-worth [3].

Evidence proves that teenagers are more likely to be affected than adults. Adolescents, who are usually frequent users of social media, are also undergoing critical changes in their life, not only physical ones but also identity formation.

A recent study acknowledges that teenagers' body image is closely correlated to social media. Most the researchers conclude that the use of social media will negatively affect their body image [4, 5].

2.2 Body Image

"Body Image" refers to our perceptions, cognitions, and effects regarding our bodies [6]. Researchers suggest that we evaluate our bodies in terms of function and vitality [7]. Our body concerns are not always positive, Negative body concerns include "Body Shame", "Body surveillance" and Self-objectification."

Media plays a crucial role in shaping people's attitudes about their bodies. They impact how people perceive their bodies by celebrating ideal body types, such as a slim body for girls and a muscular body for boys. Many individuals sometimes internalize these cultural body standards and attempt to change the shapes of their bodies [8]. Once they fail to achieve these standards, it leads to a negative attitude towards their bodies [9], or, according to other researchers, to a heightened sense of body shame [10].

Other negative attitudes include "body surveillance". Body surveillance makes reference to the tendency for us to pay more attention to our physical appearance than our bodily functions and feelings. In this sense, individuals with tendencies toward body surveillance usually care more about how they look than about how they feel [11].

Body surveillance is closely related to one's tendency toward self-objectification. According to the objectification theory, objectification is a term to describe the tendency for people to think of their own body as an object. In this case, human beings are evaluated for their use to others, which includes personal gain or satisfaction. These individuals' feeling needs, personalities, and care are ignored in this process.

Self-objectification occurs when individuals internalize this objectification process. As a consequence, they adopt the observers' gaze, or other socio-cultural body standards [12]. Once individuals internalize these external standards, they tended to pay close

attention to how they look to others. In this way, the tendency of self-objectification increases as well as their body surveillance and body shame.

Some researchers pointed out that the tendency of self-objectification is closely associated with the use of social media. That is to say, behaviors on social media can result in self-objectification. Among other behaviors, Salomon et al. and Boursier et al. focus on the relationship between the time spent on social media and specific behaviors' frequency. For them, some behaviors, which include self-objectification, are related to body shame and body surveillance [1].

In conclusion, the use of social media is closely linked to three perspectives: "body surveillance," "body shame" and "selfie objectification." Many scholars accomplished their research in this field, with their focuses on factors such as gender. However, a study on the relationship between culture and the use of social media has not been conducted. My research fills this gap by examining the influence of culture on the relationship between social media use and body image.

3 Methods

3.1 Participants and Procedure

Participants are going to be fifty high school students from different countries, including US, the United Kingdom, China, South Korea, and Norway. The sample consists of 100 boys and 100 girls, 16 to 19 years old. We plan to have a data collection to be permitted by each school, and for American high schools, it will be allowed by the university institutional review board (IRB). Since the participants are selected from high schools in different countries, the sample will demonstrate cultural diversity. The participants were recruited on the Internet, and they will answer the questions we provided. To motivate participants to join our program, we will provide an Amazon gift card for them. Participants will use an average of 3 min to complete this survey.

3.2 Measures

I am going to let the participants provide their basic information, such as gender, age, and their parent's education level.

Frequency of social media use. Surveys will require participants to furnish which social media they use in their daily life and the time spent on social media (Instagram, Facebook, TikTok, YouTube shorts, Red, WeChat, and Kakao.) and social network sites combining visual and non-visual elements (Facebook). We will measure how many hours they typically spent on each site in a random week, and how many hours they typically spend on each site in a random week.

In scales of body image and self-objectification, this research evaluates two crucial aspects of people's anxiety about their bodies. The first aspect is body image, which is evaluated by Dresden Body Image Questionnaire [13]. The original questionnaire is a thirty-five-item scale that consists of five sub-scales. To adjust it to the eight groups of participants, we exclude the sub-scale of sexual fulfillment and it is now a twenty-one-item scale with positive and negative items. Levels of the agreement are calculated

Table 1. Body Self-Objectification Beliefs and Behaviors Scale

Description	Number
1. It is more important to look attractive to others.	
2. It is important for me to look attractive to others, comparing to be satisfied inside.	
3. My personality is less important than my physical appearance.	
4. My sexual appearance can represent more about me.	
5. The attractive degree of my physical appearance to others can explain who I am.	
6. I focus on my physical appearance, not my personality.	
7. My body is what endows me value to others.	
8. I try to predict others' reaction to my physical appearance.	
9. Based on how clothes let my body appear to other people, I will choose some specific clothes.	
10. I think others will view critically for some areas of my appearance when I look in the mirror.	
11. I thought about what my body would look like to others.	

1 Strongly Agree	2 Agree	3 Neutral	4 Disagree	5 Strongly Disagree
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on a five-point Likert scale from one to five, the higher scores inform a more positive body image. The second aspect is one's body self-objectification beliefs and behaviors. This is evaluated by D. Lindner and S. Tantleff-Dunn's Self-Objectification Beliefs and Behaviors Scale (SOBBS) [14]. Levels of self-objectification are scored on a five points scale, from one to five. Higher scores indicate higher self-objectification.

Table 1 is D. Lindner and S. Tantleff-Dunn's Self-Objectification Beliefs and Behaviors Scale (SOBBS) [14].

The total score of self-objectification beliefs and behaviors:

- 3.5–5: high self-objectification
- 2.5–3.4: moderate self-objectification
- Lower than 2.5: low self-objectification.

Table 2. Dresden Body Image Questionnaire

1.	I think I can move gracefully.
2.	I always lack motivation to do things.
3.	Physical contact is essential to me in order to show intimacy.
4.	I always feel exhausted (physically.)
5.	There are plenty of situations that let me feel happy about my body.
6.	My body is fit.
7.	Others think I am attractive.
8.	I always want to have physical intimacy.
9.	I am satisfied with my body.
10.	It is pleasant for me when I find someone pays attention to me.
11.	I want to choose clothes that can hide my body shape.
12.	In my opinion, my physical condition is great.
13.	I always feel uneasy about my physical appearance.
14.	I do not want to have body contact with other people.
15.	I think it is more valued for me when I find someone looks my body.
16.	I hope that I can have a different body.
17.	I always avoid touching others by using my consciousness.
18.	If I can have a chance to change my body, I will pick it.
19.	A few people are allowed to touch me.
20.	I always attract attention to others by using my body.
21.	I want to show my body to other people.

Table 2 is a shorter version of the Dresden Body Image Questionnaire, excluding the sub-scale of sexual fulfillment [13].

4 Hypothesis

Due to the lack of time and funding, the experiment cannot be completed at present. However, this proposal makes the following assumptions based on past research.

- Hypothesis 1: The more frequently one uses social media, the more negative body image he or she they will have.
- Hypothesis 2: The longer time of using social media, the more self-objectification.
- Hypothesis 3: The use of visual-based social media (Instagram, TikTok, YouTube short, and Red) is closely related to negative body image and high self-objectification.
- Hypothesis 4: The use of non-visual-based social media (WeChat and Kakao) is less correlated to negative body image and high self-objectification.

- Hypothesis 5: Gender is an essential influential factor, compared to their male counterparts who use social network sites as frequently, females are more likely to develop negative body image and high self-objectification.
- Hypothesis 6: Culture is another influential factor. East Asians are more likely to be impacted by using social media, whereas people from UK and Norway are less likely to be impacted.
- Hypothesis 7: Besides culture, nationality is another powerful factor that shapes one's body image and self-objectification.

5 Conclusion

Though we will consider different factors that influence body image and self-objectification, our study also has some limitations. The most important one is that the absence of researchers will make it difficult to maintain quality control. Because this study will be conducted in different countries, we do not have enough funds to be present in every experiment site. As a result, researchers cannot have the condition to observe the process of form filling. In this case, some participants may not pay full attention to completing questions in the questionnaire. One way to solve this problem is to add control questions to make sure that all the answers are carefully addressed, which we have already done.

This study examines the sources of adolescents' increasing anxieties about their bodies. In recent years, technology has gradually entered our life, and we are more likely to invest our time in social media. Our study examines the relationship between social media and some anxieties of the young generation including body image and self-objectification.

Moreover, we also examine the role of culture in negotiating the relationship between social media use and body image. This research thus contributes to the comparative cultural study. Finally, this research fills in a gap in adolescent studies. Even though adolescent studies receive a lot of attention in North America, there is very little research on adolescents in East Asia. Thus, this constitutes a prior study about the relationship between social media use among Chinese and Korean adolescents.

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