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# The Relative Strength of Social Media Use, Social Comparison Orientation, and Materialistic Values on Self-Worth

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This is to certify that the doctoral dissertation by

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Walden University
2024

Abstract

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## Abstract

Excessive social media use is linked to psychological and emotional issues such as depression, anxiety, and low self-esteem. Social media may expose its users to idealized representations of others' material success that, by comparison, makes individuals feel wanting. In the United States, where material possessions are often a measure of one's value, the comparative lack of material possessions takes a toll on social media users' self-worth. While researchers have investigated the potential for individual differences in social status seeking, malicious envy, and social media use to influence self-esteem/worth, none have examined the relative strength of social media use, social comparison orientation, and materialistic values on self-worth. In the current study that gap was addressed. Social comparison theory was used as the theoretical framework for this study and was used to explore the relationship between social media exposure to idealized lifestyles and individual self-worth. Online surveys were administered via SurveyMonkey to 114 participants. A hierarchical multiple regression found that, contrary to predictions, neither social media use nor materialistic values were related to self-worth. Surprisingly, social comparison orientation was significantly positive, rather than negatively as predicted, related to self-worth explained as the tendency for social media users to compare downward for a reliable ego boost. Insights from this study have implications for positive social change, are useful for media literacy programs made available for distribution to parents, middle and high schools, and social networking sites.

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# Dedication

I dedicate this dissertation to my husband, Robert; thank you for your support and encouragement. To my daughters, Jania (Archie) and Chyanne (Marques), thank you for being my motivation and inspiration. You have been my driving force, pushing me to pursue my dreams and aspirations. Your love and encouragement have been the fuel that kept me going, even during the most challenging times, and without your unwavering love, understanding, and patience, I would not have been able to achieve this significant milestone in my academic career.

To my grandchildren, Eryn, Braxton, Mila, and Miles, you bring me so much joy and happiness. Your innocent and carefree spirit has reminded me of life's beauty and wonder. You are my precious gifts, and I am so grateful for your presence in my life.

To my beautiful talented cousin Erin Robinson. You have been an inspiration to me my entire life. I've always looked at you and saw a go-getter. You have accomplished so much, and you inspire me. You said, "You're never too old to pursue your dreams," with that, I kept going.

This dissertation is a testament to my pregnant sixteen-year-old self: as my late grandfather would say, Mr. Armstead H. Barnett, never give up and always hold your head high. I hope my story will inspire others to pursue their dreams and goals, no matter how difficult the journey.

Finally, to everyone who doubted me, THANK YOU!

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I thank Dr. Anthony Perry for stepping in at the last minute to help me with my methodology. You explained things in a way that was understandable, especially for me. In short, I could not have been blessed with a better methodologist; your support and teaching style were seamless.

I would also like to thank Gabe Turner and the staff, who worked tirelessly to support my academic endeavors. Their dedication and hard work made a significant difference in my success. Finally, I would like to acknowledge the countless individuals who have supported me in ways I may not know. I am deeply grateful for the love, support, and kindness shown throughout my academic journey.

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# Chapter 1: Introduction to the Study

## Introduction

Excessive social media use has been associated with a number of problems, both psychological and emotional (Thomson, 2016), including an increase in materialistic values as a function of social comparison, making social media users feel that, compared to others, they do not quite measure up. Materialistic values refer to the importance and desire for acquiring material possessions and wealth, such that materialistically oriented individuals may place significant emphasis on possessions, status, and appearance as a means of defining their self-worth (Zhang & Hawk, 2022). The use of social media networks has become an integral part of modern life, with people using platforms like Facebook, Instagram, Twitter, and others to connect, share, and compare themselves to others. Social media can impact self-worth through social comparison and exposure to curated, idealized representations of others' lives and the tendency of individuals to compare themselves to others as a way of evaluating their own self-worth. People may engage in upward social comparison (comparing themselves to others perceived as better off) or downward social comparison (comparing themselves to others perceived as worse off), where the former has been found to negatively impact self-esteem (Lee et al., 2022).

Understanding the factors that influence self-worth is critical for promoting positive mental health and well-being. A better understanding of how social media use, social comparison orientation, and materialistic values impact self-worth can increase identification of potential risk factors and intervention strategies to mitigate the risk. With the widespread use of social media, it is essential to examine its effects on individuals' self-perception.

In the United States, materialistic values have become deeply ingrained, influencing how people perceive their self-worth based on possessions and external markers of success (Lee et al., 2022). Investigating the role of materialistic values in shaping self-worth can shed light on the broader implications of consumer culture. Informed by insights from this study, educational initiatives can be developed to promote healthier perspectives on self-worth and reduce the negative effects of social comparison. Mental health professionals can incorporate this knowledge into therapy and counseling practices. Policymakers and organizations can use the findings to implement policies and guidelines related to social media use, promoting more responsible usage to protect individuals from harmful content. Overall, the findings can contribute to enhancing mental well-being, fostering healthier self-perceptions, and encouraging a more balanced and fulfilling approach to life in the digital age.

Chapter 1 includes a short discussion of the study's topic, research problem, purpose, research questions, and hypotheses. Following this, the theoretical framework will be presented as will the nature of the study, variable definitions, assumptions, the scope, and delimitations. The chapter will end with a brief discussion of the study's limitations and significance.

## Background

A great deal of research has focused on the relationship between social media use and various aspects of psychological well-being, particularly factors such as loneliness, anxiety, depression, body satisfaction, and mental health among adolescents. For example, Reer et al. (2019) examined the relationship between diminished psychosocial well-being (i.e., loneliness, anxiety, depression) and social media engagement, findings

that individuals with lower well-being tend to use social media more extensively, with fear of missing out (FoMO) and social comparison orientation mediating this relationship. Tiggemann and Anderberg (2020) experimentally investigated the impact of exposure to social media images on women's body satisfaction, with results indicating that idealized images on social media increased negative body image, while exposure to idealized vs real images reduced social comparison and improved body image satisfaction. Lin et al. (2016) surveyed a nationally representative sample to assess the link between social media use and depression among young adults. They found that higher social media use was associated with an increased likelihood of experiencing depression. Boer et al. (2021) conducted a longitudinal study with an adolescent sample, exploring the bidirectional relationship between social media use, social media addiction, and mental health. Results revealed that social media addiction was positively related to depressive symptoms and negatively related to life satisfaction among adolescents.

In an exhaustive literature review, Damodar et al. (2022) found that social media use was associated with adolescent depression and anxiety, with cyberbullying, diminished self-esteem, and sleep disturbance reported as sources of these mental health issues. To assess the temporal association between social media use and depression, Primack et al. (2021) conducted a longitudinal study and found that higher social media use was associated with an increased risk of developing depression over time. These studies collectively highlight the complex relationship between social media use and various aspects of mental health and well-being, emphasizing the need for further research to address the negative effects of excessive social media engagement on psychological health among adolescents and emerging adults.

Recent studies have also examined the relationship between materialism, social comparison, and self-esteem to determine how exposure to materialistic content on social media platforms affects consumer behavior and psychological well-being. For example, Schalembier et al. (2020) investigated how others' income influences the life satisfaction of materialistic individuals and found that materialistic individuals who perceive themselves as less well-off than others experience a decrease in life satisfaction, while those who perceive themselves as comparatively better off experience an increase. Rai et al. (2020) examined the impact of internet usage on materialistic values and found that more time spent on the internet is associated with higher materialistic values. Likewise, Yu and Nam-Speers (2017) determined that mass media exposure is implicated in the development of materialistic values and buying impulsiveness among urban adolescents, with results showing that mass media exposure positively correlates with materialistic values and buying impulsiveness. Zhang and Hawk (2022) reconceptualized self-esteem as perceived self-esteem stability and examined its relationship with materialistic values. The authors found that perceived self-esteem stability is negatively associated with materialistic values, suggesting that in cultures or social groups where material possessions and wealth are the primary evidence of one’s success, individuals with higher perceived self-esteem stability are more likely to be negatively influenced by materialistic values.

The presence of social media influencers has increased in recent years, piquing the interest of Lee et al. (2022), who examined what motives consumers to follow social media influencers and what, if any, impact that had on materialistic values. Unexpectedly, the results indicated that social media influencers do not affect

materialistic values but that the reverse is true; materialistic values motivate consumers to follow influencers, which, in turn, affects trust in influencer brand-related posts and the frequency of purchasing influencer-recommended products. These studies highlight the complex relationship among materialistic values, social media, self-esteem, consumer behavior, and psychological well-being. Materialistic values can have far-reaching effects on various aspects of individuals' lives, from their satisfaction with life to their purchasing behavior and mental health.

Recent studies also identified links between self-worth contingencies (e.g., appearance, approval from others, and social media feedback) and social media misuse. For example, Prosek et al. (2023) focused on the link between self-worth, envy, and social media misuse and found that self-worth contingent on aspects like appearance, approval from others, and God's love predicted social media misuse, especially among college students. Sabik et al. (2019) examined the association between self-worth contingent on social media feedback and psychological well-being. The authors found that individuals whose self-worth relies on social media feedback report lower levels of resilience and self-kindness and higher levels of depression and stress. To identify other factors social media use and self-worth, Kanat-Maymon et al. (2018) explored the relationship between self-worth contingent on social acceptance and Facebook addiction. Findings showed that individuals with high social acceptance contingency self-worth are more likely to be Facebook addicted. Lopez and Polleta (2021) investigated the relationship between social anxiety and contingent self-worth among Instagram users, specifically the extent to which self-image content was manipulated. Consistent with other studies, the authors found that socially anxious individuals, whose self-worth is

contingent on appearance and social acceptance, are more likely to manipulate their online self-image. These studies collectively emphasize the impact of self-worth on various aspects of psychological well-being and highlight how factors like social media use can mediate or moderate this relationship.

While many studies have examined these variables in different combinations and contexts, no studies have examined the relative predictive strength of social media use, social comparison orientation, and materialistic values on self-worth. In this current study, I addressed this gap.

## Problem Statement

The pursuit of wealth and material possessions as evidence of one's self-worth has significantly increased in the era of social media's widespread popularity (Zhang & Hawk, 2022). Research shows that social media users tend to portray an idealized version of themselves rather than their authentic selves, and this "posing" has been linked to elevated levels of depression, anxiety, and loneliness among social media users who find themselves feeling inadequate by comparison (Lee et al., 2022; Thomson, 2016). Because people often assess their own worth by measuring themselves against others, the frequent display of material acquisitions on social media platforms can be disheartening for those who perceive a gap between their own value and the showcased affluence (Bible et al., 2021; Pellegrino et al., 2022). Given the widespread use of social media, social comparisons are inevitable, fostering the belief that material wealth defines an enviable life, often resulting in a diminished sense of self-worth (Lee et al., 2022).

## Purpose of the Study

The purpose of this quantitative study was to determine the relative strength of social media use (IV), social comparison orientation (IV), and materialistic values (IV) on self-worth (DV).

## Research Questions and Hypotheses

RQ1: To what extent does social media use, as measured by the Social Media Use Questionnaire, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o1}$: Social media use is not a significant predictor of self-worth.

$H_1$: Social media use is a significant predictor of self-worth.

RQ2: To what extent does social comparison orientation, as measured by the Iowa-Netherlands Comparison Orientation Measure, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o2}$: Social comparison orientation is not a significant predictor of self-worth.

$H_2$: Social comparison orientation is a significant predictor of self-worth.

RQ3: To what extent do materialistic values, as measured by the Materialism Scale--Modified Scale, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o3}$: Materialistic values is not a significant predictor of self-worth.

$H_3$: Materialistic values is a significant predictor of self-worth.

## Theoretical Framework

In this study, I used Festinger's (1954) social comparison theory as the theoretical framework. This theory states that individuals assess their social and personal value by

measuring themselves against others. These comparisons may take the form of upward comparisons (i.e., comparing oneself to more successful or attractive individuals) or downward comparisons (i.e., comparing oneself with less successful or attractive counterparts), impacting self-esteem negatively or positively, respectively. This theory was particularly relevant to inform my study as it explained why individuals who hold materialistic values tend to evaluate their self-worth by comparing themselves with others, a tendency that increased with social media usage.

## Nature of the Study

In the current study, I employed a cross-sectional, non-experimental, correlational survey design. A quantitative design was apt as it is used to measure relationships among variables using published instruments tested for reliability and validity. Quantitative research typically yields objective data less susceptible to researcher bias (Marczyk et al., 2005). In contrast, qualitative research is used to explore participants' lived experiences through in-depth interviews but lacks formal measures for quantifying relationships among variables (Marczyk et al., 2005).

Given that the variables of interest were not manipulable, a nonexperimental design was most appropriate (Lobmeier, 2010). The survey research approach provided insights into the attitudes, beliefs, values, and intentions of individuals meeting the inclusion criteria within the targeted population. I used SurveyMonkey, an affordable and professional online survey platform that delivered data from a large sample within a short period of time (Goodwin, 2010). Data were analyzed using hierarchical multiple regression; per social comparison theory, it was reasonable to expect that social media

use would account for the most variance in self-worth, followed by social comparison orientation and materialistic values.

The targeted population for this study included English-speaking adults aged 18 and older. Participants were restricted to individuals residing in the United States to minimize potential cultural variations in attitudes toward self-worth. Recent survey data (Lopez & Polletta, 2021) indicated that approximately 90% of U.S. adults, 18+ years old, use social media, reflecting the widespread popularity of social media among this demographic. This prevalence, combined with the early age at which many young adults acquire smartphones, and the addictive nature of social media, leads to significant daily usage. Participants provided demographic information, including age, gender, and primary language. Based on United States Census Data, the target population numbers 260,836,730 English-speaking social media users, 18+ years old (Atske, 2022). Participants were self-selected through a non-probability convenience sampling strategy, with SurveyMonkey assisting in the recruitment process from its audience pool. Eligible individuals who met the inclusion criteria (i.e., English-speaking, 18 years and older, residing in the United States) received notification via email regarding their qualification to participate, together with a link to the survey. They choose to participate at their discretion.

## Definitions

*Materialistic values:* the tendency to desire wealth and material possessions (Zhang & Hawk, 2022).

*Social media use:* the ability to interact with people by creating, sharing, and/or exchanging information and ideas in virtual communities and networks (Zhang & Hawk, 2022).

*Social comparison orientation:* the tendency to compare oneself to those perceived as better off (Lee & Cho, 2017).

*Self-worth:* the self-perceived sense of being good enough or worthy (Ackerman, 2023).

## Assumptions

I made several assumptions in this study. First, I assumed that participants would follow the instructions for completing the surveys accurately and that participants would answer truthfully. I also assumed that the theoretical reasoning for the predictor variable selection was logically sound. Finally, I assumed that participant responses to survey questions would reflect their real-world social media use, tendency to engage in social comparison, and attitudes toward materialistic values.

## Scope and Delimitations

My goal for this study was to determine if social media use had the potential to hierarchical multiple regression analysis between materialist values, social comparison orientation, and self-worth in a sample of English-speaking, 18+ years of age, and living in the United States.

A significant portion of the American population was concerned with the prioritizing of material acquisition as a measure of social worth, a concern reflected in the 2020 Harris Poll reported that 77% of Americans agreed that society is too materialistic. Studies documented a link between materialistic values, lower self-esteem, and higher

anxiety and depression, psychological outcomes exacerbated by social comparison tendencies that accompany social media use (Cho & Lee 2017; Vogel et al., 2015). The Pew Research Center (2021) reported that 69% of adults in the United States use social 1media, with 40% of 18–22-year-olds and 37% of 23–38-year-olds experiencing social media addiction (Statistica, 2022). For these reasons, a broad sample of English-speaking adults 18+ years old were recruited. The sample was limited to the U.S. population as cultural differences may influence attitudes toward materialism, social media use, and self-worth; examining cultural differences is beyond the scope of the study. I used social comparison theory in this study because it can be used to explain not only the likely negative impact on self-esteem/worth; it also took into account social media use insofar as its frequency would likewise increase social comparison tendencies. No other theory was sufficiently parsimonious to account for all the variables I investigated.

## Limitations

I used a convenience sample rather than a random sample, with participants recruited through Survey Monkey; because participants were not randomly selected, the sample may not have been representative, limiting the generalizability of the results (see Etikan et al., 2016). Online surveys are vulnerable to social desirability bias in that participants tend to respond in ways that put them in the best light rather than how they actually feel or what they actually believe; this is especially true when soliciting sensitive information. Self-report online surveys rely on the honesty of participants regarding inclusion/exclusion criteria. Prospective participants answered screening questions about age, language, and residency to ensure minimal threat to validity. Self-selection bias is a

limitation, as it can introduce systematic differences (e.g., demographic and dispositional) between individuals who chose and those who did not choose to participate in the study.

Incremental validity refers to the additional value or benefit provided by a specific screening criterion, in this case, the seriousness check, when applied after other checks have already been performed (Aust et al., 2012). A seriousness check-in online research survey is a method employed to assess the participant's level of engagement, attention, and sincerity in responding to survey questions. It serves as a measure to ensure data quality by identifying respondents who may not be taking the survey seriously or who might be providing careless or random responses. Social desirability bias (citation needed here) also threatens validity, as participants are inclined to present themselves in the most favorable light rather than disclosing their true feelings and attitudes. Assuring participants that their responses were collected anonymously will mitigate this potential threat.

## Significance

The tendency for social media users to engage in social comparison can have both positive and negative effects on individuals' self-worth (e.g., Buunk & Gibbons, 2007; Meier & Johnson, 2022). The impact of materialistic values on self-worth, particularly the potential for material possessions to become a measure of success and self-esteem, was exacerbated by social media use (Rai et al., 2020). In this study, I identified which variables under scrutiny have the greater influence on self-worth. These insights have implications for positive social change as they may be used to inform school policies (e.g., middle, high school, and university), alerting social media users to its potential hazards.

## Summary

Social media use and its associated psychological and emotional consequences have been widely researched. Protective factors with the potential to mitigate the negative impact on social media users' self-esteem/worth were examined. To date, however, social media use accompanied by social comparisons to idealized representations of others' lives, including others' material wealth, continues to negatively impact its users.

Chapter 2 includes a presentation of the literature search strategy and an analysis of social comparison theory, followed by an exhaustive review of the literature related to key variables (e.g., social media use, social comparison orientation, and materialistic values on self-worth). The chapter will end with a summary and conclusion. Social comparison theory offers a lens through which the dynamic interplay between social media use, social comparison orientation, and materialistic values will be examined and explained. I used a quantitative nonexperimental cross-sectional survey design to administer an Internet-based survey, using the SurveyMonkey platform. Insights from this study can be used to inform policymakers, educators, mental health practitioners, parents, and students to mitigate social media-related self-esteem/worth problems.

# Chapter 2: Literature Review

## Introduction

According to a survey conducted by the Harris Poll in 2020, 77% of Americans agreed that society is too materialistic (Just a moment, 2021). In the United States, researchers found that materialistic values were negatively associated with self-esteem and positively associated with anxiety and depression (Kasser & Ryan, 1993). In another survey of U.S. adults, researchers found that frequent social media use was associated with higher levels of social comparison, which in turn was associated with lower levels of self-esteem and higher levels of depressive symptoms (Vogel et al., 2015) as did Lee and Cho (2017) who found that upward social comparison (i.e., comparing oneself to those perceived as better off) was negatively associated with self-esteem and positively associated with depression (Lee & Cho, 2017). According to a 2021 report by the Pew Research Center, 69% of adults in the United States use social media. Statistica (2022) reported that in the United States, 40% of people aged 18-22 and 37% aged 23-38 feel addicted to social media. Studies have shown that excessive social media use can lead to feelings of loneliness, anxiety, and depression, which can negatively impact self-worth (Thomson, 2016).

Materialistic values (i.e., desire for wealth and material possessions) as evidence of one's success and self-worth have increased with the rise in popularity of social media (Zhang & Hawk, 2022). Studies show that the tendency for social media users to present themselves as whom they wish they were (i.e., ideal self) rather than who they are (i.e., actual self) has led to increased depression, anxiety, and loneliness among users who, by comparison, find themselves wanting (Lee et al., 2022; Thomson, 2016). Because people

tend to estimate their value by comparing themselves to others, the flaunting of material possessions so commonly found on social media sites takes a toll on those who, faced with the reality of their own lives, do not seem to measure up (Bible et al., 2021; Pellegrino et al., 2022). Given the widespread use of social media, social comparison is inevitable and the notion that material wealth makes one's life enviable leads to a diminished sense of self-worth (Lee et al., 2022).

Studies have investigated the potential for individual differences in social status-seeking (Yaple & Yu, 2020), malicious envy (Meier & Johnson, 2022), social comparison orientation (Lee et al., 2022; Thomson, 2016), and social media use (Bible et al., 2021; Pellegrino et al., 2022) to influence the relationship between materialistic values and self-esteem/self-worth. These studies provide empirical evidence of the dark side of social media and its impact on individual behavior, self-esteem, and mental health; however, no studies have examined the relative predictive strength of materialistic values, social comparison orientation, and social media use on self-worth. While studies often use self-esteem and self-worth interchangeably, there are nuanced differences (Lawrence & Gonzales, 2022; Yovel et al., 2021). Self-esteem can be influenced by external factors and can fluctuate; self-worth is seen as more constant and less dependent on external validation. It involves a sense of inherent value simply by virtue of being human. Given that my assessment of self-worth incorporated self-esteem, I used Rosenberg's Self-Esteem Scale (Rosenberg, 1965) as it captures both constructs.

## Relevance of the Problem

Social media usage is a collective term for the use of websites or apps that focus on communication, interaction, content sharing, and a way to keep in touch with family

and friends, prompting the impulse to compare certain aspects of oneself to other individuals (Buunk & Gibbons, 2007). Social media use has become increasingly prevalent, with billions of people around the world using platforms like Facebook, Instagram, and Twitter to connect with others and share their lives online (Meier & Johnson, 2022). While social media can provide benefits, such as social support and a sense of belonging, research has also suggested that excessive social media use can be detrimental to self-worth (Sahin & Nasir, 2022). This is because social media platforms often encourage social comparison, where individuals compare themselves to others and may experience negative feelings of envy or inadequacy (Meier & Johnson, 2022). However, the strength of this effect can also vary depending on individual factors, such as the type of content consumed and the motives for using social media (Lee et el., 2021).

Materialistic values are the value an individual puts on desired material possessions and the importance of material possessions and wealth as a measure of success and self-worth (Rai et al., 2020). Many people in modern society place a high value on material possessions, such as expensive cars, designer clothing, and luxurious homes. Research has shown that materialistic values can hurt self-worth, as individuals who base their self-esteem on material possessions may experience a sense of emptiness or lack of fulfillment when they do not attain these material goals (Rai et al., 2020). However, the strength of this effect can vary depending on individual factors, such as personality traits and socioeconomic status (Bible et al., 2021).

Self-worth can be associated with several different meanings; however, for this study, it is defined as the internal sense of an individual being good enough or worthy (see Ackerman, 2023). Self-worth is a fundamental aspect of human psychology and

influences many important life outcomes, including mental health, relationships, and career success (Ackerman, 2023). In recent years, several factors have been identified as potentially significant determinants of self-worth, including materialistic values, social media use, and social comparison orientation. For example, Al-Menayes (2020) found that social media use was positively related to materialism and negatively related to life satisfaction. To that same point, Fardouly et al. (2020) found that social comparison orientation mediated the relationship between social media use and depressive symptoms such that increased social media use for comparison purposes increased the likelihood of depressive symptoms. Social comparison orientation refers to an individual's tendency to compare themselves to others in various domains of life, such as physical appearance, intelligence, and social status.

Current studies continue to support the negative relationship between social comparison orientation and self-worth. Specifically, individuals who engage in frequent social comparisons tend to have lower self-esteem and self-worth, which can lead to various negative outcomes such as depression, anxiety, and disordered eating. For example, a study conducted in 2020 found that social comparison orientation was negatively related to self-esteem and positively related to depressive symptoms in adolescents (Gao et al., 2020). Another study published in the same year found that social comparison orientation was negatively related to self-worth in young adults, which in turn predicted disordered eating behaviors (Kornilaki et al., 2020). Furthermore, research suggests that reducing social comparison through interventions can positively affect mental health and well-being, as evidenced by Ribeiro et al. (2020) who found that a self-

compassion intervention reduced social comparison activities, which increased well-being among college students.

Overall, recent studies highlight the negative impact of social comparison orientation on self-worth and mental health and the importance of interventions aimed at reducing these negative effects. However, the strength of this effect can also vary depending on individual factors, such as the nature of the social comparisons made and the level of identification with the comparison target (Pellegrino et al., 2022). Studies have explored the impact of social media exposure on materialistic values and consumption behaviors, highlighting its dark side on individuals' perceived status and self-worth (Pellegrino et al., 2022). Overall, these studies shed light on the complex interplay between social media use, materialism, and individuals' psychological and behavioral outcomes, emphasizing the need for further research in this area.

The purpose of this quantitative study is to determine the relative strength of materialistic values (IV), social media use (IV), and social comparison orientation (IV) on self-worth (DV). I used hierarchical multiple regression to determine the extent to which each independent variable explains the variance in self-worth.

Chapter 2 includes a description of social comparison theory and I will review current studies that were relevant to my own. This will be followed by an exhaustive review of the literature related to key variables (i.e., materialistic values, social media use, social comparison orientation, and self-worth), ending with a summary and conclusion.

## Literature Search Strategy

The literature I accessed was peer-reviewed and found in the Walden University Library. The databases that I used were Current Psychology, APA PsycArticles, APA Psychnet, ProQuest, Google Scholar, and APA Psychinfo. I used Google Scholar to identify additional research articles that appeared in older articles. The key terms that I used included: *materialism, meta-analysis, personal well-being, values, consumer behaviors, motivation, materialism, status-seeking, self-esteem, self-worth, social media, social comparison, comparison orientation, fake, façade, buying impulsiveness, mass media exposure, materialistic values,* and *false impression*. Finally, the majority of the literature that I found was from 2017 to 2022.

## Theoretical Foundation

### Social Comparison Theory

I used Festinger's (1954) theory of social comparison as the theoretical foundation for this study. Social comparison theory explains how people use social comparisons to evaluate themselves in an attempt to reduce uncertainty and gain a more accurate sense of their own abilities and opinions. Festinger's (1954) theory was inspired by his observations of a group of doomsday cult members who had predicted the end of the world. When the predicted date came and went without the expected catastrophe, Festinger noticed that the members of the group began to actively seek out reassurance from each other that their beliefs were still valid; he realized that they were using each other as a basis for comparison to evaluate the validity of their beliefs. Social comparison can be upward or downward. Upward social comparison occurs when individuals compare themselves to others perceived as superior in a particular trait, ability, or

achievement, whereas downward social comparison occurs when individuals compare themselves to others perceived as lesser in a particular trait, ability, or achievement. For example, in a study conducted by Festinger (1954), participants performed a task and were then given feedback that was either positive or negative. He found that participants who received negative feedback were more likely to seek out the feedback of others who had also received negative feedback, suggesting that they were engaging in downward social comparison to feel better about themselves.

The motivation to engage in social comparison is influenced by two factors: relevance and uncertainty. Relevance refers to the degree to which a particular trait or ability is important to an individual, increasing the likelihood that they will engage in social comparison. For example, van der Meijden et al. (2019) found that students who perceived their academic performance as important were more likely to engage in upward social comparison (comparing themselves to those who performed better) than those who did not perceive academic performance as important; comparing themselves to students whose performance was stellar motivated them to reach the same performance level (Pekrun et al., 2019). This suggests that relevance plays a role in the type of social comparison that students engage in.

Uncertainty, on the other hand, refers to the degree of ambiguity or lack of information about an individual's own ability or opinion. For example, college students comparing their academic abilities to those of their peers in a highly competitive program where the criteria for success are ambiguous leads to uncertainty about their own abilities and performance (Tian & Sanchez, 2019). To assess their academic standing, they may compare themselves upward to get a sense of their competition and to ensure their

competitive edge. Uncertainty may also lead patients undergoing medical treatment to compare their symptoms and experiences to those of other patients with the same condition, particularly when there is uncertainty about the effectiveness of the treatment or the course of the illness (Ravert et al., 2020). Or, for example, job seekers may compare their skills and qualifications to other applicants when the job requirements are not clearly defined, leading to uncertainty about their own abilities and qualifications (Liu, 2020).

The impact of social comparison on self-evaluation depends on the similarity between the individual and the person to whom they are comparing themselves. The greater the similarity, the more likely the individual is to engage in social comparison and the greater the impact of the comparison on their self-evaluation and, ultimately, their self-esteem. For example, Yu et al. (2020) examined how similarity affects social comparison and self-evaluation in the context of social media. Participants were presented with social media profiles of people who were either similar or dissimilar to themselves in terms of their physical appearance, personality traits, and interests. The researchers found that when the profiles were similar to the participants, they were more likely to engage in social comparison and the impact of the comparison on their self-evaluation was stronger. On the other hand, when the profiles were dissimilar, participants were less likely to engage in social comparison and the impact on their self-evaluation was weaker (Yu et al., 2020). In the context of health behavior, Gerend and Aiken (2019) presented participants received feedback on their own and their peers' physical activity levels, finding that when peers were similar to participants in terms of demographic characteristics (e.g., age, gender), participants were more likely to engage in

social comparison and the impact of the comparison on their self-evaluation was stronger. Specifically, participants who received feedback indicating that they were less physically active than their similar peers reported lower self-efficacy and greater intentions to increase their physical activity compared to those who received feedback indicating that they were less active than dissimilar peers.

The theory states that individuals have a need for accurate self-evaluation and that social comparison is one mechanism through which this need is fulfilled ( Festinger, 1954). Festinger (1954) suggested that social comparison is more likely to occur in situations where individuals have a high degree of interdependence, such as in competitive or cooperative settings. Chang et al. (2020) examined social comparison in the context of group projects in an undergraduate course and found that students who perceived themselves as more interdependent with their group members were more likely to engage in social comparison with their peers, particularly in the areas of academic achievement and communication skills. The authors suggested that interdependence may increase the salience of social comparison by highlighting the relevance and impact of individual performance on group outcomes. To determine how interdependence influences social comparison in competitive and cooperative settings, Niermann et al. (2019) found that athletes with a high degree of interdependence were more likely to engage in social comparison and that this effect was particularly strong in competitive settings; specifically athletes who perceived their own performance as lower than their team's performance were more likely to engage in upward social comparison (i.e., comparing themselves to better-performing team members), presumably to boost their competitive edge.

Overall, Festinger's theory of social comparison proposes that individuals evaluate themselves by comparing their abilities, opinions, and attitudes to those of others, and that social comparison is motivated by the need for accurate self-evaluation. The theory suggests that the impact of social comparison on self-evaluation depends on the relevance of the trait or ability being compared, the degree of uncertainty about one's own ability, and the similarity between the individual and the person they are comparing themselves to. Social comparison theory was developed by Festinger based on his observations and experiments and has since been expanded and refined by other social psychologists.

Social comparison theory suggests that individuals often evaluate themselves by comparing their attributes, beliefs, and behaviors to those of others. This theory has been applied in numerous studies to examine the relationship between various dispositional characteristics and self-evaluation, including body satisfaction (Liu et al., 2023), self-efficacy (Miller et al., 2021), and tendency toward envy (Meier & Johnson, 2022). The following will be a review of studies that have previously applied social comparison theory.

Burroughs and Rindfleisch (2020) examined the relationship between materialistic values and social comparison orientation on self-esteem and life satisfaction, hypothesizing that higher levels of materialistic values would be negatively associated with self-esteem and life satisfaction and that this relationship would be further exacerbated by higher levels of social comparison orientation. In other words, they expected that individuals who placed a high value on material possessions and wealth would experience lower levels of self-esteem and life satisfaction, particularly if they

were also prone to comparing themselves to others in social situations. Participants were 252 US college students who completed the 18-item Material Values Scale (Richins & Dawson, 1992), the 11-item Social Comparison Orientation Scale (Gibbons & Buunk, 1999; e.g., "I often compare how well I am doing to how well others are doing" and "I often compare myself with others who are worse off than me"), the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965; e.g., "On the whole, I am satisfied with myself" and "At times, I think I am no good at all"), and the 5-item Satisfaction with Life Scale (Diener et al., 1985; e.g., "In most ways, my life is close to my ideal" and "I am satisfied with my life").

The results indicated that materialistic values and social comparison orientation were negatively correlated with self-esteem and life satisfaction, such that increases in materialism and social comparison were related to decreases in self-esteem and life satisfaction. In addition, social comparison orientation moderated the relationship between materialistic values and self-esteem, i.e., the negative relationship was stronger for individuals who had a high social comparison orientation. This study is relevant to the one I propose, as it provides insight into the potential negative consequences of materialistic values and social comparison orientation on individuals' self-esteem and life satisfaction. Understanding how these factors interact and influence self-worth can add to what is already known about dispositional influences on self-perceptions.

The purpose of this next study was to examine the relationship between social media use, social comparison orientation, and self-esteem. Vogel et al. (2020) hypothesized that individuals who engage in upward social comparison (i.e., comparing oneself to others who are perceived as better off) on social media are more likely to

experience lower self-esteem than those who engage in downward social comparison (i.e., comparing oneself to others who are perceived as worse off) or who do not engage in social comparison on social media. The article also examines the role of various individual and situational factors that may moderate the relationship between social media use, social comparison, and self-esteem. Seven hundred US adults completed the 16-item, 6-dimension (i.e., preoccupation, mood modification, withdrawal, conflict, relapse, and problems) Social Media Disorder Scale (Van den Eijnden et al., 2016), the 11-item Social Comparison Orientation Scale (Gibbons & Buunk, 1999)., and the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). Results revealed that social media use was negatively correlated with self-esteem, partially mediated by social comparison orientation. Specifically, individuals who spend more time on social media and engage in more social comparisons are more likely to experience lower levels of self-esteem. These findings suggest that social comparison orientation plays a mediating role in the relationship between social media use and self-esteem, highlighting the importance of considering individual differences in social comparison tendencies when examining the effects of social media use on self-esteem.

To investigate the influence of materialism and social comparison orientation on self-esteem, Richins and Dawson (2019) asked 400 adults (200 from the US and 200 from Spain) to complete the 18-item Material Values Scale (Richins & Dawson, 1992), the 11-item Social Comparison Scale (Gibbons & Buunk, 1999), and the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). The results of the study found that found that materialism was positively correlated with social comparison orientation, and that were negatively related to self-esteem. Additionally, social comparison orientation

was found to mediate the relationship between materialism and self-esteem, meaning that materialistic individuals tend to engage in more social comparisons, which in turn leads to lower levels of self-esteem. These findings suggest that social comparison orientation may be an important factor to consider when examining the relationship between materialism and self-worth.

Much has been made of the impact of social comparison on body satisfaction. To that end, Fardouly et al. (2020) examined the relationship between social media use, appearance comparison, and body dissatisfaction and whether this relationship is moderated by materialism. The study consisted of 573 US adolescents (61% female) who completed the 10-item Social Media Intensity Scale that measures the time spent on social media, its importance in daily life, and its effects on mood and relationships (Kirschner & Karpinski, 2010), the Appearance Comparison Scale (Thompson, 2000), the Body Image States Scale (Silva-Breen, 2022), and the Material Values Scale (Richins & Dawson, 1992). The results found that social media use and appearance comparison were positively correlated with body dissatisfaction. Additionally, materialism was found to moderate the relationship between social media use and body dissatisfaction, such that the relationship was stronger for individuals with higher levels of materialism. This suggests that materialistic individuals are more susceptible to the negative effects of social media on body image.

In another study, Wang et al. (2020) investigated the relationship between perceived control over one's life, social comparison, and self-worth, hypothesizing that perceived control over one's life would be positively related to self-worth and negatively related to social comparison. They also hypothesized that social comparison would be

negatively related to self-worth. Participants were 467 Chinese university students, aged 18 to 25 years old (M=20.16, SD=1.33) who completed the 7-item Perceived Control Scale (Pearlin & Schooler, 1978) to assess individuals' sense of personal control and mastery over their environment, the Social Comparison Orientation Scale (Gibbons & Buunk, 1999), and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). The results of the study showed that perceived control over one's life was positively related to self-worth and negatively related to social comparison. Social comparison was negatively related to self-worth. These findings suggest that individuals who feel in control of their lives are more likely to have higher self-worth and engage in less social comparison. Specifically, these findings suggest that perceived control over one's life contributes importantly to self-worth and that engaging in less social comparison is also associated with higher self-worth. These findings highlight the importance of promoting a sense of control over one's life and minimizing social comparison in enhancing self-worth.

Taking a slightly different approach, Van de Ven et al. (2019) investigated the relationship between upward social comparison, perceived control, and self-worth, hypothesizing that upward social comparison would be negatively related to self-worth and that this relationship would be moderated by perceived control over one's situation. Specifically, they hypothesized that the negative effect of upward social comparison on self-worth would be attenuated when individuals have a sense of control over their situation. Participants were 235 Dutch adults, aged between 18 and 68 years (M=41.14, SD=12.56), who completed  The instruments used to measure the variables were three self-report measures to assess the variables of interest: the 11-item Social Comparison Scale (Gibbons & Buunk, 1999), the 7-item Perceived Control Scale (Pearlin & Schooler,

1978), and the 20-item State Self-Esteem Scale (Heatherton & Polivy, 1991) that measures positive and negative affective states related to self-esteem. The results showed that perceived control moderated the negative relation between upward social comparison and self-worth, such that the negative effect of upward social comparison on self-worth was attenuated for individuals who had a high sense of control over their situation. These findings suggest that having a sense of control over one's situation can protect against the negative effects of upward social comparison on self-worth. This finding is particularly relevant to individuals who may be more susceptible to the negative effects of social comparison, such as those who prioritize materialistic values or engage in high levels of social media use.

### *How Social Comparison Theory Relates to the Study and Research Questions*

The social comparison theory is well-suited to inform this study as it provides a framework for understanding how individuals evaluate their own worth and abilities based on social comparisons with others, particularly those perceived as similar to themselves in relevant ways. In the context of the research problem, social comparison theory can help to explain the mechanisms through which materialistic values and social media use may impact individuals' self-worth; individuals who are materialistic and who use social media extensively may be particularly susceptible to engaging in social comparisons with others (Festinger, 1954). Additionally, individuals who place a high value on material possessions may engage in frequent social comparisons with others perceived as wealthier or more successful, leading to feelings of inadequacy and diminished self-worth. Similarly, individuals who use social media extensively may be

exposed to a constant stream of idealized images and lifestyles, leading to unrealistic expectations and comparisons that can impact their self-worth (Gao et al., 2020).

## Literature Review Related to Key Variables

### Materialistic Values

To investigate the impact of others' income on the life satisfaction of materialists, Schalembier et al. 2020 hypothesized that materialistic individuals highly value possessions and financial wealth and the tendency themselves to others on the basis of material possessions may negatively impact their self-esteem. A sample of 305 participants completed measures of materialism, upward social comparison, and life satisfaction. The survey also included a manipulation check to assess the perceived income of others. Participants were randomly assigned to one of four conditions, differing only in the perceived income of others in relation to their own income. Results indicated that materialistic individuals who perceive themselves as being less well-off than others experienced a significant decrease in life satisfaction, whereas materialistic individuals who perceive themselves as being better off than others experienced a significant increase in life satisfaction. The results also found that upward social comparison partially mediated the relationship between materialism and life satisfaction, such that materialism is associated with lower life satisfaction in part because materialistic individuals are more likely to engage in upward social comparison. These findings suggest that the income of others has a significant impact on the life satisfaction of materialistic individuals, particularly when they perceive themselves as less well-off than others. These findings suggest that the income of others has a significant impact on the life satisfaction of materialistic individuals, particularly when they perceive

themselves as being less well-off than others. The study highlights the importance of considering the social context in which materialistic values are formed and reinforced and the potential negative impact of social comparison on life satisfaction.

Acknowledging the important role that mass media, particularly the internet, plays in shaping individuals' attitudes towards materialism and brands, Rai et al. (2020) aimed to determine if the amount of time individuals spend on the internet predicts their materialistic values and brand knowledge (i.e., familiarity and associations with a particular brand). The authors hypothesized that individuals who spend more time on the internet may be exposed to more advertising and marketing messages, resulting in a disproportionate influence on the development of materialistic values and brand knowledge. A sample of 219 participants completed measures of materialistic values, brand knowledge, and media consumption habits. As predicted, results indicated that the number of hours individuals spent on the internet was significantly and positively related to materialistic values and brand knowledge and they were more likely to view material possessions as a symbol of success and social status. However, the authors did not find a significant relationship between media consumption and brand knowledge. This research has important implications for marketers and policymakers, who may want to consider the impact of media consumption on individuals' values and behaviors.

Given the media portrayal of material possessions and consumption as desirable and necessary for social status and happiness, Yu and Nam-Speers (2017) aimed to determine if mass media exposure leads to the development of materialistic values and buying impulsiveness among urban adolescents. The authors identified several factors, both environmental (i.e., parents, peers, schools, mass media) and individual (i.e., self-

esteem and materialistic values) with the potential to explain compulsive consumption among adolescents, predicting direct relations between parental, peer, and school influence on buying impulsiveness, mediated by self-esteem and materialistic values, and moderated by mass media exposure. To test their hypotheses, 431 urban youth completed measures of media exposure, materialistic values, and buying impulsiveness. The authors found that mass media exposure was positively correlated with materialistic values and buying impulsiveness and that materialistic values were positively correlated with buying impulsiveness. Results also indicated that parents decreased and peers significantly increased adolescents' compulsive buying, but neither schools nor self-esteem had any impact. As predicted, mass media moderated the relationship between schools and materialistic values, such that mass media exposure strengthened the relationship but only among high exposure participants. Lastly, the direct negative effect of parents and schools on compulsive buying was reversed by the mediation influence of materialistic values. Previous research on the relationship between self-esteem and materialism has reported mixed results, with some studies suggesting that low self-esteem is associated with higher levels of materialism, while others find no relationship (Yu & Nam-Speers, 2017).

Zhang and Hawk (2022) suggest that one reason for these mixed findings may be that self-esteem can be conceptualized in different ways and that different conceptualizations may relate to materialism differently. The authors reconceptualize self-esteem as *perceived self-esteem stability*, suggesting that individuals who perceive their self-esteem as unstable may be more likely to value material possessions as a means of obtaining stability and that this relationship may be moderated by social norms about

materialism (Zhang & Hawk, 2022). To test their hypotheses, the authors conducted two studies. Using a longitudinal correlational design, Study 1 examined relations between self-esteem stability, perceptions of social norms, and materialistic values. A sample of 303 college students completed the 10-item Rosenberg Self Esteem scale (Rosenberg, 1965), 5-item Stability of Self scale (Rosenberg, 1979), 9-item Materialistic Values Scale (Richins, 2004), and three items measured individuals perceived descriptive social norms about materialistic values (e.g., “Most of the people around me take material and financial success as the standard of their life success”). The authors found that perceived self-esteem stability was negatively associated with materialistic values and that this relationship was stronger among individuals who perceived higher social norms about materialism.

Using an experimental design, Study 2 randomly assigned 236 college students to groups that read a passage emphasizing either the importance of material possessions or the importance of non-material values; participants completed the same self-report measures as Study 1 (Zhang & Hawk, 2022). Results indicated that participants who perceived their self-esteem to be unstable reported higher levels of materialistic values after reading the passage that emphasized the importance of material possessions, but not after reading the passage that emphasized the importance of non-material values. This study highlights the impact of exposure to idealized images of models on social media on young women's social comparison orientation and body image dissatisfaction (Zhang & Hawk, 2022).

To gain insight into the role social media influencers play in consumer purchasing, Lee et al. (2022) aimed to identify the gratifications sought by consumers

who follow these micro-celebrity influences on Instagram to examine the influence of materialism on these pursuits. To that end, the authors examined (a) consumer motives to follow influencers, (b) associations between motives to follow influencers and trust in influencer brand-related posts, and (c) links between motives to follow influencers and frequency of buying influencer-recommended products. The authors hypothesized that materialistic values would influence consumers' motives for following influencers (e.g., desire for status, social comparison, and self-enhancement), these motives would be positively associated with engagement with influencer content (e.g., liking, commenting, and sharing influencer posts), and that trust in influencer-recommended brands would increase frequency of purchasing those brands. Participants were 395 Instagram users who completed open-ended responses to motivation for following social media influencers, Richin's (2004) Material Value Scale (e.g., "I admire people who own expensive homes, cars, and clothes"), trust toward brand-related posts (adapted from Ohanian's Source Credibility Scale, 1990), and purchase frequency was measured with a single item (i.e., how often the participant purchased products and brands recommended by social media influencers). The findings revealed four motivations for following social media influencers on Instagram: authenticity, consumerism, creative inspiration, and envy. These motives had varying effects on trust towards social media influencers' brand-related posts and frequency of purchasing influencers' recommended brands. Authenticity was the strongest predictor of trust, while consumerism was associated with increased frequency of purchasing influencers' recommended brands. Materialism was found to be strongly associated with all four motives, indirectly influencing consumers' purchase behavior.

To extend the current debate about the impact of social media use and materialistic values on consumption behaviors, Pellegrino et al. (2022) examined the potential for exposure to materialistic content on social media platforms to encourage compulsive (i.e., chronic purchasing of goods repeatedly and excessively), conspicuous (i.e., showing off expensive items or services to impress and improve one's social status), and impulsive buying (i.e., immediate response to a stimulus with no consideration of potential purchase outcomes). The authors hypothesized that social media exposure to materialistic content would strengthen the relationship between materialism and negative consumption behaviors, as materialistic content may reinforce the importance of material possessions and status. The authors hypothesized, further, that attitudes toward social media content (i.e., emotional responses to paid forms of non-personal presentation and promotion by sponsors of ideas, products, or services) and social media intensity (i.e., users' levels of activity and engagement with social media; extent to which social media is integrated into everyday life) would mediate the relationship between materialism and consumer behavior. Several thousand survey invitations were sent and received 176 completed responses. The two social media platforms selected for this study was Facebook and Instagram as they are among the top 5 most-used platforms based on the e-commerce in Thailand. The results of the study support the authors' hypothesis that exposure to materialistic content on social media, mediated by social media intensity, strengthens the relationship between materialism and consumption behaviors such that individuals who are more prone to comparing themselves to others on social media may be particularly vulnerable to the effects of materialistic content.

To further investigate the influence of social media use and materialism on emotional and psychological wellbeing, Bible et al. (2021) aimed to determine if excessive time spent on social media platforms, where users are inundated with messages about material wealth, social status, and ideal self-presentation, has implications for self-stigma related to mental health. Obsessed with maintaining a positive self-image, adolescents who engage frequently with social media platforms may internalize idealized appearance and lifestyle expectations and find themselves lacking by comparison. The authors hypothesized that desire to seek others' validation would compel adolescents with a materialistic values orientation not only to use social media platforms but to ruminate on, internalize, and feel threatened by its idealized norms, threats that may be self-stigmatizing. In this case, self-stigma is defined as self-perceived inadequacies potentially requiring psychological help. Participants were 175 adolescents who completed the 35-items Aspiration Index (measures materialistic values orientation; Kasser & Ryan, 1993), General Social Media Usage subscale (Rosen et al., 2013), 12-item Social Media Rumination Scale (Parris et al., 2020), 10-item Self-Stigma of Seeking Help (Vogel et al., 2006), and K6+ measured psychological distress (Kessler et al., 2002). As predicted, results indicated that individuals who prioritize external validation of their image and social status are more likely to anticipate stigmatization when seeking psychological help. Furthermore, results revealed indirect pathways by which materialistic value orientation influenced anticipated self-stigma. Specifically, materialistic value orientation was associated with higher social media usage which, in turn, was linked to increased social media rumination. This rumination on social media content was then associated with higher levels of anticipated self-stigma. The study

suggests that adolescents with materialistic values orientation may engage in frequent social media usage and rumination, amplifying concerns about self-image and validation and the stigmatizing nature of seeking psychological help.

Materialistic values can have a profound impact on an individual's self-worth. When one's self-worth becomes tied to possessions, wealth, or external markers of success, their sense of value and identity can become fragile and conditional. This reliance on materialistic measures of self-worth can lead to constant comparison, dissatisfaction, and a perpetual quest for more, hindering the development of true self-esteem and fulfillment (Bible et al., 2021).

**Social Media Use**

Given the immense popularity of social media, a great deal of research has been generated by psychologists aiming to determine its psychological impact on users. To extend this body of research, Reer et al. (2019) examined the relationship between three indicators of diminished psychosocial wellbeing (i.e., loneliness, anxiety, and depression) and social media engagement. The authors also investigate the potential mediating factors of FoMO and social comparison orientation to provide a deeper understanding of the underlying mechanisms. Fear of missing out refers to the feeling of being excluded from rewarding experiences others are having, leading individuals to stay constantly connected and informed about others' activities. Previous research has shown that people with decreased psychological wellbeing experience more FoMO, resulting in increased social media use. Social comparison orientation refers to an individual's tendency to compare themselves with others. High social comparison orientation is prevalent among individuals with low psychological wellbeing as they seek to reduce self-uncertainty. The

results indicated a relationship between psychosocial well-being (i.e., loneliness, anxiety, and depression) and social media engagement, such that participants with lower levels of psychosocial well-being tend to use social media more extensively. Results also showed that social comparison orientation and FoMO mediated the relationship between psychosocial well-being and social media engagement; participants high in loneliness, depression, and anxiety engage in more social comparisons and experience higher levels of FoMO, leading to increased social media use. These findings suggest that individuals with emotional and social problems may turn to social media as a coping mechanism or to fulfill their needs for connection, which can further impact their well-being.

To further investigate the influence of social media use on psychological wellbeing, Tiggemann and Anderberg (2020) experimentally examined the impact of exposure to social media images on women's body satisfaction. Informed by social comparison theory (Festinger, 1954), which suggests that individuals evaluate their own abilities and worth by comparing themselves to others. Social media provides an opportunity for individuals to engage in upward social comparison (i.e., comparing oneself to idealized images), which can have negative effects on body image. The authors hypothesized that exposure to an idealized image juxtaposed with the real image of that same person would reveal the reality behind idealized social media posts, thereby reducing the negative effects of upward comparison tendencies on body image (Tiggemann & Anderberg, 2020). Participants were 305 randomly selected females aged 18-30 from a large public university in Australia who were randomly assigned to one of three sets of Instagram images: the *ideal* image alone, the *real* image along, or the *idealized vs. real* images. Participants completed measures of social media use, body

dissatisfaction, body appreciation, appearance comparison, and perceived realism, thinness, and attractiveness; all but social media use were assessed before and after exposure to the treatment conditions. Results supported the authors' hypothesis, such that exposure to idealized Instagram posts increased social comparison and negative body image, while exposure to *idealized vs. real* images reduced social comparison and improved body image. Specifically, the exposure to idealized vs. real images resulted in a significant decrease in appearance comparison, body dissatisfaction, and drive for thinness. These findings have important implications for understanding the impact of social media on body image and the mitigating potential of promoting more realistic and diverse portrayals of body image on social media.

Depression is a common condition in the US and research has found some association between social media use and depression among young people. To assess the link between social media use and depression, Lin et al. (2016) surveyed a nationally representative sample of 1787 US adults aged 19 to 32, recruited through random sampling. To measure depression, the 4-item Patient-Reported Outcomes Measurement Information System (National Institutes of Health Roadmap initiative) was used. Social media was assessed with participants' self-reported total times per day they used social media. Covariates with the potential to influence the relationship between social media use and depression were race, relationship status, living situation, household income, and education level. Consistent with other findings (e.g., Christakis et al., 2011), results indicated that participants whose total time per day on social media was highest were significantly more likely to experience depression than those who used social media less, after controlling for all covariates. The authors concluded that due to the high usage of

social media and the significant morbidity and mortality due to depression in the world, the likelihood that depression is associated with excessive social media use has significant implications for intervention and future research.

Social media has become fully integrated in most everyone's lives, raising concerns about its impact on mental health, especially among adolescents. To examine the bidirectional link between adolescent use of social media, social media use problems (e.g., depressive symptoms, emotional problems, addiction-like social media use, diminished ability to regulate social media use impulses, stress and/or anxiety when social media access is denied), and mental health among adolescents, Boer et al. (2021) conducted a 3-way longitudinal study with 2109 secondary school students (2016, 2017, 2018), hypothesizing that addiction-like social media use would decrease mental health and that lower mental health would increase social media use problems. Participants completed the 9-item Social Media Disorder Scale (Van den Ejinden et al., 2016), the 4-item SMU intensity measured the frequency of social media use (Boer et al., 2020), the 6-item Depressive Mood List (Kandel & Davies, 1982), 7-item Student's Life Satisfaction Scale (Huebner, 1991). Other variables include upward social comparison, cyber victimization, subject school achievements, and face-to-face contact with friends. Results revealed that adolescents with social media use problems had higher depressive symptoms and decreased life satisfaction. Additionally, social media use problems predicted increases in both cyber victimization and upward social comparison. The authors conclude that the considerable amount of time adolescents spend on social media raises concerns as it pertains to mental health.

Adolescents' need for almost constant engagement with social media, a compulsion compounded by a fear of missing out when not connected, has led to anxiety and impaired social functioning (Glover & Fritsch, 2018). To get a sense of how social media use impacts adolescent mental health, Damodar et al. (2022) conducted a literature search of PubMed from June 2010 through June 2020 to identify English-language studies that addressed anxiety and/or depression among adolescents aged 13 to 18 years old. Twenty-three articles met the criteria, including 10 literature reviews, nine systematic reviews, two observational studies, one experimental study, and one meta-analysis. A correlation between social media use and depression was found in 82.6% of the articles, among which the most commonly reported sources of depression were cyberbullying, diminished self-esteem, and sleep disturbance. Social media use was related to anxiety in 78.3% of the articles; among these, social media use corresponded with the same mental health issues as with depression. A majority of the studies recommended therapeutic interventions (i.e., screen-time restrictions and social and therapeutic support, but none examined their implementation. Given the widespread popularity of social media and the mounting evidence of its association with mental health problems among adolescents, future research would be well-advised to investigate ways to counteract these negative effects.

As the preponderance of studies that address the relationship between adolescent social media use and mental health is cross-sectional, Primack et al. (2021) conducted a much-needed longitudinal study to assess the temporal association between social media use and depression from baseline to 6 months later. Participants ($N$ = 1289) aged 18-30 were recruited a large national cohort (White non-Hispanic, Black non-Hispanic,

Hispanic, and Asian), using Qualtrics Sampling Services. Baseline data included participant sociodemographic (i.e., age, sex, race, ethnicity, educational level, household income), personal characteristics (i.e., relationship status, living situation, and adverse childhood experiences), depression, and social media use. Depression was measured at baseline and at follow-up, using the 9-item Patient Health Questionnaire (e.g., "Over the past 2 weeks, I've had little interest or pleasure doing things or feeling down, depressed, or hopeless"). To measure social media use, participants were given a list of the 10 most popular social media sites and asked to report the average time spent daily on social media; this was measured at baseline and at follow-up. Results indicated a significant positive correlation between baseline social media use and depression, controlling for all covariates. Participants reporting the highest social media use were significantly more likely to develop depression than those reporting the lowest social media use. However, this effect was not bidirectional; depression at baseline was not related to increased social media use at follow-up. The authors suggested that practitioners working with depressed patients should recognize social media use as a potential risk factor.

**Self-worth**

Perceived self-worth is also impacted by the breakup of a relationship, especially when one's sense of self-worth is contingent on being in a romantic relationship. This was investigated by Park et al. (2011) who argued that the extent to which self-worth depends on their relationship status predicts how they respond to relationship dissolution. The authors hypothesized that individuals whose self-worth is based on being in a relationship will experience high levels of emotional distress, compelling them to obsessively pursue their ex-partner in an effort to reinstate their relationship. The study

participants included 312 individuals recruited through email who had experienced romantic breakups. Relationship contingency self-worth was measured using four items adapted from Sanchez and Wang (2007; e.g., “I feel worthwhile when I have a significant other”), the 12-item Multiple Adjectives Affect Check List (Zuckerman & Lubin, 1985) measured emotional distress, and the 32-item Obsessive Pursuit Scale (Davis et al., 2000) measured behaviors ranging from mild, severe, and Internet stalking. The authors controlled for attachment styles, self-esteem, and rejection sensitivity. As predicted, results revealed that greater reliance on relationship status as a basis for self-worth was related to greater breakup distress which, in turn, increased obsessive pursuit of ex-partners.

The relationship between self-worth and problematic social media use is currently of interest to social psychologists. To date, studies have documented associations between excessive social media use and psychological issues (e.g., loneliness, anxiety, depression), especially when social comparison exposes users to idealized appearances and lifestyles. However, studies have not yet examined self-worth as related to a behavioral compulsion such as social media misuse. To that end, Prosek et al. (2023) aimed to determine if self-worth and envy (i.e., coveting what others have, feelings of inferiority) predicted social media misuse (i.e., compulsive use, loss of control, detrimental effects on physical and psychological wellbeing). Participants ($N$ = 307) U.S. college students who completed the 14-item Social Media Addiction Scale (Al-Menayes, 2015; e.g., *I often cancel meeting my friends because of my occupation with social media*), 35-item Contingencies of Self Worth Scale (Crocker et al., 2003); subscales measure family support, competition, appearance, God’s love, academic competence,

virtue, and approval from others, and the 10-item Benign and Malicious Envy Scale (Lange & Crusius, 2015). Results showed that self-worth was the strongest predictor of social media misuse; in particular, participants whose self-worth was contingent on appearance, approval from others, and God's love were most likely to misuse social media.

Owing to its immense popularity, especially among adolescents and young adults, interest in the relationship between social media use and its emotional and psychological impacts persists. Although most of the current studies have found that excessive social media use is related to loneliness, anxiety, depression, and fear of missing out, a balanced appraisal of the findings also reports some positive effects, e.g., social connectedness, albeit with some caveats. For example, the pursuit of social connectedness requires significant time spent on social media sites, and with it, the feedback from other users that inevitably impact one's sense of self-worth. To that end, Sabik et al. (2019) examined the impact on psychological wellbeing when one's sense of self-worth is contingent on social media feedback. The authors hypothesized that when self-worth is dependent on social media feedback, psychological wellbeing suffers (i.e., higher self-reported stress, lower resilience, higher depressive symptoms, lower self-kindness. They also hypothesized that self-worth contingent on social media feedback as related to indicators of psychological wellbeing will be moderated by social media use for purposes of status seeking.

One hundred sixty-four college-aged females recruited online in the United States completed the 6-item Self-Worth Dependent on Social Media Scale (Sabik et al., 2019) adapted from the Contingencies of Self-Worth Scale (Crocker et al., 2003), 13 items to

measure daily social media use (e.g., “How often do you comment on other individuals’ posts during an average day?”), 4-factor Social Media Uses and Gratifications Scale (*socializing, entertainment, self-status-seeking, information*; Park et al., 2009), 10-item Perceived Stress Scale (Cohen & Williamson, 1988), 6-item Brief Resilience Scale (Smith et al., 2008), 10-item Center for Epidemiologic Studies Depression Scale Revised (Andresen et al., 2018), and the Self-Compassion Scale (self-kindness subscale; Neff, 2003). Results indicated that females whose self-worth depended on social media feedback reported less resilience, less self-kindness, and more depression and stress and were more likely to use social media for status-seeking.

While acknowledging that social media has benefits, most notably its opportunity for social connectedness, its widespread popularity, and the tendency among many toward compulsive use, studies are now investigating Facebook addiction and the toll it takes on self-worth. To that end, Kanat-Maymon et al. 2018 examined the relationship between contingent self-worth (i.e., *social acceptance* domain) and Facebook addiction, hypothesizing that the pursuit of social acceptance (i.e., high contingent self-worth) is positively related to Facebook addiction. Participants ($N = 337$) with active Facebook accounts completed the 6-item Bergen Facebook Addiction Scale (e.g., “I am using Facebook in order to forget my personal problems”; Andreassen et al., 2012), Facebook usage time was measured by asking how many hours, on average, the participant engaged in daily Facebook use, the 5-item social acceptance subscale of the Contingencies of Self-Worth Scale (e.g., “My self-esteem depends on the opinions others hold of me”; Crocker et al., 2003), 10-item Global Self-Esteem Scale (e.g., “I feel that I’m a person of worth at least on an equal plan with others”; Rosenberg, 1989), and the 44-item, 5 subscale Big

Five Inventory (John et al., 1991). Results revealed that over and above accounting for global self-esteem and individuals' personality traits, participants with higher levels of social acceptance contingency self-worth spent more time on Facebook, showing higher levels of Facebook addiction.

There is no shortage of literature that examines the link between social media use and psychological wellbeing, as the various platforms present novel opportunities not only to curate an online persona but to influence one's sense of self-worth in the process. In an effort to determine how Instagram users regulate their online selves, and to what effect, Lopez and Polleta (2021) examined the relationship between social anxiety, contingent self-worth tied to Instagram use (i.e., self-esteem that arises from approval one gains while posting content on Instagram), and content control of Instagram self-images (e.g., editing captions, disabling comments). The authors hypothesized that socially anxious individuals, whose self-worth was contingent on their Instagram presence, would be more likely to manipulate their online self-image. Participants ($N = 247$) were a geographically diverse sample of frequent Instagram users, aged 18 to 65, who completed the 30-item Social Anxiety Questionnaire for Adults (Caballo et al., 2012) to rate levels of discomfort across various social situations, the Contingencies of Self-Worth Scale *subscale* (i.e., contingent self-worth based on others' approval; Crocker et al., 2003), and Instagram control behaviors (e.g., editing photos/content and filter, delete, or disable comments) were measured with a 3-item survey (e.g., "How often do you edit the captions of your posts after you have posted?"). Consistent with hypotheses, results indicated that those who reported high levels of social anxiety staked their self-worth on Instagram approval and were more likely to regulate their Instagram self-images than

those who were less socially anxious. Results also found, not surprisingly, that Instagram approval increased self-esteem, compelling those whose self-worth was contingent on continued positive recognition from other Instagram users to engage in more online self-image manipulation.

Depression is a significant factor associated with low self-worth. This is highlighted by Ishizu et al. (2022) in a study that aimed to investigate whether psychological inflexibility (i.e., fixed idea of who one is) mediates the relationship between contingent self-worth (i.e., dependence of the approval of others) and depressive symptoms among adolescents. Participants were 210 Japanese junior high school students aged 12 to 15 asked to complete the 11-item Japanese adaptation of the Self-Worth Contingency Questionnaire (Ishizu & Shimoda, 2012; e.g., "If other people's feelings about me change, my feelings of self-worth change as well"), 18-item Japanese version of the Depression Self-Rating Scale for Children (Murata et al., 1996), and the 8-item Japanese version of the Avoidance and Fusion Questionnaire for Youth (Ishizu et al., 2014; e.g., "The bad things I think about myself must be true"). All instruments were tested and found to be valid and reliable. While contingent self-worth did not directly influence depressive symptoms, results indicated that psychological inflexibility, influenced by contingent self-worth, did predict depressive symptoms.

## Summary and Conclusions

The literature reviewed highlighted the relationships between materialistic values, social media use, social comparison orientation, and an individual's self-worth. Materialistic individuals often attach their self-worth to possessions and financial success, which can impact their overall life satisfaction. Social media platforms play a

significant role in shaping materialistic values and self-worth; exposure to idealized lifestyles and possessions on social media can lead to upward social comparison and negatively affect self-worth. Studies have found that social comparison orientation, particularly upward social comparison, tends to strengthen the negative relation between materialism and life satisfaction; materialistic individuals tend to engage in more social comparison, contributing to lower life satisfaction. While the literature provides valuable insights into the relationships among these variables, gaps in what is known remain. Therefore, the proposed study will examine the relative strength of materialistic values, social media use, and social comparison orientation on individual self-worth.

Chapter 3 will provide details of the planned research design, sampling strategies, recruitment procedures and data collection procedures, instrumentation, and data analysis plan. This will be followed by threats to validity, ethical procedures, and ending with a summary.

# Chapter 3: Research Design and Methodology

## Introduction

The purpose of this quantitative study was to determine the relative strength of social media use (IV), social comparison orientation (IV), and materialistic values (IV) on self-worth (DV). I used hierarchical multiple regression to determine the extent to which each independent variable explained the variance in self-worth. Chapter 3 includes details of the planned research design, sampling strategies, recruitment and data collection procedures, instrumentation, and data analysis plan. These are followed by threats to validity and ethical procedures. The chapter concludes with a summary.

## Research Design and Rationale

In this study, I used a cross-sectional, non-experimental, correlational survey design. A quantitative design was appropriate as it measures relationships among variables using published instruments tested for reliability and validity. Quantitative research tends to generate objective data less influenced by researcher bias. While qualitative research explores participant experiences via in-depth interviews, it does not use formal measures to quantify relationships among variables (Marczyk et al., 2005). I used a nonexperimental design because the preexisting variables of interest were not subject to manipulation (see Lobmeier, 2010). Survey research offers insight into the attitudes, beliefs, values, and intentions of individuals who meet the inclusion criteria of the target population. I used SurveyMonkey, a low-cost professional online survey platform that provides a large volume of data in a short period of time (see Goodwin, 2010).

# Methodology

## Population

The target population for this study was English-speaking adults, who are 18+ years old. Participants were limited to those living in the United States to minimize potential cultural differences in attitudes toward self-worth. Though using social media has become more common for young adults, a recent survey (Lopez & Polletta, 2021), suggested that 90% of young adults 18+ years old use social media. Therefore, due to the prevalence of young adults getting phones at a younger age combined with the addictive nature of social media, this resulted in many young adults spending hours each day on social media. Participants answered demographic questions assessing their age, gender, and primary language. Based on the United States Census data, the target population represented approximately 260,836,730 million English-speaking 18 years of age and older who use social media (Atske, 2022).

## Sampling and Sampling Procedures

Participants were self-selected using a nonprobability convenience sampling strategy; SurveyMonkey recruited participants from their audience pool. Individuals who met the inclusion criteria (i.e., English-speaking, 18+ years of age, living in the United States) were notified via email that they qualified to participate at which time they received the link to the survey where they could choose to participate if they wished to do so.

To determine the minimum sample size needed for the study, a power analysis was conducted using G*Power 3.1 (Faul et al., 2009). Using an alpha level of .05, a power of .80, three predictor variables (i.e., social media use, social comparison

orientation, and materialistic values), and an estimated effect size of .10, the recommended sample size is 114. The estimated effect size was selected, as the effect sizes of relationships between materialistic values, social media use, and social comparison orientation ranged from small to medium (see Pellegrino et al., 2022).

**Recruitment, Participation, and Data Collection**

I received Walden's Institutional Review Board (IRB) approval. I used SurveyMonkey to recruit participants. Those who met all inclusion criteria and wished to participate received a link directing them to the consent form, screening questions to ensure eligibility was met, a demographic questionnaire, and the survey. Before participating in the study, all prospective participants were required to complete an informed consent form. To safeguard participants' rights, the informed consent ensured that all participants were fully capable, well-informed, and participating voluntarily. The informed consent detailed expectations for participation, study procedures, potential participation risks, the use and protection of research findings, privacy assurances, and the potential benefits to future research. Participants also received my contact information and the contact information for Walden University's participant advocate should they have any concerns or questions regarding the research or their rights. The actual study was not fully disclosed in the consent form; rather, passive deception will be used to maximize the collection of reliable data. Fully disclosing the purpose of the study may incline participants either to respond as they think the researcher wants or to withhold the desired responses intentionally. All data was collected anonymously. My contact information was provided along with contact information for Walden University's

participant advocate should they have concerns or questions about the research or their rights.

After granting consent, potential participants were asked to answer screening questions to verify their eligibility for the study. Those who did not meet these criteria were directed to a page expressing gratitude for their interest, informing them of their ineligibility, and providing my contact information for any inquiries they may have. Participants who met the inclusion criteria were presented with a brief demographic questionnaire to collect information about their age, gender, primary language, and confirmation of residence in the United States. Following this, they proceeded to complete the survey, which typically took around 20 minutes. Upon completing the survey, participants were directed to a page expressing appreciation for their time and participation. This page also offered an overview of the true purpose of the study and included my contact details for any further questions or concerns.

## Instrumentation and Operationalization of Constructs

### Demographic Questionnaire

A demographic survey (Appendix A) sent via Survey Monkey was used to collect participant information, including age, gender, primary language, and current residency. The demographic questionnaire took less than 1 minute to complete.

### Materialism Scale--Modified

The 9-item Materialism Scale (Sirgy et al., 2012) measures beliefs about the importance of owning material things. Comprised of three subscales (centrality, success, and happiness), participants endorse statements they feel to be true using a 5-point scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*) and takes approximately 3 to 5

minutes to complete. Scores are summed across all nine items. The Materialism Scale is in the public domain and is authorized to be used for the purpose of research without the authors' permission.

***Reliability and Validity***

For the composite reliability estimation, I followed the Anderson and Gerbing (1988) convention, computing composite reliabilities for each dimension of the scale; this indicates the degree to which the dimensions reliably measure the underlying construct. Composite reliability is preferred with confirmatory and Cronbach's alpha with exploratory factor analysis. Composite reliabilities across items for each dimension (i.e., happiness, social recognition, and uniqueness) were .836, .855, and .858, respectively. Cronbach's alpha for the original items that comprise each dimension was .834, .851, and .850, respectively. These values are relatively high, which suggests that the items within each dimension are consistent and reliable indicators of materialism.

Convergent validity is supported when the Average Variance Extracted (AVE) by each construct is greater than 0.50, and the composite reliability is equal to or greater than 0.60 (Fornell & Larcker, 1981). AVE scores for the three dimensions were .630, .663, and .670, respectively; composite reliability scores were .836, .855, and .858, respectively, demonstrating good convergent validity. Discriminant validity is supported when the squares of correlations between any two constructs were compared with the AVE estimates of those two constructs (Fornell & Larcker, 1981). In this case, the squared correlations ranged from .0004 to .3025, demonstrating acceptable discriminant validity.

**Social Media Use Questionnaire**

The Social Media Use Questionnaire (SMUG; Xanidis & Brignell, 2016) is a 9-item measure designed to assess how often an individual uses social media across two subscales (*withdrawal* and *compulsion*). A 5-point Likert scale, ranging from 0 (*never*) to 4 (*always*) indicates the extent to which participants agree with each item (e.g., "I struggle to stay in places where I will not be able to access social networking sites" and "I feel guilty for the time I spend on social networking sites"). Subscales are scored separately by summing participants' responses to items in each, with higher scores representing a higher degree of motivation within that subscale and should take five to ten minutes to complete. The Social Media Use Questionnaire measure is in the public domain and is authorized to be used for the purpose of research without the authors' permission.

***Reliability and Validity***

The internal reliability of the Social Media Use Questionnaire was assessed using Cronbach's alpha, with a reported alpha of 0.83 for the *withdrawal* and 0.82 for the *compulsion* subscale (Xanidis & Brignell, 2016); the overall Cronbach's alpha for all items in the SMUQ was even higher at 0.87. These values are generally considered acceptable, indicating that the items within each subscale are consistent in measuring the intended construct.

Convergent validity was tested by comparing the Social Media Use Questionnaire with other relevant measures, such as the Internet Addiction Diagnostic Questionnaire (*withdrawal* = .65, *compulsion* = .72), Pittsburg Sleep Quality Index (*withdrawal* = .52, *compulsion* = .47), and Cognitive Failures Questionnaire (*withdrawal* = .51, *compulsion*

= .58). These correlations indicated that the SMUQ aligns with related constructs, demonstrating good convergent validity.

**Iowa-Netherlands Comparison Orientation Measure (INCOM)**

The Iowa-Netherlands Comparison Orientation Measure (Gibbons & Buunk, 1999) is a 23-item questionnaire designed to assess comparison behaviors across three subscales (i.e., *social, upward,* and *downward*). A 5-point Likert scale, ranging from 1 (*I disagree strongly)* to 5 (*I agree strongly*) measures how individuals compare the way they feel, their opinions, their abilities, and/or their situation with other individuals. Each subscale is scored separately by summing participants' responses to items in each subscale, with higher scores representing a higher degree of motivation within that subscale; scores for the social comparison subscale range from 11-55 and for the upward and downward comparison subscales, scores range from 6-30. The questionnaire should take 15-20 minutes to complete. The Iowa-Netherlands Comparison Orientation Measure is in the public domain and is authorized to be used for the purposes of research without the authors' permission.

***Reliability and Validity***

Internal consistency of Cronbach's alpha for the INCOM was found to be .83 in the original sample, which is acceptable within the .70 to .95 range (Gibbons & Buunk, 1999). The alpha remained consistent across different samples, ranging from .78 to .85 in American samples and .78 to .84 in Dutch samples. This indicates that the INCOM has high internal consistency, suggesting that the items in the scale are measuring a consistent underlying construct. The temporal stability was assessed through repeated measurements over time, with correlations ranging from .60 to .72. While these values are not extremely

high, they are acceptable for a construct like social comparison orientation, which is sensitive to situational factors. This suggests that the INCOM has reasonable temporal stability.

To assess convergent validity, each of several scales related to the social orientation construct were administered to at least one sample together with the INCOM. Moderately strong correlations were found with interpersonal orientation (Swap & Rubin, 1983; *r* = .43) and public self-consciousness (Fenigstein et al., 1975; *rs* = .38 to.49); stronger correlations were found with the Attention to Social Comparison Information Scale (Lennox & Wolfe, 1984; *rs* = .47 and .66). The INCOM demonstrates discriminant validity by showing weak or no correlations with measures of unrelated constructs, e.g., impulsivity (Wills et al., 1994; .04), well-being (Diener et al., 1985; -.13 to .03), and optimism (Life Orientation Test).

**Rosenberg Self-Esteem Scale**

The Rosenberg Self-Esteem Scale (RSES) is a 10-item, widely used instrument for measuring global self-esteem (Rosenberg, 1965). The Rosenberg Self-Esteem Scale uses a 4-point Likert scale, with responses ranging from *strongly agree* to *strongly disagree* in response to statements such as, “I feel that I am a person of worth, at least on an equal basis with others.” Five of the statements are negatively worded and reverse scored such as, “I wish I could have more respect for myself.” The RSES is an extensively used tool for measuring global self-esteem, including the broader implications of an individual's sense of value and worthiness. It is important to recognize that the constructs of self-esteem and self-worth, while distinct, often overlap, and the RSES provides a valuable tool for measuring both dimensions simultaneously (Lawrence

& Gonzales, 2022; Yovel et al., 2021). This comprehensive approach allows for a more nuanced understanding of an individual's overall sense of self-worth, and for that reason, it will be used in the proposed study.

The scale is scored on a unidimensional continuum; the minimum score is 0 and the highest possible score is 30, with higher scores indicating higher levels of self-esteem. Scores between 15 and 25 are considered to be within the normal range, with scores below 15 suggesting low self-esteem. The instrument should take approximately three to five minutes to complete. The Rosenberg Self-Esteem Scale is in the public domain and allowed to be used without author permission for research purposes.

***Reliability and Validity***

Because questions have been raised as to the suitability of the RSES to measure global self-esteem in populations other than university students, Sinclair et al. (2010) recruited a matched sample of 503 participants from the U.S. population, using Polimetrix, Inc., a professional sampling organization specializing in polling research. Participants represented 48 states, with roughly equal numbers of men and women widely distributed across demographics (e.g., age, employment, education, race/ethnicity, income, and marital status). Using Cronbach's coefficient α, internal consistency across subgroups was .91 for the overall sample and ranged from .84 to .95 across subgroups, meeting the .70 standard for group-level comparisons. Statistical results indicate satisfactory reliability for the RSES.

Convergent validity was tested by calculating the Pearson product-moment to ensure that the scale items are linearly related to the underlying construct being measured. Overall and across subgroups, all items (except one) correlated with external

measures of similar constructs at above the minimum required *r* of .40. Tests of discriminant validity found that the RSES was not theoretically related to either physical health (*r* =.25) or grandiose narcissism (*r* = .20). Convergent and discriminant validity are satisfactory for the RSES.

## Data Analysis Plan

Data collected from the SurveyMonkey platform was downloaded into the Statistical Package for Social Sciences (SPSS) version 29.0 for data analysis. Hierarchical multiple regression determined the relative strength of social media use, social comparison orientation, and materialistic values on self-worth. In hierarchical multiple regression, independent variables are entered into the regression equation in a series of steps, using theoretical reasoning to determine the order of entry. Hierarchical regression analysis involves running a series of regression analyses, each step adding one or more predictor variables in the order of predictive power (Warner, 2013). The theoretical framework and relevant literature suggest that social media use may have the greatest predictive strength on self-worth (Meier & Johnson, 2022), social comparison orientation would be the next strongest predictor (Lee, 2020), and materialistic values was be entered last. Regression assumptions of linearity, normality, homoscedasticity, and multicollinearity will be checked prior to running the regression analysis in SPSS (Geert van den Berg, 2023). Using scatterplots, linearity will be checked to ensure that each independent variable has a linear relation with the outcome variable. Normality will be tested by checking that prediction errors are normally distributed using histograms and Q-Q plots. Homoscedasticity will be examined using a scatterplot of residuals versus predicted values to ensure that the variance of errors is constant and that there is no clear

pattern in the distribution. Multicollinearity will be checked using variance-inflation-factor (VIF values) to ensure that the data do not include two or more highly correlated independent variables.

## Research Questions

RQ1: To what extent does social media use, as measured by the Social Media Use Questionnaire, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o1}$: Social media use is not a significant predictor of self-worth.

$H_1$: Social media use is a significant predictor of self-worth.

RQ2: To what extent does social comparison orientation, as measured by the Iowa-Netherlands Comparison Orientation Measure, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o2}$: Social comparison orientation is not a significant predictor of self-worth.

$H_2$: Social comparison orientation is a significant predictor of self-worth.

RQ3: To what extent do materialistic values, as measured by the Materialism Scale--Modified Scale, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o3}$: Materialistic values is not a significant predictor of self-worth.

$H_3$: Materialistic values is a significant predictor of self-worth.

## Threats to Validity

The proposed study poses several potential threats to validity. The inability to confirm eligibility poses a threat to validity. Self-report online surveys rely on the honesty of participants regarding inclusion/exclusion criteria. Screening questions about

age, language, and residency are presented to potential participants in an effort to ensure that this threat to validity is minimal. Self-selection bias is another threat to validity. The study will use a convenience sample rather than a random sample, with participants recruited through Survey Monkey; because participants are not randomly selected, the sample may not be representative, limiting the generalizability of the results (Etikan et al., 2016). Incremental validity is an effective way of using seriousness checks in online research surveys. Incremental validity refers to the additional value or benefit provided by a specific screening criterion, in this case, the seriousness check, when applied after other checks have already been performed (Aust et al., 2012). Online surveys are also vulnerable to social desirability bias in that participants tend to respond in ways that put them in the best light, rather than how they actually feel or what they actually believe; this is especially true when soliciting sensitive information.

## Ethical Procedures

Before participant recruitment and data collection, this study and procedures were presented to and approved by the Walden University Institutional Review Board approval #01-22-24-1003420 to ensure appropriate steps were taken to protect participant rights and welfare. Additionally, the informed consent will provide participants with an overview of the study, their role as participants, potential risks and benefits of participating, their rights, and privacy practices in an effort to make certain participants' consent is informed. All efforts will be made to ensure participants understand their participation is voluntary and that they may withdraw from the study at any time without consequence. Participants will be made aware of their rights to privacy to include that all data are collected without any personally identifying information, using encrypted

software, stored for a minimum of five years on a password-protected computer and a locked flash drive accessible only by me.

Participants may find the research topic to be sensitive and personal. They may have feelings and reactions to being asked about social media use, their self-esteem, their behaviors and traits, and their self-worth. The informed consent will outline the risks of the study, including evoking emotional distress. Participants will be reminded that participation is voluntary and that all responses are recorded anonymously. In an effort to reduce emotional distress or feelings of discomfort, participants will be referred to Mental Health America (http://www.mentalhealthamerica.net/search/node) and directed to the "Get Help" tab, which provides options for mental health support in their area. This resource will be included in the informed consent as well as the debriefing page to ensure all participants are familiar with how to access support should the need arise.

Chapter 4 will report the participant demographics. This will be followed by descriptive statistics, analysis of statistical assumptions, statistical analysis, and the results of the study, ending with a summary.

# Chapter 4: Results

## Introduction

In this quantitative research study, I determined the relative strength of materialistic values, social media usage, and social comparison orientation in predicting self-worth. I used hierarchical multiple regression. Chapter 4 includes the research questions and hypotheses and discussions of the data collection and screening procedures. Additionally, descriptive statistics and evaluation of the statistical assumptions are presented, culminating in presenting the multiple regression findings.

## Research Questions and Hypotheses

RQ1: To what extent does social media use, as measured by the Social Media Use Questionnaire, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o1}$: Social media use is not a significant predictor of self-worth.

$H_1$: Social media use is a significant predictor of self-worth.

RQ2: To what extent does social comparison orientation, as measured by the Iowa-Netherlands Comparison Orientation Measure, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o2}$: Social comparison orientation is not a significant predictor of self-worth.

$H_2$: Social comparison orientation is a significant predictor of self-worth.

RQ3: To what extent do materialistic values, as measured by the Materialism Scale--Modified Scale, relate to self-worth, as measured by the Rosenberg Self-Esteem Scale Measure?

$H_{o3}$: Materialistic values is not a significant predictor of self-worth.

$H_3$: Materialistic values is a significant predictor of self-worth.

## Data Collection

I collected data on a single day in February 2024. The survey was designed using the online SurveyMonkey platform and was administered to participants recruited by SurveyMonkey from their Audience Panel. To be eligible for the study, participants had to meet all inclusion criteria (i.e., English-speaking adults, 18+ years old, social media user residing in the United States). Those who did not meet these criteria were excluded. The online survey commenced with participants providing informed consent, acknowledging the study's purpose, procedures, voluntary nature, potential risks, benefits, privacy safeguards, and contact details. The survey was conducted anonymously to ensure privacy, refraining from collecting personal information. Those who declined consent were directed to the survey's conclusion and deemed ineligible. Consent-granting participants proceeded through screening questions using skip logic to exclude those not meeting inclusion criteria. Participants failing to meet these criteria were directed to a thank-you page, concluding their participation.

Upon completing all survey questions, participants were directed to a debriefing page that explained the use of incomplete disclosure, or passive deception, as revealing the study's true purpose upfront might bias participant responses. The debriefing page then disclosed the real nature of the study, which aimed to examine the relative strength of materialistic values, social media use, and social comparison orientation in predicting self-worth.

## Demographics

The demographic data were collected from the 125 participants. The age of the participants was 18 years or older, with slightly more females ($n$ = 82, 60.3%) than males ($n$ = 54, 39.7%).

## Results

### Descriptive Statistics

The sample included 125 participants. The following means and standard deviations were calculated for the three predictor variables: social media use ($M$ = 8.91, $SD$ = 4.72), social comparison orientation ($M$ = 27.42, $SD$ = 6.74), and materialistic values ($M$ = 17.14, $SD$ = 6.75). The mean and standard deviation were also calculated for the outcome variable: self-worth ($M$ = 25.63, $SD$ = 2.82). Table 1 displays the means and the standard deviations for the predictor and outcome variables.

**Table 1**

*Descriptive Statistics for Predictor and Outcome Variables*

| Variable | *M* | *SD* | *Min* | *Max* |
|---|---|---|---|---|
| Social Media Use | 8.91 | 4.717 | 0 | 23 |
| Social Comparison Orientation | 27.42 | 6.735 | 10 | 45 |
| Materialistic Values | 17.14 | 6.751 | 9 | 36 |
| Self-Worth | 25.63 | 2.819 | 10 | 32 |

### Evaluations of Statistical Assumptions

Assumptions for multiple regression were tested before each regression analysis (i.e., normality, linearity, multicollinearity, and independence of residuals). Normality

was tested using the Shapiro-Wilk test and Q-Q plots. Table 2 provides the results of the Shapiro-Wilk test, indicating that social comparison orientation ($p = .226$) was normally distributed. However, because materialistic values ($p < .001$) and social media use ($p < .05$) were not normally distributed, the assumption of normality was only partially met. The Q-Q plot indicated that the data was normally distributed along the reference line (see Appendix A).

**Table 2**

*Shapiro-Wilk Normality Testing for Study Variables*

| Variable | Statistic | *p* | Skewness | Kurtosis |
|---|---|---|---|---|
| Social Media Use | .978 | .042 | .498 | .185 |
| Social Comparison Orientation | .986 | .226 | .058 | .501 |
| Materialistic Values | .925 | <.001 | .649 | -.256 |
| Self-Worth | .900 | <.001 | -1.444 | -7.086 |

The assessment of linearity between the predictors and outcome variables involved the scrutiny of scatterplots. The scatterplots demonstrated linear associations between individual predictors and the outcome variable (see Appendix B); thus, the assumption of linearity was met. The variance inflation factor (VIF) values were examined to evaluate multicollinearity. The VIF values for the predictor variables are presented in Table 3. These values indicated that multicollinearity was not problem, as the tolerance values are reasonably high, and the VIF values are below common thresholds for concern.

**Table 3**

*Collinearity Diagnostics for Predictor Variables*

| Variable | Tolerance | *VIF* |
|---|---|---|
| Social Media Use | 0.770 | 1.299 |
| Social Comparison Orientation | 0.781 | 1.280 |
| Materialistic Values | 0.802 | 1.247 |

The independence of residuals was assessed using the Durbin-Watson *d* test. The Durban-Watson test results for the regression, using the three predictor variables (i.e., social media use, social comparison orientation, and materialistic values). The Durbin-Watson score of 2.35 was between 1.50 and 2.50, indicating that the assumption of independence of residuals was met.

The homoscedasticity assessment was examined with scatterplots depicting standardized residuals and standardized predicted values from the regression test (see Appendix C). The scatterplots revealed that the variance of residuals did not exhibit uniformity across all models. Consequently, it can be concluded that the assumption of homoscedasticity was not met.

P-P plots were used to evaluate the residual distribution for all three regression models (see Appendix D), revealing that the residuals were normally distributed in one of the regression models (i.e., social media use); however, residuals for social comparison orientation and materialistic values were not normally distributed. As a result, the assumption of normally distributed residuals was only partially met.

In addition to verifying the assumptions for multiple regression, the reliability of the instruments employed in the present sample was evaluated by computing Cronbach's alpha. Table 4 displays the Cronbach's alpha coefficients (α) for each instrument, indicating low internal consistency, ranging from .478 to .637.

**Table 4**

*Cronbach's Alpha Coefficients for Study Instruments*

| Instrument | *a* |
|---|---|
| Social Media Questionnaire | .508 |
| Comparison Orientation Measure | .478 |
| Materialism scale | .520 |
| Rosenberg's Self-esteem Scale | .637 |

**Hierarchical Multiple Regression Analysis**

Hierarchical multiple regression analysis was used to determine the relative strength of the three independent variables (social media use, social comparison orientation, and materialistic values) in predicting self-worth. This approach was chosen to assess the unique influence of each independent variable while controlling for the other variables. In hierarchical multiple regression, the independent variables were introduced sequentially into the regression equation, prioritizing their predictive strength based on theoretical reasoning. Consequently, the regression analysis followed a 3-stage process: social media use was introduced in the initial step, followed by social comparison orientation in the second step, and lastly, materialistic values in the third step. This sequence of variable entries adheres to the theoretical framework and established literature.

The results revealed in Model 1 that social media use did not significantly contribute to the regression model, $F(1,123) = 2.70$, $p = .103$. The results in Model 2 revealed that social comparison orientation significantly contributed to the regression model, $F(3,121) = 5.17$, $p = .025$, and explained 4.0% of the variance in self-worth. The results in Model 3 revealed that materialism did not significantly contribute to the regression model, $F(2,122) = 2.66$, $p = .105$.

**Table 5**

*Model Summary*

| Error of Model | *R* | *R s*quare | Adjusted *R s*quare | Std. the estimate |
|---|---|---|---|---|
| 1 | 0.147[a] | 0.021 | 0.014 | 2.799 |
| 2 | 0.206[b] | 0.042 | 0.027 | 2.735 |
| 3 | 0.286[c] | 0.082 | 0.059 | 2.734 |

The purpose of RQ1 through RQ3 was to determine the relative strength of social media use, social comparison orientation, and materialistic value in predicting self-worth. Tables 6 and 7 display the regression model and the coefficients for this model. Social media use ($B = .088$, $\beta = .147$, $t = 1.643$, $p = .103$) and materialistic values ($B = .065$, $\beta = .157$, $t = 1.633$, $p = .105$) were not significant predictors of self-worth. I failed to reject the null hypothesis for RQ1 and RQ3. However, social comparison orientation was a significant predictor of self-worth, $B = .094$, $\beta = .224$, $t = 2.274$, $p < .025$. For every unit increase in social comparison orientation, self-worth increased by 0.094 units. Thus, I rejected the null hypothesis for RQ2 and accepted the alternative hypothesis.

**Table 6**

*ANOVA Results for Three Stage Regression Model*

| | Model | *SS* | *df* | *MS* | *F* | *p* |
|---|---|---|---|---|---|---|
| 1 | Regression | 21.163 | 1 | 21.163 | 2.701 | .103 |
| | Residual | 963.909 | 123 | 7.837 | | |
| | Total | 985.072 | 124 | | | |
| 2 | Regression | 72.285 | 2 | 36.142 | 4.832 | .010 |
| | Residual | 912.787 | 122 | 7.482 | | |
| | Total | 985.072 | 124 | | | |
| 3 | Regression | 80.453 | 3 | 26.818 | 3.587 | .016 |
| | Residual | 904.619 | 121 | 7.476 | | |
| | Total | 985.072 | 124 | | | |

**Table 7**

*Regression Coefficients*

| Model | *B* | *SE* | β | *t* | *p* |
|---|---|---|---|---|---|
| 1 (Constant) | 24.852 | .537 | | 46.300 | <.001 |
| Social Media Use | .088 | .053 | .147 | 1.643 | .103 |
| 2 (Constant) | 22.531 | 1.031 | | 21.851 | <.001 |
| Social Media Use | .026 | .057 | .044 | .463 | .644 |
| Social Comparison Orientation | .105 | .040 | .250 | 2.614 | .010 |
| 3 (Constant) | 22.247 | 1.066 | | 20.872 | <.001 |
| Social Media Use | .009 | .059 | .016 | .160 | .873 |
| Social Comparison Orientation | .094 | .041 | .224 | 2.274 | .025 |
| Materialistic Values | .042 | .041 | .102 | 1.045 | .298 |

## Summary

Hierarchical multiple regression analysis was used to determine the relative strength of social media use, social comparison orientation, and materialistic values in predicting self-worth. The findings showed that social media use and materialistic values were not significant predictors of self-worth. However, a statistically significant positive relationship was found between social comparison orientation and self-worth. Chapter 5 provides a description of these results, study limitations, implications for social change, and recommendations for future research.

# Chapter 5: Discussion, Conclusions, and Recommendations

## Introduction

The purpose of this study was to determine the relative strength of social media use, social comparison orientation, and materialistic values in predicting self-worth through a quantitative, cross-sectional, correlational approach. Social media plays a significant role in our lives, especially among younger generations. While it offers opportunities for connection and self-expression, it is essential to be mindful of how the tendency to compare oneself to others' material gains impacts social media users' sense of self-worth. Online surveys were distributed to English-speaking adults, 18+ years old, living in the United States. By determining the relative strength of individual differences in social media use, social comparison orientation, and materialistic values, findings from this study have the potential to identify the most significant source of vulnerability to self-worth. In an attempt to address the widely reported deleterious impact of excessive social media use on self-worth/esteem (Lee et al., 2022), insights from this study can be used to inform media literacy programs made available for distribution to parents, middle and high schools, and on social networking sites.

The study's results indicated that social media use and materialistic values did not significantly predict an individual's self-worth; contrary to predictions, results revealed a significant positive correlation between social comparison orientation and self-worth, such that self-worth increased with social comparison. This chapter includes a presentation of the interpretations of the research findings, followed by limitations of the study, recommendations for future research, and implications for social change.

## Interpretation of Findings

### Social Media Use and Self-Worth

While much has been made of the negative relation between social media use and self-esteem, especially among adolescents (e.g., anxiety, depression, fear of missing out; Kasser & Ryan, 1993; Reer et al., 2019; Thomson, 2016), recent meta-analyses covering hundreds of empirical studies found that results were inconclusive (Cingel et al., 2022; Valkenburg, 2022; Valkenburg & Beyens, 2022; Valkenburg et al., 2022). Taking into account both theoretical (e.g., social media and self-esteem defined both broadly and narrowly), methodological issues (e.g., cross-sectional vs longitudinal designs), social media uses (e.g., dating, gaming, social connection), and psychosocial vulnerabilities (e.g., narcissism, low self-esteem), findings indicated that social media use and self-esteem/worth were negatively, positively, or not related at all; moreover, when relationships were significant, effect sizes were small. My results did not yield a significant relation between social media use and self-esteem/worth, which in the broader context of research in this specific domain, seems reasonable.

### Social Comparison Orientation and Self-Worth

Social comparison orientation refers to an individual's tendency or inclination to make self-assessments by comparing themselves to others. People with a high social comparison orientation frequently compare their abilities, achievements, and attributes to those of others, often for purposes of enhancing motivation (Fardouly et al., 2020). However, social comparison orientation is expected to decrease self-worth in certain situations, especially when comparing themselves with images of idealized bodies and lifestyles featured on social media, an upward comparison that can negatively affect self-

worth (Lee, 2020; Tiggemann & Anderberg, 2020). Conversely, studies have found that downward social comparison (i.e., comparing oneself to people less attractive, intelligent, or successful) functions as an ego boost and is used primarily for that purpose (Lee & Cho, 2017). Because the instrument I used to measure social comparison orientation did not distinguish between upward and downward comparisons, the significant positive relationship I found suggests that participants' responses may reflect downward comparisons they have made for a much-needed ego boost.

**Materialistic Values and Self-Worth**

Materialistic values refer to a preoccupation or emphasis on acquiring and owning material possessions, often placing a high value on wealth, luxury goods, and physical belongings as a measure of personal success or happiness. Previous research on the relationship between materialistic values and self-worth found that higher materialistic values was related to low self-worth (Yu & Nam-Speers, 2017). Low self-worth drives materialistic values as individuals attempt to compensate, seek validation, and enhance their self-image through possessions (Yu & Nam-Speers, 2017). That said, a meta-analysis conducted by Dittmar et al. (2014) indicated that significant negative associations between materialistic values and self-worth were found only when mediated or moderated by contextual (e.g., social norms) and/or dispositional traits (e.g., self-esteem stability). To that end, Zhang and Hawk (2022) examined the relation between self-esteem stability (i.e., over-time fluctuations in levels of individuals' global self-evaluation) and materialistic values and found a significant negative relation, when mediated by context (i.e., prevalent materialistic social norms), but only when social norms about materialism were high.

No significant relation between materialistic values and self-evaluation was found when social norms about materialism were low. That I did not measure the mediating/moderating potential for either dispositional traits or context may explain why I failed to find a significant relation between materialistic values and self-worth. I simply measured the value of material possessions irrespective of prevailing attitudes toward conspicuous wealth (Sirgy et al., 2012). Self-worth was measured globally (i.e., relevant to psychological wellbeing; Rosenberg, 1979), which does not measure individual differences in trait self-esteem (e.g., self-esteem stability). In contrast, had I used the measure of specific self-esteem (i.e., relevant to behavior in specific contexts; Rosenberg et al., 1995), a relation between materialistic values (i.e., desire to acquire material possessions) and self-worth may have been found.

## Limitations of the Study

Using a convenience sampling strategy limited the representativeness of the sample and the generalizability of the findings. Participants were recruited by SurveyMonkey whose participant pool is voluntary. Because participants were self-selected, individuals who did not volunteer to participate in research may be very different demographically and ideologically from those who did volunteer. Additionally, there is no way to confirm the truthfulness of participant responses to self-report questionnaires, nor can qualification criteria be confirmed. Screening questions were used to minimize these threats. Social desirability bias may limit the truthfulness of participants' responses, prompting them instead to present themselves in the most favorable light; this is especially likely when participants are reluctant to disclose sensitive information (Borsari & Carey, 2006; Durkin et al., 2005). To reduce this,

participants were reminded that no identifying information was collected, and all responses were anonymous. Participants were also told they could exit surveys at any time without penalty. The short amount of time participants spent to complete the study may have limited the reliability of the findings; as reported in Chapter 3, it was estimated that surveys should take approximately 20 minutes to complete; however, the average time to complete the survey was 10 minutes, suggesting that participants moved quickly through responses rather than seriously considering them.

## Recommendations

My goal for this study was to address the existing gap in the literature by determining the relative strength of social media use, social comparison orientation, and materialistic values in predicting self-worth. While the study yielded significant findings, there remains a need for further exploration into the dynamics among these constructs and their predictive capacity related to individuals' self-worth. Considering self-worth, future studies should look more deeply into various dimensions, such as self-esteem, self-efficacy, and self-compassion (Arens & Schmidt, 2018) and the sociocultural context influencing individuals' perception of their worth. Investigating how these dimensions interact and influence overall self-worth is crucial.

Researchers should develop and refine measurement tools that capture intentional (conscious) and automatic (unconscious) self-worth-related strategies that involve deliberate actions to enhance self-worth, such as practicing self-compassion, setting achievable goals, and seeking positive social interactions. Emotion regulation can significantly impact self-worth. Individuals lacking effective emotion regulation strategies might experience envy, inadequacy, and lower self-worth. Conversely,

effective emotion regulation can help them engage in positive self-talk (“I am doing fine too”) and maintain healthier self-worth (Lewczuk et al., 2022). Investigating the effectiveness and outcomes of various strategies enables researchers to discern which methods contribute positively or negatively to individuals' self-worth. An example would be facing adversity with practical techniques, including maintaining control, taking charge of actions and attitudes, and preserving self-dignity by focusing on positive coping while addressing negative behavior (Sarkar, 2024).

When individuals adopt self-improvement strategies (e.g., self-compassion, positive affirmations, goal setting), there might be a delay before experiencing changes in self-worth. There will likely be a time lag, and it is essential to recognize that strategies take time to yield noticeable effects. Immediate shifts are unlikely. Future studies should investigate how long it takes for strategy implementation to impact self-worth. Longitudinal designs allow tracking changes over time, unlike cross-sectional studies that measure variables at a single point in time. Longitudinal studies observe the same group over an extended period and capture changes, developments, and patterns. To understand the evolving dynamics, future research should employ longitudinal designs (Robert et al., 2024).

## Implications

### Positive Social Change

In this study, I examined the relative strength of social media use, social comparison orientation, and materialistic values in predicting self-worth. Social media is used by over 80% of individuals 18+ years of age residing in the United States. Nene and Olayemi (2019) examined how excessive social media use has been associated with

diminished self-worth, increased stress, and pressure to compare oneself to others. Social comparison orientation influences the development of self-worth, with favorable comparisons that may enhance self-concept, while unfavorable comparisons can lead to self-doubt (Van der Meijden et al., 2019). Understanding these implications is crucial for individuals and mental health professionals responsible to treat individuals suffering from the well-documented ill-effects of social media overuse (e.g., anxiety, depression, loneliness). Recognizing the interplay between control, social comparison, and emotions contributes to positive social change by promoting adaptive comparison processes (Van de Ven et al., 2019).

## Conclusion

According to a Pew Research Center survey conducted in 2021, approximately 84% of adults ages 18 to 29 say they use social media sites. This percentage is similar to the share of those ages 30 to 49 who also use social media (81%). Social media platforms remain widely used among young adults, with Instagram, Snapchat, and TikTok having a strong following in this age group (Boer et al., 2021). I determined the relative strength of social media use, social comparison orientation, and materialistic values in predicting self-worth. The results failed to find the predicted relationships between social media use, materialistic values, and self-worth, but did find an unexpected positive relation between social comparison orientation and self-worth, potentially attributable to participants' use of downward comparisons to enhance self-worth.

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## Appendix A: Eligibility and Demographic Questionnaire

Eligibility: (4 questions)

1. Do you speak and read English?

Yes (continue)

No (End study)

2. Are you over 18 years of age or older?

Yes (continue)

No (End study)

3. Do you currently reside in the United States?

Yes (continue)

No (End study)

4. Do you use social media?

Yes (continue)

No (End study)

Demographics: (1 question)

1. What is your gender?

Responses:

Male

Female

Other:_____

Prefer not to answer

Appendix B: Rosenberg Self-Esteem Scale (RSES)

**Instructions:** Rate the items using the following scale:

1 = *strongly agree*
2 = *agree*
3 = *disagree*
4 = *strongly disagree*

| Items |
|---|
| 1. I feel that I am a person of worth, at least on an equal basis with others. |
| 2. I feel that I have a number of good qualities. |
| 3. All in all, I am inclined to feel that I am a failure.* |
| 4. I am unable to do things as well as most other people. |
| 5. I feel I do not have much to be proud of.* |
| 6. I take a positive attitude toward myself. |
| 7. On the whole, I am satisfied with myself. |
| 8. I wish I could have more respect for myself.* |
| 9. I certainly feel useless at times.* |
| 10. At times I think I am no good at all.* |

• Reverse-scored

# Appendix C: Social Media Questionnaire

**Instructions:** Rate the items using the following Likert scale: 0 (never) to 4 (always).

0 = *never*
1 = *Rarely*
2 = *Sometimes*
3 = *Often*
4= *Always*

1. I struggle to stay in places, where I will not be able to access SNS.
2. I feel anxious when I am not able to check my Social network account.
3. I feel angry, when I am not able to access my social network account.
4. I use SNS when I am in the company of friends.
5. My relatives and friends complain that I spend too much time using SNS.
6. I feel guilty for the time I spend on SNS.
7. I stay online longer than I initially intended.
8. I spend a large proportion of the day using SNS.
9. I lose track of time when I use SNS.

Appendix D: Iowa-Netherlands Comparison Orientation Measure

**Instructions:** The measure is rated on a 5-point Likert-type scale ranging from "I disagree strongly" (1) to "I agree strongly" (5).

1 = *Disagree Strongly*
2 = *Disagree*
3 = *Neither agree nor disagree*
4 = *Agree*
5= *Agree Strongly*

1. I often compare myself with others with respect to what I have accomplished in life.
2. If I want to learn more about something I try to find out what others think about it.
3. I always pay a lot of attention to how I do things compared with how others do things.
4. I often compare how my loved ones (boy or girlfriend, family members, etc.) are doing with how others are doing.
5. I always like to know what others in a similar situation would do.
6. I am not the type of person who compares often with others.
7. If I want to find out how well I've done something, I compare what I have done with how others have done.
8. I often try to find out what others think who face similar problems as I face.
9. I often like to talk with others about mutual opinions and experiences.
10. I never consider my situation in life relative to that of other people.
11. I often compare how I am doing socially (e.g. , social skills, popularity) with other people.

[Note: Items 6 and 10 should be reversed coded when index created; Each item scored 1-5; total 11-55.]

*Upward comparison subscale*

1. When it comes to my personal life, I sometimes compare myself with others who have it better than I do.
2. When I consider how I am doing socially (e.g., social skills, popularity), I prefer to compare with others who are more socially skilled than I am.
3. When evaluating my current performance (e.g., how I am doing at home, work, school, or wherever), I often compare with others who are doing better than I am.
4. When I wonder how good I am at something, I sometimes compare myself with others who are better at it than I am.
5. When things are going poorly, I think of others who have it better than I do.
6. I sometimes compare myself with others who have accomplished more in life than I have.

*Downward comparison subscale*

1. When it comes to my personal life, I sometimes compare myself with others who have it worse than I do.
2. When I consider how I am doing socially (e.g., social skills, popularity), I prefer to compare with others who are less socially skilled than I am.

3. When evaluating my current performance (e.g., how I am doing at home, work, school, or wherever), I often compare with others who are doing worse than I am.
4. When I wonder how good I am at something, I sometimes compare myself with others who are worse at it than I am.
5. When things are going poorly, I think of others who have it worse than I do.
6. I sometimes compare myself with others who have accomplished less in life than I have.

[Note: Same scoring; Total = 6 – 3O for each]

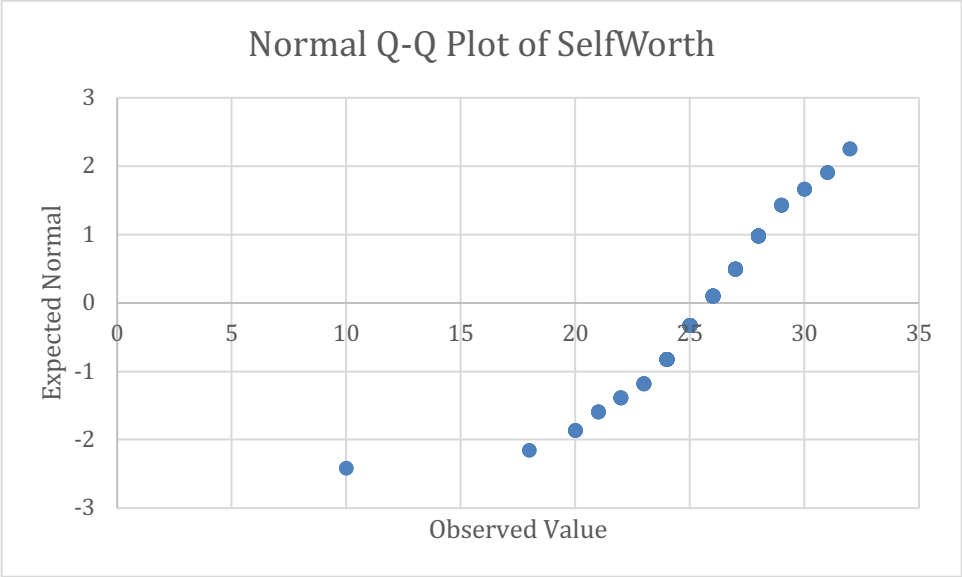
# Appendix E: Materialism Scale--Modified

Three items are used to measure each of the three dimensions (for a total of 9 items) on five-point scales (1 = strongly agree, 5 = strongly disagree).

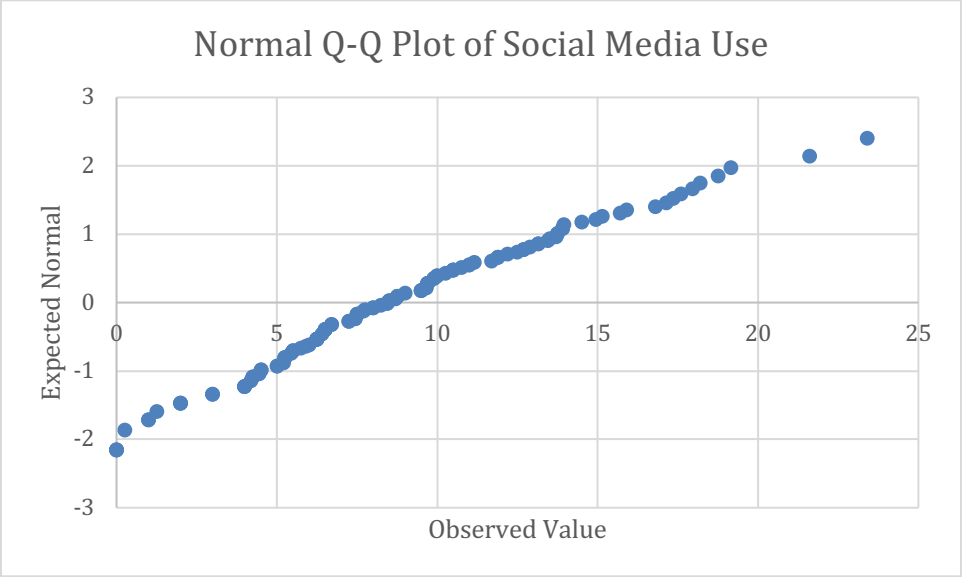
1 = *Disagree Strongly*
2 = *Disagree*
3 = *Neither agree nor disagree*
4 = *Agree*
5= *Agree Strongly*

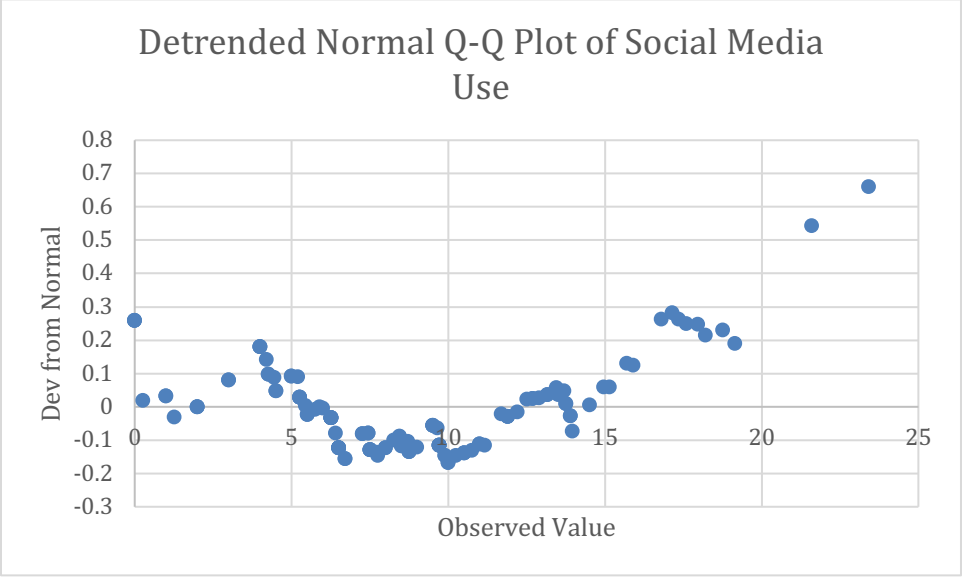
1. Having luxury items is important to a happy life.
2. To me, it is important to have expensive homes, cars, clothes, and other things. Having these expensive items makes me happy.
3. Material possessions are important because they contribute a lot to my happiness.
4. I love to buy new products that affect status and prestige.
5. I like to own more expensive things than most people because this is a sign of success.
6. I feel good when I buy expensive things. People think me of as a success.
7. I enjoy owning expensive things that make people think of me as unique and different.
8. I usually buy expensive products and brands to make me feel unique and different.
9. I usually buy expensive things that make me look distinctive.

Appendix F: Q-Q Plot Self-worth

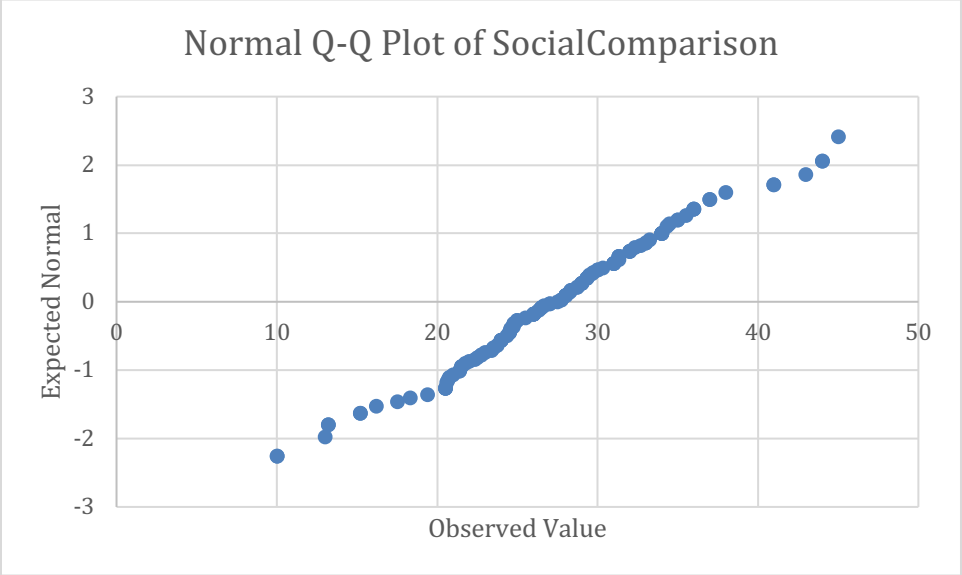


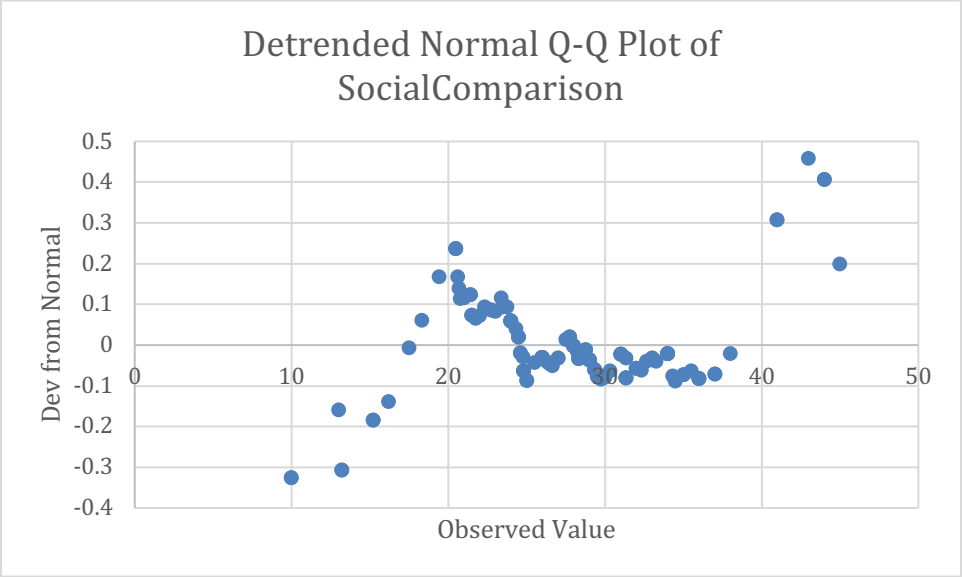
Appendix G: Q-Q Plot Social Media Use



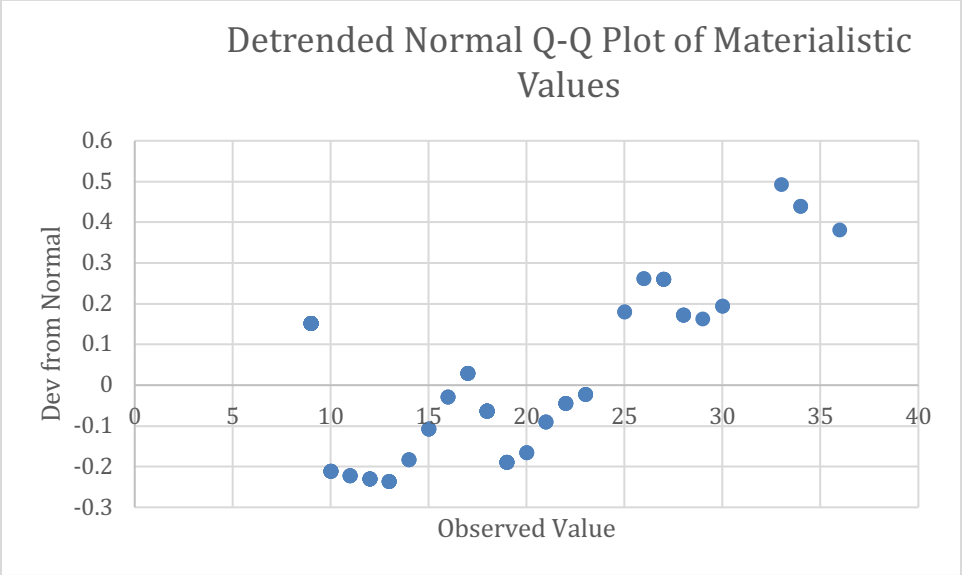



Appendix H: Q-Q Plot Social Comparison

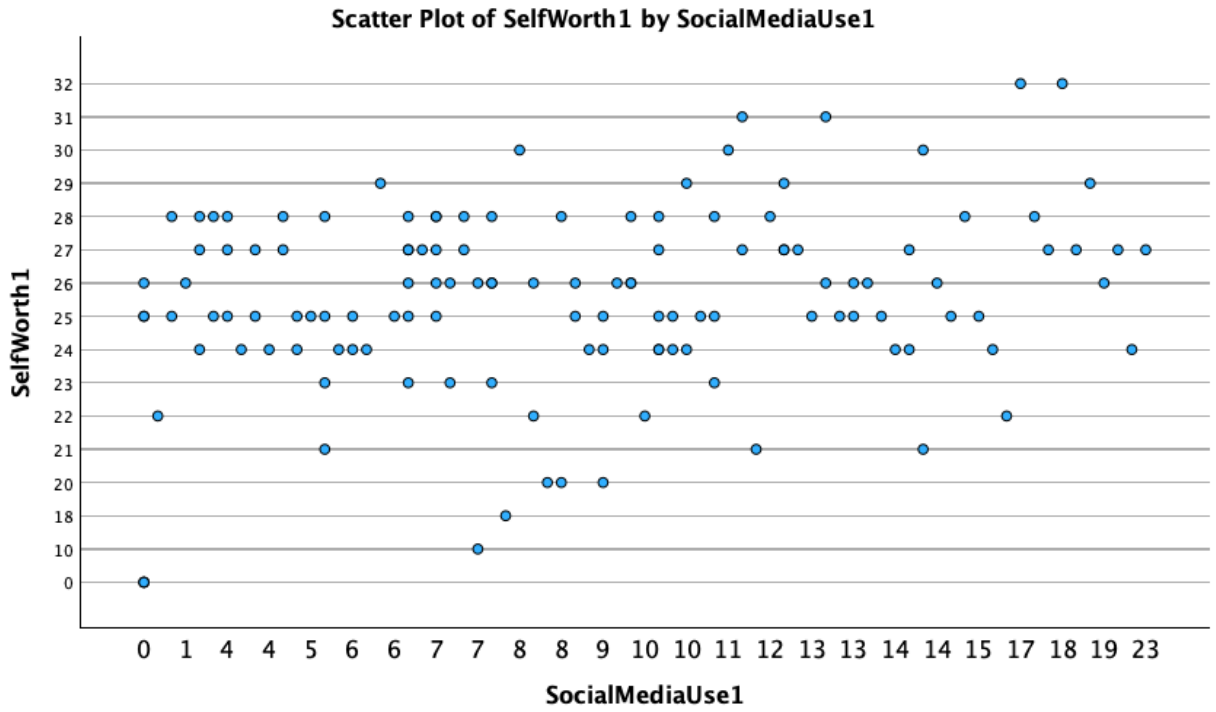


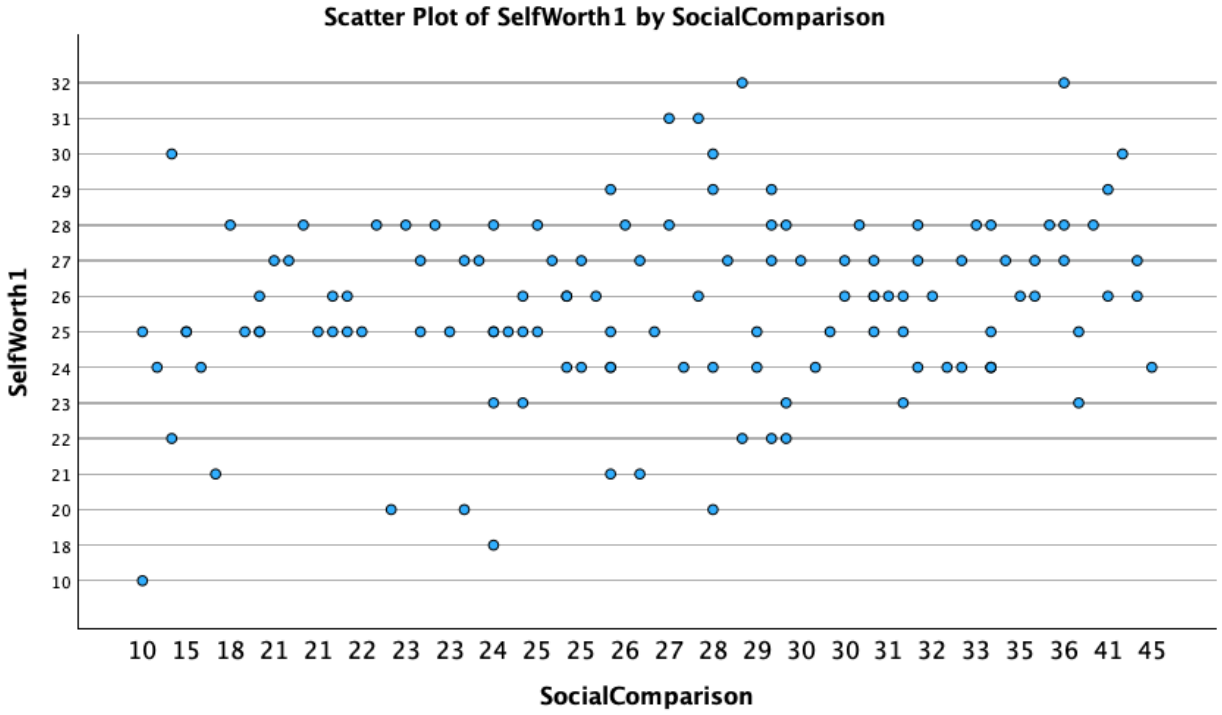
Appendix I: Q-Q Plot Materialistic Values



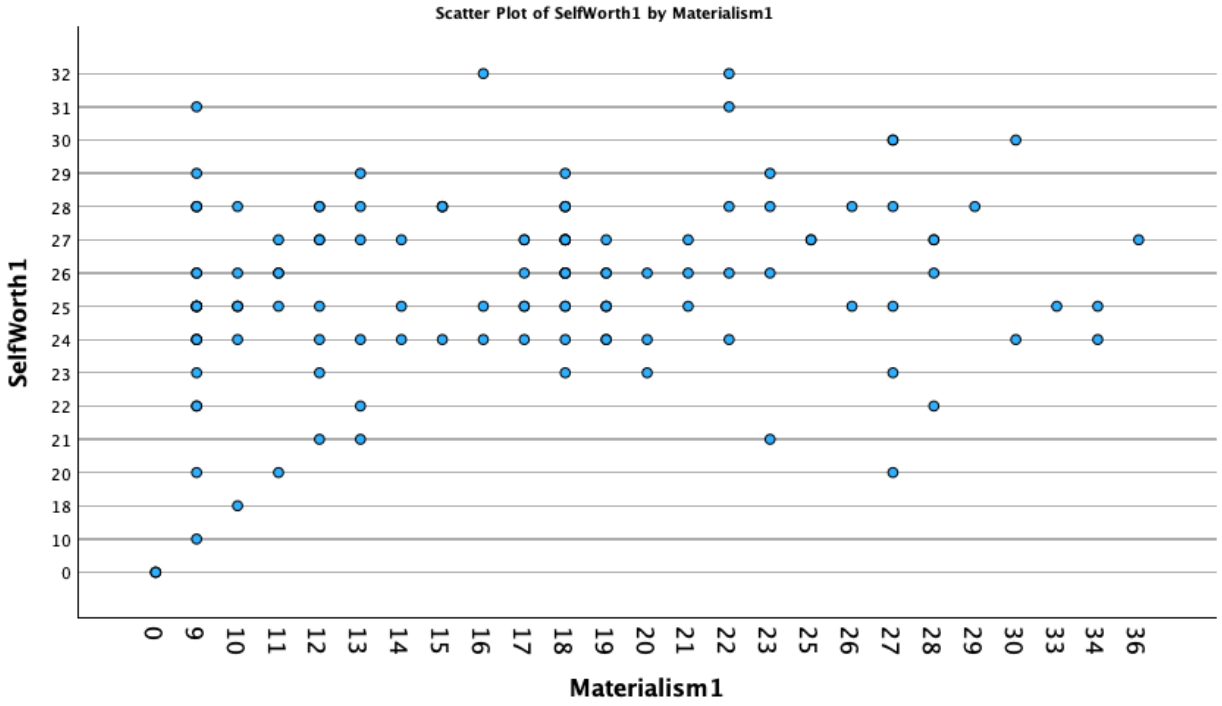
Appendix J: Scatter Plot Self-worth by Social Media Use



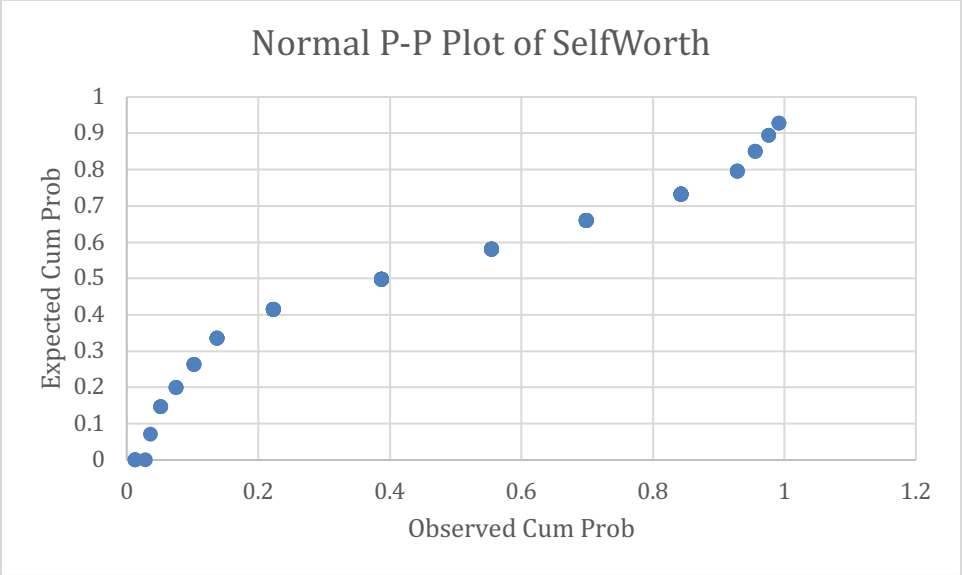
Appendix K: Scatter Plot Self-worth by Social Comparison Orientation



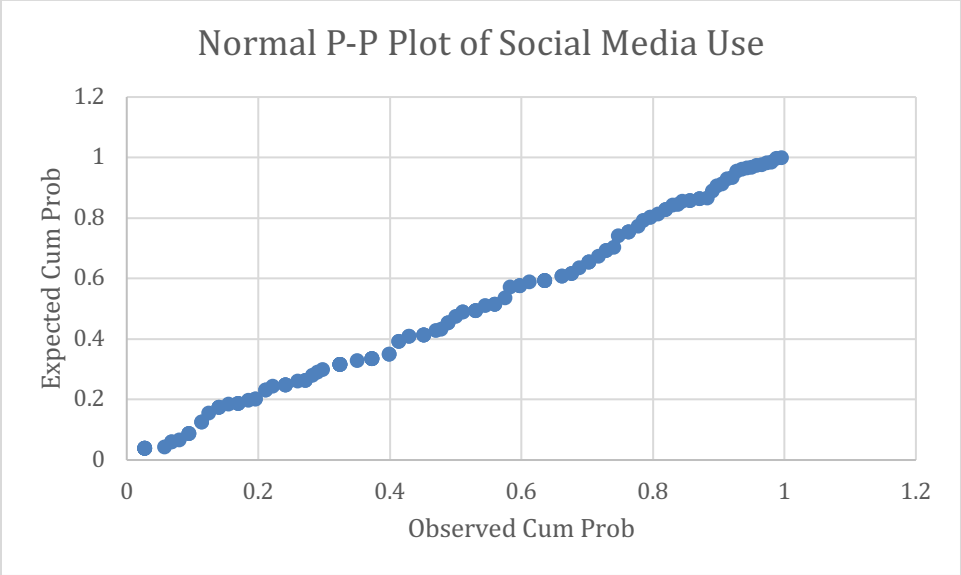
Appendix L: Scatter Plot Self-worth by Social Comparison Orientation



Appendix M: P-P Plot Self-worth



Appendix N: P-P Plot Social Media Use



Appendix O: P-P Plot Social Media Use