

EXAMINING PERSONAL SELF-CONCEPT, SOCIAL SELF-CONCEPT, AND EXTERNAL  
VALIDATION SEEKING AS PREDICTORS OF PROBLEMATIC SOCIAL MEDIA USE IN  
18 TO 22 YEAR OLDS

A Dissertation

by

NORA MAZA

BA, Texas A&M University, 2014  
MS, Texas A&M University-Corpus Christi, 2017

Submitted in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

in

COUNSELOR EDUCATION

Texas A&M University-Corpus Christi  
Corpus Christi, Texas

December 2022

© Nora Alicia Maza

All Rights Reserved

December 2022

EXAMINING PERSONAL SELF-CONCEPT, SOCIAL SELF-CONCEPT, AND EXTERNAL  
VALIDATION SEEKING AS PREDICTORS OF PROBLEMATIC SOCIAL MEDIA USE IN  
18 TO 22 YEAR OLDS

A Dissertation

by

NORA MAZA

This dissertation meets the standards for scope and quality of  
Texas A&M University-Corpus Christi and is hereby approved.

Richard Ricard, PhD  
Chair

Kristina Nelson, PhD  
Co-Chair

Joshua Watson, PhD  
Committee Member

James Silliman, PhD  
Graduate Faculty Representative

December 2022

## ABSTRACT

Since 2005, social media use has grown tremendously from 5% of U.S. adults engaging on social media sites to 72% of U.S. adults in 2021, with even higher usage in young adults (Pew Research Center, 2021). Despite its purpose of creating interconnectedness amongst people, researchers have discovered harmful effects when users engage in problematic social media use (Primack et al., 2017; Stapelton et al., 2017). Problematic social media use is conceptualized as a behavioral addiction through a biopsychosocial framework in which a person becomes fixated on social media, has difficulty withdrawing from it, and suffers consequences interpersonally (Andreassen et al., 2017; Griffiths, 2005). Previous research has explored aspects of the self in relation to social media as well as the motivation to receive validation from others on social media. This quantitative study examines the relationship between personal self-concept, social self-concept, and external validation seeking as predictors of problematic social media use in 18 to 22 year old's. In order to better grasp how to address problematic social media use in counseling, it is imperative to understand the characteristics of this issue. A demographic questionnaire, *The Bergen Social Media Addiction Scale* (Andreassen et al., 2012), two subscales, personal self-concept and social self-concept, from the *Tennessee Self-Concept Scale 2<sup>nd</sup> edition* (Fitts & Warren, 1996), and one subscale approval from other's from the *Contingencies of Self-Worth Scale* (Crocker et al., 2012). Because of a low alpha score using the approval from other's subscale, two items were used to create "Revised Researcher Created: Approval from Other's." Results from this study revealed a significant relationship between personal self-concept, social self-concept, and external validation with problematic social media use. The results of a hierarchical regression analysis indicated that external validation, as

measured by “Revised Researcher Created: Approval from Other’s” accounted for a significant proportion of the variance. These findings support practical implications for parents of children and adolescents, counselors, school counselors, and counselor educators. Counselors and school counselors can use these findings to better understand how to address problematic social media use. Future researcher can expand on the results of this study by conducting more qualitative research on the motivations behind social media use and seeking validation from others on social media.

## DEDICATION

This work is dedicated to my loved ones who believed in me when I did not believe in myself and those who motivated me through the end. To my parents— thank you for your unwavering love, support, and empowerment that you have showered me with throughout my entire life. This achievement is a reflection on your never-ending belief in me. To my Olive and Baby Boy— thank you for motivating me to reach the finish line of this dream. I cannot wait to watch you achieve yours.

## ACKNOWLEDGEMENTS

I cannot begin to express the gratitude I feel for my committee, Dr. Richard Ricard, Dr. Kristina Nelson, Dr. Joshua Watson, and Dr. James Silliman. Thank you for supporting me and sticking by me through this long grueling process. Dr. Ricard, thank you for all the ways in which you have supported me and pushed me both personally and professionally throughout my life. Thank you to Dr. Nelson for your warmth and guidance throughout this process. I will always remember to lead with love because of you. I also want to thank the late Dr. Robert L. Smith for challenging my thinking in every possible way. There are not enough words to describe the impact you made on me and many other students across the world, but I know I am a better educator, colleague, mentor, and person because of you. I know you must be looking down on me now saying, “Well, finally!”

I want to thank my colleagues’ turned friends turned family that have supported me through this process, Wendy, Dana, and Carlee. Wendy, I would not have survived this program without you by my side. Thank you for always being down for an all-nighter. Those soul torturing nights would not have been the same without you. Dana, thank you for always knowing exactly what to say when I need to hear it. I am so grateful for your empowering words throughout the dissertation process. Carlee, I have grown and learned so much from you and with you. I have been so grateful to be on this journey with you. From PhD to motherhood, you are my guiding light. To my ladies, Carly, Daniella, Kimmie, Hannah, Kate, Lauren, and Taylor. This journey has taken so much of time and energy, but you’ve supported me and understood. I cannot thank you enough for believing in me and empowering me through until the end.

This achievement would not be possible without my family. Throughout this journey, they provided me with a sense of safety and escape. Aunt Nora, thank you for always bringing optimism and light into everything. When I've been stressed, your presence has been such a relief to me. Also, thank you for always been willing to read and edit my papers. Angela, thank you for always having the perfect escape from reality plan. I needed those fun adventures with you to get me through the persistent feelings of stress. And Dillon, thank you for supporting and encouraging me to the end. I am in love with the little family we have created and I am so excited for our next journey!



## TABLE OF CONTENTS

	Page
ABSTRACT.....	iv
DEDICATION.....	vi
ACKNOWLEDGEMENTS.....	vii
TABLE OF CONTENTS.....	ix
LIST OF FIGURES.....	xiii
LIST OF TABLES.....	xiv
CHAPTER I: INTRODUCTION.....	1
Statement of Problem.....	4
Purpose of the Study.....	4
Theoretical Foundations.....	5
Research Questions.....	6
Significance of Study.....	7
Methodology.....	7
Population and Samples.....	7
Instrumentation.....	8
Data Analysis.....	9
Limitations.....	9
Key Terms.....	10
CHAPTER II: REVIEW OF THE LITERATURE.....	14
Social Media.....	15
History of Social Media.....	15

Social Media Platforms and Usage .....	16
Problematic Social Media Use.....	18
Biopsychosocial Framework.....	18
History of Problematic Social Media Use .....	19
Emperical Research .....	20
History of Self.....	22
Self-Concept Compared to Self-Esteem .....	26
Self-Concept .....	27
Theory Related to Self-Concept.....	27
External Validation Seeking .....	30
Theory Related to External Validation .....	30
Self and External Validation Seeking .....	33
Self and Problematic Social Media Use.....	33
External Validation Seeking and Social Media Use .....	35
CHAPTER III: RESEARCH DESIGN AND METHODOLOGY .....	37
Research Questions .....	37
Participant Selection .....	38
Data Collection .....	39
Measurement of Constructs .....	39
Demographic Questionnaire .....	39
Tennessee Self-Concept Scale, 2 <sup>nd</sup> Edition.....	40
Contingencies of Self-Worth Scale.....	40
Bergen Social Media Addiction Scale .....	41

Data Analysis .....	42
Statistical Power Analysis.....	42
Preliminary Analysis.....	42
Primary Analysis.....	43
Representation of Data.....	43
CHAPTER IV: RESULTS.....	44
Preliminary Analyses .....	44
Data Cleaning.....	44
Reliability.....	44
Demographics .....	46
Tests of Model Assumptions .....	48
Descriptive Results .....	50
Evaluation of Research Questions .....	51
Research Question 1 .....	51
Research Question 2 .....	52
Research Question 3 .....	53
Research Question 4 .....	53
Summary of Results .....	55
CHAPTER V: DISCUSSION.....	57
Discussion of Research Questions .....	57
Research Question 1 .....	57
Research Question 2 .....	58
Research Question 3 .....	59

Research Question 4 .....	60
Study Limitations.....	61
Future Research .....	63
Study Implications .....	65
Implications for Supporting Parents .....	65
Implications for Professional School Counselors .....	66
Implications for Professional Counselors .....	67
Implications for Counselor Educators .....	68
Conclusion .....	69
REFERENCES .....	70
APPENDIX A DEMOGRAPHIC QUESTIONNAIRE .....	85
APPENDIX B BERGEN SOCIAL MEDIA ADDICTION SCALE.....	86
APPENDIX C CONTINGENCIES OF SELF-WORTH SCALE.....	87
APPENDIX D TENNESSEE SELF-CONCEPT SCALE 2 <sup>ND</sup> EDITION (TSCS:2) .....	88

## LIST OF FIGURES

	Page
Figure 1. Self-Concept.....	26
Figure 2. Self-Concept & Self-Esteem. ....	26
Figure 3. Self-Concept & External Validation. ....	32

## LIST OF TABLES

	Page
Table 1. Distribution of Demographic Variables .....	46
Table 2. Descriptive Statistics for Study ( $n = 115$ ) .....	51
Table 3. Summary of Correlations.....	52
Table 4. Summary of Regression Model .....	55

## CHAPTER I: INTRODUCTION

Debates on the impact of social media have been raised as the use of social media has increased over the years (Pew Research Center, 2021). In 2005, 5% of U.S. adults were utilizing at least one social media account, such as Facebook, Instagram, or Twitter (Pew Research Center, 2021). Fourteen years later, this percentage had grown to include 72% of all adults in the U.S. being active with social media accounts (Pew Research Center, 2021). Social media sites (SMSs) were created as a tool for individuals to express themselves and connect with others. While there is some debate regarding the inception of Facebook and its purpose, Mark Zuckerberg (2012) stated, “Facebook was not originally created to be a company. It was built to accomplish a social mission - to make the world more open and connected” (Horton, 2018). Although social media was seemingly created to connect people, at times the effect of social media can almost seem paradoxical due to its effects on social connectedness (Allen et al, 2014). Younger generations, like Generation Z (born 1997-2012), have grown up in a society consumed with social media, and have utilized SMSs at a greater rate and at a younger age than older generations (Pew Research Center, 2019; Rideout & Robb, 2018). Additionally, the percentage of young adults between the ages of 18-29 actively using social media has grown from 7% to 84% since the year 2005 (Pew Research Center, 2021). This trend is consistent across race, gender, income, educational level, and community (Pew Research Center, 2021). Because of its growing popularity, social media has been a topic of discussion regarding its societal impact.

In recent studies, researchers have focused on the relationship between social media use and the user’s mental health. Some researchers have found an association between social media use and depression, anxiety, and low self-esteem (Primack et al., 2017; Stapelton et al., 2017). According to Primack and colleagues (2017), there is a positive relationship between the number

of social media sites an individual engages with, the number of social media accounts they hold and their symptoms of depression and anxiety. This relationship between social media and declining mental health does not indicate causation and other studies have demonstrated a need for further exploration. It might be that some individuals might be more susceptible to adverse effects of social media use. Burrow and Rainone (2017) found that individuals who had a stronger sense of purpose in life maintained a consistent self-esteem regardless of the number of likes on Facebook. However, individuals who had a lower sense of purpose in life also experienced lower self-esteem when the number of likes they received on social media was lower (Burrow & Rainone, 2017).

Conversely, some studies found there was no relationship between social media use and psychological well-being (Tandoc et al., 2015). In one study, there was no relationship found between Facebook use and depressive symptoms in young adults (Tandoc et al., 2015). Hardy and Castonguay (2018) found that age may be a moderating factor between social media use and mental health. According to these findings, young adults using social media may not experience as many effects as an older individual on social media. Differences in these findings may be attributed to many other different factors such as the amount of time spent on social media and personality traits.

Discrepancy in findings among studies highlights the need for further research regarding the relationship between social media use and mental health. Therefore, researchers have continued to examine mediating factors between social media and mental health such as social comparison (Chae, 2018), attention seeking behaviors (Marshall et al., 2015), and contingent self-worth (Stapleton et al., 2017). Social comparison was found to play a mediating role between contingent self-esteem and contingent self-worth (Stapleton et al., 2017). A young adult



engaging in high levels of social comparison has a greater likelihood of building their self-worth based on the approval of others, which then has an adverse effect on their self-esteem.

While previous researchers (Andreassen et al., 2017; Burrow & Rainone, 2017; Marshall et al., 2015) have discussed the relationship between self-esteem and social media use, little research has examined the relationship between self-concept and social media use. Self-concept is defined as an “individual's belief about himself or herself, including the person's attributes and who and what the self is” (Baumeister, 1999). According to Rogers (1959), there are three components to self: self-image, self-esteem, and ideal self. One of the important differences between self-concept and self-esteem is self-concept is multidimensional and develops over time (Braken, 1992; Byrne, 1996; Hattie, 2014). The domains that make up one’s self-concept contribute to one’s overall sense of self, such as personal self-concept, social self-concept, and academic self-concept.

External validation seeking is an individual’s want for others’ approval of that individual’s thoughts, beliefs, and behaviors (Thornton, 2015). Problematic social media use is not clearly defined, however, it is conceptualized using the biopsychosocial model (Banyai et al., 2017). An individual is engaging in problematic social media use when they experience: mood changes, preoccupation with social media use, increasing engagement on social media, distress when removed from social media, interpersonal difficulties, and returning to social media after a period of abstinence (Andreassen et al., 2017)

Because there is inconsistent data regarding the effects social media may have on mental-well-being, it is important to also examine problematic social media use more closely. Additionally, there is a lack of research focused on self-concept and external validation seeking and how these variables correlate and predict problematic social media use amongst young

adults. More specifically, this study examined the relationship between personal self-concept, social self-concept, and external validation seeking with problematic social media use.

### **Statement of Problem**

The prevalence of young adult's activity on social media continues to rise and the number of social media sites available continues to increase (Pew Research Center, 2021). While researchers have examined the relationship between social media and mental well-being, it is difficult for research to progress at the same rate as the development of social media. Researchers have explored the experiences of young adult's engagement with social media as well as the effects of social media. However, inconsistencies in research findings seems to indicate that not all social media is harmful, and users might have different experiences with social media. For this reason, it seems important to explore factors contributing to problematic social media use. Currently, little research has examined the relationship between self-concept, external validation seeking, and problematic social media use together. This study seeks to expand upon existing literature by examining the relationship between personal self-concept, social self-concept, and external validation seeking and how they may predict problematic social media use. The findings of this study will contribute to the existing literature regarding social media use and inform clinicians on predictors of problematic social media use in their clients.

### **Purpose of the Study**

The purpose of this quantitative was to examine the relationship between personal self-concept, social self-concept, and external validation seeking with problematic social media use in 18 to 22 year old's. Additionally, this study addresses the variance that can be explained by personal self-concept, social self-concept, and external validation seeking in problematic social media use. Limited research has examined these relationships and it is becoming increasingly

more important to understand the factors contributing to young adults' problematic social media use. Not all social media use may be problematic, but by identifying the factors that contribute to self-reported problematic social media use, research can move toward a deeper understanding of the nature of the relationship between the variables. By gaining a deeper understanding of the protentional impact of problematic social media use, counselors may be able to provide better support for individuals engaging in this behavior.

### **Theoretical Foundations**

The theoretical foundations that ground this study derive from the humanistic and social cognitive perspectives (Hattie, 2014; Rogers, 1959). Self-concept theory asserts that self-concept is an organized multidimensional construct that contains cognitive appraisals of the self that are developed over time (Braken, 1992; Byrne, 1996; Hattie, 2014; Purkey, 1988). These cognitive appraisals are beliefs, attitudes, and evaluations that one holds about themselves, such as "I am a kind person" (Hattie, 2014). As someone grows up, their self-concept is developed by both biological and environmental factors surrounding them, like illnesses or parenting styles. Generally, self-concept is considered to be organized or stable, and when it changes, it typically takes time to change (Purkey, 1988). Additionally, self-concept is conceptualized as a multidimensional construct, meaning it has many different domains, such as personal, social, moral, physical, and academic self-concept. For example, someone might have a stronger physical self-concept than they do about their academic self-concept. To better understand the theory of external validation seeking, first self-concept and self-esteem must be differentiated.

Self-concept and self-esteem are often used interchangeably in the literature. While self-concept are beliefs one develops over their lifetime about themselves, self-esteem has a more evaluative component to it (Byrne 1996; Rogers, 1959; Hattie, 2014). Self-esteem refers to the

extent in which one assigns value to themselves and their beliefs about themselves. For example, the individual that said, “I am a kind person,” will only gain esteem from that belief if kindness is something they value. Crocker and Wolfe (2001) proposed that self-esteem can be affected by the approval of others, or external validation seeking. For example, the person from the previous example might gain greater esteem if they believe that others also view them as kind.

Based on these theories, individuals with unstable self-concepts may turn to social media to gain external validation from people on the internet. This study aims to determine the relationship between personal self-concept, social self-concept, and external validation seeking with problematic social media use.

### **Research Questions**

This study examined the relationship between personal self-concept, social self-concept, and external validation seeking. The following research questions will be investigated in this study:

1. Research Question 1: What is the relationship between personal self-concept and problematic social media use in young adults ages 18-22?
2. Research Question 2: What is the relationship between social self-concept and problematic social media use in young adults ages 18-22?
3. Research Question 3: What is the relationship between external validation seeking and problematic social media use in young adults ages 18-22?
4. Research Question 4: To what extent does external validation seeking, personal self-concept, and social self-concept predict problematic social media use in young adults ages 18-22?

## **Significance of Study**

This study contributed to a growing available literature regarding social media and its effects on young adults. Young adults engaging on social media may experience adverse mental health effects and understanding the contributing factors can aid in the reduction of problematic social media use. As the prevalence of social media use increases, it seems necessary for counselors to be aware of the effects of social media. This study may provide counselors with more knowledge regarding problematic social media that may lead to improved services for clients. Appropriate interventions for problematic social media use can be developed depending on the predicting factors. The findings of this study may also provide counselor educators and supervisors with information to better prepare counselors-in-training to work with this population.

## **Methodology**

### **Population and Samples**

The population for this sample included young adults with ages ranging from 18 years old to 22 years old actively engaging on at least one of the following social media accounts: Facebook, Instagram, Snapchat, TikTok, or Twitter. These young adults are amongst the first group of young adults to have grown up in a society in which most of the population is utilizing social media (Seymour, 2019). Active engagement on these social media accounts will be defined as accessing the social media account at least seven times a day through a cell phone app, tablet app, laptop, or computer (Arrington, 2012). These user's must also report that they typically post content on at least one social media platform at least once a week. The content posted can include photos, statuses, and/or updates on stories. Sample size needed for this study was predicted to be at least 54 participants to gain a large effect size  $f^2 = .35$ , Power = .95, and

probability of error = .05 according to G\*Power (Ellis, 2010, Erdfelder, E. et al., 1996). Amazon Mechanical Turk (MTurk, n.d.) was used to obtain participants and provide participants with consent forms, the demographic questionnaire, and instruments.

### **Instrumentation**

This study is a quantitative analysis of factors predicting problematic social media use of young adults. The participants of this study completed the necessary informed consent documents, a demographic questionnaire, two subscales, personal self-concept and social self-concept, from the Tennessee Self-Concept scale 2<sup>nd</sup> edition (Fitts & Warren, 1996), one subscale, Approval from Others, from the Contingencies of Self-Worth scale (Crocker et al., 2012), and the Bergen Social Media Addiction Scale (Andreassen et al., 2012).

The Tennessee Self-Concept scale measures how participants perceive themselves across multiple dimensions using a 5-point Likert scale (Fitts & Warren, 1996). This study utilized two subscales from this instrument: Personal and Social. Personal Self-Concept is a 12-item measure of an individual's sense of self-worth. This subscale included items such as "I am a cheerful person" and "I am satisfied to be just what I am." Social Self-Concept is a 12-item measure of how worthy and adequate participants feel within social interactions. This scale included items such as "I get along well with people" and "I am as sociable as I want to be."

The Approval from Other's subscale from The Contingencies of Self-Worth scale was utilized to measure external validation seeking (Crocker et al., 2012). This 5-item subscale measures the extent to which an individual places importance on gaining approval from others. This subscale included items such as "I don't care if other people have a negative opinion about me" and "my self-esteem depends on the opinions others hold of me" (Crocker et al., 2012).

Bergen Social Media Addiction Scale is a 6-item scale that measures problematic social media use (Andreassen et al., 2012). The scale is a 5-point Likert scale and asks participants how often or rarely they experienced specific addiction components (salience, craving/tolerance, mood modification, relapse/loss of control, withdrawal, and interpersonal conflict) regarding social media use within the last year (Andreassen et al., 2012). Items within this scale include “how often during the last year have you used social media to forget about personal problems?” and “how often during the last year have you spent a lot of time thinking about social media or planned use of social media?”

### **Data Analysis**

Following data collection, the data was inputted into IBM Statistical Package for Social Sciences (SPSS). The data was reviewed for any error of entry, missing data values, and outliers. The data was examined to meet regression model assumptions of normality, multicollinearity, linearity, homoscedasticity, and residuals. Additionally, internal consistency was measured using Cronbach’s alpha to determine the reliability of each instrument. Bivariate correlational analyses were performed in order to examine the individual relationships between personal self-concept, social self-concept, and external validation seeking with problematic social media use. A hierarchical multiple linear regression analysis was performed to estimate a linear equation of personal self-concept, social self-concept, and external validation seeking for predicting problematic social media use.

### **Limitations**

One of limitations of this study is it utilized self-report measurements and participants might not have responded honestly due to social desirability. Additionally, limited research explored predictors of problematic social media use and these variables are not the only valid factors

contributing to this behavior. Additionally, the scope of this study was narrowed to a small population of individuals between the ages of 18-22. While individuals of all ages may engage in problematic social media use, the findings of this study are not generalizable to wider age ranges.

### **Key Terms**

For the purposes of this study, the following definitions apply:

***Academic/Work Self-Concept:*** Individual's perceptions of themselves within the setting of school and work as well as how individuals believe others perceive them within these settings (Fitts & Warren, 1996).

***Contingent Self-Worth:*** Domains, such as approval from others, appearance, and family support that self-worth, or self-esteem are contingent on (Crocker & Wolfe, 2001).

***External validation seeking:*** Individuals needs or wants for others' approval of that individual's thoughts, beliefs, and behaviors (Thornton, 2015).

***Facebook:*** A free social networking site that allows users to interact with friends, family, and colleagues through posted text and uploaded images and video. Users have the ability to react to posted content using different emoji (e.g. happy, sad, angry, etc) or with comments (Facebook, n.d.)

***Ideal Self:*** The ideal self holds the highest amount of value and is how one would like to be (Rogers, 1959).

***Instagram:*** A free social networking site that allows users to interact with a wide variety of individuals, including personal acquaintances and celebrities through uploaded images and videos. Followers can comment and/or "like" another user's uploaded content. Users can also interact directly through direct messaging (Instagram, n.d.).



**Personal Self-Concept:** Individual's perceptions of their sense of worth and feelings of adequacy. (Fitts & Warren, 1996).

**Problematic Social Media Use:** Problematic social media use is not clearly defined; however, it is conceptualized using the biopsychosocial model (Banyai et al., 2017). An individual is engaging in problematic social media use when they experience: mood changes, preoccupation with social media use, increasing engagement on social media, distress when removed from social media, interpersonal difficulties, and returning to social media after a period of abstinence (Banyai et al., 2017).

**Self:** The self as subject, or "I," is a psychological process that allows for self-awareness, executive control, and the ability to think, feel, and behave (Brockner & Wiesenfeld, 2016; Leary & Tangney, 2012).

**Self-Concept:** The cognitive appraisals individuals develop over a lifespan about themselves across multiple domains (i.e, social, competence, affect, academic, family, physical) (Baumeister, 1999; Bracken, 2009, Hattie, 2014).

**Self-Esteem:** Self-esteem refers to global judgments of self-worth and is an evaluative component within self-concept that refers to the extent in which an individual assigns value to themselves (Byrne 1996; Rogers, 1959; Hattie, 2014).

**Self-Image:** One's perception of themselves. This might include perceptions of physicality or personality, such as height or kind (Rogers, 1959).

**Social-Cognitive Theory:** Social- Cognitive Theory proposes that behavior is influenced by the perpetual interaction between personal and environmental factors (Bandura, 2001).

***Social Media:*** Forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos) (Merriam-Webster, n.d)

***Social Media “Likes”:*** to electronically register one's approval of (something, such as an online post or comment) for others to see (as by clicking on an icon designed for that purpose) (Merriam-Webster, n.d.)

***Social Media “Friends/Followers”:*** A user of social media may have friends (Facebook) and followers (Instagram/Twitter). These individuals can see the user’s posted content and interact with the user. Depending on the user’s privacy settings, these individuals may have had to ask for permission to be a friend/follower.

***Social Self-Concept:*** Individual’s perceptions of their worth and adequacy in social interactions with others (Fitts & Warren, 1996).

***Snapchat:*** Snapchat is a visual social media platform where users can share pictures and videos that are typically only available for a short period of time. (Beveridge, 2021)

***Twitter:*** A free social networking site that allows users to post messages with a 140-character restriction. These messages are referred to as “tweets.” Other users can “like,” comment, and/or retweet the message. Retweeting refers to the reposting of one user’s message onto another user’s site. Users can publicly interact through comments and privately interact using direct messages.

***TikTok:*** An app for making and sharing short videos with followers (Herrman, 2019)

***Young Adults:*** For the purpose of this study, young adults are defined as individuals between the ages of 18 and 22 years.

## **Remaining Chapters**

The remaining chapters will include four more chapters including: an extensive review of the literature, methodology, results, and discussion and conclusions.

## CHAPTER II: REVIEW OF THE LITERATURE

Since the inception of the internet, a growing number of adults in the United States utilize its features. This rising trend has been consistent across age, race, gender, income, and education level (Pew Research Center, 2019). According to the Pew Research Center (2021), 93% of adults in the United States are using the internet as of 2021. This is a 3% rise compared to data collected in 2019 (Pew Research Center, 2019). While many of these individuals access the internet through their personal computer, smart phones have made it more accessible for users to interact online using mobile phone applications, “Apps.”

Early studies examined the relationship between internet use and mental health (Selfout et al., 2009; Young, 1999). Young (1996) was among the first researchers to examine internet addiction and its consequences on people’s academics, relationships, finances, occupations, and physicality. Young found that the amount of time users spent on the internet was concerning and believed the behavior to be considered an addictive disorder. Consequences associated with excessive internet use were consistent with symptoms seen in other established addictions, such as pathological gambling, alcoholism, and eating disorders (Young, 1996). Some professionals and academics have argued that the term “addiction” should only be used when referring to the ingestion of physical substances (Rachlin, 1990; Walker, 1989). Despite the controversy, Young found that internet addiction can cause personality changes, declining interest in relationships, and occupational problems (Young, 2004). Additionally, other researchers have directed their focus on process addictions such as, gambling and gaming (André et al., 2020; Clark & Goudriaan, 2018).

Over the last 15 years, the internet has been used as the foundation for social media websites and apps developed for the purpose of connecting people. Contrary to its purpose of

connection, many researchers have pointed out social media's paradoxical effects and how mental health can suffer due to social media (Calancie et al., 2017; Kalpidou et al, 2011; Primack et al, 2017). On the other hand, other findings have suggested a mental health benefit to connecting with others on social media (Hardy & Castonguay, 2018; O'Reilly et al., 2019). To better understand this contradiction, researchers have directed their focus to examine problematic social media use.

## **Social Media**

According to the Marriam-Webster Dictionary (n.d.), social media is a form “of electronic communication (such as websites for social networking and blogging) through which users create online communities to share information, ideas, personal message, and other content (such as videos).” A brief history of the rapid growth of social media, an explanation of the various social media platforms, and the amount of engagement on these platforms is provided in the following sections.

### **History of Social Media**

Social media use increased exponentially in the mid 2000s when Facebook and Myspace were first introduced, however, they were not the first (Jones, 2015). Jones (2015) provides a detailed timeline of the rise of social media. In the late 1990's, Six Degrees was one of the first social media platforms that allowed its 3.5 million users to create personal profiles and add friends to their network. Later, in 2002, Friendster became popular amongst 100 million users. Friendster not only allowed users to add friends to their network, but also share messages, photos, and videos. A year later, Myspace was launched and became one of the most popular social media sites at that time. By 2008, Myspace's popularity had declined, and Facebook became one of the top social media platforms.

In 2004, Mark Zuckerberg, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz, and Chris Hughes created Facebook exclusively for Harvard University students to interact through an online community (Jones, 2015). Because of its notoriety amongst college students across the country, Facebook became available to all individuals of at least 13 years of age with an email account in 2006. Twelve million active users accessed Facebook and by December 31, 2018, the number had risen to 2.32 billion monthly active users on Facebook (Facebook Newsroom, 2018). Since Facebook, several social media platforms, such as Instagram, Twitter, and Snapchat, have emerged and have been widely accepted by people across the world (Jones, 2015).

### **Social Media Platforms and Usage**

Overall, 72% of all U.S. adults currently utilize at least one social media site (Pew Research Center, 2021). Around 84% of the adults in the United States between the ages of 18 and 29 are engaging on at least one social media site as well. This has increased greatly from the 7% of young adults between the same ages that were utilizing social media sites in 2005. One possible explanation for this large increase over the last fourteen years is the greater accessibility to social media sites. Originally, social media sites were accessed on internet browsers through laptops or desktop computers (Pew Research Center, 2019). Currently, most social media platforms have smartphone applications that can be directly downloaded to cellphones which allows social media to be easily accessible to its users. According to the Pew Research Center (2019), 81% of adults in the United States own a smartphone. Additionally, around 17% of adults in the U.S. rely only on their smartphone as the only means for internet access at home. It may be possible that because individuals have easier access to these social media platforms on their smartphones, they are engaging on these platforms more often.

Facebook, Instagram, Snapchat, YouTube, Twitter, and TikTok are amongst some of the more popular social media platforms for young adults ranging from ages 18-29 years of age (Pew Research Center, 2021). Each social media platform has its own unique characteristics and can be utilized differently to connect people with one another. The common themes within the mission statements for various social media platforms emphasize building communities, sharing stories, and empowering users to express themselves (Instagram, n.d.; Twitter Incorporated n.d.; Zuckerberg, 2017).

Facebook, Instagram, Snapchat, YouTube and Twitter are amongst some of the more popular social media platforms for young adults ranging from ages 18-29 years of age. According to the Pew Research Center (2019), 91% of young adults within this age range use YouTube, 79% use Facebook, 67% use Instagram, 62% use Snapchat, and 38% use Twitter. Facebook allows users to share text, photos, and videos with other users and can be accessed through a phone application or through an internet browser (Egan, 2017). Instagram is accessed through a phone application and users use it to share photos and videos for the purpose of visual storytelling (Instagram, n.d.b). Like Instagram, Snapchat is also a mobile phone application in which users can share photos and videos, however, this platform is well known for how content shared cannot be viewed twice (Elgersma, 2018). YouTube is site that allows users to share videos with other users with a mission to move toward building community through stories (Youtube, n.d.). Twitter users use this site to share photos and videos along with thoughts and information in 280 characters or less (Egan, 2017).

A substantial amount of the counseling literature has been primarily focused on the social media activity of young adults and adolescents utilizing Facebook since they utilize this platform the most frequently (Calancie et al., 2017; Marino et al., 2018). Despite its initial popularity,

recent data revealed very little growth in Facebook users (only 1% of U.S. adults) since 2016 (Pew Research Center, 2021). This may be attributed to younger generations moving their attention toward photo-centered social media accounts like Instagram as the selfie, an image someone takes of themselves (and maybe a group), has gained notoriety. Because of this shift, researchers have begun to extend their research interests toward examining social media use as a whole (Andreassen, 2015; Merriam-Webster, n.d.).

### **Problematic Social Media Use**

As research on social media use has emerged, there has been a debate on an agreed upon term for problematic social media use (PSMU). The phenomenon is often referred to as social network site addiction (Andreassen, 2015), addictive social media use (Andreassen et al., 2017), problematic network site use (Hussain & Griffiths, 2018), and problematic social media use (Kirkaburun et al., 2019; Shensa et al., 2017). Despite the inconsistency across terms, researchers have begun to conceptualize this concept based on behavioral addiction models from a biopsychosocial framework (Griffiths, 2005). Using the biopsychosocial framework, addiction is not just seen as the ingestion of a substance, but conceptualized to include behaviors such as gambling, video games, and internet use.

### **Biopsychosocial Framework**

The biopsychosocial framework conceptualizes behavioral addictions by comparing those behaviors to the clinical criteria of drug-ingested addictions (Griffiths, 2005). Within this framework, the main component of addiction includes salience, mood modification, tolerance, withdrawal, conflict, and relapse. Problematic social media use (PSMU) can be identified by the preoccupation of social media (salience), the use of social media to reduce unwanted feelings (mood modification), the gradual increase of social media in order to receive the same pleasure



(tolerance/craving), experiencing distressing symptoms when not using social media (withdrawal), forgoing other priorities or hindering important life areas in order to remain active on social media (conflict/functional impairment), and attempting to manage the personal use of social media and failing to do so (relapse/loss of control) (Andreassen et al., 2017). Thus, individuals engaging in PSMU appear to experience an excessive concern regarding their social media activity and their time spent on social media begins to affect their functioning across various aspects of their life, such as relationships, mental health, and work (Andreassen, 2015).

### **History of Problematic Social Media Use**

Problematic social media use may be considered a specific type of internet addiction, like online gaming (Wartberg et al., 2020). Young (1996) first presented the idea of internet addiction as a clinical disorder at the 104<sup>th</sup> annual meeting of American Psychological Association in 1996. Many scholars argued that the term, addiction, was only applicable to problematic behaviors and should be a term reserved for substance abuse (Young, 1999). Critics were also initially hesitant to label the problematic use of the internet as an addiction because of the growing technological benefits the internet provided to society (Levy, 1997). Young (1996) found that individuals who reported excessive internet use also reported problems related to their academics, relationships, finances, and occupation. While there is not a formal diagnosis within the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), internet gaming disorder is included within the emerging measures and models section (American Psychiatric Association, 2013). Despite the lack of formal diagnosis, the first treatment model for internet addiction was created from a cognitive behavioral framework in order to address internet addiction (Young, 2011). Additionally, researchers (Andreassen, 2015; Andreassen et al., 2017) have continued to

examine the progression of addictive behaviors as it relates to internet addiction and social media use.

### **Empirical Research**

Researchers studying problematic social media use have examined the usage of various sites (e.g., Facebook, Instagram, Snapchat) in relation to mental health issues across age and gender. Initially, researchers focused solely on Facebook before the surge of other social media sites. Kalpidou et al., (2011) examined the relationship between Facebook use and the well-being of undergraduate college students at a small Catholic, liberal arts college in the Northeast. They found the number of Facebook friends was negatively correlated with academic adjustment and time spent on Facebook was also inversely related with level of self-esteem. Students that had more friends on Facebook reported having more difficulty adjusting academically. Additionally, students that spent more time on Facebook also reported having a lower self-esteem. Researchers began to direct their focus on social media when new social media sites, such as Instagram, Twitter, and Snapchat, began to gain popularity (Banyai et al., 2017; Kiracaburun et al., 2019).

Researchers gathered a nationally representative Hungarian sample of adolescents and discovered 4.5% of the adolescents were at risk for engaging in PSMU because of their self-reported high social media use, low self-esteem, and depressive symptoms (Banyai et al., 2017). These findings are consistent with other studies that examined the relationship between adolescents engaging in PSMU and depressive symptoms (Raudsepp, 2019; Raudsepp & Kais, 2019; Wartberg et al., 2020). Researchers found a relationship between problematic social media use with depressive symptoms in Estonian adolescents (Raudsepp, 2019; Raudsepp & Kais, 2019). In another study with German adolescents, researchers examined a relationship between problematic social media use and depression, lower family functioning, and internet gaming

disorder (Wartberg et al., 2020). There is limited research examining the relationship between depressive symptoms and PSMU amongst adolescents in the U.S (Shafi et al., 2021). Recent findings seem to indicate depressed adolescent girls in the U.S. might have a greater risk of engaging in problematic social media use (Shafi, 2021).

Researchers collected a nationally representative sample of young adults between the ages of 19-32 from the U.S. and found problematic social media use increased the odds of depressive symptoms by 9% compared to young adults who did not engage on social media problematically (Shensa et al., 2017). Other studies have found depressive symptoms to play a mediating role between self-confidence, risk-taking (Kircaburun et al, 2018d) and childhood trauma (Kircaburun et al, 2018a) and PSMU. In other words, individuals who have a lower level of self-confidence, low risk-taking behavior, and experienced childhood trauma have a greater likelihood to engage on social media problematically if they are also experiencing depressive symptoms.

Conversely, Hardy and Castonguay (2018) found that a sample of 18–29-year-olds from the U.S. who engaged on a greater number of social media platforms were less likely to feel like they were going to experience a nervous breakdown compared to young adults who engaged on a smaller number of social media platforms. It is possible that young adults in the U.S. may be engaging in mood modification based on the biopsychosocial framework of behavioral addictions and utilizing social media as maladaptive coping, thus contributing to increased PSMU (Griffith, 2005).

In order to better understand problematic social media use and contribute to the growing literature surrounding this topic, this study will examine the relationship between problematic social media and self-concept. Self-concept has been conceptualized differently by many

theorists and philosophers' over time; therefore, it is important to understand how the theory of self-concept has developed over time.

### **History of the Self**

The idea of self has been a topic of debate that dates to the days of Plato and Socrates, who viewed the self as a spiritual entity (Hattie, 2014). Their philosophical theory placed focus on the self as the soul. For the next 2,000 years, the self was discussed within the religious context with a focus on the relationship between the mind, soul, and body (Hattie, 2014). Theological writings also included facets of self (i.e., pride, egotism, and selfishness) that may lead to sinful behavior (Leary & Tangney, 2012).

Later, during the Enlightenment period, philosophers Descartes, Locke, Hume, and Kant began to explore their theories of self with an emphasis on cognition (Bhar & Kyrios, 2016; Hattie, 2014). Descartes stated, "I think there for I am," which proposed that the self is derived from the thoughts that one has. Locke (1690) named the self, "person," and asserted that only the thoughts and experiences that can be remembered are a part of the self. Unlike Locke, Hume (1740) did not believe self was person. Instead, Hume suggested that self was a collection of perceptions and experiences that make up the self. Kant (1781) built on past philosophies and suggested that one may have a false sense of self. He suggested that the conceptions of self may not match the reality of self (Hattie, 2014).

More recently, William James (1890), Horton Cooley (1902), and Carl Rogers (1959) were amongst some of the first within the 19<sup>th</sup> and 20<sup>th</sup> century to propose their theories of self as an explanatory construct for human behavior (Leary & Tangney, 2012). Additionally, theorists began to consider the self as a complex concept that included constructs of self, such as self-esteem, self-concept, and self-worth (Gecas, 1982). Researchers and theorists have

conceptualized these constructs across various theoretical models (i.e., psychodynamic, social, cognitive, humanistic) (Bhar & Kyrios, 2016).

William James (1890) was one of the first theorist to conceptualize self from a psychological perspective and present a distinction between the self as object, “Me” and the self as subject, “I.” The self as subject, or “I,” is a psychological process that allows for self-awareness, executive control, and the ability to think, feel, and behave (Brockner & Wiesenfeld, 2016; Leary & Tangney, 2012). James referred to the “I” as pure ego. The self as object, “Me,” refers to individual’s reflections and perceptions about themselves and is what we now refer to as self-concept. James (1890) broke down the “Me” self into three constituents, a) the material self, b) social self, c) the spiritual self. The material self refers to an individual’s body, clothes, immediately family, and home and the impulse to collect possessions. The social self refers to the recognition an individual receives from those around them and the natural tendency to portray different social selves based on the different groups of people or situations. The spiritual self refers to the inner being that contains personal dispositions that remain consistent throughout one’s lifetime.

Focusing on the social self, Cooley (1902) proposed the idea of the looking-glass self which is a process in which individuals evaluate themselves based upon how they believe others view them. There are three main components to his theory (Shaffer, 2005). First, an individual must envision how they seem to others around them within a social situation. Next, the individual will react based on their interpretation of how they believe others view them. Finally, that individual will develop their sense of self based on those perceived judgments from others. This interpretation of the self informs the foundation of this study as individuals with an unstable self-concept may engage in problematic social media use based on the perceived judgements

they experience online. Other theorists have contributed to the understanding of self-concept in context of this study.

Years later, Abraham Maslow (1943) developed his own theory of self and proposed humans are motivated to reach self-actualization which is a belief that individuals who are self-actualized have met their full potential and have achieved a sense of fulfillment. Maslow (1954) suggested humans must first meet a series of basic needs in order to reach self-actualization. These human needs were organized in hierarchal order with the lower-level needs demanding satisfaction before the upper level needs.

Maslow initially believed the human needs must be met in the following order 1) physiological needs 2) safety needs 3) belongingness and love needs 4) esteem needs. Physiological needs include basic requirements for survival such as air, food, water, shelter, and sleep. Humans cannot live without the satisfaction of these physiological needs, therefore, all other human needs become secondary. Individuals can move toward meeting safety needs once their physiological need are satisfied. Safety needs include a sense of stability, dependency, and security. Maslow suggested humans have a need for structure and order and when safety needs are met, one has a sense of control and predictability in their lives. The third level of human needs is belongingness and love. According to Maslow's theory, a feeling of belonging within a group or family motivates human behavior. Individuals who have satisfied the previous levels will begin to feel loneliness or rejection in the absence of interpersonal relationships. The final human need before self-actualization is esteem needs, which is the need to feel a sense of achievement or mastery within their world while also building a reputation for themselves amongst those around them. Along with this reputation comes status, recognition, and appreciation. Later, Maslow refined his theory by suggesting that the satisfaction of human needs

may not be fully met before meeting upper-level needs. However, it is still suggested that individuals are motivated to achieve each of these levels even if not fully. This informs this study in the sense that individuals have a need to feel belonging, recognition, and status and they might seek out these needs on social media. This is not inherently harmful, but further research is needed to examine that relationship.

Building upon previous theorists' work on self and personality, Carl Rogers (1959) defined the self as an organized, consistent set of perceptions of oneself. He proposed the idea of self-concept as being comprised of three parts, self-experience, self-structure, and ideal self. Self-experience, or self-image, is one's perception of themselves. This might include perceptions of physicality or personality, such as height or kindness. These perceptions may not always be accurate to reality, meaning one may have a more grandiose view of themselves while others might hold a more self-depreciating view of themselves.

Self-structure, or self-esteem, is how one places value on those perceptions of self, meaning some perceptions might hold more value than others. Additionally, self-structure includes how one might evaluate those perceptions in comparison with others. For example, someone might place a lot of value on being tall but view themselves as short compared to others.

The ideal self holds the highest amount of value and is how one would like to be. When the self-image and the ideal self are incongruent, this can have a negative effect on self-esteem. For example, an individual who places a high value on being tall but views themselves as short in comparison to others might then have a negative self-esteem surrounding their height. For the purpose of this study, it is important to understand the difference and relationship between self-concept and self-esteem.

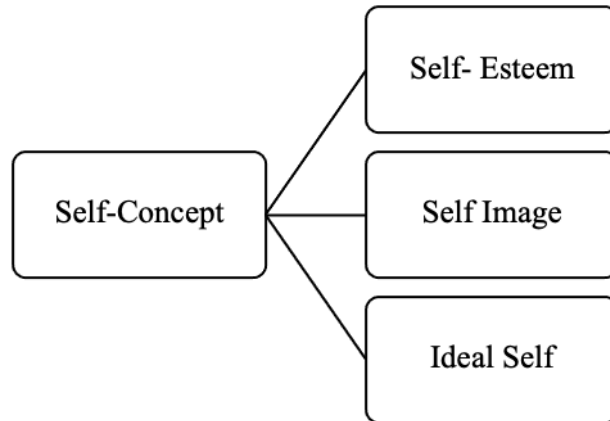


Figure 1: (Rogers, 1959)

### Self-Concept Compared to Self-Esteem

Within literature, self-concept and self-esteem are often confused and used interchangeably. For the purpose of this study, a distinction between self-concept and self-esteem must be made. Self-concept is the belief individuals develop over their life about themselves (Baumeister, 1999; Bracken, 2009, Hattie, 2014). Self-esteem refers to global judgments of self-worth and is an evaluative component within self-concept that refers to the extent in which an individual assigns value to themselves (Byrne 1996; Hattie, 2014; Rogers, 1959). For example, an individual might hold the belief, “I am not good at math.” If this person does not place importance on math, then it is likely their self-esteem will not be harmed by this belief.

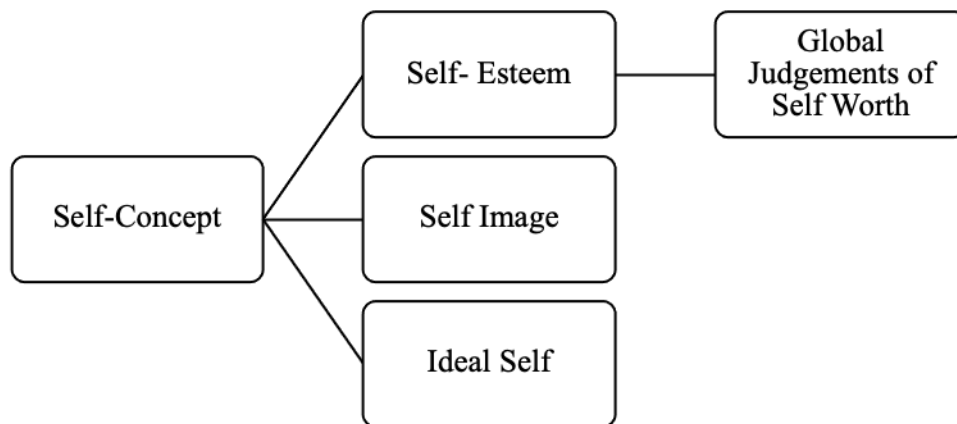


Figure 2: (Rogers 1959, Byrne 1996, Hattie, 2014)



## **Self-Concept**

Self-concept is a multifaceted construct that has been challenging for researchers to conceptualize over the last century due to inconsistencies in its discussion within the literature (Zhao, 2014). Researchers have been unable to settle upon a universally accepted definition of self-concept (Byrne, 1996). Additionally, self-concept is often confused with other terms related to self, such as self-esteem, self-efficacy, and self-worth because of the relatedness amongst the terms. For the purpose of this study, self-concept is defined as the cognitive appraisals' individuals develop over a lifespan about themselves across multiple domains (i.e., social, competence, affect, academic, family, physical) (Baumeister, 1999; Bracken, 2009; Hattie, 2014).

### **Theory Related to Self-Concept**

Self-concept is a multidimensional construct that can be conceptualized from both a social and humanistic perspective (Hattie, 2014; Rogers, 1959). Self-concept is the cognitive appraisals, or beliefs, one holds about themselves across multiple domains such as personal, social, and family (Braken, 1992; Hattie, 2014). These beliefs are developed across the lifespan and are influenced by both biological and environmental factors (Byrne, 1996). Beliefs about self are typically more malleable throughout childhood and adolescent and become more stable in adulthood (Costa & McCrae, 1980). Additionally, they are not always consistent with reality, and one might hold beliefs about themselves that are not factual (Hattie, 2014).

### ***Self-Concept is Developed Across Lifetime & Organized***

When someone is born, they do not automatically inherit a self-concept (Purkey, 1988). Instead, self-concept is developed over time throughout one's development through experiences.

Additionally, Self-concept is typically consistent and stable, meaning one's perceptions of themselves do not change easily (Purkey, 1988). The more malleable one's self-concept is, the less consistent their personality is as well.

### ***Self-Concept is Multidimensional***

Until recently, researchers viewed self-concept as a global construct, meaning one's overall view of themselves is stable and consistent (Braken, 2009). Recently, researchers have accepted self-concept as a multidimensional construct that includes various domains, such as personal, social, moral, competence, affect, physical, academic, work, and family (Braken, 1992; Fitts & Warren, 1996). Individuals develop cognitive appraisals about themselves across each of these specific self-concept domains. For example, one person might demonstrate negative social self-concept because of their inability to maintain relationships. However, they might have a stronger academic self-concept because of the ability to quickly learn new concepts in school. While these domains are widely accepted, it is important to consider how self-concept is unique to each individual and these categories may not be all inclusive (Hattie, 2014). For this study, the relationship between problematic social media use and self-concept domains will be examined.

### ***Cognitive Appraisals***

Cognitive appraisals are beliefs, attitudes, and evaluations individuals hold about themselves in response to life events and situations (Hattie, 2014). Because these appraisals are beliefs about self and not factual knowledge, they may or may not be consistent with reality (Hattie, 2014). For example, the statement, "I am five feet tall" is an example of knowledge one might hold about themselves, while the statement, "I am short" is a cognitive appraisal. One statement is fact while the other statement is a belief. Cognitive appraisals are informed by values individuals hold that are often influenced by their environment and may be learned

through social interaction (Hattie, 2014). The statement “I am short,” is a cognitive appraisal one might hold based on their understanding on what their society deems “short” and “tall.”

According to Roger’s (1959) theory of personality, individuals move toward self-actualization when all three selves (self-esteem, self-image, and ideal self) are consistent. Based on this theory, individuals may seek experiences that confirm, or validate, their established cognitive appraisals in order to reach self-actualization (Hattie, 1992). On the other hand, disconfirmation, or invalidation, of cognitive appraisals can have a negative effect on self-concept (Hattie, 1992). Both confirmation and disconfirmation of these beliefs may come from within the individual or from others. Confirmation from others may often be referred to as external validation. This construct will be discussed in more detail in the following sections.

Based on this theory, it may indicate that individuals may seek external validation from others online to confirm or validate their own cognitive appraisals. This study aims to examine whether this behavior of seeking external validation is correlated with problematic social media use.

### ***Descriptions, Expectations, and Prescriptions***

According to Hattie (2014), there are three main components to self-concept: 1) descriptions, 2) expectations, and 3) prescriptions. Descriptions are the ways in which individuals describe themselves regarding the various domains (Hattie, 2014). For example, “I am a caring person,” would be a description of self. This individual may seek experiences like volunteering in their community that confirm this belief about themselves.

Expectations are the beliefs a person holds about their ability to achieve (Hattie, 2014). An example of an expectation would be a student who had the thought, “I will get an A on my final exam.” If that student did in fact receive an A on their exam, their belief would be

confirmed, and their academic self-concept may increase. However, if they failed their final exam, their belief would be disconfirmed, and this may have a negative impact on their academic self-concept.

Prescriptions are a set of standards that provide individuals with a framework for correct and acceptable behavior (Duval & Wicklund, 1972; Hattie, 2014). These are usually in the form of laws, norms, and ideals (Baumeister, 2010). Prescriptions may be informed by religion, society, teachers, and childhood caregivers.

### **External Validation Seeking**

In counseling literature, external validation seeking is referred to by many different names such as approval-seeking and the need for approval (Pellegrini et al., 2020; Steers et al., 2020). In this study, external validation seeking is defined as an individual's desire to gain approval from others.

### **Theory Related to External Validation**

According to Crocker and Wolfe (2001), external validation seeking may be considered a contingency of self-worth, or self-esteem, meaning some individuals' self-esteem may be dependent on the approval or validation from others. While some researchers have argued self-esteem is a stable personality trait (Rosenberg, 1979), others have suggested self-esteem is a psychological state that oscillates based on different experiences and situations (Leary, et al., 1995). Crocker and Wolfe's (2001) model suggests self-esteem is both a personality trait and a psychological state. Their theory supports the idea that individuals have a certain level of trait self-esteem that is mostly stable across time. However, their theory also supports the belief that an individual's state self-esteem will fluctuate around their typical trait self-esteem level based

on various situations. Crocker and Wolfe (2001) suggest people vary in how their state self-esteem is affected based on domains in which their self-esteem and self-worth is contingent on.

The domains include, but are not limited to, approval from other's, appearance, competition, academic competence, family support, virtue, and god's love (Crocker & Wolfe, 2003). Crocker and Wolfe (2001) believed these contingencies were organized hierarchically, meaning the greater a person's self-esteem is contingent on a specific domain, the more likely their self-esteem will fluctuate when that domain is triggered. For example, a student's self-esteem is more likely to be affected by a failing test grade than a negative comment made by a peer if their self-esteem is more strongly contingent on school competence than the approval of others.

Additionally, people vary in their global judgements of self-worth, or contingencies of self-worth (Crocker & Wolfe, 2001). Contingencies of self-worth develop over the course of a person's life based on several variables, such as environment, society norms, and social influence. While these domains are typically stable, people may find themselves adapting their contingencies of self-worth over time based on changes to their environment. For example, a retired professional soccer player whose self-esteem and self-worth has been contingent on competition may begin to develop a stronger contingency of self-worth based on their family support. However, it is more likely for the retired professional soccer player to continue to engage in competitive activities because it is harder to shift from one contingency to another.

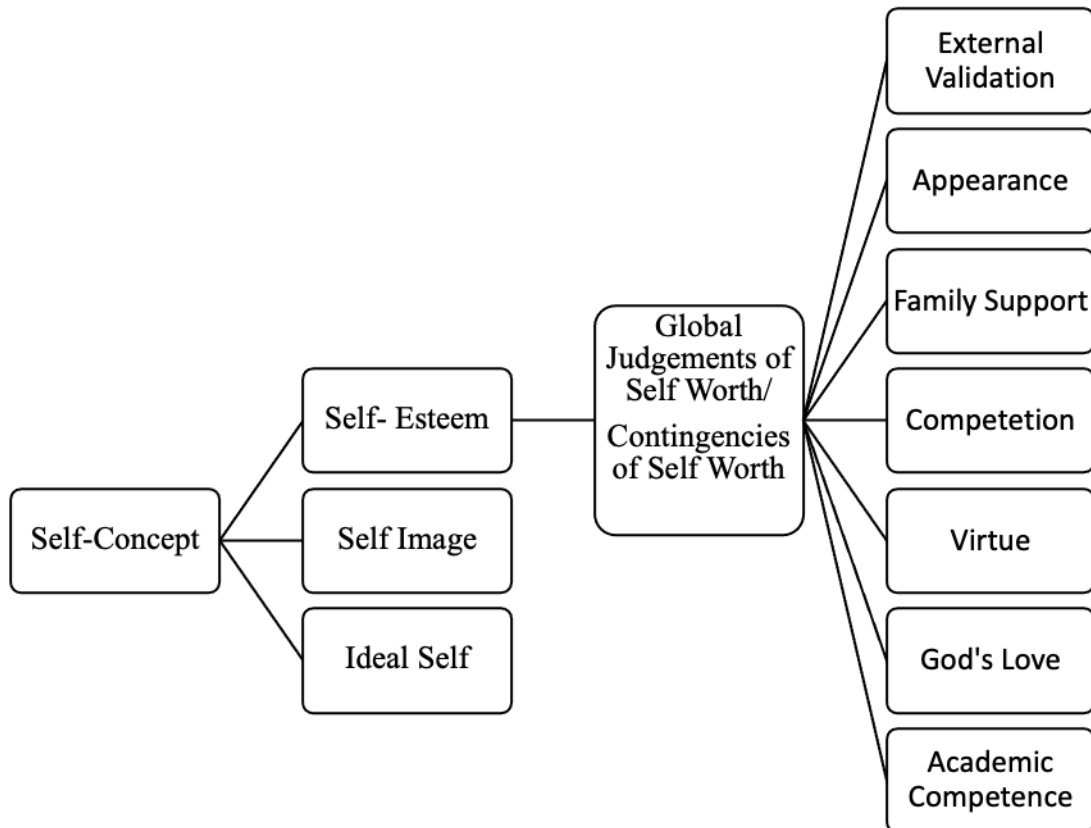


Figure 3: (Crocker & Wolfe, 2001, 2003; Rogers, 1959)

Crocker and Wolfe (2001) proposed self-esteem fluctuates based on a person's perceptions of their own successes and failures within these domains. Individuals are more likely to place themselves in situations where they can succeed within the domains their self-esteem is strongly contingent on. Thus, these contingences of self-esteem seem to regulate behavior. This is consistent with Maslow's theory that individual's behavior is motivated by the need to fulfill

each level within the hierarchy of needs in order to reach self-actualization. This suggests that people whose self-esteem and self-worth is contingent on external validation may be motivated to satisfy psychological needs of belongingness and love and esteem. Humans may want not only a sense of acceptance within their communities, but also approval. Thus, for someone who bases their self-esteem on external validation and is active on social media might exhibit certain patterns of behavior that is consistent with problematic social media use.

### **Self and External Validation Seeking**

Consistent with Maslow's theory, previous researchers have linked the self with the need to belong (Baumeister & Leary, 1995; Leary & Baumeister, 2000). Researchers found that this need ultimately impacted self-esteem as individuals who were received favorably from their peers reported greater self-esteem. Additionally, researchers found this prompted people to behave in ways to maintain connections with peers (Leary et al., 1995). This informs the present study because individuals with an unstable self-concept may engage in more external validation seeking. This study aims to determine how personal self-concept, social self-concept and external validation seeking may be predictors of problematic social media use.

### **Self and Problematic Social Media Use**

Researchers have examined the relationship between problematic social media use (PSMU) and constructs related to self, such as self-esteem and self-presentation (Andreassen et al., 2017; Calancie et al., 2017; Kircaburun et al., 2018b). For example, Calancie et al. (2017) interviewed eight teenagers in Canada and found a theme negotiating self and social identity. Some participants shared their experience on social media and discussed the feelings of inadequacy that was caused due to comparing themselves to their peers on social media.

Additionally, researchers have produced findings that support a negative relationship between problematic social media use and self-esteem amongst Norwegians between the ages of 16 and 88 (Andreassen et al., 2017). These findings have been consistent with Turkish students ages 17-24 (Kircaburun, 2018b). Researchers suggest that the participants of each of these studies who reported lower self-esteem also engaged in more PSMU (Andreassen et al., 2017; Kircaburun et al., 2018b).

Kircaburun et al. (2018d) also examined the relationship between self-confidence and PSMU and found a direct negative relationship between self-confidence and PSMU amongst 460 Turkish young adults between the ages of 18-26. Those young adults that reported lower self-confidence also engaged in higher problematic social media use.

More recently, researchers in Australia examined the relationship between the amount of time spent on social media and self-concept clarity in young adults (O'Donnell et al., 2021). The sample included 525 young adults between the ages of 18 and 25 years old. The results of the study presented a negative relationship between the amount of time spent on social media and self-concept clarity. Based on these findings, the participants who spent more time on social media appeared to not have a strong sense of their own identity understanding as those participants who spent less time on social media.

Past research has demonstrated a pattern of relationship between PSMU, and other concepts related to self. This may indicate a possible relationship between self-concept and PSMU. This study aims to examine the relationship between self-concept and PSMU with young adults in the U.S. to contribute to the growing literature on this topic.



## **External Validation Seeking and Problematic Social Media Use**

There have been some studies exploring the relationship between external validation seeking, or related constructs, and social media use. In one qualitative study, researchers explored how social media sites impacted adolescents between the ages of 13 and 18 years old (Calancie et al, 2017). The researchers discovered a theme of adolescents seeking peer approval on social media through “likes.” Participants reported their awareness of how many “likes” they received on their content on social media sites in comparison with their peers and positive emotions associated with these likes. Participants also noted that these positive emotions were “false” or “fleeting.” Additionally, even when participants wanted to delete content from their social media accounts, they were reluctant to delete content if it had “a lot of likes.” While this behavior on social media does not meet the criteria of problematic social media use, it demonstrates how seeking approval, or external validation seeking, through social media may have an impact on an individual’s emotions.

In another study, researchers gathered data from an introductory psychology class to explore how participants might use twitter to satisfy unmet needs of belonging (Iannone et al., 2018). Researchers found that users with high and unmet needs of belonging, engaged on twitter more than twitter users who did not experience chronic ostracism. This seems to indicate that individuals with unmet needs of belonging may turn to social media to gain a sense of belonging or approval from others virtually.

More recently, researchers examined the relationship between the need for social approval and the number of followers a user had on Instagram with 200 Italian participants (Sciara et al., 2021). The results indicated that participants with a high need for approval were more willing to place their profile on public view when they imagined themselves with

thousands of followers. Users with many a greater number of followers reported feelings of appreciation from others but also high anxiety from fear of not meeting the expectations of their followers. Those with a high need for approval and a lower number of followers reported feeling less appreciated than users with a low need for approval and lower number of followers. These findings may indicate that social media users who need more external validation from others may experience more negative effects from their time on social media.

While there have been some studies examining the relationship between external validation seeking and social media use, further research can provide a deeper understanding on whether those with higher needs of social approval online might be engaging in problematic social media use.

## CHAPTER III: RESEARCH DESIGN AND METHODOLOGY

The purpose of this quantitative was to examine the relationship between personal self-concept, social self-concept, and external validation seeking with problematic social media use. This study also evaluated to what extent does an individual's personal self-concept, social self-concept, and need for external validation predict problematic social media use. Limited research has examined these relationships and it is becoming increasingly more important to understand the factors contributing to young adults' problematic social media use. Not all social media use may be problematic, but by identifying these factors, research can move towards a deeper understanding of the nature of the relationship between these variables. By gaining a deeper understanding, better support can be given to individuals engaging in problematic social media use.

A hierarchical multiple regression was used in order to examine the relationship between two or more predictor variables (Balkin & Kleist, 2017). This study included one criterion variable (problematic social media use) and three predictor variables (personal self-concept, social self-concept, and external validation). A hierarchal multiple regression model was used in this study in order to examine the relationships of the variables (Field, 2013).

### **Research Questions**

The following study was guided by the research questions listed below:

1. Research Question 1: What is the relationship between personal self-concept and problematic social media use in young adults ages 18-22?
2. Research Question 2: What is the relationship between social self-concept and problematic social media use in young adults ages 18-22?

3. Research Question 3: What is the relationship between external validation seeking and problematic social media use in young adults ages 18-22?
4. Research Question 4: To what extent does external validation seeking, personal self-concept, and social self-concept predict problematic social media use in young adults ages 18-22?

### **Participant Selection**

Participants were recruited using quota sampling through Amazon Mechanical Turk (MTurk, n.d.). MTurk is considered to produce high quality data within the social science fields (Kees et al., 2017). The target population is 18-22 year old's in the United States. These young adults are amongst the first group of young adults to have grown up in a society in which most of the population utilized social media (Seymour, 2019). Moreover, participants that are 18 years of age were born the same year Facebook was created, 2004. As such, it may be inferred that these participants essentially grew up with the influence of Facebook and social media throughout their lives. The participants included all genders and gender nonconforming individuals. Participants recruited also included all individuals who are actively engaged on social media. Active engagement was defined by accessing at least one social media account through their cell phone, tablet, laptop, or desktop computer at least 7 times per day (Arrington, 2012). Participants must also post content on social media at least once per day every week in the form of a photo, status update, or social media story, which is content that is added temporarily and typically removed within 24 hours. Individuals who do not engage on social media or do not have at least one social media account were not eligible to participate in this study.

## **Data Collection**

After receiving approval from the Texas A&M University- Corpus Christi Institutional Review Board (IRB), data was gathered using Amazon's Mechanical Turk (MTurk, n.d.). This further allows researchers to distribute their measures to their targeted population based on their specific criteria and demographic data. Participants were provided with information regarding the study that informs them of their voluntary and anonymous participation.

The survey that was distributed to willing participants through a Qualtrics's survey link (Qualtrics XM, n.d.) included informed consent forms, the demographic questionnaire, two subscales, personal self-concept and social self-concept, from the Tennessee Self-Concept Scale, 2<sup>nd</sup> edition, one subscale, Approval from Other's, from the Contingencies of Self Worth scale, and Bergen Social Media Addictions scale. Participants were informed that these assessments should take 15-25 minutes to complete in total. Within the Qualtrics survey, a CAPTCHA, was included in order to avoid fraudulent bot responses (Salinas, 2022). CAPTCHA is used to determine the difference between human users and computers that have been designed to take assessments. Participants who completed the questionnaire were given a monetary payment for completion of this survey, which was deposited directly into their MTurk account.

## **Measurement of Constructs**

### **Demographic Questionnaire**

The demographic questionnaire included questions related to age, gender, ethnicity, and their presence on social media. Participants were also asked to identify how many social media accounts they are currently active on and an estimate of how long they spend on social media each day.

### **Tennessee Self-Concept Scale, 2<sup>nd</sup> Edition**

The Tennessee Self-Concept Scale, 2<sup>nd</sup> edition (TSCS-2) was developed to assess self-concept which is an individual's perception of who they are (Fitts & Warren, 1996). The TSCS-2 was originally developed to measure self-concept across individuals ages 13 years of age or older (Byrne, 1996). The TSCS is a self-report assessment that measures self-concept across multiple domains such as personal self-concept, moral self-concept, physical self-concept, social self-concept, family self-concept academic/work self-concept. This 82-item assessment uses a 5-point Likert-type response format with response of "Always False," "Mostly False," "Partly False and Partly True," "Mostly True," and "Always True."

For this study, two subscales, Personal Self-Concept and Social Self-Concept, were administered to participants. Personal Self-Concept is a 12-item measure of an individual's sense of self-worth (Fitts & Warren, 1996). This subscale included items such as "I am satisfied to be just what I am" and "I am a cheerful person." For personal self-concept with adults 19-90 years of age, the Cronbach alpha coefficient was .81. Social Self-Concept is a 12-item measure of how worthy and adequate participants feel within social interactions and included items like, "I get along well with people" and "I am a friendly person" (Fitts & Warren, 1996). For social self-concept with adults 19-90 years of age, the Cronbach alpha coefficient was .84.

### **Contingencies of Self-Worth**

The Contingencies of Self-Worth is a 35-item scale that was developed to be used to measure the internal and external sources of self-esteem (Crocker et al, 2003). Within this scale, there are seven subscales with five items each that include: approval from other's, physical appearance, outdoing others in competition, academic competence, family love and support, being a virtuous or moral person, and God's love. This scale uses a 7-point Likert scale that

ranges from “strongly disagree,” “disagree”, “somewhat disagree,” “neutral,” “agree somewhat,” “agree,” to “strongly agree.”

For this study, only one subscale was used to measure external validation seeking. This subscale included items such as, “I don’t care if other people have a negative view of me,” “what others think of me has no effect on what I think of myself,” and “my self-esteem depends on the opinions of others hold of me.” Crocker et al. (2013) reported Cronbach’s alpha coefficient for scores on the other’s approval scale as .82 using a sample of University of Michigan students ranging from ages 16-27 years old, indicating strong reliability.

### **Bergen Social Media Addiction Scale**

The Bergen Social Media Addiction Scale (BSMAS) was originally developed as the Facebook Addiction Scale and measured the extent to which an individual was addicted to Facebook (Andreassen et al., 2012, Shensa et al., 2017). However, with the increase in access to varying social media sites, the measure was adapted to encompass social media as a whole. The BSMAS is a 6-item scale that measures problematic social media use (Andreassen et al., 2012). The scale is a 5-point Likert scale and asks participants how often or how rarely they experienced specific addiction components (salience, craving/tolerance, mood modification, relapse/loss of control, withdrawal, and interpersonal conflict) regarding social media use within the last year (Andreassen et al., 2012). These items are based on the theoretical framework of addiction from the biopsychosocial model (Griffith, 2005). Items within this scale included “how often during the last year have you used social media to forget about personal problems?” and “how often during the last year have you spent a lot of time thinking about social media or planned use of social media?” Higher scores indicated greater problematic engagement on social media. With a sample of 22,533 Norwegians between the ages of 16 and 88 years old, the

Cronbach alpha coefficient was .88, indicating strong reliability. Banyai et al. (2017) reported a Cronbach alpha coefficient of .85, indicating strong reliability, when used with a sample of Hungarian adolescents while Shensa et al. (2017) reported a Cronbach alpha coefficient of .89, also indicating strong reliability, using a nationally representative sample of U.S young adults ages 19 to 32 years.

## **Data Analysis**

### **Statistical Power Analysis**

An a priori power analysis was conducted to determine the minimum number of participants needed to establish statistical power for this study at a .90 power level and  $\alpha = .05$  in order to increase the chances of detecting effects and reduce the likelihood of Type II error (Ellis, 2010). Using the G\*Power 3.1 statistical power analysis program, the power analysis revealed that a sample size of 54 was necessary to detect a large effect ( $f^2 = .35$ ) of predictor variables for estimating change among the criterion variable (Faul, Erdfelder, Buchner, & Lang, 2009).

### **Preliminary Analysis**

First, the data was examined for any missing data and the researcher determined which technique to use to account for missing data. Using SPSS, the researcher examined the model assumptions of normality, linearity, homoscedasticity, and residuals to ensure they are met prior to the primary analysis (Field, 2013). An analysis was also conducted to determine whether multicollinearity exists between predictor variables (Balkin & Kleist, 2017). Multicollinearity occurs when two or more predictor variables are highly correlated. Additionally, internal consistency was calculated using Cronbach's alpha.



## **Primary Analysis**

To address research questions 1, 2, and 3 a bivariate correlational analysis was conducted to determine the relationship between 1) personal self-concept and problematic social media use, 2) social self-concept and problematic social media use, and 3) external validation seeking and problematic social media use.

To address research question 4, a hierarchical multiple regression analysis was performed to examine the relationship between problematic social media use and self-concept, and external validation (Field, 2013). Personal and social self-concept were entered into the regression model together first while external validation seeking was entered into the model second. IBM Statistical Package for Social Sciences (SPSS) was used in order to complete the correlational analysis.

## **Representation of Data**

The relationships between variables is represented using SPSS scatterplots (Field, 2013). Scatterplots depict a visual representation of linear relationships using dots that represent participant scores. Output descriptive statistics, correlational statistics and the model summary will be represented in APA format tables (Field, 2013).

## CHAPTER IV: RESULTS

The purpose of this research study was to examine the relationship between measures of external validation seeking, personal self-concept, and social self-concept with problematic social media use. The following chapter provides an overview of the preliminary analyses, which includes data cleaning, estimating the reliability of the assessments, reporting on demographic data, testing model assumptions, providing descriptive results, and the primary analyses associated with each of the research questions posted in this study.

### **Preliminary Analyses**

#### **Data Cleaning**

To complete the data analyses, the data was first inspected and cleaned for any missing data. For this study, there were a total of 231 individuals who accessed the Qualtrics survey online and of those individuals, 188 participants submitted their survey. All 188 participants submitted completed data sets. Seventy-one participants were removed because they reported they were over the age of 22 and did not meet the age qualification to participate in this study. Two cases were removed because they reported what appeared to be inaccurate data. For example, one respondent reported they spent 35 hours a day on social media while the other case reported they held 50 different social media accounts. Since enough participant data was gathered to meet the necessary statistical power, researchers decided to omit these two cases from further analyses. The remaining 115 participants were included in this study and did not have any missing values.

#### **Reliability**

Cronbach's alpha coefficients were calculated for each of the assessments to determine their internal consistency for this study. Alpha coefficients indicates the reliability of the

assessment and how well it measures the construct it is intending on measuring. Typically, a Cronbach alpha reliability coefficient between of  $\alpha = .7 - .8$  is acceptable but may be even lower than  $.7$  when working with psychological constructs (Field, 2014). For the Bergen Social Media Addiction Scale, the alpha coefficient was  $\alpha = .76$ . This is lower than other studies that indicated strong reliability at  $.85$  (Banyai et al., 2017) and  $.89$  (Shensa et al., 2017), but still an acceptable reliability for this study. It is possible this study had a lower alpha coefficient due to its homogenous sample. This will be discussed as a study limitation in the following chapter. For the Personal Self-Concept subscale and Social Self-Concept subscale, the Cronbach alphas were  $\alpha = .73$  and  $\alpha = .67$ , respectively. Brown (1996) reported alpha coefficients ranging from  $.73$  to  $.93$ , indicating strong reliability. While this sample's alpha coefficient results are lower, they are still acceptable for this research study as they are measuring what they are intended to measure.

For the Approval from Other's subscale of the Contingencies of Self-Worth Scale, the Cronbach alpha was  $\alpha = .07$ . This is not consistent with previous studies in which this assessment was used with young adults ages 16-27 and indicated a strong reliability of  $.82$ . It is uncertain why this subscale was unreliable in this study, but participants may not have had a strong understanding of the nature of each item. For example, one of the items stated, "What others think of me has no effect on what I think about myself." This language might take a little longer to process the meaning and determine whether they agree or disagree with this statement. On the other hand, the other assessments, personal and social self-concept, produced larger alpha scores and contained items such as, "I am a cheerful person" and "I am as sociable as I want to be." These items are much shorter and perhaps might be easier to answer accurately. Because this subscale did not reveal strong reliability within this study, the full subscale will not be used in further analyses.

When correlations between items from the Approval from Other’s subscale were examined, it was determined that three items might need to be removed in order to proceed with the preliminary and primary analyses. While this is a large limitation to this study, a two item “Revised Researcher created: Approval from Other’s” measure was created from the two remaining items of the Approval from Other’s Scale which will be used as measure of Approval from Other’s used in this study. These two items included “I can’t respect myself if others don’t respect me” and “my self-esteem depends on the opinion other’s hold of me.” When examining these items, they appeared to be face valid indicators of approval from others (Nunnally & Bernstein, 1994). In other words, these items appeared to measure the construct they were intended on measuring. This revised measure produced a Cronbach’s alpha of .77.

**Demographics**

The participants of this study included 115 individuals (79 women, 69%; 36 men, 31%) with a mean age of 21.49 years (*SD* = 0.81) that are actively engaged on social media by accessing one social media site at least seven times per day and posting content at least once per day. Participants were predominately White or Caucasian (*n* = 109, 95%), with other participants identifying as either Asian or Pacific Islander (*n* = 3, 2%), Black or African American (*n* = 1, 1%), Hispanic or Latino (*n* = 1, 1%), Native American or Alaskan Native (*n* = 1, 1%). Participants reported a mean of 5.78 hours (*SD* = 2.05) were spent on social media daily and they held a mean of 4.17 social media accounts (*SD* = 2.03).

**Table 1**

*Distribution of Demographic Variables of study participants*

Variable	n	Frequency	Percentage
Age	115		

Variable	n	Frequency	Percentage
19		2	2%
20		17	15%
21		19	16%
22		77	67%
Gender	115		
Woman		79	69%
Man		36	31%
Race/Ethnicity	115		
White or Caucasian		109	95%
Asian or Pacific Islander		3	3%
Black or African American		1	1%
Hispanic or Latino		1	1%
Native American or Alaskan Native		1	1%
Daily Average Hours Spent on Social Media	115		
1		1	1%
2		4	4%
3		12	10%
4		16	14%
5		19	16%
6		15	13%
7		29	25%
8		11	10%
9		2	2%
10		4	3%
11		2	2%
Number of Social Media Accounts	115		
1		11	10%
2		16	14%
3		15	13%

Variable	n	Frequency	Percentage
4		24	21%
5		29	25%
6		4	3%
7		5	4%
8		9	8%
9		1	1%
10		1	1%

## **Tests of Model Assumptions**

### ***Bivariate Correlation***

Before running a bivariate correlation analysis with the gathered data, model assumptions for a bivariate correlation were tested. As recommended by Field (2014), the model assumptions tested included normality, linearity, and the data is free of outliers. To test normality and linearity, a linear relationship is computer for each independent variable (personal self-concept, social self-concept, and revised researcher created: approval from other's) with the dependent variable (problematic social media use). For normality, the Q-Plot is examined for points near the plotted line. In each of the three relationships examined, the visual inspection of the Q-plots indicated the assumption of normality was met. To test the assumption of linearity, a scatterplot is created to visually determine if a linear line exists between the variables. For each of these variables, the assumption for linearity was met and there was no curving of the lines. Finally, the data set must be free of any outliers. Boxplots were examined for any outliers, and none were detected.

### ***Hierarchical Regression***

While results from regression analysis are generally robust, the validity of conclusions are dependent upon several model assumptions based on the distributions of data points. Accordingly, before running the primary analysis, the model assumptions of normality, multicollinearity, linearity, homoscedasticity, and residuals must be first tested. According to Ghasemi and Zahediasl (2012), the first model assumption of normality should not pose any statistical issues due to the large sample size of 115 participants. The model assumption of normality is tested through a visual inspection of histograms and a normal p-plot of standardized residuals (Field, 2014). According to UCLA (n.d.), a visual inspection of a histogram should reveal a normal distribution of scores which appears in this data in the shape of a bell curve. The p-plot compares the observed cumulative distribution of the standardized residual to the expected cumulative distribution of the normal distribution. If the model assumption of normality is met, this p-plot should follow a linear line. In this study, it appears to follow the linear line, indicating a normal distribution.

The second model assumption of multicollinearity was tested through bivariate correlations analyses of the independent variables as well as collinearity diagnostic (Field, 2014). There was a concern for multicollinearity between the personal self-concept subscale and the social self-concept subscale because of their correlation of .79. Correlations above .80 might indicate the presence of multicollinearity (Field, 2014). Some correlation between the two subscales might be expected since they ultimately measure different dimensions of an individual's overall self-concept. Based on collinearity diagnostics, both subscales had VIF scores of 2.63, which are below the general guideline of 10 (Field, 2014). According to

researchers at Penn State (2018), if the VIF is below 4, no further investigation into multicollinearity is needed.

As recommended by Field (2014), linearity, homoscedasticity, and residuals were both tested through a visual examination of the plot of standardized residuals against predicted values. The plot in this study appears to have met the assumption of linearity, homoscedasticity, and residuals because each of the plotted points are spread across with no appearance of patterns. With each of the model assumptions tested and met, the descriptive statistics are provided in Table 2.

### **Descriptive Results**

Descriptive statistics were computed for each of the independent variables and the dependent variable and can be found in Table 2. The dependent variable, problematic social media use, was measured using the Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2012). The BSMAS has a possible score range from 6 to 30, with 30 indicating the highest risk for social media addiction. For this study participants' scores ranged from 10 to 28 with a mean of 21.30 ( $SD = 4.00$ ), indicating a higher risk for problematic social media use.

The independent variables, personal self-concept and social self-concept are both subscales from Tennessee Self-Concept Scale 2<sup>nd</sup> edition (TSCS:2; Fitts & Warren, 1996). Both subscales from the TSCS:2 have the possible score range of 12 to 60, with 60 indicating a stronger sense of self-concept. For this study, with the personal self-concept subscale, participants scores ranged from 32 to 57 with a mean of 41.04 ( $SD = 5.66$ ). For the social self-concept subscale, participants scored ranged from 25 to 55 with a mean of 39.57 ( $SD = 5.31$ ). External validation seeking was measured by the "Revised Researcher Created: Approval from Other's measure using two out of five items from the Approval from Other's subscale in the



Contingencies of Self-Worth Scale (Crocker et al., 2003). The two items had a possible range of 2 to 14 and the range of scores included 2 to 13, with a mean of 9.06 ( $SD = 2.72$ ). The following section includes the results of each research question.

**Table 2**

*Descriptive Statistics for Study Variables (n = 115)*

Variable	M	SD	Range		$\alpha$
			Min	Max	
Problematic Social Media Use	21.30	4.00	10	28	.76
Personal Self-Concept	41.04	5.66	32	57	.73
Social Self-Concept	39.57	5.31	25	55	.67
Researcher Revised: Approval from Others	9.06	2.72	2	13	.77

### Evaluation of Research Questions

#### **Research Question 1: What is the relationship between personal self-concept and problematic social media use in young adults ages 18-22?**

For research question one, the relationship between personal self-concept and problematic social media use is examined. Based on the literature (Andreassen et al., 2017; Calancie et al., 2017; Kircaburun et al., 2018b), it might be expected that the relationship between personal self-concept and problematic social media use will result in a significantly negative relationship. Accordingly, it seems as though lower levels of reported personal self-concept would be predictive of increased levels of problematic social media use. As recommended by Field (2004), in order to explore this relationship, a bivariate correlational

analysis using Pearson’s  $r$  was conducted to assess the relationship between personal self-concept and problematic social media use among a total of 115 participants. As expected from the hypotheses, participants reported levels of personal self-concept was significantly negatively related to problematic social media use,  $r(115) = -.22, p \leq .05$ , indicating a small effect size. These findings suggest individuals with reported lower levels of personal self-concept had higher levels of problematic social media use.

**Table 3**

*Summary of Correlations*

Variable	1	2	3	4
1. Problematic social media	-			
2. Personal Self-Concept	-.22*	-		
3. Social Self-Concept	-.20*	.79**	-	
4. Researcher Revised: Approval from Other’s	.62**	-.24**	-.24*	-

*Note.*  $N=115$ , \*\* $p < .01$ , \* $p < .05$

**Research Question 2: What is the relationship between social self-concept and problematic social media use in young adults ages 18-22?**

For research question two, the relationship between social self-concept and problematic social media is explored. Based on the findings from previous studies (Calancie et al., 2017; Iannone et al, 2018), it seems likely that a significantly negative relationship will exist between social self-concept and problematic social media use. Individuals who do not view themselves strongly socially might also engage in problematic social media use. A bivariate correlational analysis using Pearson’s  $r$  was conducted to examine the relationship between reported levels of

social self-concept and problematic social media use among a total of 115 participants. As expected from hypothesis, there was a significant negative relationship between participant reported social self-concept and problematic social media use,  $r(115) = -.20, p \leq .05$ , indicating a small effect size. Thus, participant reports of lower levels of social self-concept were associated with higher participant reported levels of problematic social media use.

**Research Question 3: What is the relationship between external validation seeking and problematic social media use in young adults ages 18-22?**

The relationship between external validation seeking and problematic social media use was examined. It might be expected that individuals who demonstrate a higher need for external validation from others might engage in problematic social media use. To explore research question three, a bivariate correlational analysis using Pearson's  $r$  was conducted to examine the relationship between external validation seeking and problematic social media use among a total of 115 participants. Revised Researcher Created: Approval from Other's was significantly positively related to problematic social media use,  $r(115) = .62, p \leq .05$ , indicating a large effect size. These findings indicate participants with a higher need for external validation from others engaged in higher levels of problematic social media use.

**Research Question 4: To what extent does external validation seeking, personal self-concept, and social self-concept predict problematic social media use in young adults ages 18-22?**

Research question four explores the confluence of reported personal self-concept, social self-concept, and external validation seeking on reported levels of problematic media use. It is expected that each of these independent variables might account for a significant proportion of the variance prediction of problematic social media use. A two-step hierarchical multiple linear

regression analysis was conducted to determine to what extent the combination of self-reported external validation seeking, personal self-concept, and social self-concept predicts levels of self-reported problematic social media use in 115 participants (results found in Table 4). In the first step, both self-concept subscales, personal and social, were entered into the model. These two items were chosen to be entered first based on previous research that discovered a relationship between problematic social media use and aspects of the self (Andreassen et al., 2017; Calancie et al., 2017; Kircaburun et al., 2018b). However, the analysis did not yield a statistically significant model,  $F(2, 114) = 2.89, p = .06, \text{adjusted } R^2 = .03$ . While it is uncertain why this analysis was not found to be statistically significant, it may be possible that this did not yield a significant relationship due to the homogenous sample since previous research had more diverse samples.

In the second step of this hierarchal multiple regression analysis, the revised external validation variable was added to the self-concept subscales, which were entered in the model in step one. This analysis yielded a statistically significant model,  $F(1, 113) = 23.58, p = .00, \text{adjusted } R^2 = .37$ , with an  $R^2$  change of .34, indicating a large effect size in which model predictors account for approximately 37% of the change in scores estimating personal and social self-concept and external validation with problematic social media use. Within this second model, scores associated with personal self-concept and social self-concept did not yield a predictive relationship,  $\beta = -.06, p = .63, sr^2 = -.04$  for personal self-concept and  $\beta = -.01, p = .91, sr^2 = -.01$  for social self-concept. The researcher created revised Other's Approval measure variable did yield a predictive relationship,  $\beta = .60, p = .00, sr^2 = .58$ , with 58% of the variance of problematic social media use is explained by the revised external validation variable.

**Table 4**

*Summary of Regression Model for Personal Self-Concept, Social Self-Concept, and External Validation as Predictors for Problematic Social Media Use*

Model	Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>sr</i> <sup>2</sup>	<i>F</i>	<i>Adjusted R</i> <sup>2</sup>
1	<b><u>Problematic Social Media Use</u></b>						2.89	.03
	Personal Self-Concept	-.11	.11	-.15	-1.01	.31		
	Social Self-Concept	-.06	.11	-.08	-.55	.58		
2	<b><u>Problematic Social Media Use</u></b>						23.58	.37
	Personal Self-Concept	-.04	.09	-.06	-.48	.63		
	Social Self-Concept	-.01	.19	-.01	-.11	.91		
	Revised Researcher Created: Approval from Others' Measure	.89	.11	.60	7.86	.00**		

*Note.* *N*=115, \**p* < .05, \*\**p* < .05

### Summary of Results

Preliminary and primary analyses examine the relationship between personal self-concept, social self-concept, and external validation seeking with problematic social media use as

well as the predictive nature between the three independent variables on problematic social media use. Findings indicate significant relationships exist between personal self-concept, social self-concept, and external validation seeking with problematic social media use. Both personal and social self-concept are significantly negatively related to problematic social media use, meaning participants with higher levels of personal and social self-concept do not demonstrate high levels of problematic social media use. Self-reported External validation seeking was found to be significantly positively related with problematic social media use, meaning participants reported need for external validation from others was directly associated with reported levels of problematic social media use. A two-step multiple linear regression yielded a significant confluence ( $R^2 = .37, p \leq .05$ ) of three self-reported measures (Personal Self Concept, Social Self Concept, and External Validated) on the self-reported level of problematic media use. The following chapter will include a discussion of the results and their relevancy with previous literature.

## CHAPTER V: DISCUSSION

The current study examined the extent to which the confluence of three self-reported measures of self-concept and need for social validation are associated or predictive of reported problematic social media use. Each of the independent variables (personal self-concept, social self-concept, and external validation) were found to be significantly related to reported problematic social media use when evaluated independently. The results of this study revealed that higher levels of reported engagement in problematic social media use were associated with lower levels of reported personal and social self-concept scores and higher levels of reported need for external validation. Additionally, the results of a hierarchical multiple linear regression support a conclusion of a significant confluence of self-reported levels of personal, social self-concept and need for social validation on self-reported measures of problematic social media use. The following chapter will provide a discussion of each of the research questions, limitations within this study, implications for counseling, and future research recommendations.

### **Discussion of Research Questions**

#### **Research Question 1: What is the relationship between personal self-concept and problematic social media use in young adults ages 18-22?**

Based on the bivariate correlational analysis, personal self-concept and problematic social media use were found to be significantly negatively related. This result indicated that higher reports of problematic social media use were associated with lower levels of personal self-concept.

These findings are consistent with a recent study of 525 young adults between the ages of 18 to 25 that found participants who spent more time on social media also appeared to not have a strong sense of their own identity (O'Donnell et al., 2021). Similarly, these findings are also

consistent with another study that found young adults who engage in higher levels of problematic social media use also tended to report lower self-confidence (Kircaburun et al., 2018d).

Individuals with lower levels of personal self-concept might utilize social media as a mood modification tool to reduce unwanted feelings they could be experiencing due to their lower levels of personal self-concept (Griffiths, 2005). It is possible that individuals who do not think highly of themselves might use social media as a tool to either escape their current negative feelings and/or gain positive feedback online. Over time, it is possible that their need for validation from others through social media might increase, thus leading to higher levels of problematic social media use. The results of research question one were similar to those of research question two.

**Research Question 2: What is the relationship between social self-concept and problematic social media use in young adults ages 18-22?**

Based on the bivariate correlational analysis, social self-concept and problematic social media use were found to also be significantly inversely related; higher levels of self-reported problematic social media use, were associated with lower levels of social self-concept in the study sample. According to the authors of the assessment, a person who scores lower on the social self-concept subscale might present as awkward or uncomfortable in social situations (Fitts & Warren, 1996). Therefore, those with lower levels of social self-concept might rely on social media to fulfill unmet social needs. Since they do not hold strong beliefs about themselves socially, social media might provide a tool for these individuals to engage online with others. However, it appears that this engagement online might not function as a tool, but rather pose a risk for problematic social media use. As previously discussed, it might be that the more social media is used to fulfill these unmet social needs, the more and more they need to engage on



social media to receive the same pleasure of need fulfillment (Griffiths, 2005). Increased use of social media might also begin to interfere in other areas of the individual's life, such as in-person social interaction. This might then decrease their levels of social self-concept.

The results to research question two are consistent with a previous study that discovered a relationship between PSMU and lower self-confidence, which might also suggest an impact on how one views themselves socially (Kircaburun et al., 2018d). These findings are also consistent with a recent study that found that social fears mediate the relationship between social anxiety and compulsive social media use (Ali et al., 2021). In their study with 402 college students, Ali and colleagues (2021) found that when individuals, who report social anxiety, experience fears of negative evaluation from others and fears of rejection, are more likely to engage in increased compulsive social media use. The researchers concluded that although these individuals might have reduced their negative feelings of self through social media use for a short time, in the long run, their compulsive engagement on social media can be considered unhealthy.

**Research Question 3: What is the relationship between external validation seeking and problematic social media use in young adults ages 18-22?**

Upon initial inspection of the Approval from Others subscale in the Contingencies of Self-Worth Scale, it was determined that this scale was unreliable for this group of participants within this study. Two items with stronger reliability were used instead as a Revised Researcher Created: Approval from Other's measure. The results of this bivariate analysis indicated a significant negative relationship between external validation and problematic social media use. According to these findings, higher levels of reported problematic social media use were related to higher levels of external validation seeking.

Though this variable only includes two items and is a limitation within this study, these findings are consistent with previous studies that found participants engaged in external validation seeking behavior on social media whether through an awareness of “likes” (Calancie et al., 2017), fulfilling unmet needs of belonging (Iannone et al., 2018), or placing profiles publicly in hopes of gaining thousands of followers (Sciara et al., 2021). Individuals seem to gain a sense of external validation based on the number of “likes” they receive on a post or by the number of followers they have. The more likes and followers someone gets, the more that person might feel a sense that others approve of them or think highly of them. The more they experience this, the more they might post or engage on social media to get that same feedback. Thus, the individual might begin to fall into some of the problematic social media use symptoms, such as needing to use it more and more, using it to reduce unwanted feeling, and feeling preoccupied with thoughts about social media when not utilizing it (Griffiths, 2005). Similar to the previous research questions, it appears that the more individuals are aware of and seek out validation, the more this behavior might have a negative effect on their mental health. This might be due to the anxiety that might result from fixating on the number of “likes” and “followers” or it could be a result of not gaining the validation they had hoped for.

**Research Question 4: To what extent does external validation seeking, personal self-concept, and social self-concept predict problematic social media use in young adults ages 18-22?**

The results of a two-step hierarchical multiple linear regression yielded a statistically significant model in the second step, but not the first. Personal and social self-concept did account for a significant proportion of the variance in problematic social media use scores in neither model. This is not consistent with previous studies that found aspects of the self to be

related to problematic social media use (Andreassen et al., 2017; Calancie et al., 2017; Kircaburun et al., 2018b). It is possible that the study limitations, which are discussed in detail in the following section, played a role in these findings. For example, perhaps the results might be different with a more diverse sample of 18- to 22-year-olds that did work online. Additionally, it might be useful to examine these variables (personal and social self-concept) as predictor variables again with those limitations in mind. Perhaps the significant relationship that exists between these aspects of the self-system and problematic social media use is not strong enough to establish a predictive relationship. In this scenario, it might be important to examine other variables that do have a predictive relationship with problematic social media use.

Based on this model, it appears as though the Revised Researcher Created: Approval from Other's measure accounted for a significant proportion of the variance. One of the items included in the Revised Researcher Created: Approval from Other's measure was "my self-esteem depends on the opinion others hold of me." These findings indicate individuals who rely on the opinion of others might seek validation from others through social media and exhibit problematic social media use. These findings also call for more investigation into the predicative relationship between these variables (external validation and problematic social media use) with other populations, such as older adults or adolescents.

### **Study Limitations**

A major limitation of this study is the low reliability of the original external validation variable as measured by the Approval from Other's subscale (Crocker et al., 2003). A "Revised Researcher Created: Approval from Other's" scale was used instead and included two items from the subscale. This limitation is based on the fact that the revised measure, while demonstrating validity in this study (Alpha =.77), does not have a record in the literature and may thus support a

limited association with previous literature using the more established measure by Crocker and colleagues.

Additionally, when using self-response assessments, it is a concern that participants will respond in a manner that they believe is socially desirable. This means they would not want to respond in such a way that paints themselves in what might appear socially unacceptable. This might be an even greater concern for participants that may have negative social perceptions surrounding items such as “I spend too much time on Facebook or other social media.” There is also the risk that participants responded to items in a manner that they believed seemed more favorable as opposed to their truth. For example, participants might have underreported their problematic social media use and need for validation from others and over scored their personal and social self-concept. Despite the anonymity, it might be difficult for someone to provide honest answers because they may not always be honest with themselves regarding these beliefs and behaviors. Someone who might have a higher need for validation from others might not want to respond accurately for fear of judgement. Perhaps these individuals are accustomed to presenting themselves in a favorable light. The inclusion of one or more of the established scales measuring social desirability (Crowne & Marlowe, 1996) would be an important addition to a replication of this study. Such an addition would be useful in ruling out the possibility or extent to which participants were responding with a ‘social desirability mindset’.

Another limitation is that the sample was made up of primarily White women. This is somewhat consistent with MTurk’s typical demographics since overall, 79.9% of the workers are White (Moss, n.d.). Additionally, 52.6% of young adults (18-29 years old) on MTurk are female. It is possible that because of the time of day that I posted my study on MTurk, there happened to be more White women online. Because of this, the results of these findings might not accurately

represent the experiences of individuals from other gender, racial, and ethnic identities. For example, in one study, sexual and gender minority young adults that experience minority stress may be more at risk for problematic social media use (Vogel et al., 2021). A previous study found differences in problematic social media use symptoms among genders (Wang et al., 2022). For example, when engaging in problematic social media use, men were more impacted by salience, the preoccupation with social media. Women, on the other hand, were more negatively impacted by conflict, interpersonal problems that arise from problematic social media use. The differences that have been found in the literature may have influenced the results of the current study. Thus, these findings are not generalizable to wider populations. Future research can focus on more diverse, representative samples to provide more inclusive results to better inform future counseling practices for diverse populations.

Finally, this study might also be limited because sample bias might exist. This study aimed to examine predictors of problematic social media use in 18-to-22-year-olds, but participants were recruited via MTurk, the service through which participants work online. It appears the individuals who participated in this study might spend a significant amount of time online since they are also working online. In the future this might need to be addressed in a similar manner to the last limitation. It might be helpful to expand recruitment methods to include individuals who do not work online, such as college students. This might help reduce bias by including individuals who are not spending their time online because of work.

### **Future Research**

While this study had limitations, it also provides useful findings for future research. Though the scale used to measure external validation seeking in this study was deemed unreliable, some items within the scale did suggest a relationship exists between this behavior

and problematic social media use. It might be useful to replicate this study with a different group of participants that represents the US national population. It might even be useful to replicate this study using college students from various universities from across the country. In effort to diversify the findings, it may even be useful to target students from Hispanic-serving institutions and Historically Black Universities. Replicating this study with college students from diverse universities can provide more information on the differences across race, ethnicity, and gender. Additionally, this would allow the findings to be more generalizable to wider audiences.

In the future, it might be informative to examine the relationships between these variables, but only including individuals who score on the higher end of the problematic social media scale. By examining those extreme, high scores, researchers might find a stronger predictive relationship. Additionally, further research may also include an examination of existing mental health issues as a moderator. For example, it might be useful to investigate whether individuals that are diagnosed with an anxiety disorder, depression disorder, or attention-deficit/hyperactivity disorder are more vulnerable to engage in problematic social media use than those who do not meet those diagnostic criteria.

Further, it might be important to incorporate qualitative research to gather additional information from participants through post-assessment focus groups and discussion groups. In the future, researchers can examine participants who scored higher on the problematic social media scale and create a focus group to gather rich data. These groups can also focus on social media and how it connects with their thoughts, beliefs, and lifestyle. Additionally, phenomenological qualitative research can be conducted to explore external validation or approval seeking behavior on social media sites. The aim of these studies would be to understand the phenomenon of young adults utilizing social media as a tool to gain external validation or

approval from others. This can also provide a foundation in designing a new scale that specifically measures external validation seeking behavior on social media. This type of scale can then be used to better examine the relationship between external validation seeking behavior and problematic social media use.

It might also be revealing to compare problematic social media use across different social media platforms as each has their own unique features and tools. This information can be useful within the counseling setting by understanding which social media sites are more highly related to problematic social media use. Additionally, it would be essential to understand what features (e.g. likes, photos, videos) contribute the most to PSMU. It seems likely that certain features are more attractive than others and this can be especially useful in addressing the issue of problematic social media use.

### **Study Implications**

In order to mitigate problematic social media use and its effects, it might be helpful to begin to address this issue earlier on in the individual's life. Since this study found a significant relationship between the independent variables (personal self-concept, social self-concept, and external validation seeking) and problematic social media use, these findings might provide useful information to parents, school counselors, professional counselors, and counselor educators.

#### **Implications for Supporting Parents.**

A recent poll gathered information from 2,909 American parents of teenagers between the ages of 13-19 years (Children's Hospital of Chicago, 2020). The results of this poll found that 68% of those parents believed that social media influenced their teen's ability to socialize normally. Additionally, 56% of these parents believed their teenager had an unhealthy desire for

approval while 67% of parents expressed concern that their teenager is addicted to social media. Based on this recent poll, it appears as though problematic social media use, socialization, and external validation seeking might be prominent concerns for parents of teenagers. In order to prevent problematic social media use and its associated issues in young adulthood, it might be important to begin prevention throughout childhood and adolescence.

Parents can encourage their children from a young age to gain validation internally, from themselves, rather than from external sources. A few tools that might help this process are using positive affirmations, taking social media breaks, practicing mindfulness, and practicing emotional regulation (Denny, 2015; Palladino, 2015). Positive affirmations have been found to be effective in improving self-concept (Denny, 2015). Parents can guide their children through using positive affirmations, such as “I am a kind person” and “I am strong person,” to help their children build their self-concept and rely less on the validation from others. Parents can help their children to “rethink” screentime and gain the skills to make healthier decisions about their screen time as opposed parent regulation (Palladino, 2015). This may be accomplished through practicing mindfulness and active listening so that parents and children can participate together. Parents can also support their children in building their emotion regulation skills by engaging in physical exercise and outdoor play time (Palladino, 2015). It seems important for parents to examine their own social media use and practice each of these tools as well in order to model these behaviors for their children.

### **Implications for Professional School Counselors**

Since not all children and adolescents enjoy listening to their parents, it might be helpful to gain this information from outside sources. School counselors who work with children and adolescents can also aid in the prevention of problematic social media use in young adults by



increasing awareness of the risks and exploring patterns of behavior on social media with students. School counselors can create psychoeducation programming on problematic social media use for students. These programs can include symptoms of PSMU, effects of PSMU, and ways of mitigating these behaviors. Additionally, it might be beneficial to utilize the Bergen Social Media Addiction Scale (Andreassen et al., 2012) to determine which of their students are engaged in problematic social media use or are at risk. For these students, smaller groups might be formed for students to share their lived experiences on social media and the effects they might have experienced from problematic social media use. These support groups might provide the counselors with the opportunity to work on group goals to reduce the student's symptoms of problematic social media use.

### **Implications for Professional Counselors**

It is especially important for professional counselors to be aware of these issues since they might be providing counseling services to children, adolescents, and young adults engaging in problematic social media use. Young adults who experience problematic social media use might seek counseling or support from outside sources. It seems important for counselors and counselor educators to be aware and competent on issues related to problematic social media use. It might be informative for counselors to include a question related to social media use within their intake forms. This might provide them with a better understanding of how much time they are spending utilizing social media. Counselors might also do well to explore media use with their clients more deliberately. Exploration could include a focus on client motivation and satisfaction with their social media milieu. One implication of these findings is that clients may need to be made more aware of the potential negative impact of media messages they are receiving. Akin to the 'misery loves company', clients may seek self-fulfilling prophecies

specific to the various internet affiliations they seek. Consistent with the findings of this research, individuals with low self-esteem may be looking for places where they can belong. However, they may find that they are looking for belonging in all the wrong places (Allen et al., 2014).

According to the findings of this study, the Revised Researcher Created: Approval from Other's scale was found to be conceptually related to both measures of self-concept. When working with clients who are experiencing issues related to social media use, it might be therapeutic to explore issues related to the clients personal and social self-concept. The counselor can also explore whether these concepts might relate to a need for validation or approval from others. This can be accomplished by inviting the client to share their thoughts and beliefs about themselves, their social presence, and how they receive approval from others. An exploration of aspects of the client's identity and motivations for engaging online may be useful tools in mitigating symptoms of problematic social media use.

Counselors working with clients that appear to have a low sense of personal and social self-concept and/or a high need for validation from others might check-in on their client's social media habits. It might be possible that these individuals are at risk for engaging in problematic social media use. They might also want to utilize the Bergen Social Media Addiction Scale (Andreassen et al., 2012) to determine any risk of problematic social media use in their client.

### **Implications for Counselor Educators**

To better service clients and communities, it seems important for counselor educators to prepare counselors in training for current issues, such as problematic social media use. Counselor educators can accomplish this by conducting their own research on this topic and by staying up to date on the most current literature. As fast as social media grows, it seems as though the

literature on social media also expands. Additionally, counselor educators might need to be aware of their own biases as it relates to social media use in order not to pass those down onto their students. Counselor educators may need to be informed on both the risk and benefits associated with social media use. Similar to other topics in counseling, it might be important for counselor educators to provide opportunities for counselors in training to reflect on their own biases and behaviors related to social media. By increasing students' awareness, this better prepares them in recognizing risks associated with problematic social media use. For example, a counselor in training might utilize social media five hours per day with no lasting negative effects. However, without awareness, this behavior might lead the counselor to overlook some of the effects that could be occurring in an adolescent or young adult who is engaged in problematic social media use.

### **Conclusion**

The findings of this study examine the significant relationship between external validation seeking, social self-concept, and personal self-concept with problematic social media use. Additionally, this study yielded a significant predictive model with external validation seeking accounting for a significant proportion of the variance. Despite limitations, these findings can provide information for future researchers exploring these variables as well as parents, counseling practitioners, and counseling educators working with young adults engaging in problematic social media use.

## REFERENCES

- Ali, F., Ali, A., Iqbal, A., & Ullah Zafar, A. (2021). How socially anxious people become compulsive social media users: The role of fear of negative evaluation and rejection. *Telematics and Informatics*, *63*, 101658. <https://doi.org/10.1016/j.tele.2021.101658>
- Allen, K. A., Ryan, T., Gray, D. L., McInerney, D. M., & Waters, L. (2014). Social media use and social connectedness in adolescents: The positives and the potential pitfalls. *The Australian Educational and Developmental Psychologist*, *31*(1), 18-31. <https://doi.org/10.1017/edp.2014.2>
- Amazon Mechanical Turk. (n.d.). Amazon Mechanical Turk. <https://www.mturk.com/>
- American Psychiatric Association (2013). Diagnostic and statistics manual of mental disorders (5th ed.). Washington, DC: Author
- André, F., Broman, N., Håkansson, A., & Claesdotter-Knutsson, E. (2020). Gaming addiction, problematic gaming and engaged gaming – prevalence and associated characteristics. *Addictive Behaviors Reports*, *12*, 100324-100324. <https://doi.org/10.1016/j.abrep.2020.100324>
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, *64*, 287-293. doi:10.1016/j.addbeh.2016.03.006
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional

- study. *Psychology of Addictive Behaviors*, 30(2), 252–262. <https://doi-org.manowar.tamucc.edu/10.1037/adb0000160>
- Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addict Reports*, 2(2), 175-184. doi:10.1007/s40429-015-0056-9
- Arrington, M. (2012, September 11). Lessons learned with Mark Zuckerberg [Interview]. TechCrunch. <https://techcrunch.com/2012/09/11/the-best-soundbites-from-mark-zuckerberg-michael-arrington-interview-vid/>
- Balkin, R. S., & Kleist, D. M. (2017). *Counseling research: A practitioner-scholar approach*. Alexandria, VA: American Counseling Association.
- Baumeister, R. F. (1999). *The self in social psychology*. Philadelphia, PA: Psychology Press.
- Baumeister, R. F. (2010). The self. In R. F. Baumeister & E. J. Finkel (Eds.), *Advanced social psychology: The state of the science* (pp. 139–175). Oxford University Press
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497.
- Bandura, Albert. “Social Cognitive Theory of Mass Communication. *Media Psychology*, vol. 3, no. 3, 2001, pp. 265-299, [https://doi.org/10.1207/S1532785XMEP0303\\_03](https://doi.org/10.1207/S1532785XMEP0303_03)
- Banyai, F., Zsila, A., Kiraly, O., Maraz, A., Elekes, Z., Griffiths, M., Andreassen, C.S., Demetrovics, Z. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. *Plos One*, 12(1) doi:10.1371/journal.pone.0169839
- Beveridge, C. (2021, October 28). How to use snapchat: a guide for beginners. *Hootsuite*. <https://blog.hootsuite.com/how-to-use-snapchat-beginners-guide/>

- Bhar, S. S., & Kyrios, M. (2016). The self-concept: Theory and research. In M. Kyrios, R. Moulding, G. Doron, S. S. Bhar, M. Nedeljkovic, & M. Mikulincer (Eds.), *The self in understanding and treating psychological disorders* (pp. 8–18). Cambridge University Press. <https://doi.org/10.1017/CBO9781139941297.003>
- Bracken, B. A. (1992). Multidimensional Self-Concept Scale Examiner's Manual. Austin, TX: Pro-Ed. <https://doi.org/10.1037/t01247-000>
- Brockner, J., & Wiesenfeld, B. M. (2016). Self-as-object and self-as-subject in the workplace. *Organizational Behavior and Human Decision Processes*, 136, 36–46. <https://doi.org/10.1016/j.obhdp.2016.06.005>
- Brown, R. (1996). Review of the Tennessee Self-Concept Scale, Second Edition. In Imapara, J.C., & Plake, B.S. (Eds.), *The thirteenth mental measurements yearbook* [electronic version]. Lincoln, NE: Buros Institute of Mental Measurements.
- Burrow, A. L., & Rainone, N. (2017). How many likes did I get?: Purpose moderates links between positive social media feedback and self-esteem. *Journal of Experimental Social Psychology*, 69, 232-236. doi:10.1016/j.jesp.2016.09.005
- Byrne, B. M. (1996). *Measuring self-concept across life span: Issues and instrumentation*. Washington, DC: American Psychological Association.
- Calancie, O., Ewing, L., Narducci, L. D., Horgan, S., & Khalid-Khan, S. (2017). Exploring how social networking sites impact youth with anxiety: A qualitative study of Facebook stressors among adolescents with an anxiety disorder diagnosis. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 11(4), Article 2. <https://doi.org/10.5817/CP2017-4-2>

- Chae, J. (2018). Reexamining the relationship between social media and happiness: The effects of various social media platforms on reconceptualized happiness. *Telematics and Informatics*, 35(6), 1656-1664. doi:10.1016/j.tele.2018.04.011
- Children's Hospital of Chicago. (2020). Parenting teens in the age of social media. <https://www.luriechildrens.org/en/blog/social-media-parenting-statistics/>
- Clark, L., & Goudriaan, A. E. (2018). The neuroscience and neuropsychology of gambling and gambling addiction: An introduction to the special issue. *International Gambling Studies*, 18(2), 173-177. <https://doi.org/10.1080/14459795.2018.1467946>
- Cooley, C.H. (1902). Human nature and the social order. New York: Charles Scribner's Sons
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38(4), 668–678. <https://doi.org/10.1037/0022-3514.38.4.668>
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894–908.
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A.. (2012). Contingencies of Self-Worth Scale . Measurement Instrument Database for the Social Science. Retrieved from [www.midss.ie](http://www.midss.ie)
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108(3), 593–623. <https://doi.org/10.1037/0033-295X.108.3.593>
- Crowne, D. P. and Marlowe, D. (1960). A scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.

- Denny, M. J. (2015). *The effects of positive affirmations on student self-concept in math and writing*
- Di Francisco, E. N. (2017). *Norming the young schema questionnaire in the U.S*
- Duval, S., & Wicklund, R. A. (1972). *A theory of objective self awareness*. Academic Press.
- Egan, K. (2017, February 10). The difference between Facebook, Twitter, LinkedIn, Youtube, & Pinterest, [Updated for 2020]. *Impact*. <https://www.impactbnd.com/blog/the-difference-between-facebook-twitter-linkedin-google-youtube-pinterest>
- Elgersma, C. (2018, June 18). Everything you need to know about Snapchat. *Phys.org*.  
<https://phys.org/news/2018-06-snapchat.html#:~:text=Snapchat%20is%20a%20popular%20messaging,and%20share%20them%20with%20friends>.
- Ellis, P. D. (2010). *The essential guide to effect sizes: Statistical power, meta-analysis, and the interpretation of research results*. Cambridge: Cambridge University Press
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments & Computers*, 28(1), 1–11. <https://doi.org/10.3758/BF03203630>
- Facebook. (n.d.). Facebook. <https://www.facebook.com/>
- Facebook Newsroom. (2018). Stats. Retrieved from <https://newsroom.fb.com/company-info/>.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160. doi:10.3758/BRM.41.4.1149
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics, 4<sup>th</sup> edition*. Thousand Oaks, CA: Sage.



- Fitts W.H. & Warren W.L. (1996). Tennessee Self-Concept Scale (2nd edition). Los Angeles, CA: Western Psychological
- van den Eijnden, Regina J.J.M, Lemmens, J. S., & Valkenburg, P. M. (2016). The social media disorder scale. *Computers in Human Behavior*, 61, 478-487.  
doi:10.1016/j.chb.2016.03.038
- Gecas, V. (1982). The self concept. *Annual Review of Sociology*, 8, 1-33. <https://doi.org/10.1146/annurev.so.08.080182.000245>
- Griffiths, M. (2005). A “components” model of addiction within a biopsychosocial framework. *Journal of Substance use*, 10(4), 191-197. doi:10.1080/14659890500114359
- Hardy, B. W., & Castonguay, J. (2018). The moderating role of age in the relationship between social media use and mental well-being: An analysis of the 2016 general social survey. *Computers in Human Behavior*, 85, 282-290. doi:10.1016/j.chb.2018.04.005
- Hattie, J. (2014). *Self-concept*. Psychology Press. <https://doi.org/10.4324/9781315802183>
- Herrman, J. (2019, March 10). How TikTok is rewriting the world. *The New York Times*.  
<https://www.nytimes.com/2019/03/10/style/what-is-tik-tok.html>
- Horton, A. (2018). Channeling ‘The Social Network,’ lawmaker grills Zuckerberg on his notorious beginnings. *The Washington Post*. <https://www.washingtonpost.com/news/the-switch/wp/2018/04/11/channeling-the-social-network-lawmaker-grills-zuckerberg-on-his-notorious-beginnings/>
- Hume, D. (1978). *A treatise of human nature* (2<sup>nd</sup> ed.). Oxford Clarendon. (Original work published in 1740)

- Iannone, N. E., McCarty, M. K., Branch, S. E., & Kelly, J. R. (2018). Connecting in the twitterverse: Using twitter to satisfy unmet belonging needs. *The Journal of Social Psychology, 158*(4), 491-495. <https://doi.org/10.1080/00224545.2017.1385445>
- Instagram. (n.d.). *Community*. Instagram. <https://about.instagram.com/community/>
- Instagram. (n.d.b). *What is instgram?* Instagram. <https://help.instagram.com/424737657584573>
- James, W. (1890). *The principles of psychology, Vol. 1*. Henry Holt and Co. <https://doi.org/10.1037/10538-000>
- Jasso-Medrano, J. L., & López-Rosales, F. (2018). Measuring the relationship between social media use and addictive behavior and depression and suicide ideation among university students. *Computers In Human Behavior, 87*183-191. doi:10.1016/j.chb.2018.05.003
- Jones, M. (2015). *The Complete History of Social Media: A Timeline of the Invention of Online Networking*. History Cooperative. <https://historycooperative.org/the-history-of-social-media/>
- Kalpidou, M., Costin, D., & Morris, J. (2011). The relationship between facebook and the well-being of undergraduate college students. *Cyberpsychology, Behavior, and Social Networking, 14*(4), 183-189. doi:10.1089/cyber.2010.0061
- Kant, I. (2016) *Critique of pure reason (classic reprint)*. Forgotten books. (Original work published in 1781)
- Kees, J., Berry, C., Burton, S., & Sheehan, K. (2017). An analysis of data quality: Professional panels, student subject pools, and amazon's mechanical turk. *Journal of Advertising, 46*(1), 141-155. <https://doi.org/10.1080/00913367.2016.1269304>

- Kircaburun, K., Demetrovics, Z., Király, O., & Griffiths, M. D. (2018). Childhood emotional trauma and cyberbullying perpetration among emerging adults: A multiple mediation model of the role of problematic social media use and psychopathology. *International Journal of Mental Health and Addiction*, doi:10.1007/s11469-018-9941-5
- Kircaburun, K., Demetrovics, Z., & Tosuntaş, Ş. B. (2018). Analyzing the links between problematic social media use, dark triad traits, and self-esteem. *International Journal of Mental Health and Addiction*, 17(6), 1496-1507. <https://doi.org/10.1007/s11469-018-9900-1>
- Kircaburun, K., Kokkinos, C. M., Demetrovics, Z., Király, O., Griffiths, M. D., & Çolak, T. S. (2018). Problematic online behaviors among adolescents and emerging adults: Associations between cyberbullying perpetration, problematic social media use, and psychosocial factors. *International Journal of Mental Health and Addiction*, 17(4), 891-908. doi:10.1007/s11469-018-9894-8
- Kircaburun, K., Griffiths, M. D., & Billieux, J. (2019). Trait emotional intelligence and problematic online behaviors among adolescents: The mediating role of mindfulness, rumination, and depression. *Personality and Individual Differences*, 139, 208-213. doi:10.1016/j.paid.2018.11.024
- Kircaburun, K., Griffiths, M. D., Şahin, F., Bahtiyar, M., Atmaca, T., & Tosuntaş, Ş. B. (2018). The mediating role of Self/Everyday creativity and depression on the relationship between creative personality traits and problematic social media use among emerging adults. *International Journal of Mental Health and Addiction*, doi:10.1007/s11469-018-9938-0

- Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction--a review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528-3552. doi:10.3390/ijerph8093528
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in experimental social psychology* (pp. 1-62). Elsevier Science & Technology. [https://doi.org/10.1016/S0065-2601\(00\)80003-9](https://doi.org/10.1016/S0065-2601(00)80003-9)
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518–530. <https://doi.org/10.1037/0022-3514.68.3.518>
- Levy, S. (1996, December 29). Breathing is also addictive. *Newsweek*. Retrieved from <https://www.newsweek.com/breathing-also-addictive-175570>
- Locke, J. (1959). *An essay concerning human understanding*. Dover Publications. (Original work published in 1690)
- Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The associations between problematic Facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *Journal of Affective Disorders*, 226, 274–281. <https://doi-org.manowar.tamucc.edu/10.1016/j.jad.2017.10.007>
- Marshall, T. C., Lefringhausen, K., & Ferenczi, N. (2015). The big five, self-esteem, and narcissism as predictors of the topics people write about in Facebook status updates. *Personality and Individual Differences*, 85, 35-40. doi:10.1016/j.paid.2015.04.039
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Maslow, A. H. (1954). *Motivation and personality*. Harpers.

- Merriam-Webster. (n.d.). Social media. In *Merriam-Webster.com dictionary*. Retrieved September 20, 2020, from <https://www.merriam-webster.com/dictionary/social%20media>
- Merriam-Webster. (n.d.). selfie. In *Merriam-Webster.com dictionary*. Retrieved April 4, 2022, from <https://www.merriam-webster.com/dictionary/selfie>
- Merriam-Webster. (n.d.). like. In *Merriam-Webster.com dictionary*. Retrieved April 4, 2022, from <https://www.merriam-webster.com/dictionary/like>
- Moss, A. (n.d.). *Demographics of People on Amazon Mechanical Turk*. Cloud Research. <https://www.cloudresearch.com/resources/blog/who-uses-amazon-mturk-2020-demographics/>
- Nunnally, J.C. & Bernstein, I.H. (1994). *Psychometric theory*. McGraw-Hill.
- O'Donnell, K. J., Stuart, J., & Barber, B. L. (2021). The impact of social network site use on young adult development: Extending the research beyond time use and considering the role of self-disclosure motivations. *Psychological Reports*, 3329412110547-332941211054766. <https://doi.org/10.1177/00332941211054766>
- O'Reilly, M., Dogra, N., Hughes, J., Reilly, P., George, R., & Whiteman, N. (2019). Potential of social media in promoting mental health in adolescents. *Health Promotion International*, 34(5), 981-991. <https://doi.org/10.1093/heapro/day056>
- Qualtrics XM. (n.d.). Qualtrics. <http://www.qualtrics.com>
- Palladino, L. J. (2015). *Parenting in the age of attention snatchers: A step-by-step guide to balancing child's use of technology*. Shambhala.
- Pellegrini, R. J., Hicks, R. A., & Meyers-Winton, S. (1978). Effects of simulated approval-seeking and avoiding on self-disclosure, self-presentation, and interpersonal

- attraction. *The Journal of Psychology*, 98(2), 231-240.  
<https://doi.org/10.1080/00223980.1978.9915966>
- Penn State. (2018). 10.7 Detecting Multicollinearity Using Variance Inflation Factors. State 462  
*Applied Regression Analysis*. <http://online.stat.psu.edu/stat462/node/180>
- Pew Research Center. (2021). *Internet/Broadband Factsheet* [Data File]. Retrieved from  
<https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>
- Pew Research Center. (2019). *Internet/Broadband Factsheet* [Data File]. Retrieved from  
<https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>
- Pew Research Center. (2021). *Social Media Fact Sheet* [Data File]. Retrieved from  
<http://www.pewinternet.org/fact-sheet/social-media/>
- Pew Research Center. (2019). *Social Media Fact Sheet* [Data File]. Retrieved from  
<http://www.pewinternet.org/fact-sheet/social-media/>
- Pew Research Center. (2018). *Social Media Fact Sheet* [Data File]. Retrieved from  
<http://www.pewinternet.org/fact-sheet/social-media/>
- Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., &  
James, A. E. (2017). Use of multiple social media platforms and symptoms of depression  
and anxiety: A nationally-representative study among US Young adults. *Computers In  
Human Behavior*, 691-9. doi:10.1016/j.chb.2016.11.013
- Purkey, W.W. (1988). An Overview of Self-Concept Theory for Counselors. Highlights: An  
ERIC/CAPS Digest.
- O'Donnell, K.J., Stuart, J., & Barber, B. L. (2021). The Impact of Social Network Site Use on  
Young Adult Development: Extending the Research Beyond Time Use and Considering

- the Role of Self-Disclosure Motivations. *Psychological Reports*, 1. <https://doi.org/manowar.tamucc.edu/10.1177/00332941211054766>
- Rachlin, H. (1990). Why do people gamble and keep gambling despite heavy losses? *Psychological Science*, 1(5), 294-297. <https://doi.org/10.1111/j.1467-9280.1990.tb00220.x>
- Raudsepp, L. (2019). Brief report: Problematic social media use and sleep disturbances are longitudinally associated with depressive symptoms in adolescents. *Journal of Adolescence*, 76, 197-201. doi:10.1016/j.adolescence.2019.09.005
- Raudsepp, L., & Kais, K. (2019). Longitudinal associations between problematic social media use and depressive symptoms in adolescent girls. *Preventive Medicine Reports*, 15, 100925-100925. doi:10.1016/j.pmedr.2019.100925
- Rideout, V., & Robb, M. B. (2018). *Social media, social life: Teens reveal their experiences*. San Francisco, CA: Common Sense media.
- Rogers, C. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In (ed.) S. Koch, *Psychology: A study of a science*. Vol. 3: *Formulations of the person and the social context*. New York: McGraw Hill.
- Rosenberg, M. (1979). *Conceiving the self*. Basic Books.
- Salinas, M. R. (2022). Are your participants real? dealing with fraud in recruiting older adults online. *Western Journal of Nursing Research*, , 1939459221098468-1939459221098468. <https://doi.org/10.1177/01939459221098468>
- Sciara, S., Contu, F., Bianchini, M., Chiocchi, M., & Sonnewald, G. G. (2021). Going public on social media: The effects of thousands of instagram followers on users with a high need

- for social approval. *Current Psychology (New Brunswick, N.J.)*, <https://doi.org/10.1007/s12144-021-02172-x>
- Selfhout, M. H. W., Branje, S. J. T., Delsing, M., ter Bogt, T. F. M., & Meeus, W. H. J. (2009). Different types of internet use, depression, and social anxiety: The role of perceived friendship quality. *Journal of Adolescence*, *32*(4), 819–833. <https://doi-org.manowar.tamucc.edu/10.1016/j.adolescence.2008.10.011>
- Seymour, E. (2019, August 25). Gen Z: Born to be Digital. *VOANews*. [https://www.voanews.com/a/student-union\\_gen-z-born-be-digital/6174519.html](https://www.voanews.com/a/student-union_gen-z-born-be-digital/6174519.html)
- Shaffer L. S. (2005). From mirror self-recognition to the looking-glass self: exploring the Justification Hypothesis. *Journal of clinical psychology*, *61*(1), 47–65. <https://doi.org/10.1002/jclp.20090>
- Shafi, R. M. A., Nakonezny, P. A., Miller, K. A., Desai, J., Almorsy, A. G., Ligezka, A. N., Morath, B. A., Romanowicz, M., & Croarkin, P. E. (2021). An exploratory study of clinical and physiological correlates of problematic social media use in adolescents. *Psychiatry Research*, *302*, 114020-114020. <https://doi.org/10.1016/j.psychres.2021.114020>
- Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2017). Problematic social media use and depressive symptoms among U.S. young adults: A nationally-representative study. *Social Science & Medicine*, *182*, 150-157. doi:10.1016/j.socscimed.2017.03.061
- Stapleton, P., Luiz, G., & Chatwin, H. (2017). Generation validation: The role of social comparison in use of Instagram among emerging adults. *Cyberpsychology, Behavior, And Social Networking*, *20*(3), 142-149. doi:10.1089/cyber.2016.0444



- Steers, M. L., Quist, M. C., Bryan, J. L., Foster, D. W., Young, C. M., & Neighbors, C. (2016). I Want You to Like Me: Extraversion, Need for Approval, and Time on Facebook as Predictors of Anxiety. *Translational issues in psychological science*, 2(3), 283–293. <https://doi-org.manowar.tamucc.edu/10.1037/tps0000082>
- Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing? *Computers in Human Behavior*, 43, 139–146. doi:10.1016/j.chb.2014.10.053
- Thornton, E.R. (2015). Do you have an external validation mental model? *Psychology Today*. Retrieved at <https://www.psychologytoday.com/us/blog/the-objective-leader/201506/do-you-have-external-validation-mental-model>
- Twitter Incorporated. (n.d.) *faq*. Investor Relations. <https://investor.twitterinc.com/contact/faq/default.aspx>
- UCLA. (n.d.). Introduction to regression with SPSS Lesson: 2 SPSS regression diagnostics. <https://stats.oarc.ucla.edu/spss/seminars/introduction-to-regression-with-spss/introreg-lesson2/#s2>
- Vogel, E. A., Ramo, D. E., Prochaska, J. J., Meacham, M. C., Layton, J. F., & Humfleet, G. L. (2021). Problematic social media use in sexual and gender minority young adults: Observational study. *JMIR Mental Health*, 8(5), e23688–e23688. <https://doi.org/10.2196/23688>
- Walker, M. B. (1989). Some problems with the concept of "gambling addiction": Should theories of addiction be generalized to include excessive gambling? *Journal of Gambling Behavior*, 5(3), 179–200. <https://doi.org/10.1007/BF01024386>

- Wang, Z., Yang, H., & Elhai, J. D. (2022). Are there gender differences in comorbidity symptoms networks of problematic social media use, anxiety and depression symptoms? evidence from network analysis. *Personality and Individual Differences, 195*, 111705. <https://doi.org/10.1016/j.paid.2022.111705>
- Wartberg, L., Kriston, L., & Thomasius, R. (2020). Internet gaming disorder and problematic social media use in a representative sample of German adolescents: Prevalence estimates, comorbid depressive symptoms and related psychosocial aspects. *Computers in Human Behavior, 103*, 31-36. doi:10.1016/j.chb.2019.09.014
- Young, K.S. (1996). Internet addiction: the emergence of a new clinical disorder. *CyberPsychology and Behavior, 1*(3), 237-244. 10.1089/cpb.1998.1.237
- Young, K.S. (1999). Internet Addiction: Symptoms, Evaluation, And Treatment. *Innovations of Clinical Practice, 17*, 19-31.
- Young, K.S. (2004). Internet Addiction: A New Clinical Phenomenon and Its Consequences. *The American Behavioral Scientist, (48)4*, 402-415.
- Young, J.E., Klosko, J.S., & Weishaar, M.E. (2003). Schema therapy: A practitioner's guide. New York: Guilford Press
- Zhao, S. (2014). Self as an emic object: A re-reading of william james on self. *Theory & Psychology, 24*(2), 199-216. <https://doi.org/10.1177/0959354314527181>
- Zuckerberg, M. (2017, June 22). *Bringing the world closer together*. Facebook. <https://www.facebook.com/notes/mark-zuckerberg/bringing-the-world-closer-together/10154944663901634/>

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

<b>Age</b>	
<b>Gender Identity</b>	
<b>Ethnicity/Race</b>	
<b>Daily Average Number of Hours Spent on Social Media</b>	
<b>Number of Social Media Accounts</b>	

APPENDIX B

BERGEN SOCIAL MEDIA ADDICTION SCALE

**Instructions:** Below you find some questions about your relationship to and use of social media (Facebook, Twitter, Instagram, and the like). Choose the response alternative for each question that best describes you and type the number that corresponds to it in the empty column next to the statement.

How often during the last year have you...	Very Rarely	Rarely	Sometimes	Often	Very Often
...spent a lot of time thinking about social media or planned use of social media	1	2	3	4	5
...felt an urge to use social media more and more	1	2	3	4	5
...used social media to forget about personal problems	1	2	3	4	5
...tried to cut down on the use of social media without success	1	2	3	4	5
...I become restless or troubled if I have been prohibited from using social media	1	2	3	4	5
...I used social media so much that it has had negative impact on my job/studies	1	2	3	4	5

*Note.* Addiction component: 1 salience, 2 craving/tolerance, 3 mood modification, 4 relapse/loss of control, 5 withdrawal, 6 conflict/functional impairment. All items are scored on the following scale: 1 (*very rarely*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), 5 (*very often*).

Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook Addiction Scale. *Psychological Reports, 110*, 501–517.  
<http://dx.doi.org/10.2466/02.09.18.PR0.110.2.501-517>

APPENDIX C

CONTINGENCIES OF SELF-WORTH SCALE

APPROVAL FROM OTHERS SUBSCALE

**Instructions:** Please respond to each of the following statements by circling your answer using the scale from "1 = Strongly disagree" to "7 = Strongly agree." If you haven't experienced the situation described in a particular statement, please answer how you think you would feel if that situation occurred.

		Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Agree	Strongly Agree
1.	I don't care if other people have a negative opinion about me.	1	2	3	4	5	6	7
2.	I can't respect myself if others don't respect me.	1	2	3	4	5	6	7
3.	I don't care what other people think of me.	1	2	3	4	5	6	7
4.	What others think of me has no effect on what I think about myself.	1	2	3	4	5	6	7
5.	My self-esteem depends on the opinion others hold of me.	1	2	3	4	5	6	7

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894–908.

APPENDIX D

TENNESSEE SELF-CONCEPT SCALE 2<sup>ND</sup> EDITION (TSCS:2)

**Directions:** This scale asks you to describe how you feel about yourself. There are no right or wrong answers, so please just describe yourself as honestly as you can. When you are ready to begin, read each statement and decide how well it describes you according to the scale below. Read each statement carefully, then choose the number that shows your answer. Choose only one number for each statement, using this scale:

- Answer 1 if the statement is ALWAYS FALSE
- Answer 2 if the statement is MOSTLY FALSE
- Answer 3 if the statement is PARTLY FALSE AND PARTLY TRUE
- Answer 4 if the statement is MOSTLY TRUE
- Answer 5 if the statement is ALWAYS TRUE

**Personal Self-Concept Subscale**

		Always False	Mostly False	Partly False and Partly True	Mostly True	Always True
1.	I am a cheerful person.	1	2	3	4	5
2.	I am a nobody.	1	2	3	4	5
3.	I am a hateful person.	1	2	3	4	5
4.	I am losing my mind.	1	2	3	4	5
5.	I have a lot of self-control.	1	2	3	4	5
6.	I am just as nice as I should be	1	2	3	4	5
7.	I am not the person I would like to be.	1	2	3	4	5
8.	I despise myself.	1	2	3	4	5

9.	I am satisfied to be just what I am.	1	2	3	4	5
10.	I try to run away from my problems.	1	2	3	4	5
11.	I can always take care of myself in any situation.	1	2	3	4	5
12.	I solve my problems quite easily.	1	2	3	4	5

### Social Self-Concept Subscale

		Always False	Mostly False	Partly False and Partly True	Mostly True	Always True
1.	I am a friendly person.	1	2	3	4	5
2.	I am mad at the whole world.	1	2	3	4	5
3.	I am hard to be friendly with.	1	2	3	4	5
4.	I am as sociable as I want to be.	1	2	3	4	5
5.	I am satisfied with the way I treat other people.	1	2	3	4	5
6.	I ought to get along better with people.	1	2	3	4	5
7.	I am no good at all in social situations.	1	2	3	4	5
8.	I do not feel at ease	1	2	3	4	5

	with other people.					
9.	I get along well with other people.	1	2	3	4	5
10.	I try to understand the other person's point of view	1	2	3	4	5
11.	I see something good in everyone I meet.	1	2	3	4	5
12.	I find it hard to talk with strangers.	1	2	3	4	5

Fitts W.H. & Warren W.L. (1996). Tennessee Self-Concept Scale (2nd edition). Los Angeles, CA: Western Psychological