

# The Relationship between Extraversion, Self-Esteem, Relationship Satisfaction, and Social Media Use



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## Introduction

### Background

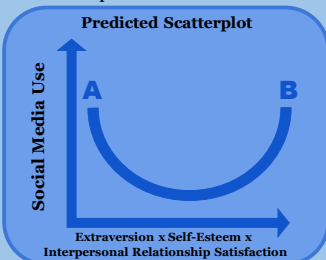
Digital communication has become a key component of our day to day lives. Social media plays a large role in this communication. There are many unanswered questions regarding the motivations behind social media use. Among these are the questions, what draws people to social media and what type of people are more likely to use social media. Our study analyzes the extent to which extraversion and perceptions of one's self and friendships are related to the level of motivation to use social media.

### Rationale

- Extraversion and high interpersonal competency was correlated with high social media use (Jenkins-Guarnieri et al., 2013)
- Interpersonal relationship satisfaction and introversion were predictors of high social media use (Lemieux et al., 2013).
- Introversion was found to have a positive correlation with high social media use (Thomas et al., 2020).
- Social media addiction was negatively correlated with self-esteem (Hawi & Samaha, 2019).
- Social Compensation Hypothesis says that individuals who are dissatisfied with their level of popularity utilize social media to compensate (Valkenburg, Schouten, & Peter, 2005).
- Social Enhancement Hypothesis, points to individuals using social media as a way to augment their popularity (Valkenburg, Schouten, & Peter, 2005).

### Hypothesis

We propose two clusters of traits that we predict will show higher social media use than their counterparts.



Firstly, introverts with low self-esteem and low interpersonal relationship satisfaction will show more social media use compared to introverts with high self-esteem and high interpersonal relationship satisfaction (Cluster A). Secondly, extraverts with high self-esteem and high interpersonal relationship satisfaction will show more social media use than extraverts with low self-esteem and low interpersonal relationship satisfaction (Cluster B).

## Methods

Participants of the study were gathered via the SONA pool, from General Psychology courses at UMW and were between ages 18 and 26 years old. All participants completed this study as an online survey through Qualtrics. In total there were 59 recorded responses, including two participants who requested their responses be removed, thus 57 responses were taken into account in the analysis. The survey was completed by participants in the setting of their choice. Participants were instructed that they could skip any questions or end their participation at any time. The participants of the survey were kept completely anonymous and no identifying information was collected.

## Materials

Participants completed four self report questionnaires, each measuring a separate variable. The variables were measured in the following order: social media use, extraversion, self-esteem, and interpersonal relationship satisfaction.

**Section 1: 10 item Social Media Use Integration Scale (SMUIS)**

Section 1

Please read the statements below and rate how they apply to you

	Strongly Disagree	Disagree	Neutral/Disagree	Somewhat Agree	Agree	Strongly Agree
I feel that using social media is an important part of my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel disconnected from friends when I have not logged into social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get upset when I am unable to find something on social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy checking my social media accounts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to use social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer to communicate with others mostly through social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respond to content that others share through social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be disappointed if I could not use social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using social media is an important part of my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be disappointed if I could not use social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Section 2: Ten-Item Personality Inventory (TIPI)**

Section 2

Please read the statements below and rate how they apply to you

I see myself as...

	Strongly Disagree	Somewhat Disagree	Neutral/Disagree	Somewhat Agree	Agree	Strongly Agree
Self-reliant/independent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outgoing/social	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm/compassionate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Imaginative and artistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open to new experiences, concepts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reverent and quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathetic and warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organized and serious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm and emotionally stable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conventional and conservative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Section 3: Single-Item Self-Esteem Scale (SISES)**

Section 3

Please read the statement below and rate how it applies to you

	Not very true of me	Slightly true of me	Neither true nor untrue of me	Slightly true of me	Very true of me
I have high self-esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Section 4: 7 item modified Relationship Assessment Scale (RAS)**

Section 4

Please read the statements below and rate how each applies to your friendships

	Low	Somewhat Low	Neither low nor high	Somewhat High	High
How well do your friendships meet your needs?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are you satisfied with your friendships?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you wish your friends were closer to you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent have your friendships met your original expectations?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many problems do you have with your friendships?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How good are your friendships compared to most?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much do you love your friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Procedure

Participants were gathered from general psychology courses at the University of Mary Washington and completed a four-part online questionnaire, hosted in Qualtrics, administered via SONA.

The participants were informed of the nature of the study and gave consent before proceeding with the questionnaire. They were then asked to mark their gender, age, race, and year at UMW. Finally, using the Likert scales pictured above, the four variables were measured. Upon completing the survey, participants were debriefed and were given an option to have their data removed from the study. Participants received half a point of extra credit towards their general psychology course as compensation.

## Results

A multiple regression analysis was conducted to evaluate how well the factors extraversion, self-esteem, and interpersonal relationship satisfaction predicted social media use. The hypothesis was that people with low extraversion, low self-esteem, and low interpersonal relationship satisfaction or people with high extraversion, high self-esteem, and high interpersonal relationship satisfaction would score higher on social media use than people who did not score consistently low or high for each variable. The predictors were extraversion, self-esteem, and interpersonal relationship satisfaction. The criterion variable was social media use. The linear combination of the predictors was not significantly related to social media use,  $F(1, 54) = 1.57, p = .216$ . The multiple correlation coefficient was .17, indicating that approximately 2.8% of the variance in social media use can be accounted for by extraversion, self-esteem, and interpersonal relationship satisfaction combined.



## Discussion

### Limitations

Our study had a number of limiting factors. Firstly, due to the pandemic of the COVID-19 SARS virus, we were limited to online survey measures only. Data was also limited in that our N size was very small (N = 57). This was partly due to the time constraints of our study as well as our decision to not recruit from social media (due to confounding factors). There was also a potential ceiling effect for the RAS due to a limited array of questions that led to low accuracy and low internal validity.

### Conclusions

We were unable to reject the null hypothesis of our study, we found no significant relationship present between extraversion, self-esteem, and interpersonal relationship satisfaction, and social media use. However, due to the small sample size of our study, our power of .15 was likely too low to do so.

### Further Research

For future research, we would caution researchers to maintain a higher level of power than we did if attempting a similar study, as it would take roughly 380 participants to reach a power level of .8, assuming similar  $R^2$ . It may also be beneficial to look at other variables related to social media use, such as fear of missing out, to test if they may have their own interactions.

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