

TikTok Usage on Body Image and Satisfaction

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Abstract. Given the significant influence of social media on mental health and the rise of TikTok world-wide, it is important to study its effects, especially on college students. Since a variety of content on TikTok is being consumed at a high rate, how this has affected the self-esteem and mood of teenagers has become a point of concern. In this experiment the author instructed two groups of participants to report their daily TikTok usage in hours and watch either a selection of body positive TikTok videos or body neutral TikTok videos. Using a Positive and Negative Affect schedule self-report questionnaire for mood and The Robson Self-Concept questionnaire for self-esteem, the author assessed if there was a significant relationship between gender, daily usage, and the genre of videos consumed. Results indicated that the effect of gender is marginal; however, positive, and neutral video exposure had an effect on mood as participants, in which watching positive body-image related videos was associated with better mood. Moreover, those that used TikTok more frequently than their counterparts who used the application moderately or not at all scored significantly lower on mood. According to these findings, the author concludes that as the population undergoes frequent social media exposure there is a larger scale influence on the general population's mental well-being.

Keywords: TikTok, body-image, mental health, self-perception.

1. Introduction

With the rapid development of social media, social media derived from it has a significant impact on body image, but different cultures are bound to have different values. The author read the literature and found that foreign scholars in the past focused on the real face anxiety. With the popularity of social media and other Internet applications, scholars' research focus has gradually shifted to online.

Mobile social software has emerged as a result of the mobile Internet's slow rise in popularity and has had a significant impact on people's lives. Numerous studies have cataloged the relationship between social media use and its adverse outcomes, such as increased anxiety, stress, depression, bullying, and loneliness [1]. No correlation was observed among attention span and the amount of social media accounts, usage frequency, or preference for mobile or desktop access to social media by Deborah S. Carstens, who researched how social media affects attention span [2]. Deborah S. Carstens examined how the 209 participants in a self-administered survey responded differently to three study hypotheses based on age and race as independent variables [2]. The amount of time spent watching Tiktok is considered a separate factor in the present research that affects body image. From this literature, it is observed that attention time cannot be taken into account in the number of social media accounts, frequency of use or preference for accessing social media using mobile phones and computers, which saves the research time.

Due to the influence of the media, many young people today are more concerned with maintaining a positive image and will go to great lengths to do so. In order to show that having a negative body image increases the chance of developing dangerous eating disorders, Kim Rounsefell investigated how young people felt about social media, how they looked, and what they liked to eat [3].

By observing the quantitative and qualitative research in this paper, hybrid method system to social media as a research platform to study, according to 11125 participants identified 30 study, finally it is concluded that in some of the health of young people, social media participation or access to content may be related to the image of body image and food choices will have a negative impact [3]. This also makes this research more convincing and promotes the direction and method of this research [3].

Based on the root cause, social anxiety can be further delineated into categories such as appearance-related anxiety, social competition-induced anxiety, and signal anxiety [4]. Appearance anxiety, which is a psychopathology characterized by a lack of or relatively small flaws in external appearance, is subclinical diagnosed through appearance anxiety [4]. The patient imagines or overstates these flaws, leading to internal distress. Tietje and Cresap (2005) stated that based on the new media technologies, the visual culture reinforces the importance placed on appearance [5]. This emphasis makes people with high self-esteem care more about their appearance [5]. Seeing a personal photo that conforms to popular aesthetics can cause negative emotions such as physical dissatisfaction in the viewer. What's more, another study suggested that selfie culture has the potential to turn those most resistant to appearance discrimination into accepting discrimination in favor of attractive people [6]. Related to appearance anxiety, foreign scholars have raised a very noteworthy issue, namely appearance discrimination, which is the basis of prejudicial behavior based on appearance. Attractive people are favored while unattractive people are treated unfairly [6]. This unfair disparity also contributes to the phenomenon of facial anxiety [6].

Conversely, social media can have a beneficial influence on users' emotional state and perceptions of body image. Researchers found that playing body image games significantly increased adolescent participants' feelings of body satisfaction and that the modulation of body self-esteem affected how effective a body satisfaction intervention was [7].

With the increasing use of Tiktok social media, it gradually covers young users all over the world. Due to the diversified cultural backgrounds of the objects used, the cultures of various countries have produced many positive and negative influences while colliding. In this influence, many scholars have conducted many researches and experiments on it. In previous researches, most of them took common social media applications as the research media and systematically stated that under the influence of media communication, For young women and youth groups, such as in the degree of internalization, negative emotions (anxiety, depression, and etc.), social factors and health aspects of the changes, good attention to the social media influence on body image brought by all kinds of influence, at the same time, through the study found that social media content changes on human psychological and physiological factors played an important role. With the use of diversified research methods, researchers and scholars have obtained the research results and findings they need through the evaluation of various results. On the basis of this, the author in previous research, for pioneer, actively summarize the important findings (such as social media is indeed the appearance image there a big negative emotion, health, etc), the research content in today's popular Tiktok social software image of a man and a woman looks at what impact, damage to people's life and what kind of problems.

The present study differs from previous studies in that it not only considered the body image of females, but also included males. The exploration of the males' body image is equally important, as males are now also more concerned with their appearance and body shape. So, the research on according to the content and characteristics of the application, and it summarizes the influence of both sexes on Tiktok media and the degree of influence.

It is believed that this study can better present the use of Tiktok to the public as well as the open source and influence on the public body image, and help people correctly understand the values of the body image-related content in this application and better understand themselves.

The author hypothesizes that when the participants filled out mood scale, it was likely that the fluctuation of the scores of the men was smaller than the difference of the scores of the women before and after the experiment. Moreover, the longer participants watched Tiktok, the more negative emotions women experienced than men.

2. Method

2.1. Participants

Sample consisted of 36 participants, between the ages of 17-22; 86% were female (mean age = 20), 14% were male (mean age = 20-21). Participants were recruited from the University of

Connecticut's Psychological Sciences Department, with voluntary student participation and incentivization with partaking in student-led studies. Participants were randomly assigned to their respective conditions.

2.2. Measures

In this between-subjects experiment, participants were requested to furnish demographic information (including gender, age, and hours spent on TikTok). Gender was defined as three parameters: male, female, or other/non-binary. Ages were defined as ranging from less than 17, 17-21 (one answer choice each), or 21 and greater. Hours of time spent on TikToks measured the general hours the participant spent on TikToks regularly. These were defined within three parameters: 0 hours (no use), 1-3 hours (moderate use), or greater than 4 hours (high use).

The measurement of negative mood was conducted using the Positive and Negative Affect Schedule (PANAS) Questionnaire, a tool that gauges both positive and negative emotional states [7]. After viewing their respective TikTok assignments, participants were asked to express their feelings via a set of 20 descriptors, scored on a 5-point Likert scale that ranged from 'Very slightly/Not at all' to 'Extremely agree' [8]. The items included adjectives such as 'interested' or 'scared,' with higher scores signifying an improved mood [8].

Self-perception, on the other hand, was evaluated using the Robson Self-Concept Questionnaire. This tool is designed to measure a participant's self-concept post-viewing of their allocated TikTok assignments. They were asked to convey their level of concurrence or dissent over 30 first-person phrased items, utilizing a 7-point Likert scale that extended from 1 = 'Completely disagree' to 7 = 'Completely agree' [9]. These items, both positive and negative in nature, included phrases like 'I can like myself even when others don't,' or 'I often feel humiliated.' A higher score indicated a more positive self-concept [9]. Participants were randomly assigned to one of two experimental conditions: body neutral TikToks (control), or positively targeted body TikToks. Positively targeted TikToks were defined as four audiovisual videos directly related to body image; in addition, these videos were.

explicitly discussing body image in a positive light. Body neutral TikToks, on the other hand, were composed of four audiovisual videos not related to body image or other contributing factors (e.g., eating) in any way. Both forms of stimuli were approximately the same duration (98 sec. long) and given to the participants in a randomized manner using Qualtrics randomizer software. After participants were exposed to either experimental condition, negative mood and self-perception were measured using self-report questionnaires. The official names of each questionnaire were not made available to the participants; only the items were.

2.3. Procedure

Upon participants agreeing to participate in the experiment after reading the consent form, the author needed demographic information (gender, age, and hours of time spent on TikToks) from the participant. After this, the author randomly divided them equally into two groups. One group watched positively targeted body TikToks and the other group watched body neutral TikToks. Positively targeted TikToks were defined as four audiovisual videos directly related to body image; in addition, these videos were explicitly discussing body image in a positive light. Body neutral TikToks were composed of four audiovisual videos not related to body image or other contributing factors (e.g., eating) in any way. Participants watched these videos on a monitored computer for roughly 1 minute 38 seconds. After the participants watched the video, they were required to fill out the PANAS Questionnaire and the Robson Self-Concept Questionnaire.

3. Analysis

Regarding the coding method of the PANAS Questionnaire, the author executed a process where the scores of the negative items were accumulated and the positive item scores were deducted from this sum; following this, an average was computed from the collective scores of all the participants.

The Robson Self-Concept Questionnaire is used by taking the scores of positive items and subtracted from the scores of negative items to obtain the final score. Finally, the author compared the changes in the scores of the two groups of participants before and after watching TikToks.

Both negative mood scores (one for each condition; two scores) and self-perception scores (one for each condition; two scores) were compared within one another and statistically analyzed using Student's t-test, to determine whether the mood and self-perception scores of those watching negative TikToks were significantly different from those watching neutral TikToks. In addition, separately, the scores of males and females were also statistically analyzed using Student's t-test, while hours spent on TikToks analyzed the differences between the scores of all three parameters (no, moderate, high use) using ANOVA. These tests accounted for Quasi-Independent Variable effects.

4. Results

The first analysis examined whether women are more likely than men to lower their assessment of their self-perception and body image when viewing TikToks (see Figure 1 and Figure 2). Two independent sample t-tests were run to identify the effect of gender on self-perception and body image when viewing TikToks. Compared to men ($M=75.2$, $SD=4.44$), women ($M=65.77$, $SD=20.57$) have a lower self-perception score when viewing TikToks, $t(34) = -3.43$, $p=0.002$. There were no gender differences in positive affect scores between women ($M=13.25$, $SD=12.28$) and men ($M=15.2$, $SD=13.35$) after viewing TikToks, $t(34) = -0.305$, $p = 0.386$

The second analysis tested whether consuming TikToks at higher rates will decrease self-perception and body image. Two 2x2 ANOVA tests were generated to assess how self-perception and body image were affected by TikToks consumption and video type (See Figure 3). There was no change in positive mood scores between those that used TikToks for more than 4 hours ($M=13.25$, $SD=13.48$) and those that used it between 0-3 hours ($M=13.88$, $SD=10.96$), $F(1,34) = 0.021$, $p=0.885$. There were also no differences in self-perception scores between those that used TikToks for more than 4 hours ($M=68.35$, $SD=9.20$) and those that used it between 0-3 hours ($M=65.5$, $SD=11.92$), $F(1, 34) = 0.661$, $p = 0.422$.

For the third hypothesis, two 2x2 ANOVA tests were conducted to test whether those with a history of watching body related TikToks for longer periods of time will have decreased self-perception and increased negative thoughts compared to those that do not use it as often (See Figure 4). Regarding video type, those that viewed body-positive videos ($M=18.944$, $SD=13.01$) had a greater mood score than those that viewed body-neutral videos ($M=8.11$, $SD=8.811$; $F(1,34) = 7.733$, $p = 0.009$). There were no changes in self-perception scores between those that viewed body-positive videos ($M=66.89$, $SD=10.27$) and those that viewed body-neutral videos ($M=67.28$, $SD=10.89$), $F(1,34) = 0.007$, $p = 0.932$.

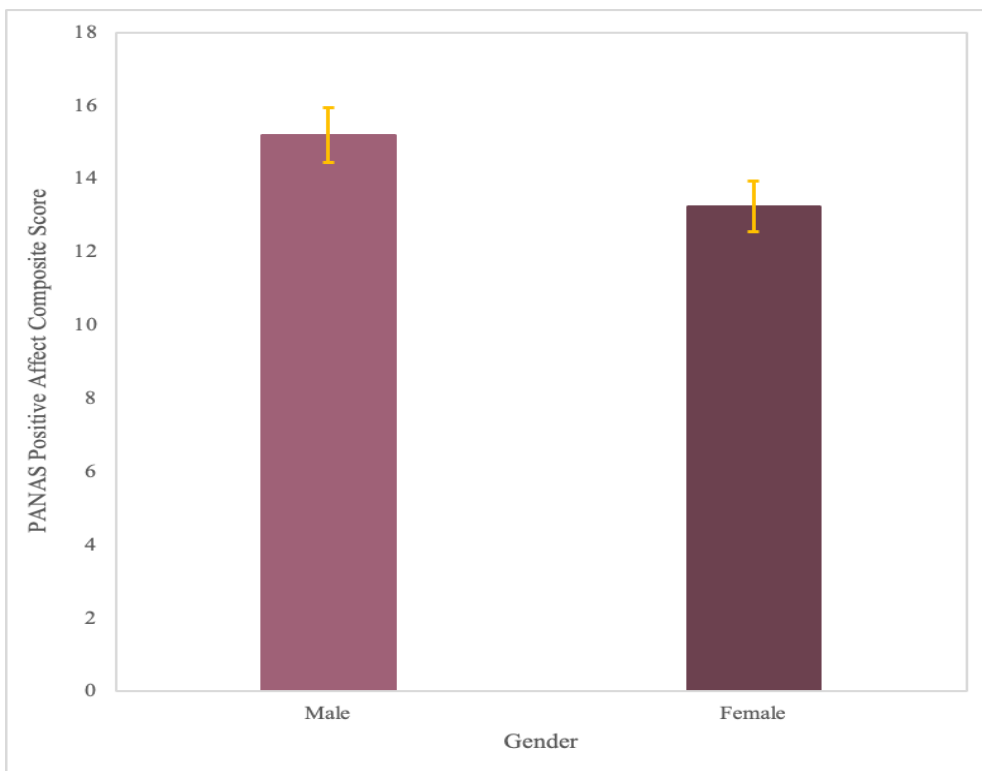


Figure 1. Gender Effects on Positive Affect.

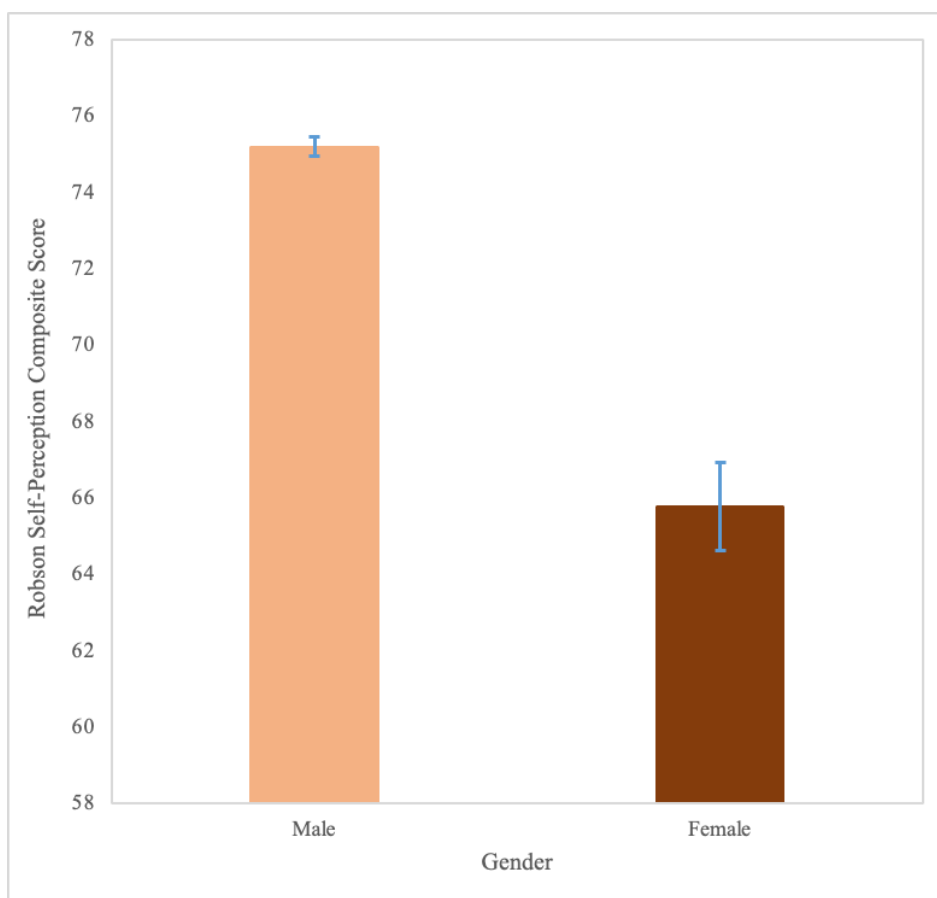


Figure 2. Gender Effects on Self-perception.

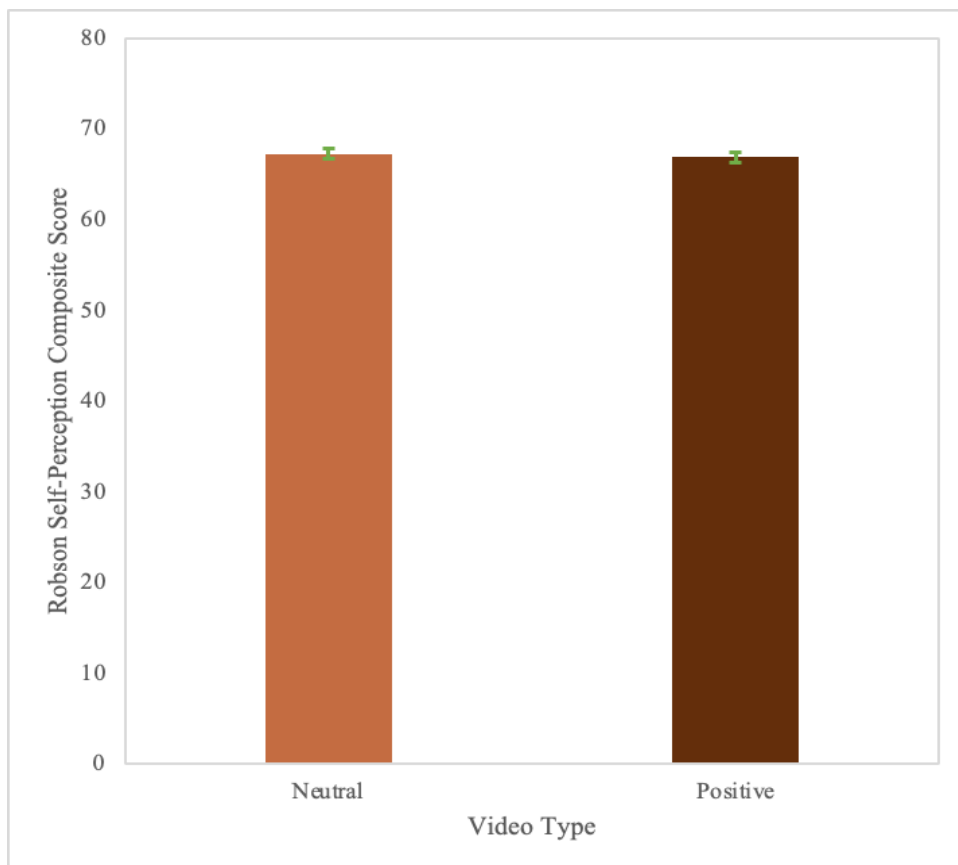


Figure 3. Effects of Video Type on Self-perception.

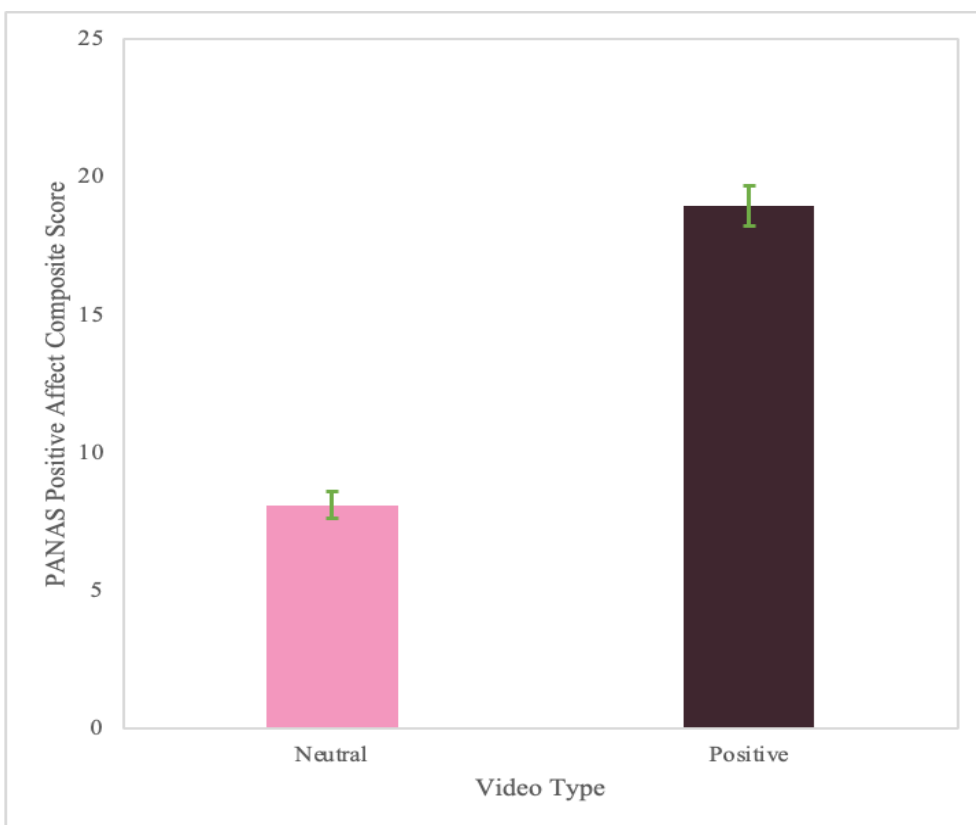


Figure 4. Effects of Video Type on Positive Affect.

5. Discussion

Social media is known to affect mood, self-perception and overall mental health, and this is more robust in females than males. Initially, the author hypothesized that women would be more likely than men to decrease their assessment of self-perception and body image when viewing TikToks. First, after watching Tiktok, women had lower self-perception scores when watching TikToks compared to men. However, the positive emotions people acquired after watching TikToks were not influenced by their gender. Second, the data showed no difference in positive emotion scores after viewing TikTok between those who use TikTok more than 4 hours per week and those who use TikTok between 0-3 hours per week. Also, there was no difference in their self-perception scores. This means that the length of time spent using TikTok also does not affect self-perception and positive emotions. Finally, those who watched the body-positive video had greater emotional scores than those who watched the body-neutral video. Nevertheless, the variance in the nature of the video had a significant impact on the viewers' positive emotional response. Generally, the empirical findings corroborated a section of the initial hypothesis. It was observed that women demonstrated lower self-perception scores compared to their male counterparts while consuming TikTok content. However, emotional response scores remained uninfluenced by gender, indicating a universal emotional engagement across both genders.

Given that women would score lower in emotions and self-perceptions because of social discrimination, inequality towards women, and biological differences of women. While women scored significantly different from men in self-awareness, they did not score significantly different from men in positive emotions. In terms of scores, there was no difference between those who used TikToks for more than four hours and those who used TikTok between 0-3 hours. According to Shelly Janet and Monique, engagement with social media platforms often exacerbates women's dissatisfaction with their body image, intensifies their emphasis on physical attractiveness, and reinforces their alignment with maladaptive eating behaviors [10]. The author's experiment also verified this result: women had lower self-perception scores after watching TikToks. Social networks contribute significantly to users' subjective well-being and enhance their positive emotions [10]. Supporting these findings, the author also found participants who watched positive genres had higher positive emotion scores [10]. In Lin Ma's study, funny musical clips evoke various types and levels of emotion [11]. Entertaining content makes subjects laugh and they tend to score higher on the validity scale [11]. Based on psychological, physiological, and experimental observational data, people experience a strong sense of well-being and excitement when they enjoy the humorous short music videos used in this study [11]. This supports author's study.

6. Limitations

There were 34 participants in this experiment and only five of them were men. Therefore, this experiment is not a good proof that men are affected. On the other hand, it is also difficult to demonstrate the differences that exist between males and females. In addition, in the design due to the short time, the participants only watched the video once. It cannot effectively prove that the results of the experiment represent the long-term effects of TikToks. Finally, the influence of the culture of different countries is not considered in the variables.

7. Future Directions

For subsequent research, it is recommended to augment the participant pool to obtain a more extensive sample size, while maintaining an equitable representation of male and female subjects. Additionally, it would be beneficial to instruct participants to view the video content on multiple occasions over an extended duration, thereby allowing for a more comprehensive understanding of the effect of repeat exposure. To verify whether the impact of TikToks is long-term or short-term. Finally, participants from different countries were chosen to see if the impact of TikToks was

consistent across different societies and cultures. In future experiments, in addition to studying the positive effects of TikToks, the negative effects generated by TikToks can also be studied. Psychological scales can be collected from users who watch negative content for a long time and from users who watch positive content for a long time. Their scores can be compared to verify the negative effects of TikToks. On the other hand, the psychological scales of underage users were collected to observe the effect of TikToks on minors.

8. Conclusions

TikTok, despite its status as a dominant force in the contemporary social media landscape, remains a largely untapped area for comprehensive scientific inquiry. Concurrently, there is a notable paucity of studies exploring the potential positive psychological impacts of social media usage. The current research contributes to this gap by providing initial insights into the effects elicited by TikTok usage. Notably, it has been observed that gender plays a role in influencing self-perceptions in the context of TikTok usage, and the positivity of the video content can also have a significant impact. On the whole, TikTok seems to have a predominantly positive effect on its user base. Moreover, it is crucial to spotlight the potential for psychological issues amongst female TikTok users. This study could provide a roadmap to preemptively mitigate psychological difficulties experienced by women on the platform. Furthermore, this research offers empirical evidence on the positive mental health effects potentially linked to TikTok usage. This information could assist TikTok in better curating and regulating high-quality content for its users, thus optimizing the user experience while minimizing potential harm.

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