



The Effect of Instagram on Psychological Well-Being of High School and University Students

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Background

- Social networking sites (SNS) provide the platform for users to engage in either upward social comparison (SC) with superior competitors or downward SC with inferior competitors (Sherlock & Wagstaff, 2019).
- Upward SC with idealized SNS profiles has been linked to negative well-being outcomes (Cohn, 2020).
- The original study by Sherlock and Wagstaff (2019) examined the effect of Instagram usage on psychological well-being of college-age women.
- Men are increasingly using Instagram and have become an important population to examine and have been shown to engage in SC on SNS (Clement, 2020).
- Previous research has shown that adolescents may be a more vulnerable population when it comes to SNS affecting their psychological well-being (Sherlock & Wagstaff, 2019).

Methods

- Participants ($N = 142$) were undergraduate ($n = 63$) and high school students ($n = 79$) who completed the Qualtrics survey on electronic devices.
- Participants completed measures of psychological well-being: depressive symptoms, general anxiety, SE, PAA, SRPA, and SC.
- Then answered questions about their Instagram usage.
- Were either placed into the experimental conditions where they saw ten images from Instagram or the control condition where they did not see any images. The four experimental conditions were images of travel, beauty (only females), female fitness, and male fitness (see Figure 1).
- Completed the SE, PAA, and SRPA again.

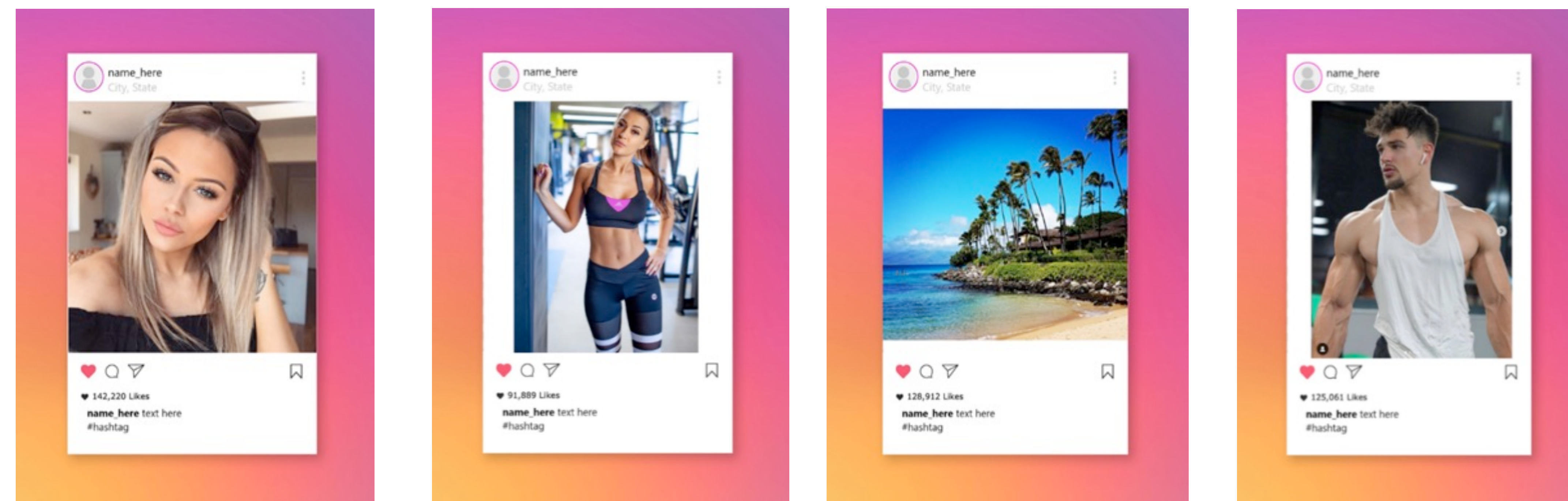


Figure 1. Example Instagram Image from each Condition. From Left to Right: Beauty, Female Fitness, Travel, and Male Fitness.

Hypotheses

H1: There will be a positive relationship between Instagram usage and the psychological well-being variables of depression, SC, physical appearance anxiety (PAA), and generalized anxiety. Instagram usage will be inversely related with self-esteem (SE) and self-rated physical attractiveness (SRPA).

H2: Time spent on Instagram will predict depressive symptoms, while SC will mediate that relationship.

H3: The fitness images and the beauty images will decrease SRPA and SE and increase PAA as opposed to the travel images and the control group.

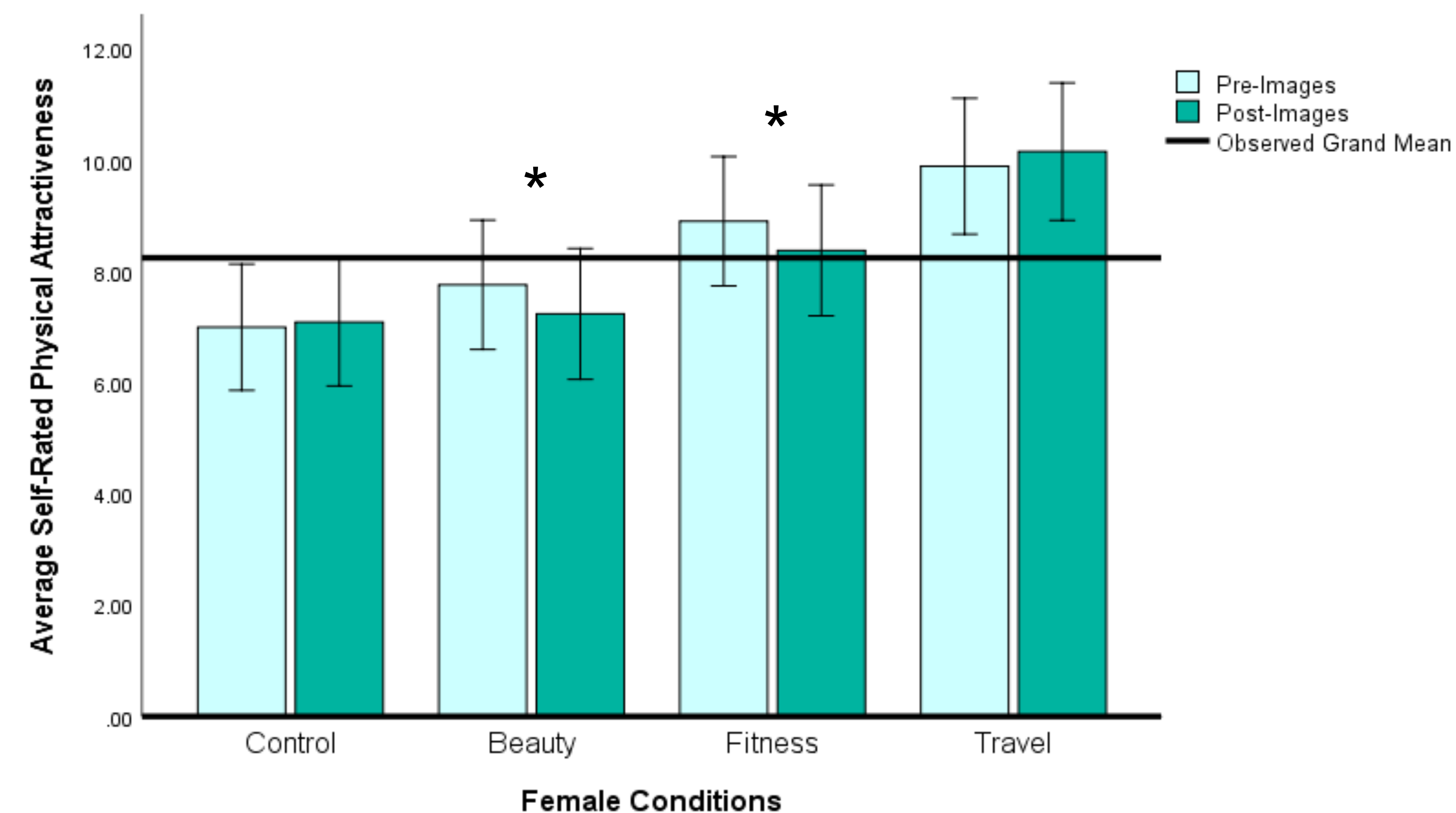


Figure 2. Average SRPA Scores for Females Before and After Exposure to the Conditions. * $p < .05$

Results

- No Pearson correlations between Instagram usage and psychological well-being for all participants, $p > .05$.
- A univariate regression demonstrated that time spent on Instagram did not predict depressive symptoms, $F(1, 119) = .103$, $p = .749$, $\beta = -0.029$ with an R^2 of .001. There was no mediation analysis for SC.
- 3 ANOVAs for pre-post scores of SE, PAA, SRPA. Interested in interactions only.
- Design: 2 (Measurement Time) x 2 (Gender) x 3 (Condition) mixed-model ANOVA.
 - No significant interactions between measurement time (MT), gender, and condition for SE, PAA, and SRPA scores, $p > .05$.
- 3 ANOVAs for pre-post scores for only the women. Interested in interactions only.
- Design: 2 (Measurement Time) x 4 (Condition) mixed-model ANOVA.
 - There was a significant interaction between females' MT of self-rated physical attractiveness scores and condition, $F(3, 79) = 2.952$, $p = .038$, $\eta_p^2 = 0.101$. Simple main effects revealed that women reported significantly lower SRPA after seeing the female fitness images, $p = .029$, and after seeing the beauty images, $p = .029$ (see Figure 2). No difference in scores in the control and travel condition, $p > .05$.
 - No interaction between condition and MT of female's self-esteem scores and PAA, $p > .05$.

Discussion

- **H1:** Not supported, no relationship between Instagram and psychological well-being.
- **H2:** Not supported, could not run mediation analysis because time spent on Instagram did not predict depressive symptoms.
- **H3:** Partially supported, exposure to fitness and beauty images resulted in lower SRPA, but no differences for SE or PAA.

Limitations:

- The high school students were among peers, teachers, and the researchers while taking the survey, which could have created a social desirability bias.
- Showing of *Screenagers*.

Areas for further exploration:

- Future research should continue to focus on gender differences in the impact of SNS on psychological well-being.
- One avenue of application for the results of future studies in this field is education on the impact of social comparison and social media use on mental health.

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