

# User Experience on Social Media Between Adolescents and Young Adults

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## ABSTRACT

Impacts of social media activities on well-being, particularly adolescent mental health has been emerged as a global issue. Although there could be benefits from social media activities, potential risk of well-being in adolescents has been reported from the perspective of degraded self-esteem, depression, aggravated social isolation or cyberbullying, anxiety, decreased life satisfaction, or disrupted brain development. Would adolescents outgrow the risk of social media use? Little to no studies have yet reported difference of user experience on social media activities between adolescents and young adults. The objective of this study was to compare differences between the two groups on social media involvement measured by time spent a typical day and influence by the degree of subjective happiness, feeling of relative deprivation, vicarious satisfaction, empathy. The survey consisted of questionnaires with several Likert scales. Mann-Whitney U-Test was applied to evaluate the difference of measures of interest at the significance level of 0.05. The results on social media involvement showed insignificant difference of time spent between the two groups for Instagram, Snapchat, TikTok, YouTube, and X, but young adult group spent significantly more time than did adolescent group with the platform Instagram and Facebook. The measures of empathy were significantly different between two groups, but subjective happiness, feeling of relative deprivation, and vicarious satisfaction were not different. Interestingly, young adult group tended to be more sensitive to understand another person's feelings, experiences, and emotions than adolescent group did.

**Keywords:** Social media use, Subjective happiness, Empathy

## INTRODUCTION

In 2024, Pew Research Center conducted a survey regarding teenagers and technology. According to the results, most surveyed parents believe that being a teenager today is more difficult than it was 20 years ago. Technology - especially social media - is identified as a primary concerning factor (Faverio and Sidoti, 2024). Most parents perceive teens feel pressured to conform to specific aesthetic and behavioral standards, and experience negative interaction with other teen users in social media. When teens are constantly connected through social media, there seems to be no way to avoid such negative impacts.

Concerns on social media have persisted since its advent, and the negative impact on well-being is not limited to adolescents. Research frequently highlights the risks associated with social media use, including diminished

self-esteem (Alfasi, 2019), depression (McCrae et al., 2017), aggravated social isolation (Yang, 2016), cyberbullying (Giumetti and Kowalski, 2022), decreased life satisfaction (Bissell and Chou, 2024) and disrupted brain development (Crone and Konijin, 2018). These findings align with recent legislative moves of Australian government's policy to deactivate accounts for users under 16 years old and prohibit them from holding accounts until after they become 16 years old (Taylor, 2025). Similarly, 2023 litigation against Meta has raised the prospect of a social media ban for those under 16 years old in the U.S. as well (Alexander, 2025).

These discussions and events raise some critical considerations. First, teen social media users are unlikely to leave social media platforms despite the identified problems, since there are also positive functions such as easy information sharing, and creation of social support group, which already became a part of their life (Alluhidan, 2024). Second, while many negative impacts stem from social comparison, a fine line exists between social comparison and social support. Benefits would outweigh risks in certain interactions in social media. User experience research, therefore, needs to explore the psychological motivations and outcomes of user experience beyond mere interface efficiency and quality. Lastly, proposed bans imply that adults are better equipped to manage the potential negative impacts of social media and less influenced by them. However, little to no studies have directly compared user experiences on social media between adolescents and adults. Do negative effects diminish, or are they reinforced as adolescents grow older? Alternatively, do the positive impacts of social media use outweigh the negatives among adults?

This study aims to answer these questions by comparing adolescents and young adults in terms of their social media experiences, especially examining time spent on various platforms and its influence on empathy, feeling of relative deprivation, vicarious satisfaction, and subjective happiness. Although the data is cross-sectional and does not demonstrate longitudinal developmental changes, the comparison seeks to open a discussion on how we can help youth not merely survive these unavoidable challenges from social media, but thrive as healthy, well-rounded individuals.

## **METHOD**

### **Participants**

Adolescent group of typically junior high or high schooler from 13 to 17 years old and young adult group of typically college student or in workforce from 18 to 25 years old residing in the United States of America participated in the survey. Adolescent was able to participate in this study after getting the permission from parents or legal guardians with submission of a consent form.

### **Measures**

**Social Media Use:** The amount of time spent on social media platform on a typical day was measure in two activities such as social media reading and social media writing. Respondents were asked to check out their screen time

spent on social media to answer the question. An 8-point scale was used to measure each activity time in a 30-minute bracket of which scale 0 was for 'not at all activities' to scale 7 for '3 hours or more'. Seven social media platforms were considered in this study, that is, Instagram, Snapchat, TikTok, Facebook, YouTube, X, and Other. Social media writing activities included making posts (e.g., images, texts, videos, etc.), writing comments, clicking 'Like/Heart' and so on.

**Subjective Happiness:** The measure of subjective happiness developed by Lyubomirsky and Lepper (1999) was adopted. Four inquiries were asked to measure subjective happiness by using a 5-point Likert scale. The first two prompt statements of which "*In general, I consider myself...*" and "*Compared to most of my peers, I consider myself...*" were responded by "Very unhappy", "Somewhat unhappy", "Neutral (neither unhappy nor happy)", "Somewhat happy", and "Very happy". The last two prompt statements were as follows: "*Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this describe you?*" and "*Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be*" Responses were "Does not describe me at all", "Describe me slightly well", "Describe me moderately well", "Describe me quite well", and "Describe me very well".

**Vicarious Satisfaction:** Four questionnaires adopted from Yang (2020) were designed with a 7-point Likert scale. One of example statements measuring vicarious satisfaction was as follow: "*I feel good when I see on social media others' luxurious purchases and/or possessions.*" It was rated by "Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree nor disagree", "Somewhat agree", "Agree", and "Strongly agree".

**Feeling of Relative Deprivation:** Five questionnaires adopted from Yang (2020) were designed with a 7-point Likert scale. Each questionnaire was asked how much they feel bad when viewing other people's fancy stories on social media. One example statement was as follow: "*I feel bad because I am missing out when I see on social media others' expensive experiences (i.e., traveling, having a nice hobby)*" It was rated by "Strongly disagree", "Disagree", "Somewhat disagree", "Neither agree nor disagree", "Somewhat agree", "Agree", and "Strongly agree".

**Empathy:** From Interpersonal Reactivity Index (Davis, 1983) three categories were selected such as perspective taking, fantasy, and empathetic concern. Each category was consisted of three questionnaires adopted from Jang (2013) and measured with a 7-point Likert scale. For the prompt statement of "*When I read posts on social media*", one example of perspective taking responses such as "*I feel as if I were in the position of the person who writes the posts*" was rated by from 1 "*does not describe me at all*" to 7 "*describes me extremely well*".

## Data Collection and Statistical Analysis

Online surveys were conducted through Qualtrics national panel pools in 2023. The survey questionnaire was reviewed and approved by University and Medical Center Institutional Review Board at East Carolina University.

Mann-Whitney U test was applied to test the difference of interesting measure between the two groups at the significance level of 0.05.

## RESULTS

### Survey Data

A total of 1424 respondents agreed to participate in this study although 1552 eligible panellists accessed the survey link. The survey completion time was checked to determine inattentive responses, and the survey with completion time less than 3 minutes and 30 seconds was discarded. After examining the data, a total of 628 responses from 267 adolescent and 361 young adults were analyzed.

### Difference of Measure

**Social Media Use:** The amount of time spent on both social media reading and writing was significantly different on Instagram and Facebook only. For social media reading, the mean rank of adolescent and young adult group was 294.75 and 329.10 ( $p < 0.05$ ) for Instagram and 265.91 and 350.44 ( $p < 0.01$ ) for Facebook, respectively. For media writing, the mean rank of adolescent and young adult group was 288.55 and 333.69 ( $p < 0.01$ ) for Instagram and 280.35 and 339.76 ( $p < 0.01$ ) for Facebook, respectively.

**Subjective Happiness:** Two groups did not show a significant difference on any of four questionnaire statements measuring subjective happiness. The overall mean rank for four questionnaires was around 308 and 319 for adolescent and young adult group, respectively.

**Vicarious Satisfaction:** To any of four questionnaire statements gauging vicarious satisfaction, two groups did not show a significant difference. The overall mean rank was around 309 and 317 for adolescent and young adult group, respectively.

**Feeling of Relative Deprivation:** A significant difference on feeling of relative deprivation between two groups was not found from any of the five considered questionnaires. But the overall mean rank was around 307 and 320 for adolescent and young adult group, respectively.

**Empathy:** For perspective taking, young adult group showed a significant difference from adolescent group in all three measures considered. The mean rank of adolescent and young adult group, respectively for each measure was as follows: 1) 288.43 vs. 333.78 ( $p < 0.01$ ) for 'I feel as if I were in the position of the person who writes the post', 2) 291.96 vs. 333.17 ( $p < 0.01$ ) for 'I try to think from the viewpoint of the person who writes posts', 3) 290.81 vs. 332.02 ( $p < 0.01$ ) for 'I try to understand the writer better by putting myself in the situation from the writer's point of view' For fantasy, young adult group also had a significantly higher mean rank than adolescent group for two measures out of three as follows: 1) 327.67 vs. 296.7 ( $p < 0.05$ ) for 'I find myself feeling the same as the person who writes the posts', 2) 331.39 vs. 291.67 ( $p < 0.01$ ) for 'I easily put myself in the place of the person who writes the posts' But one measure for 'I imagine how I would feel if the events described in post happened to me' showed insignificant mean rank between two groups (302.3 and 323.52 for adolescent and young adult,

respectively). For empathetic concern, the mean rank of young adult group was higher than that of adolescent group for all three measures considered as follows: 1) 330.29 vs. 291.15 ( $p < 0.01$ ) for 'I am empathetic about sad events or unfortunate news', 2) 337.95 vs. 282.8 ( $p < 0.01$ ) for 'I am often touched by things that I see', 3) 334.75 vs. 287.13 ( $p < 0.01$ ) for 'I have a feeling of concern'.

## CONCLUSION

The overall time spent in social media reading and writing on a usual day was not significantly different between two groups in considered platforms except Instagram and Facebook. For Instagram and Facebook, young adult group seemed to spend approximately from 60 minutes and 90 minutes for either reading or writing compared to adolescent group from 30 minutes to 60 minutes based on the rank analysis. For the other platforms such as Snapchat, TikTok, YouTube, X, and Other, two groups tended to spend between 60 and 90 minutes. This study can't rationalize the reason for the lack of popularity of Instagram among adolescents. However, there have been numerous reports (Utter et al., 2020; Farooq et al., 2023; Moss et al., 2023; Balamurugan and Vijayarani, 2025; Masri-zada et al., 2025) about the impact of Instagram on adolescents' mental health compared to young adult from behavioral and cognitive response perspectives, particularly activating the brain's reward system by "likes" Instagram. It is assumed that public awareness of its impact on adolescent mental health may lead to a parental control on the platform. The less social media activity with Facebook in adolescent group in these days compared to young adult group would be explained by some factors such as perception of the platform as older users, lack of specialization on social connection rather than general purpose utility, privacy concerns on data collection, and rising newer platforms (Aloudat et al., 2019; Slot and Oprea, 2021; Nowacki, 2024).

For subjective happiness, neither group demonstrated a significant difference across the happiness measures. For the self-assessment items, both groups' answers were around "Neutral (neither unhappy nor happy)" for the inquiry of "In general, I consider myself" and "Neutral (average)" for "Compared to most my peer, I consider myself", respectively. However, for the inquiry statement of "Some people are generally very happy. They enjoy like regardless of what is going on, getting the most out of everything. To what extent does this describe you?", the reply of both groups was on average "Describes me moderately well." Similarly, for the inquiry statement "Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this describe you?" implied "Describes me quite well" again. From those two responses, it would be concluded that both groups did not identify themselves as unhappy or happy at the time of the survey. The survey respondents might have intentionally adopted vague or moderate positions to avoid revealing their genuine emotional states.

Measures of vicarious satisfaction and relative deprivation were not significantly different between two groups for all inquiry statements. For instance, the responses to one of each vicarious satisfaction and relative

deprivation inquiries such as “I feel good, when I see on social media other’s luxurious purchases and/or possessions.” “Somewhat disagree” and “I feel bad because I am missing out, when I see on social media others’ expensive experiences (i.e., traveling, having a nice hobby).” The mean rank they feel good on other people’s happy posts, or they feel bad because they may be missing out was marked between “Somewhat disagree” and “Neither agree nor disagree” for both groups. It appears that they tend to be indifferent in their indirect experience or relative comparison with other individuals.

Interestingly, compared to indifference of vicarious satisfaction and relative deprivation, adolescent group was more insensitive towards other individuals than young adult group from the viewpoint of perspective taking, fantasy and empathetic concern. For the considered empathy measures, for instance, “When I read posts on social media, I feel as if I were in the position of the person who writes the posts.”, the mean response was “Does not describe me” for adolescent group compared to “Does not describe me very well” for young adult group based on the rank analysis. It may indicate that adolescent group might be more detached from others while teenage brain is still developing. This presumption would be supported by previous studies (Levy and Feldman, 2017; Kim et al., 2020) of which adolescents’ cognitive and empathic abilities were lower than adults and would be in the process of compensatory hyperactivation of the brain regions associated with those abilities.

In conclusion, these days’ adolescents and young adults are likely to be not happy. Although both groups tend to be insensitive or indifferent on other individuals’ social media posts, they usually spend between 60- and 90-minutes reading or writing on social media platforms in a regular day. It appears that the primary purpose of social media activities for both groups is not to promote social connection, self-expression, or community development, but to just pass the time a day.

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