

Note: This Work has been made available by the authority of the copyright owner solely for the purpose of private study and research and may not be copied or reproduced except as permitted by the copyright laws of Canada without the written authority from the copyright owner.

Park, Janice. "Social Media Usage, Narcissism, and Romantic Relationship Quality: A Correlational Analysis." BA Honours (Psychology), Tyndale University, 2023.

**Social Media Usage, Narcissism, and Romantic Relationship Quality: A Correlational
Analysis**

Janice Park

Department of Psychology, Tyndale University

PSYC 4993: Honours Thesis in Psychology

Dr. Vivette Henry

April 20, 2023

Abstract

Research has shown an increase in narcissism in the general population over time (Twenge & Campbell, 2009). One reason for this phenomenon is due to social media and its features such as likes, comments, and follows that have created a quantifiable means to measure one's popularity and self-esteem (Gabbard & Crisp, 2018), while also allowing people to have an online presence where they can control what others see. Moreover, research also shows the adverse effects of narcissism, particularly in intimate relationships (Campbell, 1999; Masterson 1998; Altinok & Kilic, 2020). Therefore, this research study addressed the questions, "Is there a correlation between social media usage and narcissism?" and, "Is there a correlation between narcissism and one's romantic relationship quality?". Moreover, it was of interest to see if social media usage was a moderating variable that influenced the relationship between narcissism and relationship quality. The results of the study showed no significant correlation between social media and narcissism nor for narcissism and relationship quality, and social media did not moderate the relationship between narcissism and relationship quality. More extensive research on social media usage and romantic relationship quality is required to determine whether there is a correlation between certain reasons for using social media with narcissism and if certain uses of social media may correlate to poorer relationship quality.

Social Media Usage, Narcissism, and Romantic Relationship Quality: A Correlational Analysis

In the past few decades, technology has advanced and extended its reach to the general population, and this is especially true for social media. The diverse network of social media applications has allowed people to have a digital presence that extends beyond physical borders, allowing people to communicate with others instantaneously and share snapshots of their lives. There is a plethora of benefits that social media has brought forth, yet it also comes with certain adverse effects (Gabbard & Crisp, 2018). As social media usage has increased in North America, so have narcissism levels within the general population (Gabbard & Crisp, 2018; Rohmann et al., 2012). Twenge and Campbell (2009) claim narcissism is becoming a feature of modern society. Moreover, Twenge (2014) attributes this phenomenon to the shifts in societal and cultural attitudes, as demonstrated in parenting styles, media culture, and increasing levels of social media prevalence in everyday life. The characteristics of narcissism (which include arrogance, greediness, the tendency to exploit others, and lack of regard for others) are generally disliked because they place strain on interpersonal relationships (Campbell, 1999). Since narcissism negatively affects social relationships (Campbell, 1999), the present research explored the relationship between social media usage, narcissism levels, and romantic relationship quality. More specifically, the present study aims to examine the relationship between social media usage and narcissism, the relationship between narcissism and relationship quality, and see if social media usage influences the relationship between narcissism and relationship quality.

What is Narcissism?

According to Young and De Abreu (2017), narcissism is a personality trait characterized by an inflated self-concept and grandiosity; narcissistic people tend to be highly focused on

themselves, have a sense of entitlement, and feel superior to others. Furthermore, narcissistic individuals tend to pursue the admiration of others while establishing dominance over them. Their sense of self-esteem and self-worth is contingent on high appraisals of others; thus, they are driven to protect and regulate their own self-esteem by striving to appear important, successful, and superior to others and thereby enhance their self-image (Young et al., 2016).

McCain and Campbell (2018) discuss two particular subtypes of narcissism: grandiose narcissism and vulnerable narcissism. Both types of narcissism share a few of the same traits such as self-centeredness, a sense of entitlement, and a lack of regard for others (Zajenkowski & Szymaniak, 2021). More specifically, grandiose narcissism is characterized by having an inflated positive image of oneself, high self-esteem, and a tendency to exploit others (Zajenkowski & Szymaniak, 2021). In contrast, vulnerable narcissism is characterized by defensiveness, low self-esteem, insecurity, avoidance, and hostility (Zajenkowski & Szymaniak, 2021).

Narcissism is a dimensional trait that varies within the population; its most severe form would be classified as Narcissistic Personality Disorder, which is characterized by a grandiose perception of one's self, excessive need for attention, excessive focus on one's self, lack of empathy, the tendency to be exploitive of others, and independence (Young & De Abreu, 2017).

Does Social Media Facilitate Narcissism?

Certain features of social media have incidentally instilled a quantitative means of garnering self-esteem enhancement, such as through the number of "likes" and "follows" one receives (Gabbard & Crisp, 2018). Social media has its benefits in allowing people to stay connected and find a sense of belonging, which is a universal human need (Baumeister & Leary, 1995) but this is lacking in modern society (Putnam, 2001). According to Twenge and Campbell

(2009), certain features of social media, such as the ability to display one's information about oneself to a wide audience, factor in the rise of narcissism since they appeal to the desire for attention and praise. Furthermore, Chaudry (2017) boldly stated that social media platforms such as Facebook, Snapchat, and Instagram are inherently narcissistic due to the ability of an individual to shape what their audience sees by only sharing the positive elements of their life. Thus, younger people, who are typically more immersed in social media, may be more inclined to trade authenticity for social appeal and approval from others (Gabbard & Crisp, 2018).

Narcissism is on the rise in the United States; Twenge et al. (2008) found a 30% increase in narcissism levels in the United States between the years 1979 to 2008. Gibson et al. (2018) suggested this increase is due to the modeling of narcissism by social media or TV stars. Celebrities tend to be more narcissistic than the general population (Young & Pinsky, 2006), and recent research has also shown a positive correlation between exposure to reality TV and viewer narcissism (Lull & Dickinson, 2018). In their study, Gibson et al. (2018) tested the hypothesis that exposure to narcissistic reality TV stars would be related to greater narcissism for viewers who engage in experience-taking. Experience-taking was defined as a phenomenon where an individual takes on a character's thoughts, emotions, and behaviours as if they were their own. In accordance with their hypothesis, the researchers found that viewers who watched TV shows with highly narcissistic characters engaged in more experience-taking and showed higher levels of narcissism compared to viewers who did not engage in experience-taking and did not watch narcissistic reality TV shows. Due to this relationship, Gibson et al. (2018) suggested that being influenced by narcissistic reality TV stars may be one explanation for the rise of narcissism levels over time that has been observed in the study conducted by Twenge et al. (2008). Moreover, Pinsky and Young (2006) discovered reality TV celebrities were generally the most

narcissistic of all celebrity groups. This finding led Gibson et al. (2018) to suggest that identifying with narcissistic reality TV show characters may be a contributor to the increased levels of narcissism over time (Twenge et al., 2008).

Therefore, taking into consideration the extent to which people view social media and celebrity icons as role models, and the fact people are more exposed to narcissism compared to past generations (Gentile, 2011), audiences may be influenced to take on narcissistic behaviours. This would, therefore, increase narcissism levels in the general population. Furthermore, social media may be a vehicle that promotes and sustains narcissism through its features that facilitate self-enhancement, such as the ability to selectively choose what kind of content one shares with others online and the number of likes and follows one garners. In this way, narcissism can be perceived as operating on the cultural/societal level as well as the individual level, with narcissistic traits becoming more socially accepted (Stefanone et al., 2011). Since narcissistic traits lead to friction and strain within interpersonal relationships (Masterson, 1988) the rise in narcissism poses a concern for the health of social relationships.

However, it is important to consider that social media usage is not always related to narcissism levels. McCain and Campbell (2018) found that the effect size for the relationship between time spent on social media and one's narcissism was small, although there was a weak positive relationship between them. In other words, the magnitude of the relationship between time spent on social media and narcissism levels was not statistically significant, however, there was a slight correlation between them. Moreover, narcissism was related to having more friends on social media, more posts, more status updates, and more pictures of themselves on the platform.

Researchers Koterba et al. (2021) explored the “selfie” phenomenon, claiming there is a lack of research on this phenomenon. A selfie is a term for a photo taken of oneself. Koterba et al. (2021) aimed to explore how narcissism, gender, and age were related to selfie-taking. They also explored what factors motivated participants to post selfies on social media. Findings indicated an association between narcissism and selfie-taking, but the researchers suggest further replication of this study to make more generalizable conclusions. The study highlighted several reasons why participants posted selfie pictures and revealed that the motives were not always due to narcissistic traits.

Both male and female participants reported narcissistic motives for posting selfies, yet they did not necessarily score high in narcissism in the Narcissistic Personality Inventory-13. Koterba et al. (2021) suggest this finding may be taken in three ways. First, this finding could have been a result of nonresponse biases due to the nature of open-ended questions. A nonresponse bias occurs when participants in a study do not answer a question, influencing the results of the study. Secondly, their findings could suggest there are narcissistic tendencies could be manifested in certain circumstances, such as taking selfies, that were not measured through the Narcissistic Personality Inventory-13 which is a test the authors used to measure narcissism in the participants. Thirdly, the findings could support the argument by Arnett (2004) that young adults are inherently self-focused but not narcissistic. Contrary to Arnett’s (2004) argument, the findings of Koterba et al. (2021) could show that narcissism is in fact on the rise, but the motives for selfie-taking cited by participants in their study have not been translated to narcissistic personalities yet. If this is the case, then Koterba et al. (2021) state these implications are alarming, especially because emerging adulthood tends to be a time of discovering one’s self-identity (Arnett, 2004). Since social media serves as a socially acceptable form of self-

promotion, the authors advise conducting longitudinal research to understand the larger societal impact of the effects of posting and viewing selfies on social media and to determine the difference between being self-focused or narcissistic in relation to selfie-taking.

Thus, many factors contribute to narcissism and social media use. Caution should be taken so that the relationship between narcissism and social media usage is not overstated. Although there generally appears to be a positive relationship between social media and narcissism, it can be assumed that a multitude of variables may play a role in the acquisition of narcissistic attitudes and behaviours. Koterba et al. (2021) suggested that the emerging adult may be inherently self-focused, but not narcissistic. Common social media behaviours, such as posting selfies, are not entirely indicative of narcissism. Many specific contextual factors must be accounted for, such as the communicative intent and the theme (Barry et al., 2019). Koterba et al. (2021) found many participants posted selfies to share their experiences with loved ones, to document memories, or to boost self-esteem. Another reason was for functional reasons, for instance, being an athlete, model, or social media figure whose job entailed posting selfies. Although it seems clear that social media provides an outlet for self-promotion, the long-term effects of social media usage are not comprehensively understood (Koterba et al., 2021).

Sociocultural Factors and Narcissism

Research by Vater et al. (2018) suggested that sociocultural factors also contribute to the facilitation of narcissism. These researchers explored narcissism levels based on sociocultural factors that foster individualistic or collectivist values. Individualistic cultures focus on one's individuality, while collectivist cultures uphold more communal and social values (Vater et al., 2018). Moreover, Fatfouta et al. (2021) describe individualistic societies as those that value

autonomy and one's uniqueness to stand out from others, while collectivist societies view people as part of a larger whole and uphold conformity.

Vater et al. (2018) investigated whether people exposed to different economic, political, and national cultures differed in their narcissism levels. Their participants consisted of Germans living in reunified Germany. In the past, Germany shared the same national culture but was divided into two societies after World War II: East Germany adopted a more collectivist ideology, while West Germany adopted a capitalist society, with interchange between the two sides being heavily restricted. The unification of Germany occurred in 1989 when the Berlin Wall fell. This unified Germany then adopted a capitalist-oriented society. The researchers believed the unique social setting of Germany sets the stage for a natural experiment and therefore believe that comparing individuals from these regions may reveal the degree to which cultural conditions shape narcissism throughout age cohorts. They hypothesized that people from the individualistic culture would show higher levels of grandiose narcissism. Thus, Vater et al. (2018) believed that the younger generations born during or after the unification of Germany have adopted a more individualistic value system; the older generations with an upbringing in East Germany hold collectivist values, while those from the West hold individualistic ones.

In line with their hypotheses, they found that individuals from West Germany showed higher grandiose narcissism scores than those who grew up in former East Germany. Moreover, the differences in narcissism were predominantly found in the participants of the middle-aged cohort (those who were 6 to 18 years old in 1989). Participants in the old-age cohort (those who were 19 to 41 years old in 1989) also showed higher levels of grandiose narcissism if they grew up in West Germany than in East Germany. However, the discrepancy between grandiose narcissism levels in the old-age cohort was not as pronounced as the findings in the middle-aged

cohort. The researchers believed this occurred because narcissism wanes with age (Edelstein et al., 2011). Since these participants were significantly older, the researchers also rationalized that the older participants may have had an increased sense of empowerment, security, personal growth, and success than younger participants which may have further buffered them against narcissism.

Moreover, Bianchi (2014) stated that economic conditions may shape one's attitudes and values in ways that reflect the concerns of their time. Narcissism may be facilitated when people are not financially dependent on others for their basic needs during periods of economic flourishing. Vater et al. (2018) reported that the socioeconomic status of East Germans was lower than that of West Germans, with urbanization occurring at a much faster rate in West Germany between 1949 to 1990 compared to East Germany. Therefore, Vater et al. (2018) suggested that these socioeconomic factors may explain the higher grandiose narcissism levels found in participants from West Germany.

Fatfouta et al. (2021) explored narcissism levels in collectivist and individualistic cultures, as these researchers believe a growing number of research demonstrates that collectivist cultures are not inherently less narcissistic than individualist ones. In their study, they found that individuals from collectivist cultures showed higher narcissism levels than those from individualistic cultures. Moreover, individuals from collectivist cultures scored higher on the narcissistic dimensions of leadership/authority and grandiose exhibitionism. The researchers believed these findings are due to the transmission of individualistic values through growing digitization and the increased use of the internet, especially social media. They suggested that social media platforms make it easier for individuals from collectivist societies to adopt individualistic ideals, thereby showing increased levels of narcissism (Fatfouta et. al, 2021, as

cited in Ellwood, 2021). This explanation may be plausible, as culture can be transmitted through technology.

These findings demonstrate the multicomplex nature of narcissism as a personality trait. From the literature review thus far, it appears that narcissism can be facilitated through social media, modeled by narcissistic celebrities, and may even be facilitated through the elements of one's upbringing such as socioeconomic status and culture. To note, these aforementioned studies only explored the correlations of narcissism, therefore meaning that causal factors for narcissism cannot be derived. Further research is needed to investigate other variables that may relate to narcissism levels.

Narcissism within Romantic Relationships and Relationship Satisfaction

Narcissism has negative ramifications on human relationships because it is, in essence, a form of self-centeredness and self-worship that makes relationships one-sided. A one-sided relationship is unlikely to be mutually satisfying for both partners. Thus, the increase in narcissism is a concerning phenomenon due to its negative implications for human relationships (Campbell, 1999) and one's socio-emotional well-being.

Narcissism: Being Liked at Zero Acquaintance

Giacomin and Jordan (2019) performed an interesting study examining the reasons why people form positive first impressions of narcissistic individuals, and whether narcissism is being misperceived as having high self-esteem. The authors believe people tend to overestimate narcissists' self-esteem, which is a socially valued trait. Furthermore, the authors believe it is important to understand how people form first impressions based on another individual's

physical appearance since this is exactly what occurs with the increasing frequency of using dating apps (e.g., Tinder).

Their study consisted of four phases which aimed to examine if participants perceive narcissists to have higher self-esteem and whether they have a favourable impression of the narcissist. Participants were undergraduate students (the perceivers) and were tasked to rate their impression of photographs and interview transcripts of targets, who were people whose narcissism and self-esteem scores have been gathered for this study using the Narcissistic Personality Inventory-40 and the 10-Item Rosenberg Self-Esteem Scale. These targets consisted of three categories: (1) those who had high self-esteem and high levels of narcissism, (2) those who had high self-esteem and low levels of narcissism, and (3) those who had low self-esteem and low narcissism.

The first study examined whether the perceivers positively rated narcissistic targets more favourably compared to targets who were not narcissistic and had high self-esteem. Perceivers overestimated the narcissistic target's self-esteem and rated their liking towards the narcissist more than their liking towards targets who were non-narcissistic with high self-esteem. Furthermore, Giacomini and Jordan (2019) found the extent to which perceivers liked targets was mediated by their perception of self-esteem but not perceptions of narcissism. This suggests that perceivers like narcissistic individuals more because they focus on the narcissist's high self-esteem and disregard their high narcissism.

The second phase of the study examined whether perceivers like narcissists because they largely focus on the target's self-esteem and neglect perceptions of narcissism. The perceivers were randomly assigned to receive information about the target's self-esteem or narcissism levels. Some perceivers did not receive any information and some only received information

about one variable (self-esteem or narcissism level). When perceivers were not informed of the target's narcissism, they were able to accurately observe that narcissistic targets were more narcissistic, egoistic, and less communal than non-narcissistic targets and targets with high self-esteem. Yet, the perceivers reported liking the narcissist even more than targets with high self-esteem and low narcissism, and they overestimated the narcissists' self-esteem. However, when perceivers were informed of the target's narcissism, the pattern of liking reversed. Giacomini and Jordan (2019) suggest people do not inherently find narcissism attractive or socially desirable when one's narcissism is disclosed to them.

The third and fourth phases of the study used a new set of targets to examine perceivers' liking and rating of targets' narcissism and self-esteem. The fourth phase also incorporated male profile photos from the dating app, Tinder, as the researchers wanted to generalize their findings to a meaningful context. Tinder is a mobile dating app that serves to find potential romantic relationships on a first-impression basis through a profile picture and a brief biography of the person. Thus, people make decisions on whom they are interested in largely based on physical appearance. Results of both studies showed perceivers accurately observed targets' narcissism and self-esteem, although the accuracy was lower for Tinder dating profiles. Perceivers rated narcissistic targets to have higher self-esteem even when self-esteem was controlled. Self-esteem as a controlled variable means that it is being held constant and therefore does not vary. This allows researchers to determine the influence of self-esteem as a variable. In the study, perceivers rated liking narcissistic targets more overall despite the negative effect of narcissism on liking. Thus, the perception of self-esteem overshadowed perceived narcissism. Giacomini and Jordan (2019) believe this supports their contention that people generally like narcissists upon

first impression because they believe a narcissistic individual has high self-esteem and, as in study one, they disregard the fact they may be narcissistic.

In conclusion, Giacomini and Jordan (2019) discovered the tendency for people to overestimate the self-esteem of narcissistic individuals upon first impression. People tend to believe that a narcissist has higher self-esteem than a non-narcissistic, high-self-esteem individual and thus like the narcissistic individual more upon first impression. Yet, the perception of narcissism was associated with less liking, meaning that once people are informed or perceive that an individual is narcissistic, they like them less.

Since high self-esteem is favoured (Giacomini & Jordan, 2019), it could be inferred that people may be more inclined to find themselves attracted to, and willing to pursue, a relationship with narcissistic individuals. Lawrence (2018) states that narcissists seem to possess an irresistible social charisma that increases their allure, which may make perceivers initially blind to their new partner's narcissism. Once the admirer recognizes their partner's narcissistic behaviours and attitudes, dissatisfaction and unhappiness may arise and negatively affect the relationship's health and quality (Back et al., 2010).

Narcissism and Romantic Partners

Campbell (1999) states narcissists tend to prefer potential romantic partners based on the merits that their partner may provide for them. The researcher hypothesized that narcissistic individuals were more likely to be romantically attracted to partners who may direct more attention and admiration to the narcissist. Campbell (1999) describes this type of ideal partner as "self-oriented" (p. 1257) since narcissists tend to focus more on themselves rather than their

relationship or their partner. These self-oriented characteristics, such as showers of compliments, praise, and admiration, enhance the narcissist's sense of self.

When tested, Campbell (1999) found narcissists were indeed more attracted to partners that were oriented toward the narcissist, but only to the extent they felt their partners would enhance their self-esteem and bolster their popularity. Hence, he suggested narcissists may choose potential romantic partners to regulate self-esteem. Masterson (1988) believed that narcissists are likely to become hostile and egotistical within their romantic relationship and further claimed that maintaining an intimate relationship based on one's self-orientation alone lacks durability and adds strain to the relationship.

According to Ye et al. (2016), perception discrepancy (PD) is the discrepancy or a lack of similarity between the perceived happiness of both partners within a relationship in a given situation. The researchers highlight the fact that PD between romantic partners has significant predictive power of approximately 50% in relationship satisfaction and quality. In their study, non-narcissistic individuals with high self-esteem did not suffer from PD within their relationships. This may have been because non-narcissists put more emphasis on communal traits (e.g., such as togetherness) rather than self-oriented traits, while narcissists tend to focus on self-oriented traits within relationships (Jones & Brunell, 2014). In contrast, narcissists tended to have a greater PD between their own and their partner's feelings in both positive and negative interactions. Perhaps a romantic relationship with a narcissistic partner may inherently lack quality because the relationship is established upon the merits of self-orientation toward the narcissist, making the relationship between two partners superficial and lacking durability.

Narcissism and Tendency for Infidelity

Research strongly suggests that narcissism is associated with lower relationship satisfaction, and decreased satisfaction is related to infidelity (Altinok & Kilic, 2020). Within romantic relationships, narcissists continue to focus on sustaining their self-image and self-esteem more than on showing intimacy toward their partner; moreover, they lack relationship commitment and are less inclined to equate sex with intimacy, which may lead to acquiring multiple sexual partners (Altinok & Kilic, 2020; Lawrence, 2018).

Another study by Lee et al. (2019) investigated the role of narcissism and self-esteem in predicting an individual's attitude towards their current partner and a potential romantic partner on Instagram. Participants who scored high on the Narcissistic Personality Inventory-13 and were already in a relationship displayed positive attitudes toward other potential partners on Instagram. In contrast, participants who scored high on self-esteem on the Rosenberg Self-Esteem Scale and were non-narcissistic showed more negative attitudes towards interacting with potential new partners, being approached by potential new partners, and intentions to communicate with them. This finding demonstrates how a narcissist's lack of commitment to their current relationships may cause them to be open to other potential partners, increasing the chances that they might betray the trust of their current partner (Buffardi & Campbell, 2008).

Another finding of Lee et al.'s (2019) study was that narcissistic participants tended to post more pictures with and of their romantic partners and disclose information about them. Thus, the researchers believed that narcissism could predict online behaviour regarding one's romantic partner. The authors stated that previous research has also found similar results. So, they suggest that narcissistic individuals publicly display their relationships for their own self-gain by enhancing their self-concept and esteem (Lee et al., 2019).

Does Social Media Usage Play a Role in Relationship Satisfaction?

Social media usage has been found to be associated with romantic relationship satisfaction (Stewart & Clayton, 2022), and narcissism and psychopathy predict the number of posts that one uploads on social media. Furthermore, narcissism and self-objectification predict photo manipulation (Fox & Rooney, 2015). Using the Self-Discrepancy Theory by Higgins (1987), Stewart and Clayton (2022) examined whether Instagram photo manipulation was associated with participants' actual-ideal self-discrepancy, and how this may affect romantic relationship satisfaction. Higgins' (1987) Self-Discrepancy Theory posits that a discrepancy exists when one's actual self (the actual reality of one's possessed attributes) is different from their ideal-self (the representation of the attributes one would like to have). Thus, through photo manipulation, an individual can mitigate their actual-ideal discrepancy by making their appearance more congruent with their ideal representation (Stewart & Clayton, 2022). The authors of this study hypothesized that the magnitude of participants' actual-ideal self discrepancies would be positively related to photo manipulation and that there would be a positive relationship between posting manipulated photos on Instagram and interpersonal conflicts related to Instagram. The Instagram-related conflict was measured using the Instagram-Related Conflict Scale (Ridgway & Clayton, 2016) which measures relationship conflicts due to Instagram-related behaviours (e.g., viewing friends' profiles, Instagram usage, etc.).

The results of this study displayed a positive relationship between the participant's actual-ideal self-discrepancy with their photo manipulation behaviours and Instagram-related conflict (e.g., jealousy and arguments due to a romantic partner's Instagram usage). Moreover, Instagram-related conflict was positively related to increased infidelity and break-ups (Stewart & Clayton, 2022). So, the authors suggested that one's actual-ideal self-discrepancy was positively

related to Instagram conflict through increased photo manipulation behaviours. This study demonstrates the influence of certain social media behaviours on romantic relationship satisfaction and well-being, thus showing that the interactive associations between social media usage, narcissism, and romantic relationship satisfaction are multifaceted and complex.

Hypothesis

The present study explores the relationships between social media's modeling of narcissism, the presence of narcissism in romantic relationships, and relationship quality. Currently, there is not enough literature that addresses the link between social media usage and narcissism, and how narcissism within a romantic relationship affect relationship quality. Therefore, this study had three hypotheses: (1) that social media usage (time spent on social media) would be related to higher levels of narcissism, (2) that there would be a negative relationship between narcissism levels and romantic relationship quality, and (3) that social media usage would moderate the relationship, if there is any at all, between narcissism and relationship quality.

Methods

Participants

Participants were recruited from Tyndale University's student population and by use of convenience sampling through the researcher's social media networks. The goal of this study was to recruit at least 30 participants who are currently in a romantic relationship (dating/engaged/married). E-mails were sent to undergraduate and graduate psychology students at Tyndale, inviting them to participate. Additionally, posters were circulated via the researcher's online social networks (see Appendix F for the posters). The contents of the e-mail summarized

the purpose of the study: to examine the relationship between social media usage and one's perceptions of themselves for individuals in a romantic relationship. Non-Tyndale students were recruited via the author's social media networks such as Facebook and Instagram.

Participants who were enrolled in an undergraduate psychology program at Tyndale University during the time of the study had the option to claim a 1% bonus credit for a psychology course of their choice, or the option to enter a draw for one of two \$25 Amazon gift cards. Non-Tyndale participants had the option to enter a draw for the Amazon gift cards.

A total of 84 people opened the link to the study however, 10 individuals did not complete the study, leaving a total of 74 participants who completed the study. In this sample, there were 57 female participants (77%) and 17 male participants (23%). There were 34 participants (45.94%) who were Tyndale undergraduate students, 27 participants (36.49%) were Tyndale counseling psychology graduate students, and 13 participants (17.57%) were not affiliated with Tyndale University.

Participants were asked to choose the age category they were in. The majority of participants were between 18 to 25 years old (46.7%) with the next category of 26 to 33 years old containing 18.7% of the sample. Both categories of 34 to 41 and 42 to 49 years old consisted of 13.3% of the sample, and 5.3% and 2.7% of the sample fell between 50 to 57 and 58 to 65 years old, respectively. Please see Table 1 for the descriptive statistics for ages.

Table 1*Descriptive Statistics for Age Category*

Age Category	Frequency	Percentage
18-25	35	46.7%
26-33	14	18.7%
34-41	10	13.3%
42-49	10	13.3%
50-57	4	5.3%
58-65	2	2.7%

Although this study aimed to recruit participants who were currently in a relationship (dating/engaged/married), there were some participants who did not meet this criterion but have reported being in a relationship in the past. There were 67 participants (90.54%) who were currently in a relationship and seven (9.46%) who were not.

Materials*Informed Consent*

Participants were to indicate their informed consent on the first page of the study on SurveyMonkey.com. The informed consent form provided information about the purpose of the study, its procedures, the potential risks of participating in the study, its potential benefits, the options for compensation for participating, and the availability of counseling services after partaking in the study, if required. This form affirmed the participant's voluntary participation in the study and informed them of their right to withdraw from the study at any time without

penalty. Participants were informed about the limitations of confidentiality regarding their data. See Appendix A for a copy of the consent form.

Narcissism Measure

Narcissism was measured using the 40-item Narcissistic Personality Inventory (NPI-40) developed by Raskin and Terry (1988). The inter-item reliability of this inventory is high (Cronbach's $\alpha = 0.83$). This inventory consists of 40 forced-choice items measuring narcissistic characteristics. Each item in the inventory has two options. Participants selected the most accurate statement pertaining to themselves. For example, participants chose between statements such as, "I can usually talk my way out of anything," or "I can try to accept the consequences of my behaviour." In the case where participants were not able to fully identify themselves with either statement, they were to select the one that is the least objectionable to them. Each item was assigned a score and was computed altogether to derive the level of narcissism within individuals. For this study, a high narcissism score was between 17 to 40, average scores were between 10 to 16, and low narcissism was between 3 to 9. See Appendix B for a copy of the NPI-40.

Relationship Quality Measure

Romantic relationship quality was measured using the Relationship Assessment Scale (RAS) developed by Hendrick (1988). This scale consists of seven items presented in a Likert-scale format. The RAS is known to have high internal reliability (Cronbach's $\alpha = 0.86$) and was shown to correlate with other related measures of or within romantic relationships (Hendrik, 1988). Participants were to select the answer that most accurately reflected how they feel about their romantic relationship between answers 1 = unsatisfied to 5 = extremely satisfied on

questions such as, “In general, how satisfied are you with your relationship?”. See Appendix C for the RAS inventory. Relationship quality scores can range from 7 to 35, with scores 7-14 considered as low relationship quality, 15-21 as average, and 22-35 as high relationship quality.

Social Media Measure

The Social Media Engagement Questionnaire (SMEQ) made by Przybylski et al. (2013) was used to measure social media usage. This measurement tool contains five items regarding social media usage in the past seven days (e.g., “How often did you use social media when eating supper?”) where 0 = not one day to 7 = every day. The inter-item reliability of SMEQ is high (Cronbach’s alpha = .82 to .89). See Appendix D for the SMEQ.

Demographic Survey

A survey gathered general demographics such as gender, age, ethnicity, relationship status, habitual tendencies and attitudes toward social media, the social media platforms used, daily social media usage, and more. See Appendix E for the complete demographic survey.

Procedure

Participant recruitment methods consisted of classroom announcements, e-mails, and social media posts. Undergraduate Tyndale students were invited to participate in the study via e-mail and in-class announcements in their psychology classes. Tyndale graduate students were recruited via e-mail invitations to the study. The researcher also used convenience sampling via social media posts on Facebook and Instagram to further recruit participants. Participants accessed the study through the link provided in the e-mail or post. Recruitment posts on social media provided a hyperlink and a QR code that directed participants to the study.

This study was conducted online through SurveyMonkey.com to provide flexibility of time and access for participants. On the first page of the study, participants indicated their consent and were informed of their right to withdraw at any point in the study without penalty. Participants were encouraged to answer truthfully and indicate the response that best represented them. The order of the study consisted of the NPI-40, then the RAS, the SMEQ scale, and lastly the demographic questionnaire.

Results

Descriptive Statistics of Key Variables

The main variables examined in this study were narcissism levels, romantic relationship quality, and social media usage. Scores for each variable were summed to calculate the overall scores for each. See Table 2 for the descriptive statistics on these three variables.

Table 2

Descriptive Statistics on Narcissism, Relationship Quality, and Social Media Usage Scores

Variable	N	Minimum	Maximum	Mean	α
Narcissism	74	3	28	10.79	0.77
Relationship Quality	70	13	35	28.17	0.88
Social Media Usage	74	5	35	20.09	0.845

Note. Narcissism scores range from 0 to 40, with 40 being the highest narcissism score, indicating a high level of narcissism, while 3 is the lowest. Relationship quality scores can range from 7 to 35, with scores 7-14 considered as low relationship quality, 15-21 as average, and 22-35 as high relationship quality. Social media usage scores can range from 0-35, with 0 indicating low usage and 35 indicating high usage.

Narcissism

For this study, low narcissism scores are classified as 3 to 9, average scores are 10 to 16, and high narcissism scores are 17 to 40. This classification was based on criteria used in reference to Hascalovitz and Obhi's (2015) study. The internal reliability of the NPI-40 is acceptable, with the Cronbach's alpha being 0.77. The average NPI score of this sample ($M = 10.79$) fell in the average range. Most participants fell in the low and average narcissism score range, with 33 in the low category (44.59%), 32 participants in the average category (43.24%), and 9 participants in the high category (12.16%).

Romantic Relationship Quality

The scores of the seven Likert-scale RAS questions were summed to get the total relationship quality score. Scores can range between 7 to 35. The relationship quality assessment has good internal reliability with a Cronbach's alpha of 0.88. The average score of the sample was quite high, ($M = 28.17$), with 13 being the lowest score and 35 being the highest score. The average score of the sample ($M = 28.17$) fell in the high relationship satisfaction range, with 13 being the lowest score and 35 being the highest score. Within the sample, one participant had low romantic relationship satisfaction (1.43%), eight participants were in the average satisfaction range (11.43%), and 61 participants were in the high satisfaction range (87.14%). This classification was based on the criteria provided by Greenspace ("Relationship Satisfaction", 2023).

Social Media Usage

The SMEQ is a five-item measure that assesses how many instances within the last seven days that the participant looked at their social media. Scores of the five items were summed to

get an overall score, with the minimum score being 0 and the maximum score being 35. The average score in the sample was 20.09, with the lowest score being 5 and the highest score being 35. The SMEQ scores had good internal reliability with a Cronbach's alpha of 0.84. Please see Table 3 for descriptive statistics of each of the SMEQ questions.

Table 3

Descriptive Statistics on the Social Media Engagement Questionnaire

Questions	N	Mean	Standard Deviation
How often did you use social media in the 15 minutes before you go to sleep?	74	4.95	2.35
How often did you use social media in the 15 minutes after you wake up?	74	4.75	2.43
How often did you use social media when eating breakfast?	73	3.60	2.36
How often did you use social media when eating lunch?	74	3.94	2.19
How often did you use social media when eating supper?	73	2.91	2.11

Social Media Questions

There were six Likert-scale questions about social media usage styles in the general demographics section of the study. These questions were made by the author as an additional measure of social media use that measured how much value people placed on using social media

and getting feedback from others. The internal reliability was acceptable with a Cronbach's alpha of 0.73. These questions addressed how much value one places on sharing and receiving feedback on social media. Going forward, these questions will be called Social Media Questions (SMQ). Please see Table 4 for the six questions and their descriptive statistics.

Table 4

Descriptive Statistics on the Six Social Media Questions

Questions	N	Mean	Standard Deviation
Social media is an important pastime or hobby in my everyday life.	74	3.13	1.15
I feel a sense of fulfillment when receiving attention from others on social media.	74	2.89	1.11
The support and encouragement from others on social media are important to me.	74	2.50	1.06
I often share facets of my life on social media.	74	2.24	1.16
I feel disappointed when there is no reaction or response to the content I share on social media.	74	3.01	1.22
I always set a time on a regular basis to be on social media.	73	2.17	1.20

Note. The questions were presented in a Likert-scale format, with 1 = strongly disagree, 3 = neutral, and 5 = strongly agree.

Daily Social Media Usage

One question on the SMQ measured participants' daily social media usage. Participants were to indicate whether they spend less than 1 hour, 1-2 hours, 3-4 hours, or 5 or more hours on social media every day. Most participants reported spending between one to two hours every day. According to McKinnon (2022), Canadians spent approximately 1 hour and 53 minutes on social media every day in 2022. Thus, the majority of the sample used the average amount of social media per day. See Table 5 for descriptive statistics on the hours of social media used every day in this sample.

Table 5

Descriptive Statistics for Daily Social Media Usage

Hours per day	Frequency	Percentage
Less than 1 hour	19	25.7%
1-2 hours	27	36.5%
3-4 hours	24	28.6%
5 or more hours	4	4.8%

Primary Hypothesis Investigation

The correlations used to address the first two hypotheses can be found in Table 6. The first hypothesis predicted that social media usage would be related to higher levels of narcissism. Social media usage was measured by the SMEQ as well as the SMQ. Pearson correlations were used to test this hypothesis. The correlations were both weak and not significant with correlation coefficients with less than 0.2 in absolute value, although, their direction was consistent with the

direction of the hypothesis. Please see Figures 1 and 2 for scatterplots of the relationship between SMEQ and NPI as well as SMQ and NPI, respectively.

Notably, a positive correlation was found between the SMEQ and the SMQ, $r(n = 74) = 0.465$, $p < 0.001$, indicating there was a moderate relationship between the items of the Social Media Engagement Questionnaire by Przybylski et al. (2013) and the author-generated Social Media Usage questions. Thus, higher scores on the SMEQ were associated with higher scores on the SMQ.

Table 6

Correlations between SMEQ, SMQ, RAS, and Narcissism

Variables	N	r
Social Media Engagement Questionnaire and Narcissism	74	0.124
Social Media Questions and Narcissism	74	0.110
Romantic Relationship Quality and Narcissism	70	-0.167
Social Media Engagement Questionnaire and Social Media Questions	74	0.465*

* Correlation is significant at the 0.01 level (2-tailed).

Figure 1

The Relationship Between Social Media Engagement Questionnaire and Narcissism

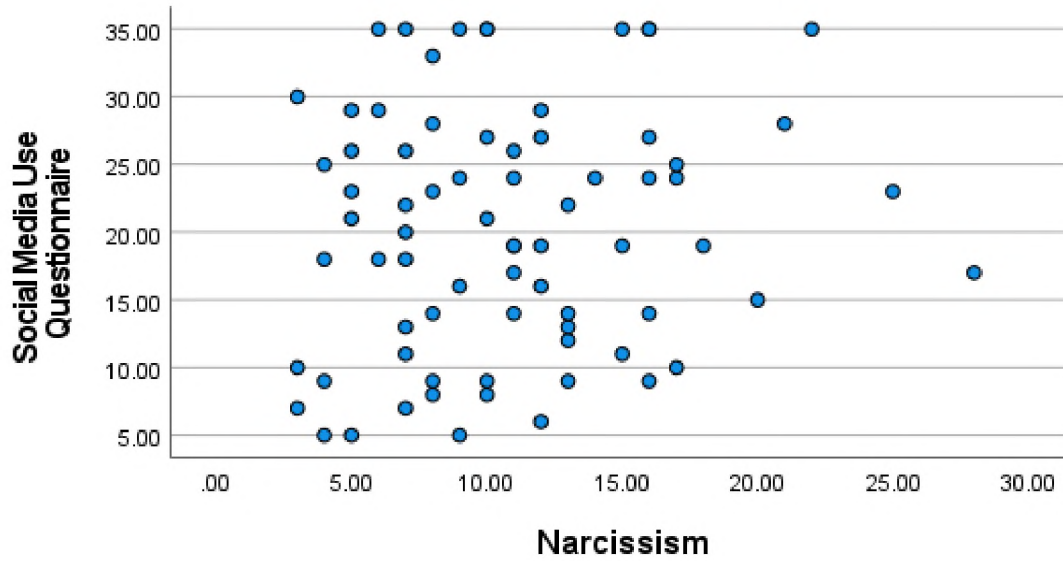
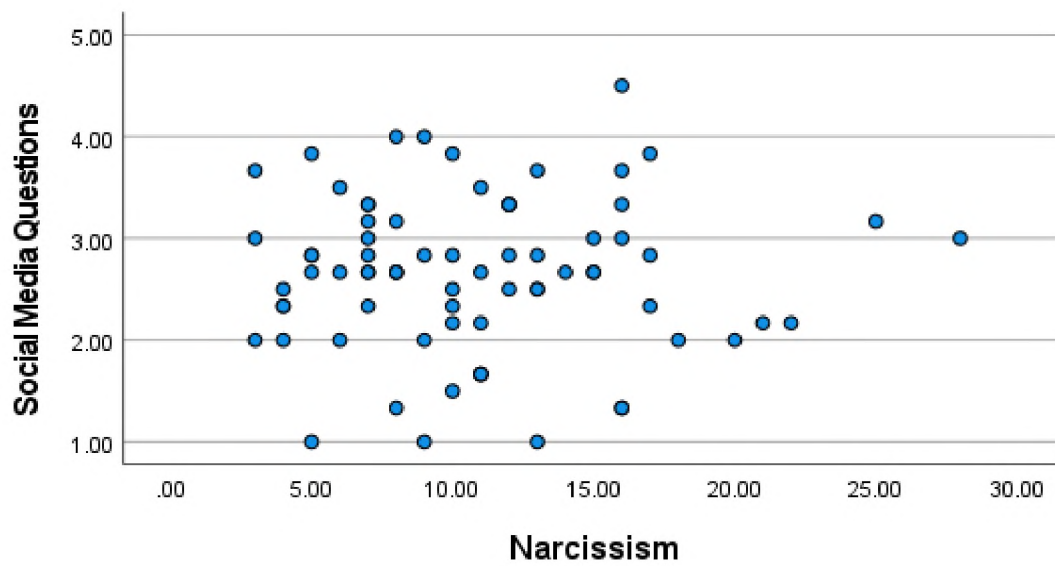


Figure 2

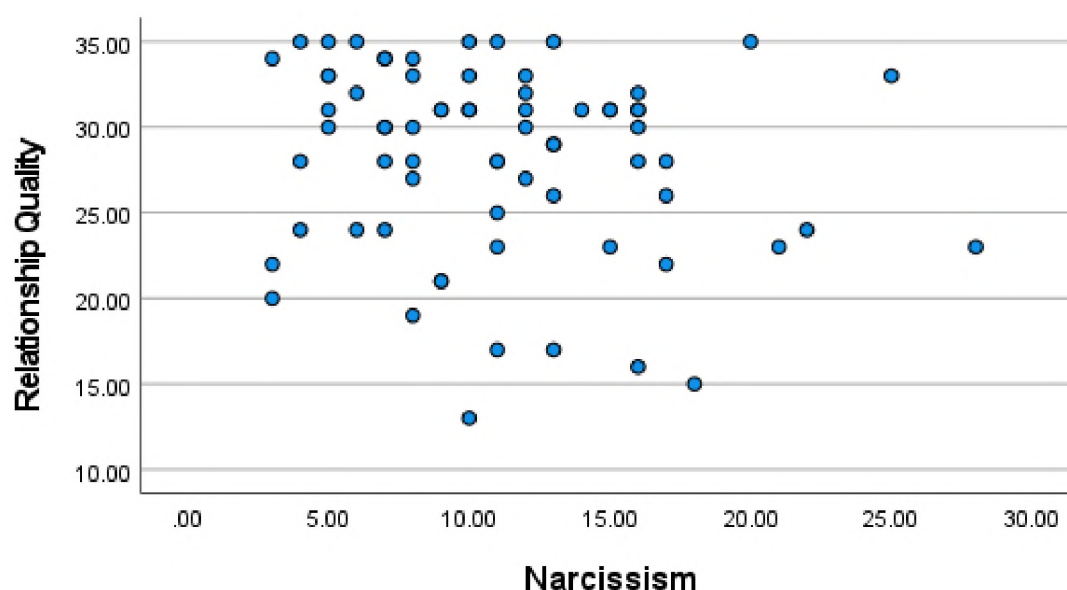
The Relationship Between Social Media Questions and Narcissism



Hypothesis two predicted that narcissism would be negatively related to relationship quality, and this was also tested with a Pearson correlation. No significant relationship was found; however, the correlation was negative, meaning there were beginning signs showing that higher narcissism scores were related to lower relationship quality scores ($r(n = 70) = -0.167$, $p > 0.05$). See Figure 3 for a scatterplot of the relationship between RAS and NPI.

Figure 3

The Relationship Between Relationship Quality and Narcissism



The third hypothesis predicted that social media usage would moderate the relationship between narcissism and relationship quality. Although no relationship was found between narcissism and relationship quality, a linear regression analysis was carried out to explore the possibility that narcissism and social media use may interact in their impact on relationship quality. When social media use, narcissism, and their interaction were included as predictors of relationship satisfaction, the model did not produce a significant amount of variability, $F(3, 66) = 0.69$, $p > 0.05$, $r\text{-square} = 0.03$. None of the predictors were significant (SMS had a beta of -0.35 ,

NPI had a beta of -0.178, and NPI by SMS had a beta of 0). The beta is an unstandardized measure of the relationship between a predicting variable and a dependent variable which signifies the direction of the relationship.

Additional Hypothesis Testing

Additional hypotheses were tested to examine whether the three main variables (narcissism, romantic relationship quality, and social media usage) related to other demographic factors that were not explored in the primary hypotheses.

Examining Narcissism and Relationship Quality Scores Based on Social Media Platforms

It was of interest to see if relationship quality and narcissism scores differed depending on the platform of social media used by participants. Since participants may have indicated they used multiple social media platforms, comparisons could not be made between those who use one particular platform to another. However, it was possible to compare people who indicated they did or did not use a particular social media platform. Therefore, independent samples t-tests were performed to compare the mean NPI and RAS scores depending on whether or not participants use a specific social media platform. See Tables 6 and 7 for descriptive statistics on social media platforms used or not used with mean RAS and NPI scores, respectively. With the exception of two marginally significant differences, no significant differences were found. Instagram was the only platform that showed marginally significant differences between the mean NPI and RAS scores among participants who do or do not use Instagram, such that participants who used Instagram showed marginally higher relationship satisfaction scores and those who did not use Instagram showed marginally higher levels of narcissism (please see the asterisk * on Tables 7 and 8 for marginally significant findings). These marginally significant

differences are in the opposite direction of what would be expected if social media usage negatively affected users.

Table 7

Mean Relationship Quality Score with Type of Social Media Platform Used

Social Media Type	Used		Did not use	
	N	Mean Relationship Satisfaction	N	Mean Relationship Satisfaction
Instagram*	51	29.03	19	25.84
Twitter	13	26.15	57	28.63
TikTok	20	28.95	50	27.86
Facebook	35	28.17	35	28.17
Snapchat	21	29.28	49	27.69
YouTube	41	28.02	29	28.37

Note. *. $p < 0.10$

Table 8*Mean Narcissism Score with Type of Social Media Platform*

Social Media Platform	Used		Did not use	
	N	Mean Narcissism	N	Mean Narcissism
Instagram*	54	10.14	20	12.55
Twitter	13	10.00	61	10.96
TikTok	22	10.59	52	10.88
Facebook	38	10.92	36	10.66
Snapchat	23	12.08	51	10.21
YouTube	43	10.83	31	10.74

Note. *. $p < 0.10$

Although no other significant results were found, there were other surprising instances where some mean narcissism scores were trending higher for those who do not use a particular social media platform and mean relationship quality scores were trending higher for those who use a particular platform.

Narcissism and Relationship Quality Depending on Time Spent on Social Media

Another analysis examined whether narcissism and relationship quality scores varied depending on the daily hours of social media use. In the demographics section, participants indicated how many hours of social media they use on a daily basis. Daily social media usage was divided into three categories: less than one hour used, one to two hours used, or three or more hours used. A one-way ANOVA was carried out to test this hypothesis. No significant differences were found.

Relationship Status and Narcissism, Relationship Quality, and Social Media Usage

It was of interest to see whether narcissism, relationship quality, and social media usage scores would differ depending on relationship status. This study intentionally recruited participants who were currently in a romantic relationship. However, several participants reported not being in a relationship. Given the intentional recruitment strategy, there was a large difference between the number of people who were in a relationship and those who were not in a relationship. The rationale behind this hypothesis was to examine whether there was a particular trend in the three main variables for people who are not in a relationship. A series of independent samples t-tests were performed to compare the mean NPI, RAS, and SMEQ scores between participants who were currently in a relationship with those who were not. Please see Table 9 for descriptive statistics on relationship status and NPI, RAS, and SMEQ scores.

Table 9

Narcissism, Relationship Quality, and Social Media Usage Based on Relationship Status

Variable	Not currently in a relationship			Currently in a relationship		
	N	Mean	SD	N	Mean	SD
Narcissism	7	9.71	4.30	47	11.63	5.24
Relationship Quality*	3	20.33	6.65	47	27.59	5.51
Social Media Engagement Questionnaire	7	16.71	10.07	47	21.10	8.77

Note. *. $p < 0.05$

Relationship quality was significantly higher for participants who were currently in a relationship than those who were not in a relationship. However, four of the seven participants who were not currently in a relationship had missing data on their RAS scores because they did not complete the RAS scale. These four participants did report they were previously in a relationship prior to the study. Although the findings for narcissism and social media usage were not of statistical significance, both narcissism and social media usage scores tended to be higher for those currently in a relationship. These results may have occurred due to the disparity between the sample size of those who are currently in a relationship and those who are not. Nonetheless, it is interesting to consider that, if the pattern did persist with a larger sample, this difference that was in the opposite direction of what would be expected might have become significant.

Comparing Tyndale and Non-Tyndale Students

Another hypothesis of interest was to see if narcissism, relationship quality, and social media usage differed among participants who were or were not current students at Tyndale University. Since Tyndale University is a Christian institution, scores on the NPI, RAS, and SMEQ could potentially differ from non-Tyndale participants. Moreover, it is possible that non-Tyndale participants could have been older than the average undergraduate and graduate student, employed full-time instead of being a student, and may have been non-Christian or non-religious, which could have influenced results differently. Participants indicated whether they were a Tyndale undergraduate student, a Tyndale Seminary student, or not a student of Tyndale. A one-way ANOVA was performed to test the prediction that scores would vary depending on enrollment status. No significant differences were found.

Narcissism, Relationship Quality, and Social Media Usage Based on Gender and Age

Additionally, general demographics such as age and gender have been examined in this study to further investigate whether certain demographic factors correlate with the three main variables. Participants were to indicate which age category they were in from seven options: 18 to 25, 26 to 33, 34 to 41, 42 to 49, 50 to 57, 58 to 65, and 66 or older. Due to the majority of participants falling into the 18 to 25 years of age category, the participants who were in the other remaining categories (26 and older) were combined. An independent samples t-test was performed to see if the main variables differed with age categories. No significant differences were found. To see if scores differed depending on gender, another series of independent samples t-tests were performed. There were no significant differences between males and females. However, there were more females ($n = 57$) than males ($n = 17$), making it more difficult to find significant differences that may exist.

Discussion

Primary Hypotheses Results

The purpose of this study was to examine whether social media usage was related to the narcissism levels in its users and whether narcissism levels would be related to their romantic relationship quality. Furthermore, it was of interest to examine whether social media usage was a moderating or an interacting factor between narcissism and romantic relationship quality. Ultimately, this study tested three main hypotheses. Hypothesis one predicted that more social media usage was related to higher levels of narcissism. The findings of this study indicated no significant relationship. Hypothesis two predicted that higher narcissism scores would be related to lower romantic relationship quality. No significant relationship was found; however, the

correlation coefficient of the relationship was negative, indicating early signs of a negative relationship between narcissism and romantic relationship quality. This result, despite its statistical non-significance, may reflect Campbell's (1999) statement that narcissism has negative ramifications on human relationships. The third hypothesis predicted that social media usage would moderate the relationship between narcissism and romantic relationships. There was no moderating effect found.

The lack of statistically significant results that aligned with the original hypotheses, was quite intriguing. This may have occurred for a few reasons. Firstly, the average narcissism score in the sample was quite low in comparison to other peer-reviewed studies. The average narcissism score (NPI-40) in this study was 10.79; Nawaz et al.'s (2018) had an average NPI score of 15.47 in their sample; Campbell's (1999) study had an average NPI score of 16.85; and Young and Pinsky (2006) found an average narcissism score of 17.84. The lower narcissism score found in the present study may be due to the relatively small sample size of 74 participants who completed the study. Moreover, the majority of the sample (61 participants) were from Tyndale University and 13 participants were not currently affiliated with Tyndale. Tyndale is a Christian University; therefore, it can be inferred that most Tyndale students are Christian or religious. Perhaps religiosity acts as a buffer against narcissistic traits, hence the low average narcissism score of the sample. Moreover, out of the 61 Tyndale students, 27 of them were Tyndale graduate students in the counseling program. It can be inferred that graduate students majoring in counseling are less narcissistic and more compassionate, therefore lowering the average narcissism score of the entire sample.

Another possibility for the lower narcissism scores in this sample may have been because participants were currently in a romantic relationship. Studies that found higher NPI-40 scores

(Campbell, 1999; Young & Pinsky, 2006; and Nawaz et al., 2018) did not require their participants to be in a romantic relationship. There is a possibility that narcissistic individuals do not have long-lasting relationships. Campbell (1999) suggests that narcissistic individuals pursue relationships that lack intimacy and durability. This may cause their relationships to be short-lasting. Therefore, the present study's requirement to be in a relationship may have prevented more narcissistic individuals from participating.

Additional Hypotheses Results

As no significant results were found in the primary analyses, four additional hypotheses were tested to see if other factors may relate to the three main variables (social media usage, narcissism, and relationship quality). These additional hypotheses were as follows: (1) whether using a specific social media platform was related to narcissism or romantic relationship quality; (2) whether the time spent on social media was related to narcissism or romantic relationship quality scores; (3) whether social media usage, narcissism, and romantic relationship quality differed depending on relationship status; and (4) whether social media usage, narcissism, and romantic relationship quality differed amongst Tyndale and non-Tyndale participants.

Instagram usage was the only platform showing differences in narcissism and romantic relationship quality scores by only a marginally significant level (this means that the differences in narcissism and relationship quality scores between Instagram and non-Instagram users were close to approaching statistical significance). However, participants who used Instagram had higher relationship satisfaction compared to those who did not use Instagram, and participants who did not use Instagram had higher levels of narcissism. These results were in the opposite direction of what was originally hypothesized. The rationale of the hypothesis followed that if social media usage facilitates narcissism levels, then higher narcissism levels would be predicted

in its users. Furthermore, participants had higher relationship quality scores for those who used Instagram than those who did not, indicating that using Instagram, and perhaps using other social media platforms, was not related to lower relationship quality with a significant other.

Lee et al. (2019) found that attitudes toward Instagram usage for people in romantic relationships differ depending on personality characteristics such as self-esteem. In their study, individuals with high self-esteem appeared to value their current relationship, displaying more negative attitudes towards interacting with other possible partners on Instagram. In contrast, narcissistic individuals displayed more openness to interact with potential other partners on Instagram while currently in a relationship (Lee et al., 2019). Thus, relationship quality may not be contingent on social media usage, but rather on certain personality traits and one's ability to healthily manage their relationship. In the case of the present study, there may be various extraneous variables that are influencing the results. For instance, people may use social media for leisure, to connect with family and friends, or to seek out information. Other common uses for social media include finding inspiration for things to do, finding products to buy, socializing with new people, and expanding one's network (McKinnon, 2022). Social media is a vast online space that can be utilized in countless ways that may not be associated with one's relationship quality with a significant other or one's narcissism levels.

Within the past few years, social media has implemented changes to benefit its user's mental health. For instance, Instagram has added a new feature to give users the option to hide the number of likes they receive on the app. This was done to facilitate better mental health by allowing users to take off the pressure of receiving likes on the platform (Criddle, 2021). One of the main goals of using Instagram is to receive likes on one's posts. Users are aware that the number of likes one has is indicative of their popularity which serves as an implicit form of

validation (Wallace & Buil, 2021). Instagram has also hidden likes on users' stories to prevent them from comparing likes with others' (Newport Institute, 2022). While the function of removing the visibility of likes may allow individuals to feel less pressure using Instagram, the extent of this change on one's narcissism is not well known. Moreover, the feature to hide likes is optional. Only individuals who do not wish to see the number of likes can turn off this function. Thus, if features such as the number of likes do facilitate narcissism, then narcissistic individuals will continue to use Instagram for narcissistic reasons to bolster and regulate their self-esteem.

The second hypothesis examined social media usage (in hours) and participants' narcissism and romantic relationship quality scores. No relationship was found between narcissism and social media use, nor relationship quality and social media use.

Although participants were asked to be in a romantic relationship (dating, engaged, married) before participating in the study, there were a few of those who were not, however, they reported they have previously been in a relationship. Another hypothesis examined narcissism, relationship quality, and social media usage based on relationship status. It is inferred that those who were not currently in a relationship were answering the study questions basing their experiences from their previous relationship, which may have ended due to issues with relationship quality. Participants who were currently in a relationship had significantly higher relationship quality than those who were not in a relationship. No differences were found in narcissism or social media usage scores based on relationship status. One note of caution for the findings of this particular hypothesis testing was the disparity between the sample sizes between those who were in a relationship and those who were not. Participants not in a relationship totaled seven people. Out of these seven participants, only three completed the RAS

(Relationship Assessment Scale) in full. Thus, the significant difference found in relationship quality scores between those who were or were not in a relationship is questionable, since it could easily be influenced by just one or two unusual participants.

Finally, comparisons were made between Tyndale and non-Tyndale participants. Tyndale University is a Christian institution, therefore the rationale behind this hypothesis is to see if Tyndale participants, which may generally include more Christian or religious individuals than non-Tyndale participants, would show differing scores on the three main variables than non-Tyndale participants. Participants were to indicate whether they were a Tyndale undergraduate student, a graduate student, or not affiliated with Tyndale. No significant differences were found.

Although there were no statistically significant results, it was interesting to note that non-Tyndale participants did have lower narcissism scores, higher relationship quality scores, and higher social media usage scores compared to Tyndale participants. Results may have been different if the sample size for non-Tyndale participants were higher. Moreover, a non-Tyndale participant may still be religious and not affiliated with Tyndale. Therefore, it is a possibility that non-Tyndale participants may not have differed much in comparison to Tyndale participants. It is also a possibility that some Tyndale participants were not religious. Non-Tyndale participants may differ from Tyndale participants as they could be older, be employed full-time, or may even be students who have graduated from Tyndale and wish to support Tyndale research.

Additional Points of Consideration

As the majority of the study's participants were from a Christian Institution, this may have influenced the overall results of the study. Participation in the study was voluntary, with most of the participants being psychology undergraduate and graduate students. Of the 74

participants, 61 of them were students at Tyndale University. Tyndale participants were mostly recruited through undergraduate psychology classrooms, with an additional 27 of them being graduate students in counseling psychology. With this in consideration, there may be a possibility that psychology students, especially those in the graduate program for counseling psychology, are characteristically more compassionate and better equipped to handle personal and interpersonal problems than the general population, which could explain the high relationship satisfaction scores and the low narcissism scores. Moreover, Tyndale is a small, private, Christian university. Its smaller population may facilitate a sense of a close-knit community which may be harder to find at larger institutions. Therefore, Tyndale may attract individuals who value communal or Christian aspects which may also explain the lower rates of narcissism found in this sample.

In this study, social media usage was measured using the SMEQ as well as author-generated SMQ which measured the value one places on their engagement with social media. The SMEQ measured how often participants used social media at a certain event (e.g., before breakfast, lunch, etc.) every day within the past seven days. This measure may not have accurately reflected social media usage in ways that would adequately address the first primary hypothesis, which predicted that social media usage would be related to higher narcissism scores. Pointedly, the SMEQ and the SMQ did not account for the reasons why people used social media. Knowing the underlying reasons and the value one places on social media use may have led to a more encompassing finding of how social media usage relates to narcissism.

For example, some individuals may use their social media platforms for business operations which may make social media usage a professional necessity, or others may use social media to communicate with their loved ones on a daily basis. According to a 2022 report on

social media statistics for Canadians (McKinnon, 2022), the top three reasons for using social media are to keep in touch with family and friends, for leisure in spare time, and to read the news. These reasons would make participants score high on the SMEQ yet would be unrelated to narcissistic tendencies, similar to how Koterba et al. (2021) found that not all people who uploaded selfies on social media were narcissistic and therefore suggested that adolescents and young adults may inherently be self-focused but not narcissistic. Young adults may seem narcissistic or self-focused as a result of trying to establish their identity in this life stage (Newport Institute, 2022). However, research also suggests that social media encourages its users to focus obsessively on themselves and how they appear to a mass public audience. Thus, narcissism may also be a multi-faceted variable that is not solely facilitated through social media usage alone, but could also be influenced by one's self-esteem, the behaviours modeled by parental or role-model figures in one's life, certain personality traits one possesses, and more. Perhaps narcissism is facilitated before one uses social media, and these narcissistic individuals discover that it can be used as a means to maintain their inflated self-concept and regulate their self-esteem.

Relationship quality is another variable that is influenced by many factors, which may mean that narcissism in itself may not be a strong influencer on relationship quality, or it could mean that the narcissism levels in the study's sample were generally too low to show a negative relationship between them. There were only nine participants (12.16%) in the study who had high levels of narcissism. It may be the case that extraneous variables of relationship quality such as the level of trust, open communication, and mutual respect may be better influencers of relationship quality.

Participants in the present study reported using the average levels of social media per day. Only four participants indicated using social media for over five hours every day. Perhaps there would be more defined differences in the study's narcissism and relationship quality scores if there were more participants who used social media longer than the average population.

Limitations of the Study

There were several limitations in the present study. First and foremost was the relatively small sample size of 74 participants. Of these participants, the majority were students at Tyndale University (61 participants) with most of them being psychology students, which may have further influenced results that cannot be generalized to the population. Another limitation concerned the study's scales measuring social media usage. To elaborate, social media usage was measured using the SMEQ which measured participants' social media usage within the past seven days; it only recorded a seven-day snapshot of social media usage. The SMEQ's questions such as, "How often did you use social media in the 15 minutes before you go to sleep?" only measured social media usage on a surface level. The scale did not account for the reasons why people used social media. The author-generated SMQ was a brief questionnaire designed to measure the value that participants placed on sharing facets of their life and receiving feedback from others on social media, however, it also did not measure the reasons for social media usage. Knowing one's intentions for using social media could have revealed a more distinctive relationship between a particular reason for using social media usage and one's narcissism levels.

Another limitation was the small number of people who reported spending a significant portion of time on social media every day. Only four participants reported spending over five hours on social media every day, with the majority of participants spending one to two hours per day. According to McKinnon (2022), the average Canadian in 2022 spent approximately two

hours on social media per day. Therefore, if the study had more participants who used social media significantly longer than the average person, there may have been different results in their relationship quality and narcissism scores.

Participants in the study were less narcissistic on average compared to other studies conducted by Nawaz et al. (2018), Campbell (1999), and Young and Pinsky (2006). In the present study, only nine participants scored high narcissism scores, while most were well in the low and average levels. If the sample had more narcissistic individuals, there may have been more definite correlations between narcissism and relationship quality or social media usage.

Another possible limitation of the study may have been the requirement to participate in the study. Perhaps the lack of narcissistic individuals in the study was because the study had a prerequisite of being in a relationship to participate. During the recruitment phase, potential participants were told they must be in a romantic relationship to take the study. In the study, there were two questions that asked whether the participant was currently in a relationship and whether they have been in a relationship in the past. There were a few people who did end up taking the study while indicating they were not currently in a relationship; however, they reported being in a relationship in the past. It could be rationalized that narcissistic individuals generally do not have long-lasting relationships, and thus, the study's requirement prevented narcissistic individuals from participating.

Directions for Future Research

To further explore social media usage and its relation to narcissism, future studies can incorporate ways to measure the reasons for social media usage and the value people place on social media usage, such as how much value they place on sharing and receiving feedback from

others, and why. Relationship quality is a variable that can be measured more extensively as well. Future research should explore relationship quality in relation to a partner's social media habits and how a partner perceives the health of their relationship based on their social media activities. It may be of interest to replicate this study measuring narcissism and friendship quality as well. There may be differences in the level of trust, intimacy, length of friendship, and communication styles within friendships that differ between narcissistic and non-narcissistic individuals.

Future research will benefit by having a larger sample size to further distinguish whether there are particular differences in social media usage, narcissism levels, and relationship quality based on various demographical factors. In the present study, the average narcissism levels in the sample were much lower than that of other studies (Nawaz et al., 2018; Campbell, 1999; and Young and Pinsky, 2006). Perhaps having a larger sample size with more individuals higher in narcissism will yield differences in social media usage and relationship quality.

The present study consisted mostly of university students at Tyndale University, which is a small, private, and Christian institution. It may be beneficial to sample participants from a larger population to get a more diverse sample. It could also be of interest to compare social media usage, narcissism, and relationship quality based on different age groups. Moreover, having a larger sample of individuals who use more social media than average could potentially yield differences in narcissism and romantic relationship quality. It may be useful to particularly examine individuals who have a large social media presence or following, such as social media influencers or celebrities.

Social media influencers are followed by many young adults and adolescents, as these age groups tend to spend quite a considerable amount of time online (Lashbrook, 2021). Alves

de Castro et al. (2021) reports that individuals from the Generation Z age cohort tend to spend more time on social media, spending approximately four and a half hours on various social media per day. According to Lashbrook (2021), two-thirds of US teens follow influencers, with the top three influencer types being music, gaming, and celebrities. However, many social media influencers focus on a variety of different topics, such as daily living, family, traveling, fitness, cuisine, education, fashion, beauty, and more (Alves de Castro et al., 2021). Alves de Castro et al. (2021) claim that adolescents report relating themselves to certain social media influencers, watching their content for both entertainment and informational advice, company, and comfort. Social media influencers have a powerful influence over their viewers, followers, and fans, such as the power to shape people's opinions and even what they do or do not buy (Alves de Castro et al., 2021). Moreover, people will listen to what social media influencers say and value their opinion and judgment (Alves de Castro et al., 2021). Therefore, with online influencers having such a wide influence over their audience, it would be intriguing to see if narcissism is higher for certain types of social media influencers and to examine the narcissism levels within young viewers who follow these influencers.

References

- Altinok, A., & Kilic, N. (2020). Exploring the associations between narcissism, intentions towards infidelity, and relationship satisfaction: Attachment styles as a moderator. *PLoS ONE*, *15*(11), 1–17. <https://doi.org/10.1371/journal.pone.0242277>
- Alves de Castro, C., O'Reilly, I., Carthy, A. (2021). Social media influences (smis) in context: A literature review. *Journal of Marketing Management*, *9*(2), 59-71.
<https://doi.org/10.15640/jmm.v9n2a9>
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. Oxford University Press.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism–popularity link at zero acquaintance. *Journal of Personality and Social Psychology*, *98*(1), 132–145. <https://doi.org/10.1037/a0016338>
- Barry, C. T., Reiter, S. R., Anderson, A. C., Schoessler, M. L., & Sidoti, C. L. (2019). “Let me take another selfie”: Further examination of the relation between narcissism, self-perception, and instagram posts. *Psychology of Popular Media Culture*, *8*(1), 22–33.
<https://doi.org/10.1037/ppm0000155>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. <http://dx.doi.org/10.1037/0033-2909.117.3.497>
- Bianchi, E. C. (2014). Entering adulthood in a recession tempers later narcissism. *Association for Psychological Science*, *25*(7), 1429-1437. <https://doi.org/10.1177/0956797614532818>
- Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and social networking web sites. *Personality and Social Psychology Bulletin*, *34*(10), 1303–1314.

- Campbell, W. K. (1999). Narcissism and romantic attraction. *Journal of Personality and Social Psychology*, 77(6), 1254–1270. <https://doi.org/10.1037/0022-3514.77.6.1254>
- Chaudry, R. (2017, May). *Narcissism and social media*. American Psychiatric Association Annual Meeting, San Diego, CA, United States.
- Criddle, C. (2021, May 26). *Instagram lets users hide likes to reduce social media pressure*. BBC News. <https://www.bbc.com/news/technology-57254488>
- Edelstein, R.S., Newton, N.J. and Stewart, A.J. (2012). Narcissism in Midlife: Longitudinal changes in and correlates of women's narcissistic personality traits, *Journal of Personality*, 80(5), 1179-1204. <https://doi.org/10.1111/j.1467-6494.2011.00755.x>
- Ellwood, B. (2021, December 11). *Survey across five world regions suggests that collectivistic societies are more narcissistic than individualistic societies*. PsyPost. <https://www.psypost.org/2021/12/survey-across-five-world-regions-suggests-that-collectivistic-societies-are-more-narcissistic-than-individualistic-societies-62236>
- Fatfouta, R., Sawicki, A., Zemojtel-Piotrowska, M. (2021). Are individualistic societies really more narcissistic than collectivist ones? A five-world region cross-cultural re-examination of narcissism and its facets, *Personality and Individual Differences*, 183. <https://doi.org/10.1016/j.paid.2021.111163>
- Fox, J., & Rooney, M. C. (2015). The dark triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality and Individual Differences*, 76, 161–165. <https://doi.org/10.1016/j.paid.2014.12.017>
- Gabbard, G. O., Crisp, H. (2018). *Narcissism and its discontents: Diagnostic dilemmas and treatment strategies with narcissistic patients* (1st ed.). American Psychiatric Association Publishing.

- Gentile, B. (2011). Celebrity and narcissism. In W. K. Campbell & J. D. Miller (Eds.), *The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatments* (pp. 403–409). John Wiley & Sons, Inc.
- Giacomin, M., & Jordan, C. H. (2019). Misperceiving grandiose narcissism as self-esteem: Why narcissists are well liked at zero acquaintance. *Journal of Personality*, *87*(4), 827–842. <https://doi.org/10.1111/jopy.12436>
- Gibson, B., Hawkins, I., Redker, C., & Bushman, B. J. (2018). Narcissism on the jersey shore: Exposure to narcissistic reality tv characters can increase narcissism levels in viewers. *Psychology of Popular Media Culture*, *7*(4), 399–412. <https://doi.org/10.1037/ppm0000140>
- Hascalovitz, A.C., Obhi, S.S. (2015). Personality and intentional binding: An exploratory study using the narcissistic personality inventory. *Frontiers in Human Neuroscience*, *9*, 1662-5161. <https://doi.org/10.3389/fnhum.2015.00013>
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and Family*, *50*(1), 93–98. <https://doi.org/10.2307/352430>
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*(3), 319–340. <https://doi.org/10.1037/0033-295X.94.3.319>
- Jones, L. L., & Brunell, A. B. (2014). Clever and crude but not kind: Narcissism, self-esteem, and the self-reference effect. *Memory*, *22*(4), 307–322. <https://doi.org/10.1080/09658211.2013.778999>
- Koterba, E. A., Ponti, F., & Ligman, K. (2021). “Get out of my selfie!” Narcissism, gender, and motives for self-photography among emerging adults. *Psychology of Popular Media*, *10*(1), 98–104. <https://doi.org/10.1037/ppm0000272>

- Lawrence, J. (2018). Fatal attractions: The dark triad and infidelity. *The dynamics of infidelity: Applying relationship science to psychotherapy practice*. (pp. 89–111). American Psychological Association. <https://doi.org/10.1037/0000053-005>
- Lashbrook, J. (2021, November 29). *2 in 3 US teens follow influencers. Which types are most popular?* Marketing Charts. <https://www.marketingcharts.com/industries/media-and-entertainment-119129#:~:text=Per%20a%20recent%20report%20%5Bdownload,63%25%20of%20US%20male%20teens>
- Lee, E., Choi, T. R., Lee, T. (David), & Sung, Y. (2019). Using Instagram while “in a relationship”: The roles of narcissism and self-esteem. *Journal of Individual Differences, 40*(2), 111–117. <https://doi.org/10.1027/1614-0001/a000282>
- Lull, R.B., & Dickinson, T.M. (2018). Does television cultivate narcissism? Relationships between television exposure, preferences for specific genres, and subclinical narcissism. *Psychology of Popular Media Culture, 7*(1), 47–60. <https://doi.org/10.1037/ppm0000107>
- Masterson, J. F. (1988). *The search for the real self*. Free Press.
- McCain, J. L., & Campbell, W. K. (2018). Narcissism and social media use: A meta-analytic review. *Psychology of Popular Media Culture, 7*(3), 308–327. <https://doi.org/10.1037/ppm0000137>
- McKinnon, M. (2022, October 2). *2022 report: Social media use in canada (statistics)*. Online Business Canada. <https://canadiansinternet.com/2022-report-social-media-use-in-canada-statistics/#:~:text=It's%20time%20for%20our%20annual,there%20every%20day%2C%20on%20average.>
- Nawaz, H., Shah, S.I.A., Mumtaz, A., & Chughtai, A.S. (2018). Alarming trend of

- procrastination and narcissism among medical undergraduates. *Biomedica*, 33(4), 320-325. <https://www.researchgate.net/publication/326668500>
- Newport Institute. (2022, May 4). *Social media narcissism in young adults*. Newport Institute. <https://www.newportinstitute.com/resources/mental-health/social-media-narcissism/#:~:text=Because%20social%20media%2C%20particularly%20Facebook,higher%20levels%20of%20grandiose%20narcissism>.
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1814-1848. <https://doi.org/10.1016/j.chb.2013.02.014>.
- Putnam, R. D. (2001). *Bowling alone: The collapse and revival of american community*. Simon & Schuster.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the narcissistic personality inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54(5), 890–902. <http://www.columbia.edu/~da358/npi16/raskin.pdf>
- Relationship satisfaction: Ras*. (2023, January 27). Greenspace. <https://greenspacehealth.com/en-us/relationship-satisfaction-ras/>
- Ridgway, J. L., & Clayton, R. B. (2016). Instagram unfiltered: Exploring associations of body image satisfaction, Instagram #selfie posting, and negative romantic relationship outcomes. *Cyberpsychology, Behavior, and Social Networking*, 19(1), 2–7. <https://doi.org/10.1089/cyber.2015.0433>
- Rohmann, E., Neumann, E., Herner, M. J., & Bierhoff, H.W. (2012). Grandiose and vulnerable narcissism: Self-construal, attachment, and love in romantic relationships. *European Psychologist*, 17(4), 279–290. <https://doi.org/10.1027/1016-9040/a000100>

- Stefanone, M. A., Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth and social-networking-site behavior. *Cyberpsychology, Behavior, and Social Networking*, *14*(1-2), 41– 49. <https://doi.org/10.1089/cyber.2010.0049>
- Stewart, V. T., & Clayton, R. B. (2022). Achieving the ideal-self while harming my relationship: Examining associations between self-discrepancy, instagram photo manipulation, and romantic relationship outcomes. *Psychology of Popular Media*, *11*(2), 208–216. <https://doi.org/10.1037/ppm0000344>
- Twenge, J. M. (2014). *Generation Me: Why today's young americans are more confident, assertive, entitled—and more miserable than ever before*. (Rev. ed.). Atria Books.
- Twenge, J. M., & Campbell, W. K. (2009). *The Narcissism Epidemic: Living in the age of entitlement*. Simon & Schuster.
- Twenge, J. M., Konrath, S., Foster, J. D., Campbell, W. K., & Bushman, B. J. (2008). Egos inflating over time: A cross-temporal meta-analysis of the narcissistic personality inventory. *Journal of Personality*, *76*(4), 875–902. <https://doi.org/10.1111/j.1467-6494.2008.00507.x>
- Vater, A., Moritz, S., & Roepke, S. (2018). Does a narcissism epidemic exist in modern western societies? Comparing narcissism and self-esteem in east and west germany. *PloS one*, *13*(1), e0188287. <https://doi.org/10.1371/journal.pone.0188287>
- Wallace, E., Buil, I. (2021). Hiding Instagram likes: Effects on negative affect and loneliness. *Personality and Individual Differences*, *170*. <https://doi.org/10.1016/j.paid.2020.110509>
- Ye, S., Lam, Z. K. W., Ma, Z., & Ng, T. K. (2016). Differential relations of narcissism and self-

- esteem to romantic relationships: The mediating role of perception discrepancy. *Asian Journal of Social Psychology*, 19(4), 374–384. <https://doi.org/10.1111/ajsp.12160>
- Young, K. S. & Nabuco De Abreu, C. P. (2017). *Internet Addiction in Children and Adolescents: risk factors, assessment, and treatment*. Springer Publishing Company.
- Young, S. M., Du, F., Dworkis, K. K., & Olsen, K. J. (2016). It's all about all of us: The rise of narcissism and its implications for management control system research. *Journal of Management Accounting Research*, 28(1), 39–55. <https://doi.org/10.2308/jmar-51024>
- Young, S. M., & Pinsky, D. (2006). Narcissism and celebrity. *Journal of Research in Personality*, 40(5), 463–471. <https://doi.org/10.1016/j.jrp.2006.05.005>
- Zajenkowski, M., & Szymaniak, K. (2021). Narcissism between facets and domains. The relationships between two types of narcissism and aspects of the big five. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, 40(5), 2112–2121. <https://doi.org/10.1007/s12144-019-0147-1>

Appendix A

Consent Form

Researcher: Janice Park

Contact:

This study has been reviewed by and approved by the Research Ethics Board committee and has been approved to be carried out. Please carefully review the consent form to understand what the study entails.

Purpose of the Study: The purpose of this study is to explore the relationship between social media usage on interpersonal and intrapersonal perceptions within a romantic relationship. The study will take place in the Fall Semester of 2022 through the Winter Semester of 2023.

Participant's Role: You are asked to participate in a survey assessing various interpersonal and intrapersonal characteristics and social media usage. Certain characteristics that will be measured are self-confidence, self-worth, narcissism, daily social media usage, and more. Completion of this survey may take 30 minutes to 1 hour.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop responding to the questions at any time without penalty. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Participant Confidentiality: All your responses will be gathered via SurveyMonkey.com and will be kept confidential. The researcher will first take note of your name and contact information for extra credit/gift card raffle. Then, your identity will be randomly assigned to a number and thereby your results will not be traced back to your identity. Your responses will be kept in a securely locked device. Only the researcher (Janice Park) and the thesis advisor (Dr. Vivette Henry) will have direct access to the responses you provide. Study data will be stored at Tyndale University for two years after the completion of the study and then destroyed. Confidentiality will be provided to the fullest extent possible by the code of ethics.

Potential Risks: Potential risks are minimal to none. You may feel potential eye strain due to staring at the screen. Or you may feel slight discomfort when reflecting on certain personality characteristics that you may not like about yourself. If you experience discomfort during the study and would like assistance with it, please contact Tyndale Counseling Services at counselling@tyndale.ca or through the Tyndale Wellness Centre's main line 416-226-6620.

Potential Benefits: By participating in this study, you may be able to further reflect on your personality, your social media intake, and the quality of your relational bonds with a significant other.

Compensation: As a way to compensate for your time in participating in this study, you have the option to choose between receiving a 1% bonus credit in any psychology course of your

choosing at Tyndale University, or you may opt to enter into a draw for a \$25 Amazon gift card (2 winners total).

Legal Rights: Your consent does not mean that you are giving up any of your legal rights.

Questions Pertaining to the Study: If you have questions about the research in general or about your role in the study, please feel free to contact the researcher by e-mail at _____ If you have any questions about this process, or about your rights as a participant in the study, you may contact Tyndale's Research Ethics Board at reb@mytyndale.ca, or the thesis supervisor, Assistant Professor of Psychology, Dr. Vivette Henry, at

Confirmation of Agreement: If you understand the nature of the survey and of your participation and wish to participate, please indicate your consent below with your name and the date. Indicating your consent signifies to the researcher that you understand the nature of the survey and that you have the right to withdraw at any time during the study.

Signature of Participant

Date

Appendix B

Narcissistic Personality Inventory (NPI-40)

Instructions: The following questions in this section will measure your interpersonal and intrapersonal perceptions, including characteristics such as your self-esteem, self-worth, confidence, narcissism, and other preferences. There will only be two possible answers for each question. Please answer all questions and be as truthful as possible, choosing the answer that best describes you, or is the least objectionable for you. Respond to each item by choosing either “A” or “B”.

1. A. I have a natural talent for influencing people.
 B. I am not good at influencing people. 1. _____

2. A. Modesty doesn't become me.
 B. I am essentially a modest person. 2. _____

3. A. I would do almost anything on a dare.
 B. I tend to be a fairly cautious person. 3. _____

4. A. When people compliment me I sometimes get embarrassed.
 B. I know that I am good because everybody keeps telling me so. 4. _____

5. A. The thought of ruling the world frightens the hell out of me.
 B. If I ruled the world it would be a better place. 5. _____

6. A. I can usually talk my way out of anything.
 B. I try to accept the consequences of my behavior. 6. _____

7. A. I prefer to blend in with the crowd.
 B. I like to be the center of attention. 7. _____

8. A. I will be a success.
 B. I am not too concerned about success. 8. _____

9. A. I am no better or worse than most people.
 B. I think I am a special person. 9. _____

10. A. I am not sure if I would make a good leader.
 B. I see myself as a good leader. 10. _____

11. A. I am assertive.

- B. I wish I were more assertive. 11. _____
12. A. I like to have authority over other people.
B. I don't mind following orders. 12. _____
13. A. I find it easy to manipulate people.
B. I don't like it when I find myself manipulating people. 13. _____
14. A. I insist upon getting the respect that is due me.
B. I usually get the respect that I deserve. 14. _____
15. A. I don't particularly like to show off my body.
B. I like to show off my body. 15. _____
16. A. I can read people like a book.
B. People are sometimes hard to understand. 16. _____
17. A. If I feel competent I am willing to take responsibility for making decisions.
B. I like to take responsibility for making decisions. 17. _____
18. A. I just want to be reasonably happy.
B. I want to amount to something in the eyes of the world. 18. _____
19. A. My body is nothing special.
B. I like to look at my body. 19. _____
20. A. I try not to be a show off.
B. I will usually show off if I get the chance. 20. _____
21. A. I always know what I am doing.
B. Sometimes I am not sure of what I am doing. 21. _____
22. A. I sometimes depend on people to get things done.
B. I rarely depend on anyone else to get things done. 22. _____
23. A. Sometimes I tell good stories.
B. Everybody likes to hear my stories. 23. _____
24. A. I expect a great deal from other people.
B. I like to do things for other people. 24. _____
25. A. I will never be satisfied until I get all that I deserve.
B. I take my satisfactions as they come. 25. _____

26. A. Compliments embarrass me.
B. I like to be complimented. 26. _____
27. A. I have a strong will to power.
B. Power for its own sake doesn't interest me. 27. _____
28. A. I don't care about new fads and fashions.
B. I like to start new fads and fashions. 28. _____
29. A. I like to look at myself in the mirror.
B. I am not particularly interested in looking at myself in the mirror. 29. _____
30. A. I really like to be the center of attention.
B. It makes me uncomfortable to be the center of attention. 30. _____
31. A. I can live my life in any way I want to.
B. People can't always live their lives in terms of what they want. 31. _____
32. A. Being an authority doesn't mean that much to me.
B. People always seem to recognize my authority. 32. _____
33. A. I would prefer to be a leader.
B. It makes little difference to me whether I am a leader or not. 33. _____
34. A. I am going to be a great person.
B. I hope I am going to be successful. 34. _____
35. A. People sometimes believe what I tell them.
B. I can make anybody believe anything I want them to. 35. _____
36. A. I am a born leader.
B. Leadership is a quality that takes a long time to develop. 36. _____
37. A. I wish somebody would someday write my biography.
B. I don't like people to pry into my life for any reason. 37. _____
38. A. I get upset when people don't notice how I look when I go out in public.
B. I don't mind blending into the crowd when I go out in public. 38. _____
39. A. I am more capable than other people.
B. There is a lot that I can learn from other people. 39. _____

40. A. I am much like everybody else.
B. I am an extraordinary person.

40. _____

Scoring of the NPI-40

The seven component traits by question:

- Authority: 1, 8, 10, 11, 12, 32, 33, 36
- Self-sufficiency: 17, 21, 22, 31, 34, 39
- Superiority: 4, 9, 26, 37, 40
- Exhibitionism: 2, 3, 7, 20, 28, 30, 38
- Exploitativeness: 6, 13, 16, 23, 35
- Vanity: 15, 19, 29
- Entitlement: 5, 14, 18, 24, 25, 27

Assign one point for each response that matches the key:

- 1, 2 and 3: A
- 4, 5: B
- 6: A
- 7: B
- 8: A
- 9, 10: B
- 11, 12, 13, 14: A
- 15: B
- 16: A
- 17, 18, 19, 20: B
- 21: A
- 22, 23: B
- 24, 25: A
- 26: B
- 27: A
- 28: B
- 29, 30, 31: A
- 32: B
- 33, 34: A
- 35: B
- 36, 37, 38, 39: A
- 40: B

Appendix C

Relationship Assessment Scale (RAS)

Instructions: The following questions pertain to romantic relationship quality and satisfaction. If you are not currently in a romantic relationship, then please refer to your previous relationship. Please answer as truthfully as possible to the next following questions, picking the number that best reflects your current/previous relationship.

How well does your partner meet your needs?

1	2	3	4	5
Poorly		Average		Extremely well

In general, how satisfied are you with your relationship?

1	2	3	4	5
Unsatisfied		Average		Extremely satisfied

How good is your relationship compared to most?

1	2	3	4	5
Poor		Average		Excellent

How often do you wish you hadn't gotten in this relationship?

1	2	3	4	5
Never		Average		Very often

To what extent has your relationship met your original expectations:

1	2	3	4	5
Hardly at all		Average		Completely

How much do you love your partner?

1	2	3	4	5
Not much		Average		Very much

How many problems are there in your relationship?

1	2	3	4	5
Very few		Average		Very many

Scoring of the RAS

Sum up the scores of each item and divide by 7 to get a mean score.

NOTE: Items 4 and 7 are reverse scored: 1=1, 2=2, 3=3, 4=4, 5=5.

Score	Level of Relationship Satisfaction
7 - 14	Low satisfaction
15 - 21	Average satisfaction
22 - 35	High Satisfaction

Appendix D

Social Media Engagement Questionnaire (SMEQ)

Instructions: The following questions pertain to the quantity of social media usage (Instagram, TikTok, Facebook, Twitter, etc.) in the past seven days. Please refer to the response anchors which specify what each number from 0 to 7 indicates. Please answer accurately as possible.

Response Anchors

Not one day		0
One day		1
Two days		2
Three days		3
Four days		4
Five days		5
Six days		6
Every day		7

1. How often did you use social media in the 15 minutes before you go to sleep?

0 1 2 3 4 5 6 7

2. How often did you use social media in the 15 minutes after you wake up?

0 1 2 3 4 5 6 7

3. How often did you use social media when eating breakfast?

0 1 2 3 4 5 6 7

4. How often did you use social media when eating lunch?

0 1 2 3 4 5 6 7

5. How often did you use social media when eating supper?

0 1 2 3 4 5 6 7

Scoring of the SMEQ

Note: Individual scores can be computed by summing responses to all five items and forms a reliable composite measure.

Appendix E

Demographic Survey

1. Please indicate your gender:
 - A. Female
 - B. Male
 - C. Other, please specify _____

2. Please indicate your age category
 - A. 17 years or younger
 - B. 18-25 years
 - C. 26-33 years
 - D. 34-41 years
 - E. 42-49 years
 - F. 50-57 years
 - G. 58-65 years
 - H. 66 + years

3. Please specify your ethnic origins (select one)
 - A. European
 - B. Caribbean
 - C. South or Central American
 - D. North American
 - E. African
 - F. Asian
 - G. Australian/Oceanic

4. Have you ever been or are currently in a romantic relationship (dating, engaged, married)
 - A. Yes
 - B. No

The next set of questions will pertain to your social media usage, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Please answer as honestly as possible.

5. Social media is an important pastime or hobby in my everyday life.

1 2 3 4 5

6. I feel a sense of fulfillment when receiving attention from others on social media.

1 2 3 4 5

7. The support and encouragement from others on social media are important to me.

1 2 3 4 5

8. I often share facets of my life on social media.

1 2 3 4 5

9. I feel disappointed when there is no reaction or response to the content I share on social media.

1 2 3 4 5

10. I always set aside time on a regular basis to be on social media.

1 2 3 4 5

11. Select the social media platforms you use on a daily basis. Select all that apply:

A. Instagram

B. Twitter

C. TikTok

D. Facebook

E. Snapchat

F. Twitch

G. YouTube

H. Other, please specify _____

12. Please indicate the number of hours you typically spend on social media on a daily basis

A. Less than 1 hour

B. 1-2 hours

C. 3-4 hours

D. 5 or more hours

Appendix F
Participant Recruitment Poster A



SOCIAL MEDIA USAGE

SELF-PERCEPTION & RELATIONSHIP QUALITY

Receive a 1% credit bonus on a psychology course OR opt in a draw to win one of two \$25 Amazon Gift Cards

PSYCHOLOGY THESIS
parkjanice@mytyndale.ca

The graphic features a blue smartphone frame containing several social media icons: Twitch (purple), Twitter (blue), Instagram (orange), Facebook (blue), YouTube (red), Reddit (orange), Snapchat (yellow), and TikTok (black). A white speech bubble with a grey border contains the recruitment text. The background is white with orange and yellow callout boxes for the title.

Participant Recruitment Poster B

SOCIAL MEDIA USAGE, RELATIONSHIP, & SELF-PERCEPTION

Participants are needed for a study examining the correlation between social media usage and one's perception of themselves and their romantic relationships

Must be **18 years+** &
currently in a relationship to
participate

To start, go to

<https://www.surveymonkey.com/r/FY89ZDY>

or scan the QR code

