

2020

The Impact of Instagram Usage and Other Social Factors on Self-Esteem Scores

yael treitel
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Social Psychology Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Yael Treitel

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Stephen Rice, Committee Chairperson, Psychology Faculty

Dr. Chet Lesniak, Committee Member, Psychology Faculty

Dr. Magy Martin, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2019

Abstract

The Impact of Instagram Usage and Other Social Factors on Self-Esteem Scores

by

Yael Treitel

MA, Walden University, 2014

BS, Touro College 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

December 2019

Abstract

Instagram has more than 400 million monthly active users and 80 million shared photos with 3.5 billion likes daily. On Instagram, many people post their entire lives for others to see and comment on. This leads to people judging, commenting, and even trying to emulate others they see on social media. This constant comparing to others can lead to a host of psychological issues such as depression, anxiety, and low self-esteem. As social media becomes more of a staple in people's lives, it is important to study and understand the possible pitfalls to the culture it perpetuates. The purpose of this quantitative study was to use cognitive dissonance and attribution theories as the theoretical foundation to examine if there is a connection between Instagram usage and self-esteem by looking at the variables of length of a person's marriage, gender, happiness in marriage, age, and culture. Participants were married men and woman between the ages of 18 and 80 who actively use Instagram. They completed both the Marriage Happiness Scale and the Rosenberg Self-Esteem Test offered in person and via Survey Monkey. The data were transferred to SPSS where multiple regression was used for data analysis. Through this research, the intention was to help people navigate social media better and create healthier peer relationships. In all the variables identified, only gender was a significant predictor of self-esteem. The positive social change for this study was that people would be more mindful of their own social media interactions to avoid their recreational use of a public platform to cause others to experience stress, depression, or other psychological harm.

The Impact of Instagram Usage and Other Social Factors on Self-Esteem Scores

by

Yael Treitel

MA, Walden University, 2014

BS, Touro College 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

January 2020

Dedication

This dissertation is dedicated to my family. To my husband, Rafi, you lived through my pursuit of higher education, understanding when I had schoolwork to complete and even pitched in when needed. You get the biggest thank you of all.

To my children, who couldn't believe I was going back to school during a time they wished they could be finished with theirs. I hope you learned it is never too late to follow your dreams and that there will always be a way to accomplish something if you really want to.

My mother gets a special shout-out for assisting with the final editing of grammar and spelling mistakes, that I couldn't see. Thank you to my parents and in-laws who encouraged me to pursue a higher degree and, more importantly, would not let me quit.

To my grandchildren, Ariella and Ami who always brighten my day when they visit. We did it! This paper was truly a group effort.

Acknowledgments

First, I want to acknowledge and thank my chair Dr. Stephen Rice, no words can express my gratitude for all your guidance, patience and countless emails back and forth. The dissertation process is just that a process and one thwart with ups and downs. You encouraged and pushed just the right amount to get me to complete this dissertation. For that, I will always be grateful.

I also want to say thank you to my other committee members, Dr. Chet Lesniak and Dr. Magy Martin. We did it. Thank you for making this process painless as possible, for being on my side and encouraging me to complete the dissertation.

I also want to acknowledge and thank Dr. Tom Diebold for his help and support in analyzing my data at the residency in Amsterdam. You were not on my committee but took personal time during the residency to help me with the data. Your patience and explanations of statistics really helped me finish chapter 4 at that crucial time. Without you, I would have struggled so much in analyzing the data and reporting my research results, prolonging the final product.

Table of Contents

List of Tables	iv
List of Figures	v
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background	2
Problem Statement	3
Purpose of the Study	4
Research Questions.....	5
Theoretical Framework.....	7
Cognitive Dissonance Theory.....	7
Attribution Theory	8
Nature of the Study	9
Definitions.....	9
Assumptions.....	10
Scope and Delimitations	10
Limitations	11
Significance.....	12
Summary.....	12
Chapter 2: Literature Review	14
Introduction.....	14
Literature Search Strategy.....	17

Theoretical Foundation	18
Cognitive Dissonance Theory.....	18
Attribution Theory	19
Determining What May Influence Self-Esteem.....	23
Instagram and Photo and Video Social Networking.....	25
Social Impact of Length of a Person’s Marriage	27
Gender Influences on Self-Esteem.....	29
Age and Social Media.....	32
Happiness in Marriage and Its Social Impacts.....	35
Cultural Aspects and Self-Esteem	37
Trying to Predict Self-Esteem.....	41
Summary and Conclusions	46
Chapter 3: Research Method.....	49
Introduction.....	49
Research Design and Rationale	49
Methodology	52
Population	52
Sampling and Sampling Procedures	52
Procedures for Recruitment, Participation, and Data Collection.....	53
Instrumentation and Operationalization of Constructs	54
Data Analysis Plan.....	55
Threats to Validity	58

Threats to External Validity	58
Threats to Internal Validity	59
Ethical Procedures	59
Summary	59
Chapter 4: Results	61
Introduction.....	61
Research Questions.....	62
Data Collection	64
Description of Participants.....	66
Data Collection	66
Participant Demographics.....	66
Descriptive Statistics.....	68
Results	73
Chapter 5: Discussion, Conclusions, and Recommendations	82
Introduction.....	82
Research Questions.....	82
References.....	98
<u>Appendix A: Consent Form.....</u>	<u>119</u>
<u>Appendix C: Letter of Cooperation.....</u>	<u>120</u>

List of Tables

Table 1. Descriptive Statistics	66
Table 2. Cronbach's Alpha and Descriptive Statistics for Variables.....	67
Table 3. Summary of Durbin-Watson Statistics.....	73
Table 4. Tolerance Value	75
Table 5. Summary of Multiple Regression Analysis of Variables.....	77

List of Figures

Figure 1. Frequency distribution of the Rosenbergall self-esteem	68
Figure 2. Frequency distribution of the Kanasall.....	69
Figure 3. Frequency distribution of the cultural group	69
Figure 4. Frequency distribution of the years of marriage.....	70
Figure 5. Frequency distribution of the Instagram usage.....	70
Figure 6. Frequency distribution of the Happiness in Marriage.....	71
Figure 7a. Rosenbergall partial regression plot for Gender.....	73
Figure 7b. Rosenbergall partial regression plot for Kanasall	73
Figure 7c. Rosenbergall partial regression plot for Age	74
Figure 7d. Rosenbergall partial regression plot for No. of years	74
Figure 7e. Rosenbergall partial regression plot for Culture.....	74
Figure 7f. Rosenbergall partial regression plot for Instagram usage	74
Figure 8. Homoscedasticity plot of residuals and predicted values	75
Figure 9. Regression Standardized Residual	76

Chapter 1: Introduction to the Study

Introduction

Instagram is a mobile application that allows users to turn their mobile pictures into images, which are then shared on the Instagram app. The images can be shared on other social networks such as Twitter, Facebook, Tumblr, Flickr, and Foursquare. Instagram is the fastest growing global social networking site (Ershad & Aghajani, 2017). Instagram has more than 400 million monthly active users and 80 million shared photos with 3.5 billion likes daily (Hawi & Samaha, 2016). According to Kircaburun and Griffiths (2018), people are spending an extensive amount of time on social media, which includes Instagram.

This is a recent phenomenon that affects how people interact with the others in their lives. In the past, when something happened in a person's life, they called or told their family and/or three best friends. Now, those same post it on Instagram, or other social media, and all their friends and acquaintances can view what is happening in their lives. It used to be that things in life, as well as in marriage, were private between the couple. Now, with Instagram, nothing is private anymore as people post their entire lives for others to see and comment on.

This leads to people judging, commenting, and even trying to emulate others they see on social media. This constant comparing to others can lead to psychological issues such as depression, anxiety, and low self-esteem (Gonzales & Hancock, 2011; Kelley & Michela, 1980; Kircaburun & Griffiths, 2018).

Sherlock and Wagstaff's (2018) study showed that there is a link between time spent on Instagram and a wide range of psychological well-being variables, which has not been explored extensively in past studies. This new study will add to the current research by looking at new variables including time spent on Instagram, marital happiness, self-esteem, gender, and culture. In this study, I employed a quantitative correlation using multiple regression in SPSS to analyze the data. I sought to help people navigate this new addiction in their lives. Because social media has become such an important part of everyday functioning, our goal in this new study is to help people navigate social media, specifically, Instagram. By educating others on having a self-awareness regarding the possible adverse psychological factors that can affect self-esteem and general mental well-being.

Background

Gajanan (2015) found that social media, in general, as well as Instagram, specifically, is an addiction that many people are unable to live without. As such, insecurities and depression increasingly develop as time is spent online (Gajanan, 2015). Many individuals fear that they will be missing out on a trend if they do not participate, which is currently driving communication methods (Abel, Buff, & Burr, 2016). Instagram's main feature of video and photo sharing may be more harmful than other social network sites that focus on written content (Sherlock & Wagstaff, 2018). Research has demonstrated that visual information is remembered more readily than written information (Noldy, Stelmack, & Campbell, 1990). Pantic et al. (2012) also found that time spent on social network sites is related to depression among high school students.

As Instagram becomes more popular in everyday life, studies indicate there can be adverse psychological effects. Pugh (2017) found that women have a higher addiction to cell phones. Further, Tiggemann and Zaccardo (2015) found that people use social media to post the ideal version of themselves that they want others to see. They then compare their lives to the unrealistic and often false versions of the people they follow. This leads others to self-reflect on their own lives and decides that they are lacking, which leads to psychological issues such as depressions, anxiety, loneliness, and unhappiness (Tiggemann & Zaccardo, 2015). In addition, Valkenburg, Koutamanis, and Vossen (2017) conducted the first longitudinal study on the relationship between social network site use and self-esteem among adolescents. They suggested that future research should pay closer attention to the effects of different types of social networks used as well as different ages and how that could affect self-esteem.

Problem Statement

The social problem is that Instagram can impact individuals in negative ways due to the tendency of people to compare their own life to others, who are posting pictures on Instagram. Past studies have shown that people often only show themselves in a positive light online, depicting perfect lives, which is not always an accurate portrayal of their reality (Kelley & Michela, 1980). When such unrealistic Instagram posts are observed by others, it leads the viewer to become anxious, envious, and resentful of their own lives (Kelley & Michela, 1980). Further, Kircaburun and Griffiths (2018) reported that the use of social networking is associated with negative social factors, such as loneliness, poorer life satisfaction, lower psychological well-being, and a higher rate of depression, sleep

problems, and lack of social connectedness. Viewing information posted by others tends to make people more aware of their limitations and shortcomings, which could lead to lower self-esteem (Gonzales & Hancock, 2011). Coulthard and Ogden (2018) found that social media may be detrimental to young people's psychological wellbeing.

As Instagram becomes more popular with diverse age groups, what they see is influencing how they think and feel. Unlike Facebook, where you need a reciprocal relationship, Instagram allows ordinary people to follow famous people and self-reflect that their lives are not as perfect as what others are posting on Instagram. This leads others to compare their lives, jobs, as well as relationships to the "perfect" ones they see on social media.

Although research has been conducted in this area, most of the past research has been conducted on unmarried individuals or those younger than 18 (Jan, Soomro, & Nawaz, 2017; Johnston, Tanner, Lalla, & Kawalski, 2013; Pantic et al., 2012). However, research suggests that married individuals between 18–80 years old are likely to be affected by this new way people communicate and share their lives. Happiness in marriage is a genuine issue many couples face; knowing if Instagram is helping or exacerbating an already fragile relationship can be beneficial to marriage counselors and other mental health professionals (Kross et al., 2013).

Purpose of the Study

The purpose of this quantitative, correlational research study was to explore if there is a connection between Instagram usage and self-esteem by looking at the variables of the length of a person's marriage, gender, happiness in marriage, age, and culture.

Research Questions

Research Question 1 (RQ1) Is Instagram usage a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture?

Null Hypothesis (H_01) Instagram usage is not a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Alternative Hypothesis (H_{a1}) Instagram usage is a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Research Question 2 (RQ2) Is the length of a person's marriage a significant predictor of self-esteem when controlling for Instagram usage, gender, happiness in marriage, culture and age?

Null Hypothesis (H_02) The length of a person's marriage is not a significant predictor of self-esteem when controlling for Instagram usage, gender, and age.

Alternative Hypothesis (H_{a2}) The length of a person's marriage is a significant predictor of self-esteem when controlling for Instagram usage, gender, and age, happiness in marriage, and culture.

Research Question 3 (RQ3) Is gender a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, happiness in marriage, culture, and age?

Null Hypothesis (H_03) Gender is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Alternative Hypothesis (H_a3) Gender is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Research Question 4 (RQ4) Is age significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender?

Null Hypothesis (H_04) Age is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Alternative Hypothesis (H_a4) Age is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Research Question 5 (RQ5) Is happiness in marriage a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age?

Null Hypothesis (H_05) Happiness in marriage is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Alternative Hypothesis (H_{a5}) Happiness in marriage is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Research Question 6 (RQ6): Is a culture a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age?

Null Hypothesis (H_06) Culture is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Alternative Hypothesis (H_{a6}) Culture is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Theoretical Framework

Cognitive Dissonance Theory

Kelley and Michela (1980) found that people typically show themselves in a positive light online. Positive postings without context could cause others to think everyone else's lives are perfect. The framework that guided this study was Cognitive Dissonance Theory, by Festinger (1962). The theory states there is a tendency for people to look for consistency among their beliefs and opinions. When there is an inconsistency between attitudes or behaviors—dissonance—something must change to eliminate the dissonance (Festinger, 1962).

Although people can recognize that focusing on someone else's life may not be healthy for their happiness, there continues to be a significant rise in social media sites despite this conclusion, which should have led people to decrease their social media usage. People who can logically say they get upset or feel less self-assured in their own lives after going on Instagram and viewing someone's "perfect" life do not post less on their page. There is a disconnect in how they feel and how their postings might be affecting others (Festinger, 1962).

Attribution Theory

Attribution theory is used to assess when people give meaning to behaviors that might or might not be there. Heider (1958) used this theory to examine why people participate in certain actions. He explains that when people justify the behavior of others, they say it is internal flaws such as jealousy, needy, and so on. However, when explaining their flaws, people attribute it to external situations, such as "I am having a bad day, not feeling well." This is seen all the time when rationalizing life choices or even someone's self-happiness. What people decide to post on Instagram reflects what they value or want others to comment on. When using Attribution theory, people will view everyone else's life as the ideal and then self-reflect that they do not have the same things. This occurs because of negative options in their own life, not through their own doing such as laziness, lack of achievement, and so on. People rationalize that outside forces prevented them from achieving what others did (Heider (1958)

Nature of the Study

In this study, I used a quantitative methodology using a correlational research design to achieve an understanding of the relationship between self-esteem and Instagram usage, the amount of time a person has been married, gender, age, marital happiness, and culture. The surveys that I used were standardized tests such as the Rosenberg Self-Esteem Scale and the Kansas Marital Happiness Scale. The survey also included demographic information such as participant's age, how long they have been married, ethnic background, and times they use Instagram, such as multiple times a day, weekly, monthly. I used multiple linear regression to analyze the relationship between the predictors and the dependent variable.

Definitions

These terms are defined as they are used throughout this study.

Attribution Theory: A theory created by Heider in 1958. He felt that people need to see their world as cause and effect even if there was no one. It is how and why regular people explain events and actions that they do (Heider, 1958).

Cognitive Dissonance: A theory thought up by Leon Festinger in 1957 that suggests that people have an inner drive to hold all our attitudes and behaviors in harmony and avoid disharmony. Cognitive dissonance is when inconsistent thoughts, beliefs, or attitudes, especially as relating to behavioral decisions and attitude change (Festinger, 1962).

Self-esteem: A person's confidence and self-worth in their lives, usually valued on their achievement, good relationships, and satisfaction (Jejunum, 2003).

Assumptions

I made several assumptions in this study. First, I assumed that all participants met the inclusion criteria. I also assumed that everyone who participated in the study gave truthful answers when filling out both surveys and answering all the questions. I assumed that the anonymous nature of the study would encourage participants to answer truthfully about their Instagram habits as well as the rest of the questions on the surveys. I checked multiple assumptions to ensure that the variables were measured appropriately.

Williams, Grajales, & Kurkiewicz (2013) mentions the eight assumptions that I checked included: (A) Ensuring that there were two or more independent variables, (B) that the dependent variable was measured on a continuous scale, (C) linear relationship between variables, (D) independence of observations, (E) show homoscedasticity; (F) not show multicollinearity, (G) no significant outliers, high leverage points or highly influential points, (H) and that the residuals are approximately distributed. If these assumptions were not met, non-parametric tests such as chi-square would have to be utilized as it does not make assumptions about the data distribution (Williams et al., 2013).

Scope and Delimitations

Delimitations are shortcomings or conditions that influence and cannot be controlled by the researcher that place restrictions on the methodology and conclusions. The first was that participants were required to be 18 or older, married, and use Instagram at least once a day. I chose people who were married because this group had not been studied in the past. Studies on social media and self-esteem have been researched using participants who are emerging adults, college students, as well as teens (Ahadzadeh,

Pahlevan Sharif, & Ong, 2017; Coulthard & Ogden, 2018), but no one looked at happiness in marriage or older adults and how Instagram might have a connection to their happiness in marriage or self-esteem. The second delimitation was that all participants understand the questions and fill out all pertinent information truthfully, to the best of their ability, and that they understand what was being asked of them. The last delimitation was the use of quantitative rather than qualitative research. Thus, this research might not gain a full understanding of the topic using this method instead of a mixed-methods study; however, this leaves the area open to future mixed-methods researchers to explore the variables.

Limitations

This research study could be limited due to relying on the participants, to be honest about their answers, and to respond to the best of their ability. According to Simundic (2013), participant bias can occur if the participants realize the true purpose of the study; thus, instead of answering truthfully, they may provide answers that they believe the researcher would want. Additionally, the measures that I used—the Marriage Happiness Scale and the Rosenberg Self-Esteem Test—may not have allowed for a full understanding of the research topic due to the quantitative nature of this research study. Another limitation is that the sample was from the Brooklyn, New York area, and, therefore, the results cannot be used to generalize to the rest of the population outside of this area. Finally, due to the time constraints of the dissertation process and the time that it took to gather participants, only 269 participants were surveyed instead of having a larger sample size.

To reduce the limitations regarding self-reporting, clear instructions were given to all participants with an emphasis that they should answer truthfully and as honestly as possible with room at the end to add their thoughts and feelings about what was asked or add any information that would be helpful to the study. Participants were instructed in the introduction email that every answer was imperative to a complete study and since they were not including any identifying information, they should feel comfortable answering honestly.

Significance

As social media becomes more prevalent in everyday life, it is imperative to know and understand possible triggers that would make someone addicted or lead to mental illness. The social change aspect is happier people lead more productive lives and have better interpersonal relationships (Lopez, Pedrotti, & Snyder, 2018). Knowing what could happen with increased social media use, then people would be aware of possible pitfalls and avoid them. On Instagram, many people follow strangers, which leads to unrealistic and negative feelings about their own lives (Lup, Trub, & Rosenthal, 2015). By understanding and acknowledging possible triggers of what is causing ill feelings, depression, jealousy, and so on, could be helpful for mental health counselors, marriage counselors, and other professionals who work with adults to ensure they manage their social media appropriately.

Summary

This chapter discusses how Instagram is the fastest growing social media site. People are spending multiple times a day looking and comparing their lives to others that

they follow on Instagram. This constant comparison could cause others to self-reflect and find their lives lacking. Past researchers focused on teenagers, college students, or emerging adults all under the age of 30. In this study, I explored married adults and how Instagram is affecting their happiness in marriage and their self-esteem.

In this chapter, I explained the problem statement, the purpose of the study, research questions, significance, and limitations. I also explained the definitions of terms, theoretical framework, and the nature of the study. I discussed how and why this study is beneficial to the population at large and who specifically could be helped by doing this research.

Chapter 2: Literature Review

Introduction

As the use of Instagram becomes more popular, social, emotional, and other issues can occur among users. Kelley and Michela (1980) showed that people often only show themselves in a positive light online, depicting perfect lives, which is not always their reality. When such unrealistic Instagram posts are observed by others, it leads the viewer to become anxious, envious, and resentful of their own lives (Kelley & Michela, 1980). Recent studies report that the use of social networking is associated with negative social factors, such as loneliness, poorer life satisfaction, lower psychological well-being, a higher rate of depression, sleep problems, and negative social connectedness (Kircaburun & Griffiths, 2018). Viewing the information posted by others tends to make people more aware of their limitations and shortcomings, which could lead to lower self-esteem (Gonzales & Hancock, 2011).

Instagram has become very popular in the last 10 years, and most users are under 50 years old (Bakshi, Shamma, & Gilber, 2014). Instagram allows users an instantaneous way to share their life moments with friends through pictures and videos. Instagram was launched in 2010 as a mobile photo and video-sharing application; it currently has over 600 million active monthly users (Instagram, 2017) and ranks among the most popular social media applications (Sheldon, Rauschnabel, Antony, & Car, 2017). Since its launch in October 2010, Instagram has attracted more than 150 million active users, with an average of 55 million photos uploaded by users per day, and more than 16 billion photos shared so far (Hu, Manikonda, & Kambhampati, 2014). Further, a quarter of U.S. internet

users ages 18–29 posted photos on Instagram in December 2012, with 14% of those in the 30 - 49-year old age bracket (Bakshi et al., 2014).

Self-esteem incorporates an individual's self-concept, which refers to their view of themselves and their feelings in response to their perception of self (Smith, 2007). It includes a series of psychological self-evaluations that influence both social behavior and self-perception. It is also related to both positive and negative feelings about oneself (Brown, 1993). Previous research has shown that people with high self-esteem have a more positive outlook and are more self-directed, persistent, independent, and autonomous than those with low self-esteem, who tend to be more insecure, lonely, negative, anxious, and depressed (Duan, 2018). Social-network sites, such as Facebook, are designed to share information about one's self with others, including hobbies, likes/dislikes, and personal musings via "wall posts," and "status updates."

In one of the first studies written on the use of social media and possible impacts on emotional well-being, Vogel, Rose, Roberts, and Eckles (2014) found that participants on Facebook had lower self-esteem. The authors found that overexposure to social comparisons on social media did affect their self-esteem. The study highlighted that excessive use of Facebook could harm the overall well-being of people who rely on social media as a platform to discuss topics and personal issues. Vogel, Rose, Roberts, and Eckles (2014) found that people with low self-esteem use social media to discuss what they think is occurring in a safe place; when viewers respond negatively, this seems to exacerbate their already low self-esteem.

This is the opposite effect of what the person writing in was seeking to achieve. One would think that there would be a positive correlation between having more “friends,” the defining aspect of Facebook popularity, and a sense of security. However, in a study of 19-29-year old’s, Lup, Trub, and Rosenthal (2015) found that the more strangers a person followed on Instagram, the more depressive symptoms they reported. Unlike Facebook, where relationships must be mutually accepted, i.e., people must “friend” you back to allow you to view their information and posts, Instagram viewers can elect to follow anyone regardless of their status or stature. This medium results in people following strangers, celebrities, politicians, and others without a reciprocal relationship, yet thinking they are in the same league and comparing their lives to those of celebrities and so on.

Because the use of Instagram has become prevalent in the lives of 50 million adults, I sought to determine if there is a relationship between repeated Instagram usage and self-esteem. The variables include age, gender, culture, marital status, length of the marriage, and marital happiness. Given the previous research on Facebook and the stated differences between Facebook and Instagram, it is important to consider how the exponential increase in Instagram usage may impact the lives of many American adults, which reflects a gap in the extant literature. In this study, I will explore if Instagram usage results in similar or different effects on self-esteem as Facebook.

In this chapter, I will detail the literature review strategies that were used to determine the noted literature gap. In addition, the literature on self-esteem, happiness in marriage, length of a person’s marriage, and how stable they feel in that relationship will

be explored in the context of participant's age, culture, and gender and the potential impact from their social media use. Finally, I will discuss different theories that explain the attraction various people have to Instagram and the possible negative, as well as positive effects Instagram can have on self-esteem and other emotions.

Literature Search Strategy

In order to review the literature, articles were gathered from multiple sources such as journals, timely periodicals, books, and dissertations. A Google Scholar search was conducted using the keywords *social media and self-esteem*, *self-esteem and culture*, *Instagram and self-esteem*, *Instagram and age*, *social media and culture*, *social media and age*, *Instagram and marriage*, *social media and marriage*, *Instagram and gender*, *social media and gender*, *self-esteem*, *age and social media*, *self-esteem and happiness in marriage*, *attribution theory and Instagram*, and *attribution theory and self-esteem*.

It was important to put in dates to ensure the information included was current. At first, articles beginning in 2000 were searched to see what research has been already done; it was then narrowed down to only search articles since 2015. The older articles helped identify what research had been done in the past, and the gaps which were described in those articles. I focused on previous studies that were related to Instagram, Facebook, and social media in general with self-esteem. To ensure that I was working with the most current outcomes, I focused on articles from 2015 comparing previous studies to current ones. As Instagram has recently increased in popularity over the past 8 years (Ershad & Aghajani, 2017), there are fewer articles and data researched on it which leaves more for me to pursue. I also reviewed articles that were quoted in past research in

order to see the most recent studies and if any additional new research had been completed since the articles were originally written.

Theoretical Foundation

Cognitive Dissonance Theory

Cognitive dissonance is a theory that was brought to the forefront of psychology by Leon Festinger in 1961. He stipulated that dissonance toward behavior or situation can be reduced in an individual, should that person adapt their belief system and consider their behavior acceptable (Festinger, 1961). The theory states there is a tendency for people to look for consistency among their beliefs and opinions. When there is an inconsistency between attitudes or behaviors, which causes dissonance, something must change to eliminate the dissonance (Festinger, 1962). Cognitive dissonance occurs when a person places a certain standard of judgment on specific types of behavior. However, upon analysis of their behavior, although their actions seemingly violate that standard, by justifying their actions, they do not modify said behavior. For example, a person indicates that they do not think social media is an appropriate forum for dating. Then as fate would have it, they end up finding their significant other through an online dating platform (Matz & Wood, 2005).

Acharya, Blackwell, and Sen (2018) explained that cognitive dissonance is when an individual experiences mental discomfort after taking actions that appear to conflict with their preferences. To minimize or avoid this discomfort, they change their preferences to align with their actions more closely. This is easily seen with Instagram after people change their views and preferences when other people like or dislike their

pictures. To further demonstrate this theory, Auer and Griffiths (2018) did a study on gamblers from a Norwegian region on how much they thought they gambled compared to how much time and money they spent gambling. This same concept can be applied to Instagram as well. Often people will not realize how much of their day is spent on social media and the effect it could have on their views and thoughts.

Attribution Theory

In this study, I will use the Attribution Theory, coined by Heider (1958), a person can make two types of attributions, either internal or external. Internal attribution is when a person behaves because of something intrinsic, e.g., their personality, attitude, or character traits. External attribution is when a person behaves a certain way because of an aspect of the situation in which they find themselves (Heider, 1958). The theory highlights a person's ability to give reasons to why people think the way they do. For example, if someone is looking at celebrities on Instagram, they make assumptions about the celebrity's ideal life and then attribute that to their own. This constant comparing of lives that are in no way similar often leads to unrealistic expectations and results in feelings of distress and inadequacy (Lup et al., 2015).

Heider (1958), in his explanation of Attribution Theory, states that people will only interpret their environment in a way that maintains their positive self-image, Instagram posts are likely to reflect this reality. Kelley and Michela (1980) found that people would only show themselves in a positive light online, while if considered, most would agree that regular life has positive, as well as negative, moments. However, that reality is not reflected in social media posts or viewing habits. The posting of only

positive events could cause others to think everyone else's lives are perfect, while they recognize theirs are not. Although people can recognize that always focusing on someone else's life is not healthy for their happiness, the abundance of viewing everyone else's perfect life, they compare it to their own, because of what is constantly on their Instagram feed. This may result in people experiencing more depression and anxiety due to always comparing their lives to an unattainable ideal. Both the Attribution Theory and cognitive dissonance have been studied less in modern times. However, Hoshino-Browne et al., (2005) thought social psychology and social interactions through online platforms have reason to suggest further studies using these two theories are needed. Cultural upbringing affects social media interactions, and cognitive dissonance is the root of an individual's beliefs and practices (Hoshino-Browne et al., 2005).

Attribution theory was first used to discuss why people smoke if it was proven to be such a health risk. Weiner (1985) explained that people rationalize and then make excuses for behaviors that they want to deem acceptable. Attribution theory has also been used to show the differences in motivation between high and low achievers. High achievers will attempt tasks related to succeeding because they believe success is due to high ability and effort which they are confident they possess. They acknowledge failure but do not think it is their fault; rather, it could be caused by bad luck or a poor test, meaning they attribute the failure to outside factors, which does not hurt their pride or self-esteem. In contrast, low achievers avoid success-related chores because they tend to doubt their ability or assume success is related to luck or to "whom you know" or to other factors beyond their control. Therefore, even when successful, it is not as rewarding to

the low achiever because they do not feel responsible, so it does not increase their pride or confidence (Lewis & Daltroy, 1990).

Kim (2010) used attribution theory to explain why certain consumers chose to buy one item over another. She looked at why certain products were chosen when there were similar ones with similar packaging. In a different article Kim (2015) used attribution theory to explain if people are moral or pretend to be for others to accept them. Kim (2015) stated that people put their thoughts into a situation and then proceeded to act on those thoughts. For example, when a person sees an overweight individual, they sometimes automatically internalize that the person has poor impulse control and they assume that is why they are heavy. There is an unconscious judgment being made and executed on the heavy person without knowing if they have a medical condition.

It is important to be aware of motivation, of the person posting, when using social media sites, as well as recognizing the specific medium which is being used. Instagram is being discussed as it relates to relationships; marriage satisfaction, marital happiness, length of the marriage, age of spouses, genders, and culture. Tartaglia (2016) said the prediction of self-esteem scores is reliant on these relationship variables that are ultimately compared to usage levels of Instagram and an individual's well-being. Schmidt & Padilla, (2003) wrote about self-esteem, how it is dependent upon success, praise, love, and perception of oneself in addition to what others think of them. Many factors contribute to self-esteem score prediction and how Instagram usage is involved. Social networking sites can be significant causes of distress, especially when they elicit social comparisons and envy due to the passive use of these sites. Often people upload images

that might make others envious or jealous (Verduyn, Ybarra, Résibois, Jonides, & Kross, 2017).

Attribution theory was chosen because it can be applied to help us understand if there is a connection between the variables. Because past research had shown that spending increased amounts of time on social media can exacerbate feelings of depression and anxiety, there should have already been a decrease in the said amount of time online or on social media, which has not been documented. Furthermore, by applying attribution theory, participants of social media understand that viewing Instagram posts are making them feel jealous and depressed, which should translate to a decrease in their posting. Since there was no decrease, it is important to note that something negative is occurring, and it is imperative to understand why this detrimental phenomenon is not translating into action.

One theory I considered and rejected was the social-cultural theory by Vygotsky(1986), who felt that people are born with a basic biological way of thinking. However, within each culture, people adapt their thinking differently. This can apply to this concept that although Instagram is addictive and can have negative consequences related to thought and self-esteem, it is still something many people participate in regularly. In the case of Instagram usage and the value it holds, it seems to be more of a cultural phenomenon motivated by fear of missing out than a biological need or drive.

Determining What May Influence Self-Esteem

While the purpose and length of time spent online varies among individuals, the common factors are how self-esteem is affected by such social interaction. Selfie culture stems from this transformation of using electronic means to communicate. Low self-esteem is often the result of this phenomenon, which creates a portion of individuals who become increasingly agitated and overly concerned with how they look all the time (Barry, Doucette, Loflin, Rivera-Hudson, & Herrington, 2017). In addition, social media usage among individuals born in the age of technology tends to express dissatisfaction with their career and life online, which can directly affect them and their moods in their everyday lives (Bivolaru, 2017).

Negative outcomes of technology include low self-esteem, marital discord, and self-image issues, as well as emotional, psychological, and medical problems. Many of these occurrences are presided by high levels of stress that are often triggered by the demand to present a perfect version of themselves online (Neff, 2009). There is a greater need for acceptance among frequent social media users, particularly Instagram. Lower self-esteem scores are most often correlated with this need for acceptance. For example, one exceptional picture posted can be the result of strenuous and grueling hours of taking multiple shots. However, the person seeing the picture on Instagram only sees the one shot and thinks that is what they always look like. On the taker's side, should their hard work not receive enough positive comments and "likes," their self-esteem could be negatively impacted (Cramer, 2003). This causes the person seeing the picture to self-

reflect if they look like the said standard, while the person who posted the picture is still relying on others for their validation.

Hawi and Samaha (2017) conducted a study on 396 students from Notre Dame University–Louaize, Lebanon. They studied the relationship between social media addiction, self-esteem, and satisfaction with life. The results showed that there was not a direct connection between social media addiction and self-esteem. However, they did note that university students who scored high on social media addiction, reported lower levels of self-esteem, compared with students who scored low on social media addiction. These results suggest that independent of culture and gender, there exists a negative relationship between self-esteem and social media addiction. Their study also noted that people with low self-esteem seem to rely more on social media.

Unfortunately, a number of these individuals who experience low self-esteem misinterpret their perception of their relationships. For instance, they may assume that their loved one is happy when the opposite may be true (Sciangula & Morry, 2009). It is important to note that emotional difficulties impede the decision-making process and can affect other aspects of their lives. Learning to cope with challenges that are exacerbated by emotional distress and low self-esteem can help individuals utilize social media to a lesser degree. Online platforms should be utilized with discretion but not to the point of reliance (Bedel, 2015).

Research has shown that using attribution theory; healthy individuals have a bias when telling their reasons for participating in an action that may have negative or questionable motives. They tend to attribute positive feedback to their abilities but

negative feedback to environmental factors (Korn, Rosenblau, Buritica, & Heekeren, 2016). Feedback seeking behavior is an emotional trigger that often results in depressive symptoms, which are linked to excessive online communication, such as Instagram. To reduce negative outcomes, a person's well-being must be considered by health care providers, friends, and family. Happiness is determined by overall well-being, including physical and psychological health. When this has been achieved, marital satisfaction will be increased as well (Ayyash-Abdo & Alamuddin, 2007).

Gonzales and Hancock (2011) did a study on Facebook and found that it has a positive effect on self-esteem. This contrasts with most other studies which found that social media had the opposite effect. They concluded that the extra care involved in digital self-presentations might improve self-esteem. The authors concluded that more research is needed to explore which part of Facebook would then have a positive or negative effect on self-esteem. For all these reasons, the focus of this new study is on self-esteem and a variety of predictor variables, such as Instagram usage, how long a person is married, his or her age, gender, happiness in marriage, and their culture.

Instagram and Photo and Video Social Networking

With an estimated 100,000,000 unique monthly visitors, Instagram has become a very popular past time. The objective of this application is to post pictures or videos which other viewers can then comment on or "like." This is unlike Facebook, where acquaintances must "follow" you back for their information to be seen. On Instagram, anyone can "follow" without a reciprocal relationship. So, there can be people who follow celebrities and comment or strive to be like them. The non-reciprocal relationship

can trigger negative feelings, particularly for users who follow many strangers (Lup et al., 2015). In a world of technology, the need for perfection and acceptance is continuously emphasized on online platforms.

Social media sites have become an addiction that many reports being unable to live without. As a result, as online time increases, insecurities and depression increasingly develop (Gajanan, 2015). Many individuals use Instagram to counter their fear that they will otherwise miss out (FOMO) on a trend that is currently the most popular communication method (Abel, Buff, & Burr, 2016). This FOMO effect creates a cycle where people go to social networking apps to know what is going on, and the greater their involvement, the more their fear that if they are on less, they will miss out increases, which results in greater involvement (Oberst, Wegmann, Stodt, Brand, & Chamarro, 2017).

There is a correlation between depression, low self-esteem, and excessive use of Instagram which is directly related to relationship problems and other mental health issues (Nesi & Prinstein, 2015). Studies have found that overuse of internet communications can have negative effects on the well-being and psychological functioning of children, adolescents, and young adults (Oberst et al., 2017). Turner and Lefevre (2017) found that higher Instagram use was associated with a greater tendency toward anorexia nervosa. Since Instagram suggests new accounts to follow based on the content that the user already selects, adolescents who view health and fitness-related content routinely on social media are more likely to have an eating disorder (Turner &

Lefevre, 2017). This could lead to unhealthy viewing habits for people who already have poor self-esteem or unrealistic body image.

In 2014, Roberts, Yaya, and Manolis conducted a study to determine if cell phone use was addictive. They concluded that since people use cell phones for a variety of reasons, the phone itself did not become addictive. They found that people were using their cell phones for multiple functions such as an alarm clock, texting, shopping, and so on; since their usage was not limited to one activity, they concluded that it was not considered addictive. Since social media sites were originally created to maintain offline relationships and social interactions, today, they have evolved to the point where social communication often consists of large numbers of individuals on one's "friend" list that a user has never met offline (Tartaglia, 2016). The progression of social media usage has developed into a trend known as the "selfie culture." The act of self-photography and posting it to one's social media site is termed as a "selfie," and it often relies on a method of finding the perfect picture from many shots (Barry et al., 2017).

Social Impact of Length of a Person's Marriage

One common behavior among adolescents and adults is the need for social feedback that involves social media usage. However, levels and motivation will vary. In addition, self-concept and self-esteem in all individuals will result in social interactions, which can affect offline relationships and life satisfaction (Abel et al., 2016). People in relationships that are emotionally and physically healthier tend to experience more happiness in their marriage. Depression and low self-esteem, on the other hand, negatively impact marital satisfaction and happiness. High levels of self-esteem in

marriage can be attributed to attribution and love (Fincham & Bradbury, 1993).

Therefore, marital discord due to inappropriate online communication results in decreased well-being, and this is especially true for women and older adults (Whisman, Uebelacker, Tolejko, Chatav, & McKelvie, 2006).

Length of marriage is positively correlated with marital happiness and satisfaction; however, there is an observed fluctuation throughout the marriage. Previous studies mentioned by Orth, Robins, and Widaman (2012) indicate that marital satisfaction during the first years was usually lower than later years. Compared to individuals who remain single, couples in long-term relationships, such as marriage, tend to be happier. The psychological well-being of married couples is much higher and is often associated with an increase in self-esteem among both participants (Frech & Williams, 2007).

As challenging as marriage can be, the benefits almost always outweigh the complex obstacles that may occur. However, only couples who are willing to work for their relationship through positive communication and meeting each other's needs will experience satisfaction and happiness in a long-term marriage (Huston, Caughlin, Houts, Smith, & George, 2001). Married couples who have children, relationship stability, and comfortability with their partner are more likely to be together much longer than newlyweds. There are always exceptions, but the impact of happiness, satisfaction, well-being, and health are factors ascended by marital length (Mitchell, 2010).

People in longer marriages with many children are more likely to experience lower levels of life satisfaction and psychological well-being. This is usually due to the strain that changes the relationship dynamic. Happier couples who have been together for

many years and had more children usually find ways to adapt to how their relationship functions after any change (Mitchell, 2010). A negative correlation between marital satisfaction and length of the marriage is usually due to the expectation that the marriage will be ideal and perfect based upon the individual's perception of marriage (Bonds-Raacke, Bearden, Carriere, Anderson, & Nicks, 2001).

The couple's high expectations based on the perception of an ideal marriage will have high levels of happiness and satisfaction at the beginning of marital life and eventually decrease as time goes on. In some cases, these levels will remain constant but lower than the original earlier years (Bonds-Raacke et al., 2001). However, when expectations and reality are closely matched, long-term marriages are more likely to have high levels of happiness and satisfaction. Long-term marriage with high levels of satisfaction and happiness includes couples who have higher levels of self-esteem (Erol & Orth, 2014).

Gender Influences on Self-Esteem

The two common genders that most people accept are boy and girl. However, some individuals do not feel like they associate with either gender or with their biological gender (Tate, Bettergarcia, & Brent, 2015). Social comparison and feedback begin to develop in the early stages of adolescents and include determining self-identity and self-esteem. Social relationships influence these factors which can also affect gender identity and overall life satisfaction (Nesi & Prinstein, 2015). Women are more likely to be active on Instagram as opposed to men (Sheldon & Bryant, 2016). Females use Instagram to

socialize and provide opinions while males use it to collect information and pass the time (Al-Kandari, Al-Hunaiyyan, & Al-Hajri, 2016).

Studies found that for both genders, self-esteem is relatively high in childhood, drops during adolescence, and then rises gradually throughout adulthood before it tends to decline in old age (Bleidorn et al., 2016). Further, there is a significant gender gap in how males and females view self-esteem. While men tend to report high levels of self-esteem, women report lower levels of self-esteem (Bleidorn et al., 2016). Females reported lower self-esteem and more frequent usage of social media, compared to males. Instagram utilizes its platform to connect people through image sharing. Females who spend most of their time online posting pictures are constantly in a state of achieving the “perfect” picture to compete with other concepts of “perfect” images. The stress of achieving perfection has an underlying vulnerability that subtly affects self-esteem on a negative level (Vogel et al., 2014).

Gender roles have mostly been traditional in most societies and cultures. However, the diversity of these duties has slowly started to spread across various countries. Gender identity has become a new term, as some individuals do not identify with their biological gender and feel the need to express who they are in other terms (Zosuls, Miller, Ruble, Martin, & Fabes, 2011). Unfortunately, some people will experience cyberbullying no matter their gender or gender identity, and social media has made it more difficult to distinguish gender role and gender identity from oneself (Underwood & Ehrenreich, 2017).

Bullying has also become more prevalent among adolescents, as technology has taken over communication and self-expression. Cyberbullying is the technical terminology for the act of harassing, making fun of, and mistreating others while utilizing online platforms. Both females and males participate in this type of behavior (Fernandes, Sanyal, & Chadha, 2015). Although both genders participate in cyberbullying, how each gender uses networking sites varies. Research shows that men tend to use their phones and online platforms for professional and entertainment purposes, while women maintain social connections (Oberst, Chamarro, & Renau, 2016).

Fox and Vendemia (2016) found that since Instagram and online dating sites focus on pictures and visual self-representation, girls and women were overly conscious about their body image and how they look. This self-reflection led to girls being more likely to have eating disorders and lower self-esteem than men. Women are also more likely than men to “doctor up” or use filters to make their pictures more flattering.

Nevertheless, social media usage can affect men and women in different ways. For instance, women are more concerned with body image than men. Since social communication is more prevalent for women on social networking sites, the effects of body image perception occur more often (Perloff, 2014). Women experience the effects of social media on their well-being more often than men. They tend to have lower self-esteem scores when social media use is abundant. Self-esteem and the value placed on appearance is an area in which women score significantly less than men (Aftab & Aslam, 2014). Constant comparison to one another heightens the risk for depression, low self-

esteem, and overall well-being, especially with the addition of Instagram (Barry et al., 2017).

Female adolescents who are withdrawn and have low tolerance are at-risk for problematic social media usage and low self-esteem scores as well. A small percentage of social media users fall into the category of at-risk, while a good number of other users have no risk of problematic social media use (Bányai et al., 2017). Nonetheless, if expectations are unmet, even these individuals can develop lower self-esteem. The need to seek approval from peers becomes almost unbearable among adolescents and their social media use, and they seem to thrive on attention during this stage of their development (Ertürk, 2016).

Age and Social Media

Jang, Han, Shih, and Lee (2015) found that teenagers were using Instagram to have more “likes.” It was their way of expressing themselves and making new friends. Studies show that adults and teenagers use Instagram for different reasons. While adults use Instagram for photo sharing on different topics and location searches, studies showed that teenagers depicted mostly themselves and their friends (Döring, Reif, & Poeschl, 2016).

The posting of selfies is more prevalent among young women between the ages of 16 to 25 than in any other age group. An average of three selfies per day with approximately five hours weekly stated by researchers is the time it takes to post self-portraits online. This behavior itself has become its own culture that triggers low self-esteem and abuse of social media (Pounders, Kowalczyk, & Stowers, 2016). Problematic

outcomes are consistent with the overuse of online platforms and the abuse of social media specifically. Depression and low self-esteem are common consequences of too much interaction with technology such as this. Adolescents are the most affected as they do not know when to stop engaging in social media when problems occur. They tend to follow their friends and want to be in contact all the time which can cause them to ignore their better judgment (Bányai et al., 2017).

The FOMO is a motivator for some adolescent's online behaviors that contribute toward negative outcomes, such as low self-esteem scores and psychological issues, which can develop later in life. Relationships are affected as problematic communication and interactions, which then continues to decrease the overall well-being of the social media user (Underwood & Ehrenreich, 2017). Despite the risk of online usage among young people, they are relatively knowledgeable and use technology more proficiently than adults. Instagram users constantly use selfies as a form of self-presentation and self-identity. Young users tend to know how to manipulate their photos to create a more positive appearance (Fernandes et al., 2015).

Djafarova and Trofimenko (2017) found that pre-school mothers in Russia used social media to interact with peers and sell their business on Instagram. They found the online platform comforting and available when watching young children at home. The parents felt that they were able to connect to other peers from all over the world who might be feeling the same way as them. However, they noted that people who had lower self-esteem did report feeling pressured by others whom they observed on social media to emulate or try to live up to the perfect picture they painted.

In addition, Fox and Vendemia (2016) identify that women edit their online images more often than men and feel worse about their body image on social media. Better coherence between the true self and Facebook self was associated with better psychological health (Grieve & Watkinson, 2016). Adolescents also have a predisposition to sensation seeking. This comes into play with social media and its consequences. Girls tend to use social media for communication and friendships whereas boys use social media for games and information. These vulnerabilities are already apparent in shifting risks for violence, mental health, suicide, and self-harm in this age group. Adolescents are also very susceptible to extremist groups who use social media to offer prospects of adventure, belonging, and fulfillment that many adolescents find missing in ordinary life (Patton et al., 2016).

Since the use of technology as the primary format for communication is so prevalent, banning online use among the young would be difficult. Therefore, it is the responsibility of parents to set a positive example of proper online behavior and monitor the interactions of young users (Fernandes et al., 2015). More than any other age group and generation, 12 to 17-year-old adolescents are internet savvy and communicate via online networking sites. Connection to electronic media is often more than seven hours a day for the average young person. This constant communication with their peers affects overall development more so than previous generations who did not have this type of communication (Nesi & Prinstein, 2015). Older adults do not compare themselves to others as much as younger people do, making them less likely to use Instagram for that reason (Mullin, 2017).

Gender and age determine the purpose of social networking use that has factored in cultural norms and self-esteem scores. Females prefer to use online communication to maintain social connections, while men utilize technology and social media for professional and entertainment interactions (Zosuls et al., 2011). Adolescents tend to read social media feeds and interact with their friends. They are motivated by the fear of missing out and not being in the loop for social events and activities. Instagram is predominantly photo posting based social interaction that young people rely on for acceptance and self-praise (Underwood & Ehrenreich, 2017).

Social media platforms have become a means to provide social connections to other individuals. However, women are at risk for decreased psychological well-being when social media usage is abused. Depression and low self-esteem are the most common issues associated with negative online social interactions (Oberst et al., 2016). Instagram and the selfie culture are synonymous with one another. However, having too many selfies can portray an individual as being narcissistic or selfish as the focus is solely on them. Peers should know that a combination of some selfies with other people, as well as pictures taken by another person, can be viewed as more positive (Kramer et al., 2017).

Happiness in Marriage and Its Social Impacts

Attributes of marital happiness and satisfaction are important variables to consider when determining the levels associated with their significant impact on well-being. Depression and self-esteem are factors that should be explored regarding happiness and satisfaction within a solid consensual relationship (Fincham & Bradbury, 1993). There is

also a correlation between self-esteem and narcissism, a trait that describes social media users over time. A person's ideal self and self-image can not only affect a person's online communication with others, but it also has an impact on relationships. Both satisfaction and eventual happiness levels are determined by variables that contribute to health and self-awareness (Ertürk, 2016).

Researchers Waldinger and Schulz (2010) indicate the importance of having social interactions with others to improve communication within a relationship. Positive emotions and people with a happier marriage are more likely to have less experience with online communication and social media platforms. It should be noted that there are also higher rates of suicide among couples and individuals who are less likely to have positive social interactions. Unfortunately, inappropriate interactions through online platforms can exacerbate the issue (Waldinger & Schulz, 2010). The uncertainty of a partner's affection affects self-esteem when consistent interaction online is more dominant than connecting with your spouse. The better the communication between a couple, the more likely happiness and satisfaction are present. Happier partners result in higher self-esteem scores (Neff & Karney, 2009).

According to Whisman et al. (2006), overall life satisfaction correlates to the level of happiness within a marriage and increased self-esteem. Individuals who are married are more likely to have higher levels of health, well-being, and quality of life than those who are not married. These factors are important when considering a person's interaction with others both online and in-person, including with their partner and children (Lehmann et al., 2015).

Marital happiness and satisfaction are a factor that self-esteem can affect and is filled with examples of cognitive dissonance as well as attribution theory to explain the outcomes. Many people believe in an idealistic version of marriage. Financial and emotional stability, the fulfillment of sexual and social needs, is believed to lead to happiness and satisfaction when married (Bonds-Raacke, Bearden, Carriere, Anderson, & Nicks, 2001). The ideal marriage is the standard that some people strive toward. However, when that same person ends up cheating or becomes unhappy in their current marriage, cognitive dissonance can occur. The violation of an ideal marriage is remaining unhappy, and cheating affects the individuals' self-esteem score due to their internal conflict (Matz & Wood, 2005).

Previous research on relationships has focused on self-actualization theory that indicates that a positive perception of self and ones' relationship results in satisfaction within a marriage, which correlates to positive self-esteem (Cramer, 2003). Humanistic theorists, such as Carl Rogers, promote self-concept and self-actualization in psychology as the basis for understanding social relationships. Studies utilizing survey data are commonly implemented to understand better what factors lead to marital happiness and satisfaction. More recently, subjective well-being related to social relationships and the use of online platforms has integrated within these surveys (Helliwell & Huang, 2013).

Cultural Aspects and Self-Esteem

Studies have found a correlation between depression, low self-esteem, and excessive use of Instagram can be directly related to relationship problems and other mental health issues (Nesi & Prinstein, 2015). "Culturally contingent cognitive content"

lies in the relationship between gender-conformity and self-esteem, which have been both positively and negatively correlated (Strandell, 2016). East Asians, compared with North Americans, evaluate themselves in a lower percentile relative to other students within the same culture on several positive traits. They attribute less positive attributes to themselves relative to other peers within the same culture (Heine & Renshaw, 2002). East Asians often tend to take less credit for their successes, and they are also less likely to think that positive events will happen to them (Falk & Heine, 2015).

In Arab culture, where males are more dominant and females more subservient, such as in Kuwait, males are more likely than females to post their pictures on Instagram, as well as more likely to disclose their personal information and have public accounts. Since Kuwait is a male-dominated culture, this study found that males are more likely than females to post their pictures or disclose their personal information on Instagram (Al-Kandari, Al-Hunaiyyan, & Al-Hajri, 2016). In contrast to Arab culture, in the United States, females are more likely to post personal pictures of themselves (Duggan & Brenner, 2013).

Sheldon, Rauschnabel, Antony, and Car (2017) did a study comparing American and Croatian college students and their habits by posting on Instagram. They found that Americans had more followers and used it to show what they are doing. While the Croatians used Instagram to depict a more collective “we.” It was interesting to note that Americans had more social interaction, but Croatians registered stronger gratification.

Cultural norms influence a person’s interpretation of self-concept as well as situational behavior. Socialization and communication styles often vary among different

cultural groups and can impact how they are affected by Instagram usage. American students posted almost five times more than their Korean counterparts, even though they reported spending the same amount of time online (Kim, Sohn, & Choi, 2011). Asian cultures concern themselves with the emotional well-being of others and minimize discussions of feelings and emotions to avoid being an imposition. Europeans and Americans, on the other hand, are characteristic of individuality and outcome-oriented discussion (Costigan, Bardina, Cauce, Kim, & Latendresse, 2006). The nature of cultural standards on communication is not limited to face-to-face interactions. Acculturation is a natural process that occurs when immigrating to another country to start a new life as well (Varela, Vernberg, Sanchez-Sosa, Riveros, Mitchell, & Mashunkashey, 2004).

The level of acculturation of parents can influence how their children perceive communication online, as well as impact self-esteem levels. Low levels of acculturation are associated with an authoritarian style of parenting in which discipline is common placed (Varela et al., 2004). Depending on other environmental circumstances, these children can experience low self-esteem scores that are impacted by online communication through Instagram related selfies. Emotion, judgment, and attitude are all related to cultural beliefs and values which can affect social interaction with others (Chuang & Su, 2009).

A worldview consists of cultural norms, beliefs, behavior, and expectations with society as well as other people. Challenges arise as intercultural marriages are on the rise, and the potential for cultural conflict impacting relationship satisfaction and happiness occur. These issues can lead to decreased self-esteem, which may affect social interaction

outside of this relationship over time (Crippen & Brew, 2007). Instagram allows for self-identity and self-view to be shared with others; however, individuals with a fragile psyche and low self-esteem are at risk for psychological problems that are further impacted by relationship satisfaction and happiness. Cultures that have predominantly low self-esteem scores do not fare well in a social media situation (Barry et al., 2017).

Therefore, it is important that cultural influences include positive self-regulation to combat negative outcomes associated with low self-esteem and depression. Compliance, emotional regulation, and delayed action are characteristics of self-regulation that are learned as children (Keller et al., 2004). Cultural norms, when applied to children, impact gender as well. Some cultures treat male children much differently than female children. Masculine dominated societies and cultures lead to a discrepancy of cultural data when gender roles are not applied. For this reason, gender is important when considering how culture and gender impact self-esteem scores (Varela et al., 2004).

It was interesting to see how culture influenced what people post. In most studies done in the United States, females posted more than males on social media, while males used their smartphones for texting and emails. In Al-Kandari et al. (2016) study conducted in Kuwait, which is a more male-dominant culture, they found that males are more likely than females to post their pictures or disclose their personal information on Instagram. While females could have Instagram accounts, most men acknowledged they would not want their wives, daughters, or sisters to post personal pictures or have an account that was not private.

Asian cultures versus European and American culture vary in how they raise their children, which affect development and social interaction. Asian families remain close to adulthood, where parents help their children make important decisions that impact their well-being (Costigan et al., 2006). Independence through cultural influence involves developmental training as children. Self-recognition and self-regulation are two characteristics that facilitate independence in children. However, these milestones are achieved at varying ages among cultural norms. Developmental pathways are culture-specific, which influences Instagram communication and self-esteem (Keller et al., 2004).

Trying to Predict Self-Esteem

Self-esteem was defined as “an individual’s positive or negative evaluation of himself or herself” (Smith, Mackie, & Claypool, 2014, p. 107). Self-esteem is especially important as life satisfaction assists in predicting these scores. For example, when a person has low self-esteem, they are more likely to experience depression, distress, and decreased levels of life satisfaction, including marital status and happiness. Psychological well-being is also decreased in individuals with low self-esteem (Jordan et al., 2013). Therefore, a prediction of low self-esteem scores can be derived from increased depression, marital discord, low life satisfaction, low psychological well-being, and distress. By increasing self-esteem in these individuals, it is possible to change other factors that contribute to low levels (Orth, Robins, & Widaman, 2012).

One’s environment and socioeconomic status are relevant, as well, as it relates to cultural upbringing. Ghetto and poverty are a culture of their own as they can influence how an individual is raised and how their personality develops (Palomar Lever,

Lanzagorta Pinol, & Hernández, Uralde, 2005). Adolescents that are raised in a poorer environment tend to have low self-esteem if they are already struggling with the stresses of living day to day life. While some of these individuals learn to cope positively with their circumstances and become stronger, others cannot, even when they become adults (McClure, Tanski, Kingsbury, Gerrard, & Sargent, 2010).

Unfortunately, with the addition of social media being responsible for social communication, individuals of younger ages can develop low levels of self-esteem with excessive usage and constant negative feedback (Nesi & Prinstein, 2015). There is a significant bond between parents and their children, which can affect self-esteem scores and social interaction. If the child can learn positive social interaction and coping skills from their parents, they are more likely to develop high self-esteem, which in turn leads to more positive social relationships (Von Soest, Wichstrøm, & Kvalem, 2016).

De Vries and Kühne (2015) found that unhappy participants showed greater levels of social comparison, which was depicted in their social media use. While predicting self-esteem scores based on levels of marital happiness and satisfaction and mental well-being can indicate similar levels to one another, Instagram usage can vary among individuals. One indicator of low self-esteem, in this case, is excessive use in which negative feedback is consistent. Adolescents who have been bullied online are often the result of this factor (Barry et al., 2017). A person with high self-esteem and positive social interactions can utilize social media in their favor and balance online usage to an appropriate amount that is less likely to result in marital or social issues (Bivolaru, 2017).

Positive emotions and well-being are often linked with overall satisfaction with family and marriage in adults. In return, higher levels of self-esteem are more likely to occur. This correlation includes positive views on gender identity, cultural appropriation, long-term relationships, and happiness (Vandeleur, Perrez, & Schoebi, 2007). The more a person feels that they are truly loved, the chance of predicting high self-esteem scores increases. Happiness and satisfaction in a relationship contribute to emotions such as love. However, it is important that both partners not have any doubts about their relationship for positive emotions and outcomes to manifest (Sciangula & Morry, 2009).

Positive and negative views of oneself is an accepted definition of self-esteem. Instagram and other social media provide a platform to express self-views, as well as receive feedback. Individuals with low self-esteem are more likely to remove photos that are perceived to be unflattering. Self-promotion is predominant in people with low self-esteem in the hope of experiencing positive comments (Barry et al., 2017). Young users, for the most part, crave attention and connection to their peers and are not necessarily addicted to social media itself. However, some cannot distinguish the difference between the two (Underwood & Ehrenreich, 2017).

Instagram and other social networking sites were created to enhance personal connections with family friends, including those who live far away. For some adolescent users, it has become a source of pain and trauma associated with being bullied. School environments always have experienced circumstances involving bullies; however, the internet and social networking have expanded bullying platforms to reach a person at their safest environment- their own home (Underwood & Ehrenreich, 2017). Constant

exposure to being bullied has a toll on ones' psychological well-being and self-esteem. Kids who already have low self-esteem, as well, tend to have difficulties making friends, and find themselves being the victim of a bully, both at school and online (Fernandes et al., 2015).

There are mixed results on the effects of prolonged social media use. Those individuals who are vulnerable are affected by negative experiences online. Relationship jealousy, a decline in psychological well-being, and depressive symptoms are factors associated with extended usage of the internet and social media in vulnerable people (Nesi & Prinstein, 2015). Vulnerable young women are constantly bombarded with body image concerns, especially when role models and media portray certain types of acceptable weight and body structure. Social networking sites allow advertisements to funnel to users' news feed, and specific algorithms can create individually oriented sponsored announcements (Perloff, 2014).

With the increase of body shaming incidents and media, individuals using Instagram and other social networking sites constantly try to perfect an image before it is posted to their account. Constant monitoring of feedback and likes has become an obsession for many young users. Emotional and physical issues arise as the desire to attain perfection becomes a struggle (Gajanan, 2015). Friendships established online through Instagram and Facebook are often misleading, temporary, or unintended. While there are friends who have been integrated from in-person social connections, not all friendships are genuine. The basis for social networking is posting pictures, responding to

being tagged, and news feeds posts. It is difficult for most individuals to maintain their happiness under this type of pressure (Underwood & Ehrenreich, 2017).

Over the past thirty years, there has been a decline in traditional social connections and overall happiness. Individuals affected are those who have self-esteem issues and decreased psychological well-being, to begin with. Traditional forms of meeting and socialization would allow a person to leave their home and have fun during social events (Bartolini et al., 2013). Constant connection to social media at home and outside does not allow time to meet new people by traditional means. Many young users of social media and Instagram have an unconscious fear of missing out on social interactions and connections. However, after viewing news feeds and photos of other people online, an individual is more likely to feel temporarily depressed and have low self-esteem (Abel et al., 2016). Self-esteem can be influenced and can impact other life factors of an individual. Social media can either exacerbate the person's well-being negatively or positively (Tartaglia, 2016). Stress from health-related issues, marriage problems, and negative social media experiences cause self-esteem scores to decrease.

Reflection of ones' self-worth is equivalent to self-esteem, where emotional response and belief in self can affect health. Individuals with low self-esteem tend to experience higher levels of depression and anxiety. The development of personality in adolescents with low self-esteem can be hindered if not corrected (McClure et al., 2010). People who conform to their biological gender identity and are happy, as such, report higher levels of self-esteem. Consequently, gender-atypical individuals experience distress and dissatisfaction with their social life and well-being. Conflict within an

individual perpetuates life obstacles, and stress that impact emotional and physical health (Tate, Bettergarcia, & Brent, 2015).

Summary and Conclusions

In summary, the variables that affect self-esteem scores on multiple levels can change over time. Marriage length, marriage happiness/satisfaction, gender, age, and culture, in conjunction with Instagram usage, may impact self-esteem scores. Online connections and interaction are impacted by real-life communications with friends (Nesi & Prinstein, 2015). Few friendships and minimal connections that are genuine result in low self-esteem scores. Parents can help adolescents to increase their overall well-being and self-esteem scores through the promotion of outside related activity and counseling. In addition, ethnic identity as part of cultural may influence self-esteem scores as well as parenting style (McClure et al., 2010).

Therefore, high self-esteem scores are likely determined by several factors that are related to using Instagram. Older females and males that are in longer relationships tend to be happier and more satisfied with life. Marriage between partners with similar cultural backgrounds can maintain stability and overall well-being. The combination of these variables when impacted by positive online experiences, relates to higher levels of self-esteem (Tartaglia, 2016). Further research should include surveys that evaluate the impact of social media on self-esteem while factoring in gender, gender identity, age, cultural norms, and marriage satisfaction. An observational study of these factors alongside survey questionnaires can provide a more detailed account of the literature presented.

Pugh (2017) did a study on smartphone addiction, social anxiety, and self-esteem to investigate whether the demographic variables age and gender would have an influence on these relationships, which is similar to what the current study is looking at. As with this study, the results will depend on the integrity of the people answering the survey. The current study is focusing on self-esteem and its relationship with Instagram usage, how long a person is married, gender, age, happiness in marriage, and culture. De Vries, MöllerWieringa, Eigenraam, and Hamelink (2018) did a study focusing on Instagram, documenting how people reacted to non-acquaintance positive posts. They found that people were more positive in their own lives when they observed other positive posts. However, they did not study if people were more negative and if they constantly viewed negative posts. Nor did they focus on posts of people they did know, would the observer feel differently about the post if they knew the poster personally?

Culture, marital length, age, gender, and marital happiness/satisfaction directly relate to Instagram usage, which in turn indirectly relates to self-esteem scores when considering path analysis (Ahn, 2002). The current study is important to conduct because it will provide a much-needed explanation of the connection between Instagram usage and self-esteem by looking at the variables of the length of a person's marriage, gender, happiness in marriage, age, and culture. It could provide insights for professionals to help people who are addicted and showing these detrimental symptoms. Understanding why Instagram influences self-esteem will assist professionals and individuals alike to curb their Instagram usage to a healthy dose that will not cause psychological harm. Knowing

possible negative triggers will assist people in understanding how to avoid or use Instagram less for a happier and more fulfilling life.

This chapter consisted of a thorough review of pertinent literature on the psychological effects of social media. An in-depth investigation into the past literature and how the research was conducted, is explored. I discussed why each variable was chosen as a possible significant predictor and identifying potential opportunities for future research. Chapter 2 further explored the research already done on social media and depression, jealousy, and other psychological issues that can occur. I also discussed the theoretical theory that guided the study.

In the next chapter, I will discuss the research design and rationale, methodology, sampling, and sampling procedures, and the procedures for recruitment were discussed. Further, participation, data collection techniques, instrumentation and operationalization of the constructs will be detailed. Next, the data analysis plan, threats to validity, and the ethical procedures for this study were explained.

Chapter 3: Research Method

Introduction

The purpose of this quantitative correlation study was to explore the connection between Instagram usage and self-esteem, by looking at the variables of the length of a person's marriage, gender, happiness in marriage, age, and culture. Studies show that social media has impacted how people view themselves and others (Nesi & Prinstein, 2015). Additional studies have shown that low self-esteem can lead to a host of other psychological disorders such as depression, anxiety, and other mental illnesses (Duan, 2018; Lup et al., 2015; Vogel et al., 2014). The gap in the literature that this study will focus on is which factors have a connection to a person's self-esteem.

This chapter includes the research design, strategy, and methodology used in this project. I then discuss each step in the preparation, selection of data and analyses with a detailed description of the variables used in the analyses. The chapter includes research methods, design appropriateness, and a brief discussion of sample and population. I continue by stating how the tests were chosen and why they are a good fit for this study.

Research Design and Rationale

For this study, I utilized a quantitative methodology using a correlational research design to help achieve an understanding of the relationship between self-esteem and the possible predictors of Instagram usage, amount of time a person is married, gender, age, marital happiness, and culture. We need to keep in mind that this method did not show causation; instead, it illustrates if there is a relationship between the variables that are being investigated. Descriptive survey research in which conclusions were drawn upon

based on the participant responses were utilized (Lodico, Spaulding, & Voegtle, 2010). A correlational design will be used due to it being straightforward as well as inexpensive, and it can be completed quickly. This method provides a useful starting point for researchers exploring a new idea (Curtis, Comiskey, & Dempsey, 2015).

Peterson and Merunka (2014) conducted a study using college students. They noted that a sample of college students cannot be perceived as the same as a sample of the population in general, but can be a sample of other college students. During this study, I sampled adults from varying backgrounds, neighborhoods, and genders who work in a random office building in the Midwood area of Brooklyn, New York. I am surmising that another multiple business office building with a similar variety of employees would have similar results. Convenience sampling will be employed for its simplicity as well as practicality in doing this type of research.

The independent variables were: (a) Instagram usage, defined as how often the participants go on to check their Instagram, e.g., in a typical week, how many times do you check your Instagram per day; (b) Length of a person's marriage defined as how long are they were married in years and months, (c) the gender of the participant, selected as either male or female; (d) how old the person was; (e) happiness in their marriages evaluated by the Marriage Happiness Scale (MHS), a standardized marital happiness survey; and (f) culture/ethnic background selected from given the choices such as Asian, Caucasian, African American, Hispanic, or Other.

Multiple linear regression will be used as the statistical analysis; the data was prescreened from surveys and evaluations. In this study, the multiple regression will be

used to test the relationship between the operational variables (Instagram usage, length of time the participant is married, gender, age, happiness in marriage, ethnic background). The dependent variable is self-esteem, as measured by the Rosenberg Self-Esteem Scale (Rosenberg, 1989).

The researcher used the Rosenberg Self-Esteem Scale, which is a standardized self-esteem test. I asked the participants to include their age, how long they are married, and ethnic background, and it gives choices as to how often they use Instagram. This informed the researcher with the other information needed without any specific identifying characteristics of the participant. There were no time constraints, but in the effort to complete the study on time, the selected participants were provided a week to complete the survey and return them to the researcher.

Quantitative analysis and research is the most appropriate choice when trying to see a relationship between multiple variables (Creswell, 2009). Multiple linear regression will be used to analyze the relationship between the predictor variables and the dependent variable. Identity development correlates to self-esteem, self-reflection, and psychological well-being, which are then impacted by various forms of feedback, including online status and relationships. Positive comments will boost self-esteem and psychological well-being and in turn, create confidence and increased security in their identity (Yang, 2014).

Prediction of self-esteem scores is reliant upon specific independent variables that are related to the outcome. Because self-esteem scores were the outcome for assessment, this is the dependent variable. Independent variables, otherwise known as predictor

variables, can lead to outcome variables such as high self-esteem scores or low self-esteem scores (Palmer & O'Connell, 2009). The predictor variables, which may relate to high or low self-esteem scores, were the marital length, gender, age, culture, Instagram usage, and marital satisfaction/happiness. This type of analysis is known as regression analysis and can consist of various models of regression (Ahn, 2002).

Methodology

Population

The target population for this study was married adults between the ages of 18-80 who use Instagram at least once a day. Convenience sampling will be utilized so that participants can be recruited through two office buildings in the Midwood section of Brooklyn. These buildings house multiple businesses, and they agreed to allow me to utilize their employees to participate in the study. The employer informed me there were over 400 employees in the multiple buildings who could potentially participate in the study. He reported that 95% of the employees were married, were from a variety of cultural backgrounds, and they would fit the study criteria.

Sampling and Sampling Procedures

The researcher distributed the packets during break time and waited to see if anyone wanted to fill them out at that time and hand them back immediately. The researcher gave participants a week to fill out both documents and return the data in a self-addressed envelope that was provided with when they received the survey. There was also a provision of a dropbox in both locations in the office lobby for completed surveys, as well as have the researcher go back personally at the end of the week to

collect completed data. Finally, there was a link online through social media to encourage those who wanted to participate in following the link.

To conduct an a priori sample size analysis, the researcher selected F tests and used a Statistical test: Linear multiple regressions: Fixed model, R² deviation from zero
Type of power analysis: A priori: Compute required sample size. Then put in Effect size: .15 (this is a medium effect size, which I estimated since I have not completed the study)
Alpha: .05 Power: .95 Number of predictors: six (the number of independent variables).
A total sample size of 146 total collected, complete, and usable questionnaires was determined as necessary to meet the specified study parameters. Thus, the goal was to collect 175 completed surveys to ensure a minimum sample size of 146 usable questionnaires back. By filling out and returning completed survey participants implied consent.

Procedures for Recruitment, Participation, and Data Collection

Once Walden Internal Review Board (IRB) approval was granted, the data collection began by posting a link online and emailing the consent and surveys to employees at the two mentioned buildings. The participants will be given instructions as to who qualifies to participate in the study, and they had a consent form for them to sign. The participants further completed all pertinent information including age, gender, culture, how long they are married, and how often they go on Instagram (within the choices provided). They also completed both the Kansas Marital Happiness Scale and the Rosenberg Self-Esteem Test. Once completed, the data were recorded via a Google doc. Only the researcher and committee had access to the completed surveys. The survey was

put online using survey monkey for additional participants. I administered 269 surveys to ensure that I reach a minimum of 146 completed that are needed for the sample size.

Instrumentation and Operationalization of Constructs

Demographics. All participants will complete both surveys as well as fill out how long they are married, gender, age, culture, and Instagram usage, in the spaces provided on the top of the first page.

Kansas Marital Happiness Scale (KMS). The KMS was first developed in 1983. The test is a 3-item self-report instrument designed to measure marital quality. Items are rated on a 7-point Likert scale, ranging from 1 (extremely dissatisfied) to 7 (extremely satisfied). The total score ranges from 3 to 21, with high scores meaning better marital quality (Omani-Samani, Maroufizadeh, Ghaheri, Amini, & Navid, 2017). It has a scoring range of 1 to 7 with a possible score of 3-21. It has been tested and shown to have internal consistency as well as test and retest reliability and criterion-based validity (Schumm et al., 2000). Permission was requested and granted from the publisher of the KMS before using the scale.

Rosenberg Self-Esteem Scale (RSES). The RSES was developed by Morris Rosenberg in 1965 and is widely used in psychology and other medical fields. The RSES is a short, easy to administer, Likert-scale type test with 10 items answered on a four-point scale with responses ranging from strongly disagree (1) to strongly agree (4). In the original version, half of the items are positively worded; for example, "I feel that I have a number of good qualities," while the other half are negatively worded; for example, "All in all, I am inclined to feel that I am a failure." Total scores range from 10-40, with the

higher the score, the higher the level of self-esteem. Versions of the scale have been tested for reliability and validity in many languages and have, on average, been found to be effective (Tinakon & Nahathai, 2012). Permission was requested and granted from the publisher of the RSES prior to using the scale.

Data Analysis Plan

The researcher gave both the marital satisfaction survey and self-esteem scales to participants who volunteered to take both surveys and submit their results in a timely fashion. The delimitations were that the participants were all married and used Instagram. The participants will be given the opportunity to self-reflect at the end of the survey if they feel there had been a change in how they feel about themselves. It was also necessary to define what high use of Instagram entails to demonstrate causality or correlation.

After the data collection, all data will be put into a database for figuring out the multiple regression analysis using SPSS. The data cleaning and screening process for the study was done as follows: The participants filled in all the complete requested information including age, culture, years married, the amount of time spent on Instagram. The researcher ensured that all participants completed forms were checked for any missing values on each instrument. Participants who did not meet the inclusion criteria (can read and understand English, married, use Instagram, and are of age 18 and older) will be excluded from the study.

I will use the data to answer the following research questions and hypotheses:

Research Question 1 (RQ1) Is Instagram usage a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture?

Null Hypothesis (H_01) Instagram usage is not a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Alternative Hypothesis (H_{a1}) Instagram usage is a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Research Question 2 (RQ2) Is the length of a person's marriage a significant predictor of self-esteem when controlling for Instagram usage, gender, happiness in marriage, culture and age?

Null Hypothesis (H_02) The length of a person's marriage is not a significant predictor of self-esteem when controlling for Instagram usage, gender, and age.

Alternative Hypothesis (H_{a2}) The length of a person's marriage is a significant predictor of self-esteem when controlling for Instagram usage, gender, and age, happiness in marriage, and culture.

Research Question 3 (RQ3) Is gender a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, happiness in marriage, culture, and age?

Null Hypothesis (H_03) Gender is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Alternative Hypothesis (H_a3) Gender is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Research Question 4 (RQ4) Is a significant age predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage and gender?

Null Hypothesis (H_04) Age is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Alternative Hypothesis (H_a4) Age is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Research Question 5 (RQ5) Is happiness in marriage a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age?

Null Hypothesis (H_05) Happiness in marriage is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Alternative Hypothesis (H_{a5}) Happiness in marriage is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Research Question 6 (RQ6): Is a culture a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age?

Null Hypothesis (H_06) Culture is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Alternative Hypothesis (H_{a6}) Culture is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Threats to Validity

Threats to External Validity

For this study, I am using adults who can give consent to participate in the study. All participants can opt-out at any time for any reason. Convenience sampling was utilized which means the results might not be able to be generalized to the greater population. There would be no way to contact every married adult who uses Instagram, so I chose to do convenience sampling by using it in a random office building in the Brooklyn area. I am aware that a correlational design cannot result in inference or show causation if there is a relationship, which could be a threat to internal validity. We are

assuming that the anonymous nature of the study will help people be honest and answering their true thoughts and feelings.

Threats to Internal Validity

Due to the nature of self-administered surveys, the participants are expected to be as truthfully as possible. However, there is always a concern that people would lie to show themselves in a more positive light. To combat this, the researcher stressed that all identifying information is confidential as they are not putting their names on the survey. Instead, only their age, gender, culture, and years married were recorded. Thus, I would not be able to know who gave which answers.

Ethical Procedures

All participants were consenting adults agreeing to participate in an optional survey. I gave a separate consent form with the two scales being used, so there is no question of consent for participation. There were no predicted issues with fallout or sensitive information gathered. However, if participants felt the need to debrief or wanted to discuss results further, a contact number for the researcher was provided. The results of the study will be made available, and a contact phone number for the researcher will be provided if any participant wants their scores after the dissertation is approved.

Summary

The purpose of this quantitative, correlational research study is to explore if there is a connection between Instagram usage and self-esteem by looking at the variables of the length of a person's marriage, gender, happiness in marriage, age, and culture. This research was conducted on married individuals between the ages of 18 and 80 by utilizing

the Rosenberg Self-Esteem Scale and the Kansas Marital Happiness Scale. Further, demographic information such as their age, how long they are married, ethnic background, and times they use Instagram, such as multiple times a day, weekly, monthly, will also be collected. In this chapter, the research design and rationale, the methodology including the population, sampling and sampling procedures, procedures for recruitment, participation and data collection, and instrumentation and operationalization of the constructs were detailed. Finally, the data analysis plan, threats to validity, and ethical procedures were also explained.

Chapter four accounts for the results of the administered survey through an analysis of the data collected.

Chapter 4: Results

Introduction

Instagram is typically used for self-expression and self-documenting everyday life (Alhabash & Ma, 2017). Recently, Instagram's rapid growth has led to more interest in investigating the possible psychological impact that increased Instagram usage might have (Jackson & Luchner, 2018). There have been several research studies in the past on Facebook usage and depressive symptoms (Steers, Wickham, & Acitelli, 2014; Feinstein et al., 2013), negative affect (Sagioglou & Greitemeyer, 2014; Verduyn et al., 2015), low self-esteem (Vogel, Rose, Roberts, & Eckles, 2014), decreased life satisfaction (Satici & Uysal, 2015), and diminished subjective wellbeing (Kross et al., 2013). However, despite the rapid growth of Instagram, as a premier social media outlet, there has not been a significant amount of research conducted regarding its possible negative effects. The current literature as mentioned above, lacks research on Instagram in general or, more specifically, on self-esteem. This new study will hopefully answer the question or concern of, does the constant bombardment of other peoples supposed perfect lives affect their feelings about themselves and their marriage.

In this chapter, I discuss the purpose, research question and hypotheses, and data collection techniques. In addition, I present the results, which include survey collection, participant data, descriptive statistics of the scales, and the research question and hypothesis testing. The chapter concludes with a summary.

The primary purpose of this quantitative study was to examine theoretically and empirically grounded mediation models of Instagram and self-esteem. The particular

variables I am looking at are Instagram usage and self-esteem by observing the length of a person's marriage, gender, happiness in marriage, age, and culture.

Research Questions

The research questions and hypotheses for this study were:

Research Question 1 (RQ1) Is Instagram usage a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture?

Null Hypothesis (H_01) Instagram usage is not a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Alternative Hypothesis (H_{a1}) Instagram usage is a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Research Question 2 (RQ2) Is the length of a person's marriage a significant predictor of self-esteem when controlling for Instagram usage, gender, happiness in marriage, culture and age?

Null Hypothesis (H_02) The length of a person's marriage is not a significant predictor of self-esteem when controlling for Instagram usage, gender, and age.

Alternative Hypothesis (H_{a2}) The length of a person's marriage is a significant predictor of self-esteem when controlling for Instagram usage, gender, and age, happiness in marriage, and culture.

Research Question 3 (RQ3) Is gender a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, happiness in marriage, culture, and age?

Null Hypothesis (H_03) Gender is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Alternative Hypothesis (H_a3) Gender is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Research Question 4 (RQ4) Is a significant age predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage and gender?

Null Hypothesis (H_04) Age is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Alternative Hypothesis (H_a4) Age is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Research Question 5 (RQ5) Is happiness in marriage a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age?

Null Hypothesis (H_05) Happiness in marriage is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Alternative Hypothesis (H_a5) Happiness in marriage is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Research Question 6 (RQ6): Is a culture a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age?

Null Hypothesis (H_06) Culture is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Alternative Hypothesis (H_a6) Culture is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Data Collection

I collected data over a 5-week period from March 1 to April 7, 2019. The data were collected via an email survey sent to married people who used Instagram at least once a day. The two scales I utilized in the survey were The Kansas Marital Happiness Scale and The Rosenberg Self Esteem Scale. In addition to these two measures, I collected demographic information such as age, ethnic background, how long the person was married, and how often they use Instagram. The survey was emailed to over 500

participants. A total of 269 surveys was collected from people who are both married and use Instagram, who qualified, responded, and sent back their feedback. The process for participant recruitment and data collection are described below.

A survey invitation was sent to employees of a particular company in the Brooklyn area. The invitation included the introduction, consent form, and a link to the survey. Once the company approved it, the email was sent out, and I waited for responses. In the first round, 220 people responded; however, most were women. Because gender was a predictor, I felt I could not have such a small sample of men. Therefore, I petitioned Walden IRB for permission to have more participants than initially requested in order to even out my sample of men and women. I resent the original consent and survey to only the male employees once permission was received. This new email helped gain more male participants. Both forms discussed the study, any risks and benefits, the lack of compensation, where the results would be made available, the approximate time to complete the survey, and anonymity. At the time, It was explained that participation was voluntary and that they could exit the survey at any time before submitting it.

Once a person clicked the link, they were taken to a page to identify their gender, marital status, and how often they use Instagram. If they selected “no” to married or that they do not use Instagram, they were automatically taken to the last page, which thanked them for their participation. If their answers met the criteria, they continued through the survey until either submitting or exiting before submitting it. Once 269 surveys were

collected, the survey was closed, and the data were transferred to the IBM SPSS statistical software program for analysis.

Description of Participants

Data Collection

Out of the 600 participants solicited, 269 surveys were returned and submitted. The data were then checked for accuracy by ensuring that there were no typos due to transferring the data between the Google Document and SPSS. Accuracy was also confirmed by ensuring the data were within the proper minimum and maximum ranges. Frequencies were run to determine if there was missing data. There was no missing data. The data was then checked for the presence of outliers. Outliers were then excluded from the final analysis. In the end, 248 qualified participants were used for data analysis. Next, data cleaning occurred by checking the assumptions.

Participant Demographics

I collected demographic data on gender, age, ethnic background, and how often the participants used Instagram. Participants were predominantly female ($n = 191$); there were fewer men ($n = 57$). The participants' ages ranged from 19 - 63 years old (35, sd 7.4). Range married were 2 - 29 years married with a mean of 9.5 and SD of 6.4. There were Caucasians (179), Asians (33), African Americans (36) Hispanics (2), and Others (11). All 269 participants qualified for the study, as they were all married and used Instagram at least once a week. However, I took out Hispanics and others as they were

not significantly representative of our sample, leaving 248 as my final sample data. The demographic data are presented in Table 1.

Table 1

Descriptive Statistics

Characteristic		Frequency (<i>n</i> = 248)	Percentage (%)	Cumulative percent
Sex	Female	191	77.0	77.0
	Male	57	23.0	100.0
	Total	248	100.0	
Ethnic	Caucasian	179	72.1	71.4
	Asian	33	13.6	83.1
	African/American	36	14.3	94.8
	Total	248	100.0	100.0
Instagram Usage	Once a day	53	21.4	21.4
	Multiple times a day	120	48.4	69.8
	Three times a week	48	19.4	89.1
	Once a week	27	10.9	100.0
	Total	248	100.0	

All individuals reported their ethnicity. 179 individuals identified themselves as Caucasians (72.1%). 36 participants identified themselves as African American (14.3%). Thirty-three participants identified themselves as Asians (13.6%).

Table 2

Cronbach's Alpha and Descriptive Statistics for Variables

	M	V	Correlation	Squared Multiple Correlation	A
Instagram	61.5349	164.302	.165	.051	.454
Kansas marriage	58.2821	169.682	-.078	.486	.486

Cronbach's alpha was conducted to measure internal consistency. Guidelines from George and Mallery (2010) were used to assess reliability. The scale had different levels of internal consistency, as determined by a Cronbach's alpha of 0.454 to 0.479, except for the years of marriage and the age of the participants that showed low or average reliability. All variables had at least average reliability. Thus, consistent responses existed among the groups of the questions. Table 2 shows the descriptive statistics for the composite scores.

Skewness and kurtosis were used to describe the shape of the distribution, whether normal or abnormally shaped for all three levels. Once the kurtosis had been reviewed, the measures revealed the tail-heaviness of the distribution, which helped to determine possible outliers. Figures 1 to 6 show the distributions of frequencies of the variables.

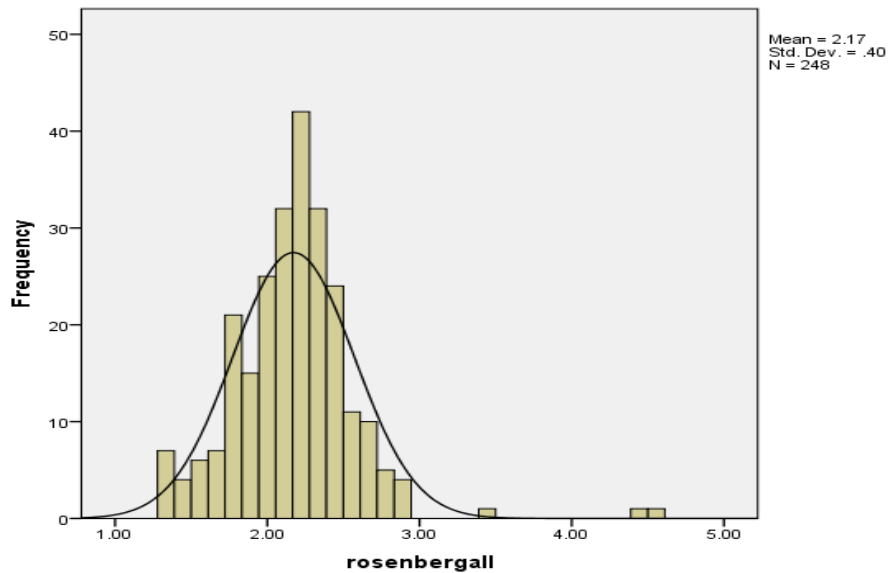


Figure 1. Frequency distribution of the Rosenbergall self-esteem

The skewness of the self-esteem was 1.294. Figure 1 shows the positive skewness since the right-hand tail is longer than the left-hand tail. The distribution was approximately symmetrical. The kurtosis at this level was 7.487. Since the kurtosis was greater than 0, the distribution has heavier tails and is called a leptokurtic distribution.

The skewness on the kanasall level was -.632. Figure 2 shows the negative skewness since the left-hand tail is longer than the right-hand tail. The kurtosis at this level was .084. Since the kurtosis was greater than 0, the distribution has heavier tails and is called a leptokurtic distribution.

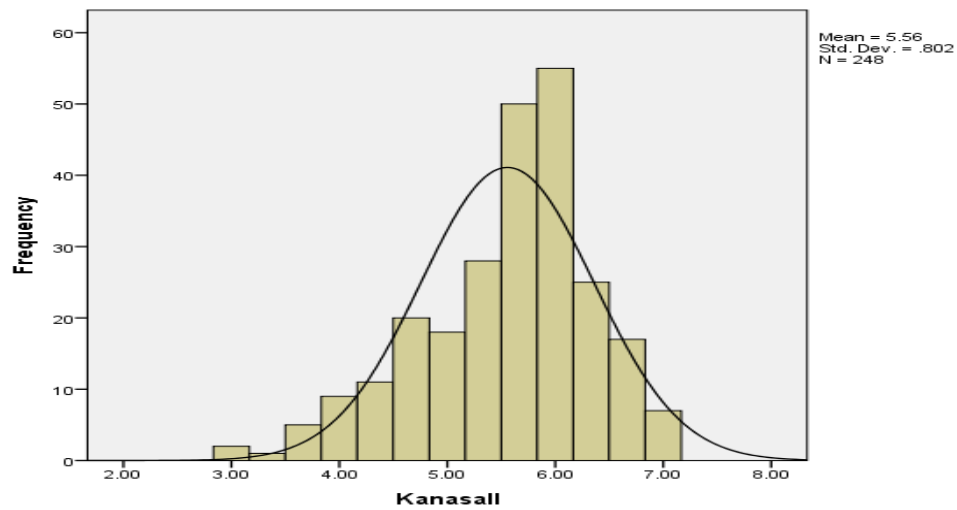


Figure 2. Frequency distribution of the Kanasall

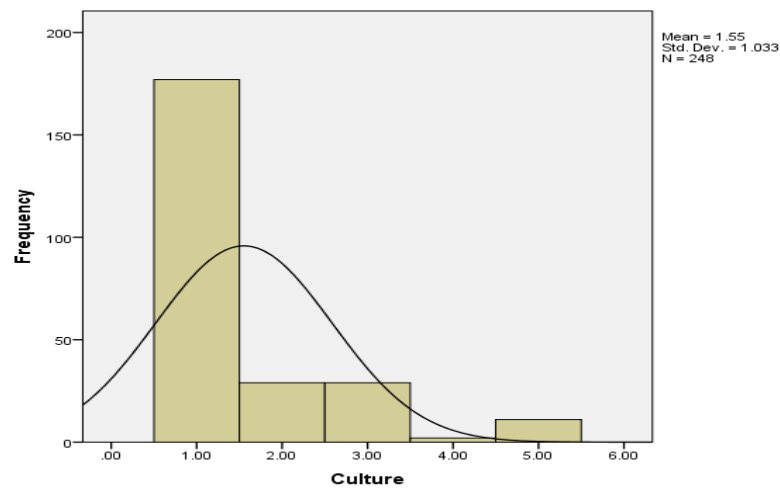


Figure 3. Frequency distribution of the cultural group

The skewness on the ethnicity level was 1.700. Figure 3 shows the positive skewness since the right-hand tail is longer than the left-hand tail. The kurtosis at this level was 2.107. Since the kurtosis was greater than 0, the distribution has heavier tails and is called a leptokurtic distribution.

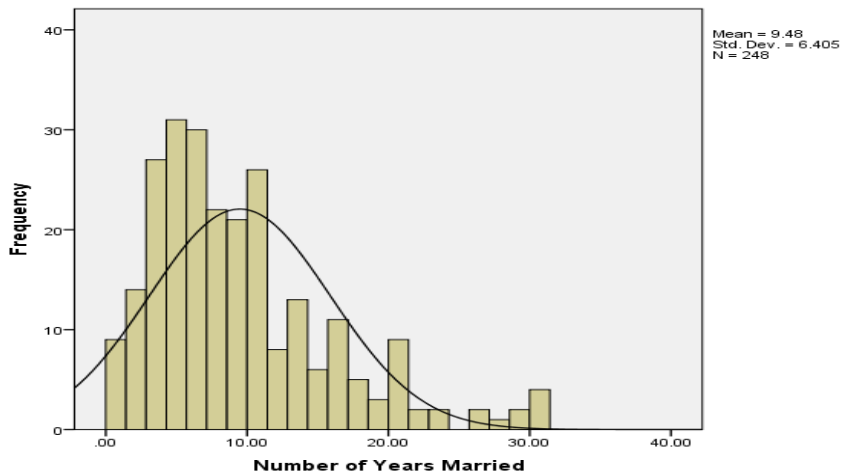


Figure 4. Frequency distribution of the years of marriage

The skewness on the years of marriage was .149. Figure 4 shows the positive skewness since the right-hand tail is longer than the left-hand tail. The kurtosis at this level was .998. Since the kurtosis was greater than 0, the distribution has heavier tails and is called a leptokurtic distribution.

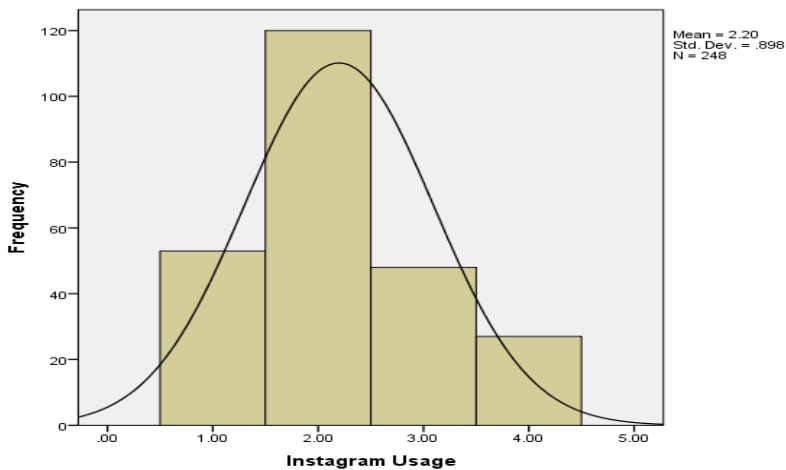


Figure 5. Frequency distribution of the Instagram usage

The skewness on Instagram was .442. Figure 5 shows the positive skewness since the right-hand tail is longer than the left-hand tail. The kurtosis at this level was -.449. Since the kurtosis was less than 0, the result of this distribution was a light tail, referred to as a platykurtic distribution, and confirmed the lack of outliers.

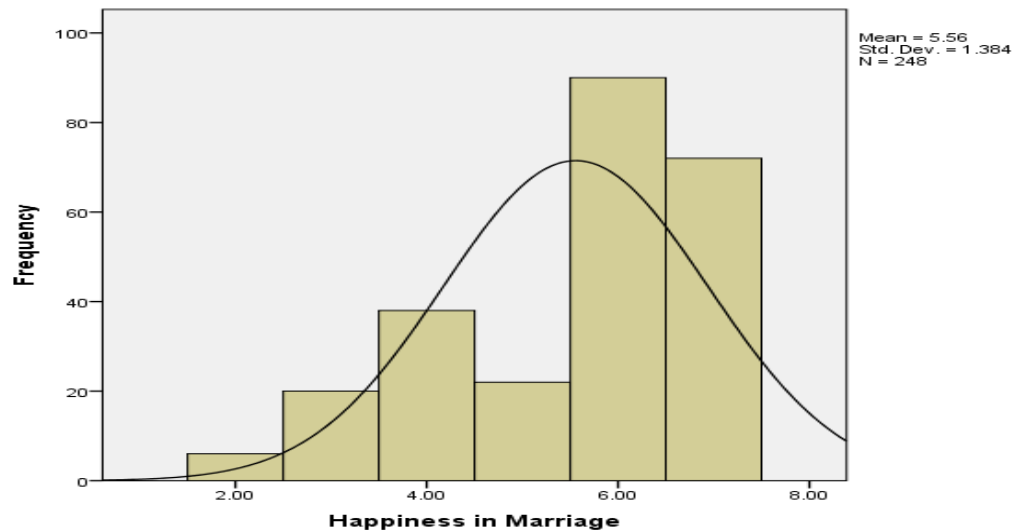


Figure 6. Frequency distribution of Happiness in Marriage

The skewness of happiness in marriage was -0.788. Figure 6 shows the negative skewness since the left-hand tail is longer than the right-hand tail. The kurtosis at this level was -.459. Since the kurtosis was less than 0, the result of this distribution was a light tail, referred to as a platykurtic distribution, and confirmed the lack of outliers.

Results

The variables were entered simultaneously into the model using no stepwise procedures. The decision not to use backward or forward regression was due to the possibility that it could cause severe biases in the resulting multivariate model fit while

losing variable predictive information from deleting marginally significant variables. Several problems may be encountered if stepwise procedures were used, including the possibility of the R^2 value being biased on the high end. In addition, the F statistic and chi-square tests do not have the claimed distribution. Also, the standard errors of the parameter estimates are too small. The confidence intervals around the parameter estimates are too narrow.

Furthermore, the p values are too low and are difficult to correct. The parameter estimates are biased high in absolute value, and collinearity problems are exacerbated (Steyerberg, 2016). By entering all independent variables into the model simultaneously, all five null hypotheses were tested together.

Assumptions

A multiple regression analysis was chosen to run on the data set to determine how much (if any) of the variation in the dependent variable was explained by the independent variables. The first step to complete a multiple regression was to consider eight assumptions. The first assumption was met because the study had one dependent variable that is a continuous measure. The dependent variable in this study is the level of self-esteem measured by the Rosenbergall Scales. Therefore, I decided to perform multiple regressions using each of these levels as dependent variables.

The second assumption was met because the study involved two or more independent variables that were measured either at the continuous or nominal level. The first independent variable, age, is continuous. The second independent variable, the length of time a person has been married, also represents a continuous variable. The third,

fourth and fifth independent variables, gender, Instagram usage and ethnicity, are nominal. Gender represents a dichotomous variable, where ethnicity and Instagram usage are polytomous variables. The nominal variables were not readily interpretable since they have no intrinsic, numeric order.

To check the third assumption, a standard multiple regression procedure was run to inspect for residuals. The following variables were considered: unstandardized predicted values, studentized residuals, studentized deleted residuals, Cook's Distance values, and leverage values. The independence of observations was checked using the Durbin-Watson statistic. On the Rosenbergall scale, residuals were independent, as assessed by a Durbin-Watson statistic of 1.256.

Table 3

Summary of Durbin-Watson Statistics

	Durbin-Watson Statistic
Rosenbergall	1.256

In the fourth assumption, linearity was tested through observed partial regression plots between each independent and dependent variable. The categorical independent variables, such as gender, were ignored. The partial regression plots for all levels demonstrated a linear relationship (Figures 7a-7f)

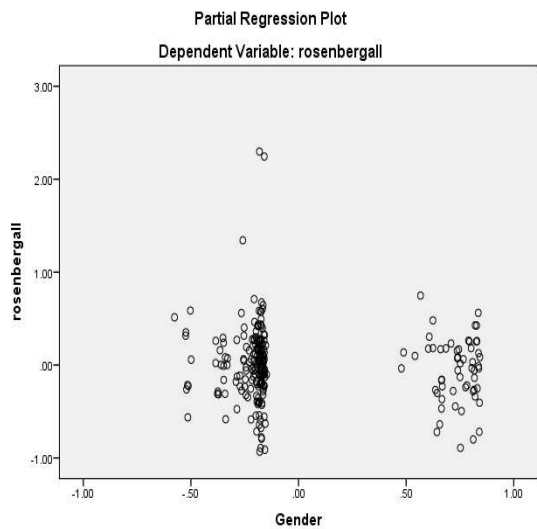


Figure 7a. Rosenbergall partial regression plot for Gender

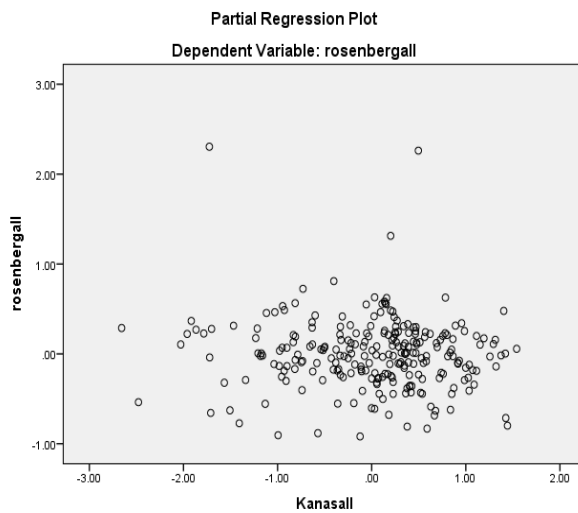


Figure 7b. Rosenbergall partial regression plot for Kanasall

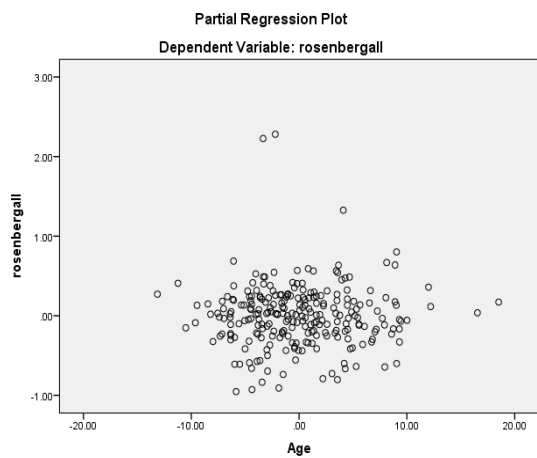


Figure 7c. Rosenbergall partial regression plot for Age

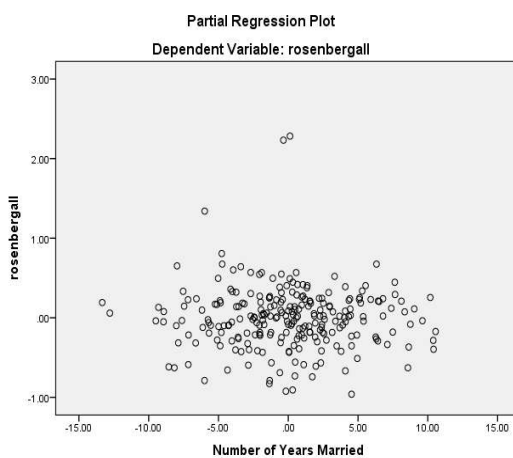


Figure 7d. Rosenbergall partial regression plot for No. of years

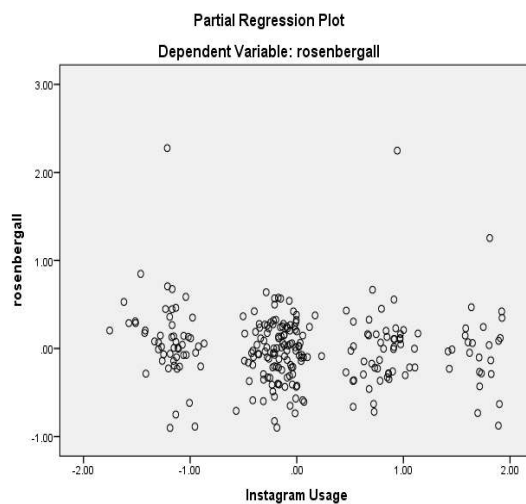
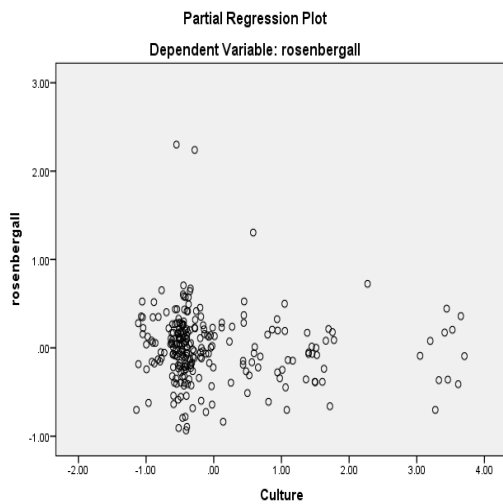


Figure 7e. Rosenbergall partial regression plot for Culture

Figure 7f. Rosenbergall partial regression plot for Instagram usage

To check for assumption five, homoscedasticity, the studentized residuals were plotted against the unstandardized predicted values. There was homoscedasticity as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. The residuals in the plot showed an approximate rectangular distribution, and thus the assumption was met.

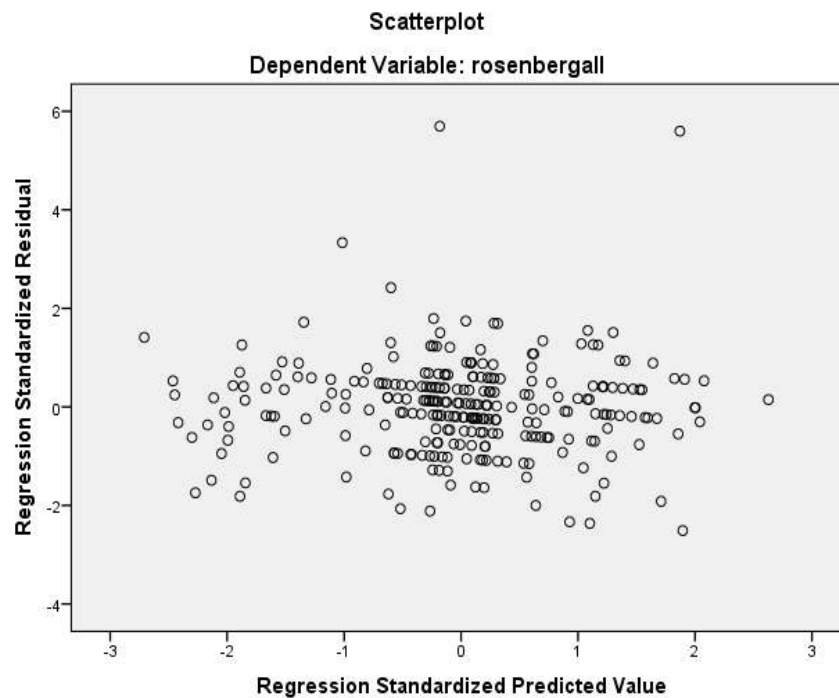


Figure 8. Homoscedasticity plot of residuals and predicted values.

The sixth assumption involved the importance of having no multicollinearity. There were no independent variables that have correlations larger than 0.7 under the correlations table for all two levels.

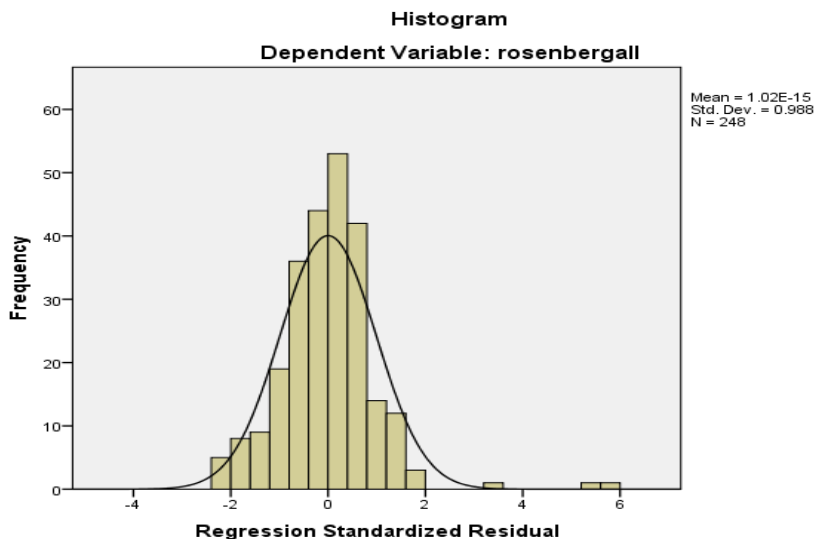
Table 4

Tolerance Value

	Rosenbergall	Kanasall
Gender	0.976	0.976
Age	0.449	0.449
Ethnicity	0.445	0.445
Instagram usage	0.964	0.964
Number of Years married	0.962	0.962
Happiness in Marriage	0.981	0.981

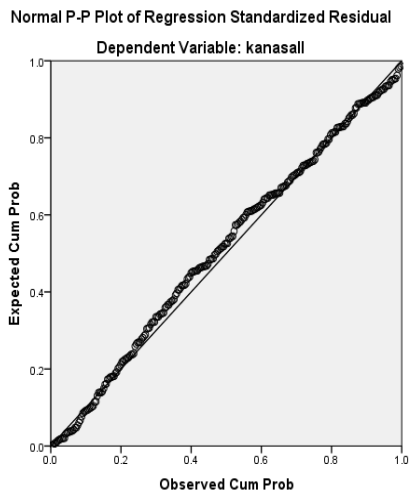
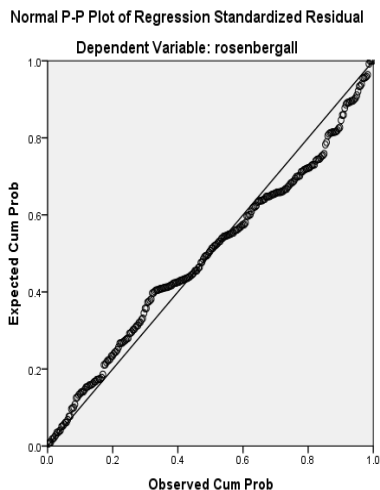
The seventh assumption checked to see if significant outliers existed. All cases on all two levels had standardized residuals less than ± 3 since no table was produced as part of the SPSS Statistics output. The studentized deleted residuals, leverage values and Cook's Distance values are shown in the Appendices. After the studentized deleted residuals were reviewed, there were no values less than ± 3 , which indicated no outliers existed for all three levels. For all three levels, the values were no higher than 0.2, which indicated a safe leverage level. Cook's Distance values for each case checked for influential points. There were no Cook's Distance values above 1 for all the levels; thus, none of the cases needed to be investigated further.

Assumption eight involved the assumption of normality. Reviewing the histograms for all two levels revealed that the standardized residuals appeared to be approximately normally distributed



The assumption of normality was also assessed by viewing the P-P Plot.

Reviewing the P-P Plot confirmed this result since the points were aligned along the diagonal line for all two levels and did not show a large deviation from normality. No transformations or otherwise needed to take place since the assumption of normality was not violated



Analysis

Table 5

Summary of Multiple Regression Analysis of Variables

	<i>B</i>	<i>SE_B</i>	β	<i>t</i>	<i>p</i>
Instagram	-.028	.028	-.062	-1.003	.317
Kansas marriage	-.032	.017	-.118	-1.919	.056
Gender	-.123	.060	-.126	-2.042	.042
Age	.001	.005	.019	.213	.832
Years married	-4.034E-5	.006	-.001	-.007	.994
Ethnic	-.005	.023	-.013	-.210	.834

Table 5 presents the regression results. The only significant predictor was Gender $b = -.123$, $t(248) = -2.042$, $p < .05$. Being female was less likely to predict high self-esteem scores compared to men. Instagram usage did not significantly predict self-esteem levels, $b = -.028$, $t(246) = -1.003$, $p > .05$. Kansas marriage did not significantly predict self-esteem, $b = -.032$, $t(246) = -1.919$, $p > .05$. Ethnicity did not significantly predict self-esteem levels, $b = -.005$, $t(246) = -.210$, $p > .05$. Years of married did not significantly predict self-esteem levels, $b = -.0004$, $t(246) = -.001$, $p > .05$.

Therefore, of the predictors, only gender was significant for self-esteem. Since significance was found on gender, null hypothesis 3 was rejected in favor of the alternative hypothesis. However, null hypotheses 1, 2, and 4, 5 and 6 were not rejected, as significance was not found.

Summary

In this chapter, I discussed the analysis of my data. A simultaneous multiple regression was completed in order to predict if Instagram usage can predict self-esteem

scores when looking at age, gender, happiness in marriage and culture. Statistical significances were seen in one of the results tested and the individual research questions were addressed in the various levels of analysis done.

In the final chapter, I compared these results with previous findings from the literature review. The findings were analyzed in the context of the theoretical and conceptual framework. In addition, I present the limitations of the study. Finally, I offer recommendations for further research and the ways this study could be expanded.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative correlational study was to determine if there was a connection between Instagram usage and self-esteem when looking at various factors such as length of a person's marriage, gender, happiness in marriage, age, and culture. This chapter is arranged into five sections. In this chapter, I have already discussed the purpose of the study, a further review of the research questions, findings. Then I interpret the results in the context of the literature reviewed as well as the theoretical framework discussed in Chapter 2. The theoretical orientation I used was both cognitive dissonance and attribution theories to examine if there is a connection between Instagram usage and self-esteem by looking at the variables mentioned above. I distributed two surveys to participants, and the responses were summarized in Chapter 4. Finally, I discuss the study limitations in addition to the recommendations for further research and the implications for social change.

Research Questions

The research questions and hypotheses for this study were:

Research Question 1 (RQ1) Is Instagram usage a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture?

Null Hypothesis (H_01) Instagram usage is not a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Alternative Hypothesis (H_{a1}) Instagram usage is a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture.

Research Question 2 (RQ2) Is the length of a person's marriage a significant predictor of self-esteem when controlling for Instagram usage, gender, happiness in marriage, culture and age?

Null Hypothesis (H_02) The length of a person's marriage is not a significant predictor of self-esteem when controlling for Instagram usage, gender, and age.

Alternative Hypothesis (H_{a2}) The length of a person's marriage is a significant predictor of self-esteem when controlling for Instagram usage, gender, and age, happiness in marriage, and culture.

Research Question 3 (RQ3) Is gender a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, happiness in marriage, culture, and age?

Null Hypothesis (H_03) Gender is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Alternative Hypothesis (H_{a3}) Gender is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and age.

Research Question 4 (RQ4) Is a significant age predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage and gender?

Null Hypothesis (H_04) Age is not a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Alternative Hypothesis (H_a4) Age is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender.

Research Question 5 (RQ5) Is happiness in marriage a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age?

Null Hypothesis (H_05) Happiness in marriage is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Alternative Hypothesis (H_a5) Happiness in marriage is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age.

Research Question 6 (RQ6): Is a culture a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age?

Null Hypothesis (H_06) Culture is not a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Alternative Hypothesis (H_a6) Culture is a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age.

Interpretation of the Findings

I asked all participants to answer how often they go on Instagram, giving choices such as once a day, twice a day, a few times a week, and once a week. The participants then filled out both the Kansas Happiness in Marriage Scale and the Rosenberg Self-Esteem Scale. The scores were then computed and used to operationalize the variables in the study. In all our variables, there was not a significant correlation between Instagram and self-esteem when controlling for the other variables.

Description of the Demographic Data

Instagram is the sixth most popular social media platform in the world, according to Perrin (2015), with about 70% of its users between the ages of 18-30 years. Data collected indicated that most of the Instagram usage was by women, with about 79% of women using Instagram. Although this study had more women participating, the current study indicates that among active Instagram users, there is a little higher female population (50.3%) than males (49.7%) (Perrin, 2015). Another study by Ye, Hashim, Baghirov, and Murphy (2018) concluded that usage is almost the same but used for different purposes and intents. Women used more emotional hashtags per post than men,

whereas men used more negative hashtags. Other studies such as Lee, Kim, and Kwahk (2016) and Perrin (2015) documented that women were more likely than men to use social networking sites for a longer period. They further indicated that up until 2014, these differences have been modest, with about 68% of all women using social media compared with 62% of all men.

Ethnicity was also considered as part of the demographics, and it turned out that Caucasians used Instagram more often than all the others, with 67% (Table 1) followed by the African Americans (13%) and Asians (12%). Studies by Perrin (2015) did not show any notable ethnic or racial difference, as did this study. In one of the reports of *Statista* (2019) on the Daily Instagram Usage in the United States as of August 2018, the survey indicated that 45% of Latino respondents accessed the social network every day. The next group was the Asians (43%), followed by African Americans (38%).

The majority of the participants indicated multiple usages of Instagram within a day (47.6%). This was consistent with studies by Al-Kandari, Al-Hunaiyyan, and Al-Hajri (2016). Other reports by Tailwind (2018) showed how often people were posting to Instagram. Their research showed that in over three months, people who moved from posting less than once a day to seven or more posts a day increased their likes by nearly 13 times.

Integration of the Data

Following RQ1, I examined whether Instagram usage was a predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture. The data gathered (Table 9) indicated that there was no statistical

significance between Instagram usage and self-esteem. Although a study by Barry et al. (2017) showed that low self-esteem was often the result of the phenomenological usage on Instagram, the authors did not conclude whether or not it was a predictor of self-esteem, whether high or low. Lowered self-esteem scores are most often correlated with this need for acceptance. It is often said (Holowka, 2018) that the amount of 'likes' one receives on a picture will correlate with self-esteem, depression, and loneliness.

According to Holowka (2018), the users active on Instagram are constantly seeking validation from not only their friends but from strangers. Although many people are constantly seeking to be on social media, Flaxington (2016) felt that the pressure to be socially accepted could prove too much for some and therefore lead to low self-esteem.

Further studies have also indicated that the more users go online, the likely they are to report negative symptoms such as depression and/or low self-esteem (Pantic, 2014). Although these studies mentioned above, seem to emphasize the issue surrounding self-esteem among users, other conflicting studies suggest the vulnerability of users to self-esteem, especially low self-esteem. Self-esteem is a central feature in emerging and upholding one's health and the overall quality of life (Pantic, 2014). The constant need to create idealistic and touched up images on Instagram may have an enormous consequence on the individual's confidence level.

When controlling for the length of a person's marriage, gender, happiness in marriage, age, and culture, there may be associations with Instagram usage, as seen in this new study. However, there was no significant statistical proof that Instagram affects self-esteem. The results suggest that the alternate hypothesis was true and that Instagram

usage was not a significant predictor of self-esteem when controlling for length of a person's marriage, gender, happiness in marriage, age, and culture. This is also supported by several studies, some of which are in the literature review (El Khouly, 2018, Hawi & Samaha 2017; Neff, 2009; Sciangula & Morry, 2009).

In RQ2, I examined whether a person's length of marriage was a significant predictor of self-esteem when controlling for Instagram usage, gender, happiness in marriage, culture, and age. In the literature, it was observed that people in relationships that were emotionally and physically healthier, and they tend to experience more happiness in their marriage. Again, it was established that the length of marriage was positively correlated with marital happiness and satisfaction (Abel et al., 2016). Frech and Williams (2007) note that psychological well-being for married couples was much higher in their study and was often associated with an increase in self-esteem among the study participants.

Generally, a person's self-esteem has a direct impact on the quality of their relationships. To the degree that they lack self-esteem, it will be difficult to love themselves fully. One relationship expert indicated that "only someone who has higher self-esteem can give love, respect, time, and attention to both himself and others" (Lieberman, 2008). Cohen, Geron, and Farchi (2009) felt that self-esteem is more of a factor in marital satisfaction of women compared to men. Yadalijamaloye, Naseri, Shoshtari, Khaledian, and Ahrami (2013) concluded that focusing on the couples' self-esteem could result in increasing their marital satisfaction and improving the families' efficiency. The study mentioned above (Yadalijamaloye, Naseri, Shoshtari, Khaledian,

and Ahrami, 2013) was in agreement with the findings of this new study. It provided evidence for the null hypothesis that the length of a person's marriage was not a significant predictor of self-esteem when controlling for Instagram usage, gender, and age.

In the RQ3, the researcher sought to find out whether gender was a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, happiness in marriage, culture, and age. There was significant prediction by gender, providing evidence for the alternate hypothesis. As indicated in the literature, women are more likely to be active on Instagram (Sheldon & Bryant, 2016) and they tend to use Instagram to socialize and provide opinions, while males use it to collect information (Al-Kandari, Al-Hunaiyyan, & Al-Hajri, 2016). Studies have shown that females tend to have lower self-esteem and more negative assessments of their physical characteristics and intellectual abilities than males have (Kling, Hyde, Showers, & Buswell, 1999), and this new study that I just conducted supported this finding too.

In a study by the American Psychological Association (2011), it was identified that self-esteem increases during adolescence, then slows in young adulthood; however, contrary to the findings of this new study I just did, there was no significant difference between men's and women's self-esteem during the phases of their lives. Bleidorn et al. 2016 also felt that for both genders, self-esteem was relatively high in childhood, drops during adolescence, and then upsurges progressively throughout adulthood before it tends to decline in old age.

It has been established that boys seem to score higher than girls on self-esteem tests during adolescence (Agam, Tamir, & Golan, 2015); one clarification that has been given is their possible individual roles (Frost & McKelvie, 2004). According to studies, many of the qualities associated with the male role are usually consistent with high self-esteem (Agam et al., 2015). In addition, self-confidence has been described extensively as a stereotypically masculine trait and boys are likely to develop self-confidence. In contrast, the exhibition of self-confidence in girls has measured a breach of traditional gender roles (Kling, Hyde, Showers, & Buswell, 1999). All these findings support the finding of this new study that gender is a significant predictor of self-esteem.

In RQ4, I sought to discover whether age is a significant predictor of self-esteem when controlling for Instagram usage, length of a person's marriage, culture, happiness in marriage, and gender. My findings showed no significant association between age and the selected factors, providing evidence for the null hypothesis. It has been established by Döring et al. (2016) that while adults use Instagram for photo sharing on different topics and location searches, teenagers mostly use it to show themselves and their friends. In one of the studies by Orth, Trzesniewski, and Robins (2010), the authors noted that self-esteem gets better with age. Their study showed that self-esteem was the lowest among young adults but increased throughout adulthood, peaking at age 60, before starting to decline. Now while self-esteem is considered a natural phenomenon by some scientists, a currently published paper was of a contrary view that the feeling of certainty and comfort level with who you are as a person begins at age 60 (El Khouly, 2018).

It is known that adolescents are usually affected by Instagram, as they usually cannot stop engaging in social media when a problem occurs. They usually follow friends and always try to be in contact at all-time (Bányai et al., 2017). The studies of the peaking of Instagram usage for adolescents and, as seen in this study, confirm this finding. Some studies indicated a more pronounced age-effects on self-esteem for women from nations with greater gender equality such as Finland and Sweden and many South Americans nations (Bleidorn, Arslan, Denissen et al., 2016). This finding implies, in these nations, gender differences in self-esteem lean toward becoming smaller with age. In contrast, however, although this gender gap may be smaller in nations, gender differences tend to become larger with age in these cultures.

In RQ5, I looked at whether happiness in marriage was a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, culture, and age. The findings of the study indicated that happiness in marriage was not a predictor of self-esteem with no statistical difference. These findings were inconsistent with other studies that clearly state that self-esteem is a boost to marital happiness. In the literature, it was established that the impact of happiness, satisfaction, well-being, and health are factors ascended by marital length (Mitchell, 2010). Happiness and self-esteem appear, on the surface, to be indistinguishably related. In one of the studied by Lyubomirsky, Tkach, and DiMatteo (2006), it was identified that the purpose and meaning in life, which were indicators of self-esteem, were dominant predictors of happiness as well. In a previous study by Shackelford (2001), the findings suggested that self-esteem was

positively related to relationship satisfaction. In another 12-year longitudinal study found that self-esteem predicted relationship satisfaction (Orth, Robins, & Widaman, 2012).

Finally, RQ6 looked at whether culture was a predictor of self-esteem when controlling for Instagram usage, how long they are married, gender, happiness in marriage, and age. The findings showed an association between culture and the selected factors, although there was no statistical significance. Cultural norms influence a person's interpretation of self-concept as well as situational behavior. Culture by the description of Ham (2017) affects self-esteem. According to Ham, there is a belief by individuals of being on their own. This belief, according to Ham, could potentially result in them collectively having higher self-esteem. Self-esteem, according to Salzman (2018), is also determined by the values of one's culture, such as interdependence, adherence, obligations, among others.

Cultures show us the way. They describe the world and guide in addressing the indispensable issues of how an individual should *live*. Cultures provide a portrayal of the world and representativeness of everything that goes on in this world. Cai, Brown, Deng, and Oakes (2007) felt that the lack of cultural differences inherent self-esteem provides evidence that cultural differences are small when it examines the way people feel.

Theoretical Framework and Research Findings

The Attribution Theory, which formed the theoretical basis for this study, highlighted and focused on the selected and consented participants' ability to give reasons why people think the way they do. The internal model was used to describe the internal behavior of people on Instagram, such as their personality, attitude, and character

traits. The external model, on the other hand, was used to describe the reason behind the behaviors of people on Instagram. When using Cognitive Dissonance, people were able to explain away their actions/behaviors were not influencing their cognitive thoughts or had an influence on someone else's thoughts. However, our research proved otherwise.

In this study, there were seven different variables, such as Instagram usage, gender, age, length of the marriage, culture, marital happiness, and self-esteem. Every one of our variables targeted on the people. People interpreted their environment in a way that maintained their positive self-image. The theory was used to highlight Instagram usage and gender, Instagram usage and age, Instagram usage and culture, Instagram usage and self- esteem, Instagram usage and years of marriage as well as marital happiness. By this theory, I can explain thoroughly that posting on Instagram may not necessarily impact the habits of people. Neither does it adequately depict the feelings of others. Rather, social media posts could stir others to think everyone else's lives are perfect, while they objectively recognize theirs are not. This theory afforded the author to comprehend how people answer the question on Instagram and whether their ages, culture and marital status played a crucial part.

Attribution theory sought to help people make sense of their world by ascertaining grounds for the behaviors and events to people's personal experience. Kim (2015) used Attribution Theory to explain whether people were moral or they pretended to be what they were not in order for others to accept them. This theory has helped me gain a deeper understanding of the connections between the chosen variables. By this theory, I can now establish that an amount of time on social media can either aggravate feelings of

depression and anxiety or better improve feelings they already have. Understandably a relative responsible amount of time may be needed on social media, whether for work or social interaction. By relating Attribution Theory to the study, it could make others knowledgeable of what their post on Instagram can potentially do to viewers at large. Taking this a step further, help them in recognizing that managing and controlling content is crucial. When people are sad and depressed, they turn to social media, and one post can revive them back on track. In summary, the study identified internal and external attributions to explain different experiences with Instagram usage, gender, age, length of the marriage, culture, marital happiness, and how that affects one's self-esteem in different contexts.

Limitations of the Study

A correlational design does not mean causation when discussing research, but we can make predictions based on our study and what the data showed. Assumptions were made that everyone who completed and sent back the survey understood the instructions and were honest in their answers. I relied on the anonymous nature of the study to allow people to be truthful to the best of their knowledge when answering the survey questions. I was limited to the people who answered and fit the criteria. As with any survey, there is no way to measure mood or temperament of the people taking the survey and hope when they participated, they answered honestly how they feel most of the time in their relationships and not focus on how they feel at that moment.

This study is commanding to promoting scholarly research concerning the total transformation of self-esteem of people who use Instagram daily. Considering the

variables such as age, gender, length of the marriage, culture, and marital happiness, one could recognize Instagram results in their overall self-worth and confidence. It is, therefore, important to understand the usage and strategies that require a complete overview of social media, which could, in effect, help cope with anxiety and depression.

This study has brought to the limelight that Instagram usage is directly linked with higher levels of loneliness, especially by the responses of the marriage couple, anxiety, and depression, among others. One key implication is to watch the usage and the number of hours or times one spends or goes to social media as that harms self-esteem. It is believed and predicted in this study that social media may help improve relationships, and even boost self-esteem, thereby providing a source of emotional support to users.

In conclusion, low self-esteem can reduce the quality of a person's life in many different ways, such as negative feelings, continuous self-criticism, and the feelings of sadness, depression, anxiety, anger, shame, and guilt. Alternatively, a person with high self-esteem may approach life with ease, be confident, better, and lead a happier life. The use of Instagram could, therefore, play a crucial role in this when its usage is managed correctly.

Implications for Social Change

My original thoughts, when deciding a dissertation topic or idea to explore, was to help people navigate this new boom in technology. Social media, especially Instagram, has impacted all ages and people. The objective is to use Instagram responsibly and in moderation. What the research did show was that Instagram might not be a cause of low self-esteem or depression, but it does exacerbate pre-existing conditions. The social

change implications of the study are that people are not always aware of the risks involved unless it is pointed out and shown to them. Unlike Facebook, which is a reciprocal relationship, Instagram is open, and you can “follow” anyone, sometimes leading to very unrealistic expectations in a person’s own life. Understanding risks and how a person can be vulnerable to such conditions is the first step to either avoiding beginning with or curbing how much they go on Instagram, in order to not get too caught up in someone else’s life that it impacts their own. Helping people navigate and use social media responsibly will be an important skill for their emotional well-being.

Recommendations for Actions

Knowledge of possible pitfalls and dangers of Instagram is imperative to making a conscious decision not to lose yourself in someone else’s reality. Understanding posts are not always an accurate portal, or the other person’s life is a healthy way of using Instagram positively without losing yourself into someone else’s fantasy life. Learning and encouraging others to use social media responsibly would go a long way to help avoid possible pitfalls that were already discussed.

Recommendations for Further Study

A longitudinal study would be more accurately measure the effect of Instagram and self-esteem. More research should be done on which variable has a higher risk of self-esteem. We looked at a small sample group such as married; however, other research could be done on older singles, how committed relationships can bolster self-esteem, does the place a person lives, and their community, play a part of which social media they use and are comfortable with. Instagram could be more or less popular, depending on

location and culture. As this study was conducted in Brooklyn, there could be an opportunity to see if the same study was given globally would the results be the same.

Conclusion

Instagram and self-esteem can be an issue as past research, and our study concluded. It might not be a causational relationship, but we have seen social media exacerbate feelings people already have. For example, if someone has low self-esteem, they will view their social media in a similar vein, looking and comparing other lives to their own and finding theirs lacking. If someone has a comfortable self-image, they are less inclined to be influenced by a prolonged time on social media. However, we cannot minimize the potential risks to healthy self-worth.

References

- Abel, J. P., Buff, C. L., & Burr, S. A. (2016). Social media and the fear of missing out: Scale development & assessment. *Journal of Business & Economics Research (Online)*, *14*(1), 33. doi:10.19030/jber.v14i1.9554
- Acharya, A., Blackwell, M., & Sen, M. (2018). Explaining preferences from behavior: A cognitive dissonance approach. *The Journal of Politics*, *80*(2), 400-411. doi:10.1086/694541
- Aftab, S., & Aslam, S. (2014). Gender differences on state self-esteem in young adults. *Pakistan Journal of Clinical Psychology*, *13*(2), 47-57. Retrieved from <https://onlinelibrary.wiley.com/journal/10974679>
- Agam, R., Tamir, S., & Golan, M. (2015). Gender differences in respect to self-esteem and body image as well as response to adolescents' school-based prevention programs. *Journal of Psychology and Clinical Psychiatry*, *2*(5), 00092.
- Ahn, J. (2002). Beyond single equation regression analysis: Path analysis & multi-stage regression analysis. *American Journal of Pharmaceutical Education*, *66*(1), 37. Retrieved from <https://www.ajpe.org/>
- Ahadzadeh, A. S., Pahlevan Sharif, S., & Ong, F. S. (2017). Self-schema and self-discrepancy mediate the influence of Instagram usage on body image satisfaction among youth. *Computers in Human Behavior*, *68*, 8-16. doi:10.1016/j.chb.2016.11.011

- Al-Kari, A. J., Al-Hunaiyyan, A. A., & Al-Hajri, R. (2016). The influence of culture on Instagram use. *Journal of Advances in Information Technology*, 7(1), 54-57.
doi:10.12720/jait.7.1.54-57
- Al-Kandari, A. J., Al-Hunaiyyan, A., & Al-Hajri, R. (2016). The influence of culture on Instagram use. *Journal of Advances in Information Technology*, 7(1), 54, 57.
- American Psychological Association. (2011). No difference in women's and men's self-esteem in youth and early adulthood, study finds. *ScienceDaily*. Retrieved from www.sciencedaily.com/releases/2011/07/110714120714.htm
- Arslan, C. (2009). Anger, self-esteem, and perceived social support in adolescence. *Social Behavior & Personality: An International Journal*, 37(4), 555-564.
doi:10.2224/sbp.2009.37.4.555
- Auer, M., & Griffiths, M. D. (2018). Cognitive dissonance, personalized feedback, and online gambling behavior: an exploratory study using objective tracking data and subjective self-report. *International Journal of Mental Health and Addiction*, 16(3), 631-641. doi:10.1007/s11469-017-9808-1
- Ayyash-Abdo, H., & Alamuddin, R. (2007). Predictors of subjective well-being among college youth in Lebanon. *The Journal of Social Psychology*, 147(3), 265-84.
doi:10.3200/SOCP.147.3.265-284
- Bakhshi, S., Shamma, D. A., & Gilbert, E. (2014). Faces engage us: Photos with faces attract more likes & comments on Instagram. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 965-974). ACM.

- Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M. D., Andreassen, C., & 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
- Barry, C. T., Doucette, H., Loflin, D. C., Rivera-Hudson, N., & Herrington, L. L. (2017). “Let me take a selfie:” Associations between self-photography, narcissism, & self-esteem. *Psychology of Popular Media Culture*, *6*(1), 48-60.
doi:10.1037/ppm0000089
- Bartolini, S., Bilancini, E., & Pugno, M. (2013). Did the decline in social connections depress Americans’ happiness? *Social Indicators Research*, *110*(3), 1033-1059.
doi:10.1007/s11205-011-9971-x
- Bedel, A. (2015). The relationship between interpersonal problem solving, positive - negative affect & anxiety. *Studia Psychologica*, *57*(2), 121-133.
doi:10.21909/sp.2015.02.688
- Bivolaru, E. (2017). Adaptive & maladaptive market & job outcomes of millennials’ social media use. *Calitatea*, *18*, 17-24. Retrieved from
<http://www.srac.ro/calitatea/en/index.html>
- Bleidorn, W., Arslan, R. C., Denissen, J. J., Rentfrow, P. J., Gebauer, J. E., Potter, J., & Gosling, S. D. (2016). Age and gender differences in self-esteem—A cross-cultural window. *Journal of Personality and Social Psychology*, *111*(3), 396.

- Bonds-Raacke, J., Bearden, E. S., Carriere, N. J., Anderson, E. M., & Nicks, S. D. (2001). Engaging distortions: Are we idealizing marriage? *The Journal of Psychology, 135*(2), 179-84. doi:10.1080/00223980109603689
- Cai, H., Brown, J. D., Deng, C., & Oakes, M. A. (2007). Self-esteem and culture: Differences in cognitive self-evaluations or affective self-regard? *Asian Journal of Social Psychology, 10*(3), 162-170.
- Calderón, C. A., López, M., & Peña, J. (2017). The conditional indirect effect of performance expectancy in the use of Facebook, Google+, Instagram, & Twitter by youngsters. *Revista Latina De Comunicación Social, (72)*, 590-607. doi:10.4185/RLCS-2017-1181
- Chuang, S. S., & Su, Y. (2009). Do we see eye to eye? Chinese mothers' & fathers' parenting beliefs & values for toddlers in Canada & China. *Journal of Family Psychology, 23*(3), 331-341. doi:10.1037/a0016015
- Cohen, O., Geron, Y., & Farchi, A. (2009). Marital quality and global well-being among older adult Israeli couples in enduring marriages. *The American journal of family therapy, 37*, 299-317.
- Costigan, C. L., Bardina, P., Cauce, A. M., Kim, G. K., & Latendresse, S. J. (2006). Inter- & intra-group variability in perceptions of behavior among Asian Americans & European Americans. *Cultural Diversity & Ethnic Minority Psychology, 12*(4), 710-724. doi:10.1037/1099-9809.12.4.710

- Coulthard, N., & Ogden, J. (2018). The impact of posting selfies and gaining feedback ('likes') on the psychological wellbeing of 16-25-year olds: An experimental study. *Cyberpsychology, 12*(2), 14–24. doi:10.5817/CP2018-2-4
- Cramer, D. (2003). Acceptance & need for approval as moderators of self-esteem & satisfaction with a romantic relationship or closest friendship. *The Journal of Psychology, 137*(5), 495-505. doi:10.1080/00223980309600631
- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of Mixed Methods Research, 3*(2), 95-108. doi:10.1177/1558689808330883
- Crippen, C., & Brew, L. (2007). Intercultural parenting & the transcultural family: A literature review. *Family Journal, 15*(2), 107-115.
doi:10.1177/1066480706297783
- Curtis, E., Comiskey, C., & Dempsey, O. (2015). Correlational research: Importance and use in nursing and health research. *Nurse Researcher, 6*, 20-25. Retrieved from <https://journals.rcni.com/nurse-researcher>
- de Vries, D. A., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences, 86*, 217-221. doi:10.1016/j.paid.2015.05.029
- de Vries, D. A., Möller, A. M., Wieringa, M. S., Eigenraam, A. W., & Hamelink, K. (2018). Social comparison as the thief of joy: Emotional consequences of viewing strangers' Instagram posts. *Media Psychology, 21*(2), 222-245.
doi:10.1080/15213269.2016.1267647

- Djafarova, E., & Trofimenko, O. (2017). Exploring the relationships between self-presentation and self-esteem of mothers in social media in Russia. *Computers in Human Behavior*, 73, 20-27. doi:10.1016/j.chb.2017.03.021
- Duan, J. (2018). How posting purchases on social media influences happiness: The Role of self-esteem. *The Journal of Social Media in Society*, 7(1), 61-77. Retrieved from <http://thejsms.org/tsmri/index.php/TSMRI/article/view/343/149>
- Duggan, M., & Bernner, J. (2013). *The demographics of social media users—2012. The pew research internet project*. Retrieved from <http://www.pewinternet.org/2013/02/14/thedemographics-of-social-media-users-2012/>
- El Khouly, C. (2018). Instagram and its relationship between self-esteem and depression amongst young adults.
- Erol, R. Y., & Orth, U. (2014). Development of self-esteem & relationship satisfaction in couples: Two longitudinal studies. *Developmental Psychology*, 50(9), 2291-2303. Retrieved from <https://www.apa.org/pubs/journals/dev/index.aspx>
- Ershad, Z. S. & Aghajani, T. (2017). Prediction of Instagram social network addiction based on the personality, alexithymia and attachment styles. *Sociological Studies of Youth*, 8(26), 21-34. Retrieved from http://ssyj.baboliau.ac.ir/article_533425.html
- Ertürk, Y. D. (2016). Analysis of the relationship between self-esteem & levels of narcissism through selfies of Instagram users*. *AJIT-e*, 7(24), 29-50. doi:10.5824/1309?1581.2016.3.002.x

- Eryilmaz, A., & Atak, H. (2011). Investigation of starting romantic intimacy in emerging adulthood in terms of self-esteem, gender & gender roles. *Educational Sciences: Theory & Practice, 11*(2), 595-600. Retrieved from <http://www.estp.com.tr/>
- Fernes, T., Sanyal, N., & Chadha, S. (2015). Self-esteem & social interaction anxiety in cyberbullied adolescents. *Indian Journal of Health & Wellbeing, 6*(7), 648-655. Retrieved from <https://journals.indexcopernicus.com/journal/40516>
- Ferwerda, B., & Tkalcic, M. (2018). You are what you post: What the content of Instagram pictures tells about users' personality. In *The 23rd International on Intelligent User Interfaces*. Retrieved from <https://www.theguardian.com/media/2015/nov/04/instagram-young-women-self-esteem-essena-oneill>
- Festinger, L. (1962). *A theory of cognitive dissonance* (Vol. 2). Stanford university press.
- Fincham, F. D., & Bradbury, T. N. (1993). Marital satisfaction, depression, & attributions: A longitudinal analysis. *Journal of Personality & Social Psychology, 64*(3), 442-452. doi:10.1037/0022-3514.64.3.442
- Flaxington, D.B., (2016) Understand Other People. *Seeking Validation Online Doesn't Bring Real Happiness*".
- Fox, J., & Vendemia, M. A. (2016). Selective self-presentation and social comparison through photographs on social networking sites. *Cyberpsychology, Behavior, and Social Networking, 19*(10), 593-600. doi:10.1089/cyber.2016.0248

- Frech, A., & Williams, K. (2007). Depression & the psychological benefits of entering marriage. *Journal of Health & Social Behavior*, 48(2), 149-163.
doi:10.1177/002214650704800204
- Frost, J., & McKelvie, S. (2004) Self-esteem and body satisfaction in male and female elementary school, high school, and university students. *Sex Roles* 51(1-2), 45-54.
- Gajanan, M. (2015). *Young women on Instagram and self-esteem: 'I absolutely feel insecure.'* Retrieved from
<https://www.theguardian.com/media/2015/nov/04/instagram-young-women-self-esteem-essena-oneill>
- Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, & Social Networking*, 14(1-2), 79-83. doi:10.1089/cyber.2009.0411
- Grieve, R., & Watkinson, J. (2016). The psychological benefits of being authentic on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 19(7), 420-425.
doi:10.1089/cyber.2016.0010
- Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576-586. doi:10.1177/0894439316660340
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: Wiley
- Helliwell, J. F., & Huang, H. (2013). Comparing the happiness effects of real & on-line friends. *PLoS One*, 8(9). doi:10.1371/journal.pone.0072754

- Holowka, E. M. (2018) Between artifice and emotion: The “sad girls” of Instagram. *Leadership, Popular Culture & Social Change*. 183-187
- Hoshino-Browne, E., Zanna, A. S., Spencer, S. J., Zanna, M. P., Kitayama, S., & Lackenbauer, S. (2005). On the cultural guises of cognitive dissonance: The case of easterners & westerners. *Journal of Personality & Social Psychology*, 89(3), 294-310. doi:10.1037/0022-3514.89.3.294
- Hu, Y., Manikonda, L., & Kambhampati, S. (2014). What we Instagram: A first analysis of Instagram photo content & user types. In *Icwsn*.
- Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, & divorce. *Journal of Personality & Social Psychology*, 80(2), 237-252. doi:10.1037//0022-3514.80.2.237
- Jan, M., Soomro, S. A., & Nawaz, A. (2017). Impact of Social Media on Self-Esteem. *European Scientific Journal*, 13(23), 1857-7881. doi:10.19044/esj.2017.v13n23p329
- Jang, J. Y., Han, K., Shih, P. C., & Lee, D. (2015). Generation like: Comparative characteristics in Instagram. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 4039-4042). ACM.
- Jaspars, J., Hewstone, M., & Fincham, F. D. (1983). Attribution theory & research: The state of the art. *Attribution theory & research: Conceptual, developmental & social dimensions*, 3-36.
- Jejunum. (2003). In *Merriam-Webster's dictionary* (11th ed.). Springfield, MA:

- Johnston, K., Tanner, M., Lalla, N., & Kawalski, D. (2013). Social capital: The benefit of Facebook 'friends'. *Behaviour & Information Technology*, 32(1), 24-36.
doi:10.1080/0144929X.2010.550063
- Jordan, C. H., Logel, C., Spencer, S. J., Zanna, M. P., Wood, J. V., & Holmes, J. G. (2013). Responsive low self-esteem: Low explicit self-esteem, implicit self-esteem, & reactions to performance outcomes. *Journal of Social & Clinical Psychology*, 32(7), 703-732. doi:101521jscp2013327703
- Keller, H., Yovsi, R., Borke, J., Kärtner, J., Jensen, H., & Papaligoura, Z. (2004). Developmental consequences of early parenting experiences: Self-recognition & self-regulation in three cultural communities. *Child Development*, 75(6), 1745-1760. doi:10.1111/j.1467-8624.2004.00814.x
- Kelley, H. H., & Michela, J. L. (1980). Attribution theory & research. *Annual Review of Psychology*, 31(1), 457-501. doi:10.1146/annurev.ps.31.020180.002325
- Kim, K. (2015). *Are you genuine or acting to appear moral? An experiment applying attribution theory to investigate the impact of inspiring UGC media on viewers*. Retrieved from https://etda.libraries.psu.edu/files/final_submissions/11261
- Kim, M. K. (2010). *The effectiveness of product conversations in social media: From an attribution theory perspective*. Retrieved from <http://ezp.waldenulibrary.org/login?url=https://search-proquest-com.ezp.waldenulibrary.org/docview/835030173?accountid=14872>

- Kim, Y., Sohn, D., & Choi, S. M. (2011). Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behavior*, 27. doi:10.1016/j.chb.2010.08.015
- Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of behavioral addictions*, 7(1), 158-170. doi:10.1556/2006.7.2018.15
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125(4), 470.
- Korn, C. W., Rosenblau, G., Buritica, J. M. R., & Heekeren, H. R. (2016). Performance feedback processing is positively biased as predicted by attribution theory. *PloS one*, 11(2), e0148581. doi:10.1371/journal.pone.0148581
- Krämer, N. C., Feurstein, M., Kluck, J. P., Meier, Y., Rother, M., & Winter, S. (2017). Beware of selfies: The impact of phototype on impression formation based on social networking profiles. *Frontiers in Psychology*, 8, 14. doi:10.3389/fpsyg.2017.00188
- Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., Shablack, H., Jonides, J., ... Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *PloS one*, 8(8), e69841. doi:10.1371/journal.pone.0069841
- Lee, S., Kim, C., & Kwahk, K. (2016). Examining the determinants of the intention of continued Instagram usage: Focused on the moderating effect of the gender. *Journal of the Korea Society of Digital Industry and Information Management*, 12(2), 61-72.

- Lehmann, V., Tuinman, M. A., Braeken, J., Vingerhoets, A. J., J., M., S&erman, R., & Hagedoorn, M. (2015). Satisfaction with relationship status: Development of a new scale & the role in predicting well-being. *Journal of Happiness Studies*, *16*(1), 169-184. doi:10.1007/s10902-014-9503-x
- Lewis, F. M. & Daltroy, L. H. (1990). How Causal Explanations Influence Health Behavior: Attribution Theory. In Glanz, K., Lewis, F.M. & Rimer, B.K. (eds.) *Health Education & Health Behavior: Theory, Research. & Practice*. San Francisco, CA: Jossey-Bass Publishers, Inc.
- Lieberman, D. (2008). *Relationships and self-esteem*. Retrieved from <https://www.aish.com/sp/pg/48937412.html>
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice* (Vol. 28). John Wiley & Sons.
- Lopez, S. J., Pedrotti, J. T., & Snyder, C. R. (2018). *Positive psychology: The scientific and practical explorations of human strengths*. Sage Publications.
- Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram# instead? Exploring associations among Instagram use, depressive symptoms, negative social comparison, & strangers followed. *Cyberpsychology, Behavior, & Social Networking*, *18*(5), 247-252. doi:10.1089/cyber.2014.0560
- Lyubomirsky, S., Tkach, C., & DiMatteo, M. R. (2006). What are the differences between happiness and self-esteem? *Social Indicators Research*, *78*(3), 363-404.

- Matthey, A., & Regner, T. (2011). Do I really want to know? A cognitive dissonance-based explanation of other-regarding behavior. *Games*, 2(1), 114-135.
doi:10.3390/g2010114
- Matz, D. C., & Wood, W. (2005). Cognitive dissonance in groups: The consequences of disagreement. *Journal of Personality & Social Psychology*, 88(1), 22-37.
doi:10.1037/0022-3514.88.1.22
- McClure, A. C., Tanski, S. E., Kingsbury, J., Gerrard, M., & Sargent, J. D. (2010). Characteristics associated with low self-esteem among US adolescents. *Academic Pediatrics*, 10(4), 238-244. doi:10.1016/j.acap.2010.03.007
- Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem & life satisfaction in adolescents--gender & age as potential moderators. *Quality of Life Research*, 22(10), 2921-8.
doi:10.1007/s11136-013-0427-4
- Mullin, A. C. (2017). *Comparison: an examination of social comparison orientation on Instagram as it relates to self-esteem and state anxiety*. Retrieved from https://scholarship.claremont.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=2057&context=scripps_theses
- Neff, L. A., & Karney, B. R. (2009). Stress & reactivity to daily relationship experiences: How stress hinders adaptive processes in marriage. *Journal of Personality & Social Psychology*, 97(3), 435-450. doi:10.1037/a0015663
- Nesi, J., & Prinstein, M. J. (2015). Using social media for social comparison & feedback-seeking: Gender & popularity moderate associations with depressive symptoms.

Journal of Abnormal Child Psychology, 43(8), 1427-1438.

doi:10.1007/s10802015-0020-0

Noldy, N. E., Stelmack, R. M., & Campbell, K. B. (1990). Event-related potentials and recognition memory for pictures and words: The effects of intentional and incidental learning. *Psychophysiology*, 27, 417– 428. doi:10.1111/j .1469-8986.1990.tb02337.x

Oberst, U., Chamarro, A., & Renau, V. (2016). Gender stereotypes 2.0: Self-representations of adolescents on Facebook/Estereotipos de género 2.0: Auto-representaciones de adolescentes en Facebook. *Comunicar*, 24(48), 81-89. doi:10.3916/C48-2016-08

Oberst, U., Wegmann, E., Stodt, B., Br &, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51-60. doi:10.1016/j.adolescence.2016.12.008014

Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem & its effects on important life outcomes. *Journal of Personality & Social Psychology*, 102(6), 1271-1288. doi:10.1037/a0025558

Omani-Samani, R., Maroufizadeh, S., Ghaheri, A., Amini, P., & Navid, B. (2017). Reliability and validity of the Kansas Marital Satisfaction Scale (KMSS) in infertile people. *Middle East Fertility Society Journal*, 23(2), 154-157. doi:10.1016/j.mefs.2017.10.005

- Palmer, P. B., & O'Connell, D. G. (2009). Regression analysis for prediction: Understanding the process. *Cardiopulmonary Physical Therapy Journal*, 20(3), 23. Retrieved from <https://journals.lww.com/cptj/pages/default.aspx>
- Palomar Lever, J., Lanzagorta Pinol, N., & Hernández Uralde, J. (2005). Poverty, psychological resources & subjective well-being. *Social Indicators Research*, 73(3), 375-408. doi:10.1007/s11205-004-1072-7
- Pantic, I., Damjanovic, A., Todorovic, J., Topalovic, D., Bojovic-Jovic, D., Ristic, S., & Pantic, S. (2012). Association between online social networking and depression in high school students: behavioral physiology viewpoint. *Psychiatria Danubina*, 24(1.), 90-93. Retrieved from <http://www.psychiatria-danubina.com/about-us/13>
- Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., ... & Kakuma, R. (2016). Our future: A Lancet commission on adolescent health and wellbeing. *The Lancet*, 387(10036), 2423-2478. doi:10.1016/S0140-6736(16)00579-1
- Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives & an agenda for research. *Sex Roles*, 71(11-12), 363-377. doi:10.1007/s11199-014-0384-6
- Perrin, A. (2015). Social media usage. *Pew Research Center*, 52-68.
- Peterson, R. A., & Merunka, D. R. (2014). Convenience samples of college students and research reproducibility. *Journal of Business Research*, 67(5), 1035-1041. doi:10.1016/j.jbusres.2013.08.010

- Pounders, K., Kowalczyk, C. M., & Stowers, K. (2016). Insight into the motivation of selfie postings: Impression management & self-esteem. *European Journal of Marketing*, 50(9), 1879-1892. doi:10.1108/EJM-07-2015-0502
- Pugh, S. (2017). *Investigating the relationship between smartphone addiction, social anxiety, self-esteem, age & gender*. Retrieved from <http://hdl.handle.net/10788/3329>
- Reisenzein, R., & Rudolph, U. (2008). The discovery of common-sense psychology. *Social Psychology*, 39(3), 125-133. doi:10.1027/1864-9335.39.3.125
- Roberts, J., Yaya, L., & Manolis, C. (2014). The invisible addiction: Cell-phone activities & addiction among male & female college students. *Journal of Behavioral Addictions*, 3(4), 254-265. doi:10.1556/JBA.3.2014.015
- Rosenberg, M. (1989). *Society and the adolescent self- image*. Revised edition. Middletown, CT: Wesleyan University Press.
- Salzman, M. B. (2018). Cultural trauma and recovery. In *A Psychology of Culture* (pp. 67-78). Springer, Cham.
- Shackelford, T. K. (2001). Self-esteem in marriage. *Personality and Individual Differences*, 30(3), 371-390.
- Sciangula, A., & Morry, M. M. (2009). Self-esteem & perceived regard: How I see myself affects my relationship satisfaction. *The Journal of Social Psychology*, 149(2), 143-58. Retrieved from ProQuest

- Schumm, W. R., Paff Bergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., Meens, L. D., & ... Bean, R. A. (2000). Kansas Marital Satisfaction Scale. *American Journal of Family Therapy*, 28, 53-60.
- Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use & relationship to narcissism & contextual age. *Computers in Human Behavior*, 58, 89-97.
doi:10.1016/j.chb.2015.12.059
- Sheldon, P., Rauschnabel, P. A., Antony, M. G., & Car, S. (2017). A cross-cultural comparison of Croatian and American social network sites: Exploring cultural differences in motives for Instagram use. *Computers in Human Behavior*, 75, 643-651. doi:10.1016/j.chb.2017.06.009
- Sherlock, M., & Wagstaff, D. L. (2018). Exploring the relationship between frequency of Instagram use, exposure to idealized images, and psychological well-being in women. *Psychology of Popular Media Culture*. doi:10.1037/ppm0000182
- Simundic, A. M. (2013). Bias in research. *Biochemia Medica*, 23(1), 12-15.
doi:10.11613/BM.2013.003
- Smith, E. R., Mackie, D. M., & Claypool, H. M. (2014). *Social psychology*. New York, NY: Psychology Press
- Social Buddies. (2019). *How often should you post on Instagram in 2019?* Retrieved from <https://socialbuddy.com/how-often-should-you-post-on-instagram/>
- Statista. (2018). *Daily Instagram usage in the United States as of August 2018, by ethnicity*. Retrieved from <https://www.statista.com/statistics/945939/daily-frequency-usage-instagram-usa-ethnicity/>

- Taghizadeh, M. E., & Kalhori, E. (2015). Relation between self-esteem with marital satisfaction of employed women in Payam-e-Noor University. *Mediterranean Journal of Social Sciences*, 6(6 S6), 41.
- Tartaglia, S. (2016). Different modalities of using Facebook: The influence of actual social relations, well-being & attitude toward the medium. *Studia Psychologica*, 58(1), 3-17. Retrieved from <http://www.studiapsychologica.com/>
- Tate, C. C., Bettergarcia, J. N., & Brent, L. M. (2015). Re-assessing the role of gender-related cognitions for self-esteem: The importance of gender typicality for cisgender adults. *Sex Roles*, 72(5-6), 221-236. doi:10.1007/s11199-015-0458-0
- Tiggemann, M., & Zaccardo, M. (2015). "Exercise to be fit, not skinny:" The effect of fitspiration imagery on women's body image. *Body Image*, 15, 61-67. doi:10.1016/j.bodyim.2015.06.003
- Tinakon, W., & Nahathai, W. (2012). A comparison of reliability and construct validity between the original and revised versions of the Rosenberg Self-Esteem Scale. *Psychiatry Investigation*, 9(1), 54-58. doi:10.4306/pi.2012.9.1.54
- Turner, P. G., & Lefevre, C. E. (2017). Instagram use is linked to increased symptoms of orthorexia nervosa. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 22(2), 277-284. doi:10.1007/s40519-017-0364-2
- Underwood, M. K., & Ehrenreich, S. E. (2017). The power & the pain of adolescents' digital communication: Cyber victimization & the perils of lurking. *American Psychologist*, 72(2), 144-158. doi:10.1037/a0040429

- Veleur, C. L., Perrez, M., & Schoebi, D. (2007). Associations between measures of emotion & familial dynamics in normative families with adolescents. *Swiss Journal of Psychology/Schweizerische Zeitschrift Für Psychologie/Revue Suisse De Psychologie*, *66*(1), 5-16. doi:10.1024/1421-0185.66.1.5
- Valkenburg, P. M., Koutamanis, M., & Vossen, H. G. (2017). The concurrent and longitudinal relationships between adolescents' use of social network sites and their social self-esteem. *Computers in Human Behavior*, *76*, 35-41. doi:10.1016/j.chb.2017.07.008
- Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, *207*, 163-166. doi:10.1016/j.jad.2016.08.040
- Varela, R. E., Vernberg, E. M., Sanchez-Sosa, J., Riveros, A., Mitchell, M., & Mashunkashey, J. (2004). Parenting style of Mexican, Mexican American, & Caucasian-non-Hispanic families: Social context & cultural influences. *Journal of Family Psychology*, *18*(4), 651-657. doi:10.1037/0893-3200.18.4.651
- Verduyn, P., Ybarra, O., Résibois, M., Jonides, J., & Kross, E. (2017). Do Social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review*, *11*(1), 274-302. doi:10.1111/sipr.12033
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, & self-esteem. *Psychology of Popular Media Culture*, *3*(4), 206. doi:10.1037/ppm0000047
- Vygotsky, L. (1986). *Thought & language*. Cambridge, MA: The MIT Press.

- Waldinger, R. J., & Schulz, M. S. (2010). What's love got to do with it? Social functioning, perceived health, & daily happiness in married octogenarians. *Psychology & Aging, 25*(2), 422-431. doi:10.1037/a0019087
- Weiner, B. (2008). Reflections on the history of attribution theory & research: People, personalities, publications, problems. *Social Psychology, 39*(3), 151-156. doi:10.1027/1864-9335.39.3.151
- Weiner, B. (1985). An attributional theory of achievement motivation & emotion. *Psychological Review, 92*(4), 548. doi:10.1037/0033-295X.92.4.548
- Whisman, M. A., Uebelacker, L. A., Tolejko, N., Chatav, Y., & McKelvie, M. (2006). Marital discord & well-being in older adults: Is the association confounded by personality? *Psychology & Aging, 21*(3), 626-631. doi:10.1037/0882-7974.21.3.626
- Williams, M. N., Grajales, C. A. G., & Kurkiewicz, D. (2013). Assumptions of multiple regression: Correcting two misconceptions. *Practical Assessment, Research & Evaluation, 18*(11), 2-14. Retrieved from <http://pareonline.net/>
- Yadalijamaloye, Z., Naseri, E., Shoshtari, M., Khaledian, M., & Ahrami, R. (2013). Relationships between self-esteem and marital satisfaction among women. *Psychology and Behavioral Sciences, 2*(3), 124-129.
- Ye, Z., Hashim, N. H., Baghirov, F., & Murphy, J. (2018). Gender differences in Instagram hashtag use. *Journal of Hospitality Marketing & Management, 27*(4), 386-404.

Zosuls, K. M., Miller, C. F., Ruble, D. N., Martin, C. L., & Fabes, R. A. (2011). Gender development research in sex roles: Historical trends & future directions. *Sex Roles, 64*(11-12), 826-842. doi:10.1007/s11199-010-9902-3

Appendix A: Consent Form

Consent Form

You are invited to take part in a research study being conducted by Yael Treitel, who is a student at Walden University, Minneapolis Minnesota for part of her dissertation.

The study, as well as your rights as a participant, are described below.

Description: This study will examine Instagram, self-esteem and happiness in marriage.

Confidentiality: Your answers will not be associated with your name. Rather, each participant will submit the questionnaire via google forms.

Risks & Benefits: There are no risks to your safety.

Freedom to Withdraw or Refuse Participation: I understand I have the right to withdraw from the survey or to refuse to answer any of the survey questions without prejudice from the investigator at any point.

Grievance Procedure: If I have any concerns or are dissatisfied with any aspect of this study I may report my grievances anonymously if desired to the Research Participant Advocate 1-800-925-3368 ext. 312-1210 from within the USA, Or 001-612-312-1210 from outside the USA, or via email at irb@mail.waldenu.edu .

Questions? Please feel free to email any questions before signing the consent form or at any time during or after the study.

Principal Investigator: Yael Treitel, Student in Walden University

Faculty Supervisor: Dr. Stephen Rice

Informed Consent Statement

I, _____, agree to participate in the research project on Instagram, self-esteem and happiness in marriage. The study has been explained to me and my questions answered to my satisfaction. I understand my right to withdraw from participating or my refusal to participate will be respected and that my responses and identity will be kept confidential unless indicated otherwise above. I give this consent voluntarily.

Participant Signature:

Signature

Date

Appendix B: Letter of Cooperation



February 28, 2019
TO WHOM IT MAY CONCERN,

This Letter of Cooperation confirms that CHE Behavioral Health allows Yael Treitel, to contact our employees via email in order to assist with her study on “Does Instagram Usage, Gender, Age, Length of Marriage, Culture and Marital Happiness Predict Self Esteem Scores”

We allow the employees to use company time to complete the emailed surveys.

Employees’ are aware and understand that participation is completely voluntary and have no bearing on their employment.

We understand that the student will not be naming our organization in the doctoral project report that is published in Proquest.

We understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student’s supervising faculty/staff without permission from Walden University IRB

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization’s policies.

Sincerely,

Shoni Eidlisz, QA Manager

3512 Quentin Road
Brooklyn, NY 11234
(718) 854-8370
Fax (718) 854-8369

4 Central Avenue
Albany, NY 12210
(518) 465-0597
Fax (518) 465-0599

1655 Elmwood Avenue
Rochester, NY 14620
(585) 271-2290
Fax (585) 271-2295

4929 Wilshire Blvd.
Los Angeles, CA 90010
(888) 307-0893
Fax (888) 307-0894

558 Chase Avenue
Waterbury, CT 06704
(203) 465-0136
Fax (203) 757-9023

1060 Waldorf Terrace
Lakewood, NJ 08701
(973) 470-9600
Fax (973) 780-4300