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## Social Desirability and Relational Self-Esteem in Adults that Experienced Childhood Peer Victimization

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Walden University 2024

#### Abstract

Social Desirability and Relational Self-Esteem in Adults that Experienced Childhood

Peer Victimization

by

Trisha Jeffers

MA, Human Services Counseling: Health and Wellness, Liberty University, 2017

BS, Psychology, Liberty University, 2012

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Clinical Psychology

Walden University

February, 2023

#### Abstract

Childhood peer victimization occurs every day in the United States. This experience causes stress, mood changes, and social discord for the victims. Other researchers have examined the long-term implications of childhood peer victimization, which include depression, anxiety, stress response, attention deficits, and poor overall well-being. Further research is needed to identify more areas impacted by childhood peer victimization. Social learning theory proposed experiences influence behaviors and provided the theoretical foundation for this study. Ninety-nine participants were recruited for this quantitative study using online crowdsourcing and social media. The participants completed a survey comprised of the California Bullying Victimization Scale Retrospective Scale, Relational Self-Esteem Scale, Marlowe-Crowne Social Desirability Scale, and a demographic questionnaire to include age and gender. Pearson correlation analysis and one-way multivariate analysis of variance were used to examine the relationship between the data gathered on age, gender, and childhood peer victimization and the data collected on social desirability and relational self-esteem. The results indicated childhood peer victimization did predict social desirability levels in adults. Additionally, the results showed gender did predict relational self-esteem in adults. This knowledge promotes positive social change by providing treatment providers insight into the origin of social deficits experienced. A greater understanding of the long-term implications of childhood peer victimization allows treating providers to address the prior experience and employ strategies that will address the social deficits as well.

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#### Dedication

This study is dedicated to my family. Without their infinite support, this project would not have been possible. Specifically, I dedicate this project to my daughters, Shevelle and Bentlee. I hope this project encourages them to chase their dreams and realize their abilities are endless.

#### Acknowledgments

I would like to thank my husband, Joe, for his support throughout the undertaking of this research. His tireless efforts to support me and fill in gaps in our life that I made to take time to complete this study are ample and much appreciated. His encouragement has kept me going when I felt like I couldn't. Additionally, I would like to thank the best friend I could ever ask for, Kay. She has been supportive through all of the emotions experienced throughout this project, the tears, anger, and celebrations. I would also like to thank my mother, Dottie, for always encouraging higher education. There are too many family members to name who have encouraged me and held me accountable by asking what stage of the process I was completing, and to all of you, I say thank you.

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#### Chapter 1: Introduction to the Study

#### Introduction

Childhood peer victimization has been acknowledged as a public health concern that has long-lasting effects on an individual's well-being (Fredrick et al., 2021). Psychologists and researchers have been working to understand the impact of peer victimization on developing children as well as adults. Peer victimization is defined as the verbal or physical abuse of a same-aged peer, otherwise known as bullying (Fredrick et al., 2021). There are long-term implications of childhood peer victimization that include mental health and physical health concerns such as depression, anxiety, and increased response of the body's stress system, as well as increased release of stress hormones (Hatchel et al., 2019). By understanding the long-term implications of being victimized by peers as a child, mental health professionals can gain a better understanding of how to treat these previously victimized clients. Additionally, research on the long-term implications of childhood peer victimization may enhance the focus on early treatment for victims to prevent some of the long-term implications. Improving the treatment of childhood peer victimization can prevent other, more pervasive mental health concerns in adulthood.

Social desirability can be defined as an individual's need to be socially valuable (Bale & Archer, 2013). The mental health concerns of depression and anxiety that are long-term implications of childhood peer victimization include symptoms that impact social functioning (i.e., social withdrawal and social avoidance). The impact of these experiences on an individual's social desirability is not clearly known. Narr et. al. (2019)

asserted childhood relationships directly influence social desirability in adulthood, but further research is needed into specific childhood relational experiences. Relational self-esteem is one's sense of self-worth based on the relationship with significant people around them, such as family and close friends (Du et al., 2017; Li et al., 2021). There is limited research on relationship types and qualities on an individual's relational self-esteem. While social desirability is an extrinsic presentation and relational self-esteem is an intrinsic presentation, research has not been completed to understand the connection between these aspects of social functioning.

This chapter includes the context and background of the concerns that prompted the study. Additionally, there will be a discussion of the purpose of the study, an outline of the research questions, the nature of the study, operational definitions, assumptions, significance, and expected limitations of the study.

#### **Background**

There has been an increase of awareness of childhood peer victimization as a social problem, as exampled by increased clinical research (Iffland & Neuner, 2022). Recent research has included expanding upon the methods of childhood peer victimization to include online platforms and specifically, cyberbullying. Furthermore, 2% of the young adult population (i.e., ages 18 to 24) who died by suicide in 2015 were cyberbullied (Mitchell et al., 2018). Additionally, 40% of the young adult population that died by suicide in 2015 were previously victimized by their peers in childhood (Mitchell et al., 2018). Research indicates childhood peer victimization directly and negatively impacts a child's stress response system and predisposes the victim to developing mental

health conditions of anxiety and depression (Hatchel et al., 2019, Iffland & Neuner, 2022). Research further indicates the public health concern of childhood peer victimization is associated with long-lasting effects on well-being (Fredrick et al., 2021).

Research indicates that a history of childhood peer victimization impacts general self-esteem in young adults (van Geel et al., 2018). General self-esteem, or how one values themselves, has a dual relationship with childhood peer victimization (van Geel et al., 2018). Experiencing childhood peer victimization directly predicts general self-esteem, and general self-esteem directly predicts childhood peer victimization (van Geel et al., 2018). The establishment of this relationship is critical to future research on the implications of childhood peer victimization. There is no known research conducted on other forms of self-esteem (i.e., relational self-esteem) as it relates to childhood peer victimization.

Social desirability, or presenting as adhering to social norms, is a term that can be used to describe an individual's need to be socially valuable (Bale & Archer, 2013). A positive correlation was found between social desirability and unspecified personality disorder traits that directly impact an individual's overall well-being (Williams et al., 2019). Research has not been conducted to assess for potential relationships between social desirability and certain social experiences such as childhood peer victimization. However, there is an association between social desirability and relational self-esteem. Relational self-esteem quantifies an individual's confidence within social relationships (Du et al., 2017; Li et al., 2021). Based on the definition, an individual's social

desirability has a direct relationship with their relational self-esteem because their social confidence is correlated to their relational self-esteem (Li et al., 2021).

According to Bandura (1977), human behavior can change and adapt from direct experience or observation of other's behavior. I used the theoretical underpinnings of social learning theory to examine the long-term social effects of childhood peer victimization. I used the theory of symbolic conditioning to specifically examine whether an individual's exposure to childhood peer victimization, as a stimulus, has conditioned their intrinsic emotional expression in adulthood (see Bandura, 1977). I examined adult intrinsic emotional expression (i.e., self-worth and social value) using the concepts of social desirability and relational self-esteem. I identified if a relationship exists between the stimulus (i.e., experiencing childhood peer victimization) and intrinsic emotional expression after the individual has entered adulthood. I expanded the research of social learning theory by more closely studying the specific stimuli and intrinsic emotional expressions. Specifically, I evaluated for a conditioned response between experienced childhood peer victimization and levels of social desirability and relational self-esteem.

Peer victimization has been identified as a major public health concern (Fredrick et al., 2021). Peer victimization has been shown to predict future well-being in areas of anxiety, depression, suicide, altered attentional processes, and overall psychosocial adjustment (Arseneault, 2018; Brendgen et al., 2019; Fredrick et al., 2021; Hatchel et al., 2019; Iffland & Neuner, 2022; Mitchell et al., 2018; Nishina & Parra, 2019; van Geel et al., 2018). Specifically, there is a concern of the impact of self-esteem on overall well-being and a present gap in the research as to how self-esteem is impacted by experiences

such as childhood peer victimization (Du et al., 2012b; van Geel et al., 2018). I expanded current research to examine the impact childhood peer victimization has on social dynamics. In this study, social dynamics refers to the behavior and relationships within a social group. Previous studies investigated collective or global self-esteem; however, I focused on relational self-esteem (i.e., one's sense of self-worth based on their relationships with others) and social desirability (i.e. an individual's need to be socially valuable; Bale & Archer, 2015; Du et al., 2012b, 2017; Li et al., 2021).

Social desirability can be defined as an individual's need to be socially valuable and social desirability bias occurs when an individual attempts to present themselves in a more favorable manner (Bale & Archer, 2013; Williams et al., 2019). The strength of childhood friendships influences the amount of social anxiety and desirability experienced in adulthood (Narr et al., 2019). Furthermore, strong and positive childhood friendships predict lower levels of social anxiety and desirability in adulthood (Narr et al., 2019). There are correlations between self-esteem and rates of social desirability (Bale & Archer, 2013; Dar-Nimrod et al., 2018; Narr et al., 2019). Further, low self-esteem rates correlate to higher social desirability rates (Bale & Archer, 2013; Dar-Nimrod et al., 2018; Narr et al., 2019). I examined those correlations in those who have experienced childhood peer victimization.

A review of relevant research indicated that childhood peer victimization impacts emotional well-being in adulthood (Arseneault, 2018; Brendgen et al., 2019; Fredrick et al., 2021; Hatchel et al., 2019; Iffland & Neuner, 2022; Mitchell et al., 2018; Nishina & Parra, 2019; van Geel et al., 2018). It is also known that self-esteem, specifically,

relational self-esteem and social desirability, are measures of social well-being. I addressed a gap in the research between these two topics. I examined the correlation among childhood peer victimization, relational self-esteem, and social desirability in adulthood. I used social learning theory to determine if experiencing childhood peer victimization would lead to higher social desirability and lower relational self-esteem. I have found no studies in which researchers have specifically addressed these specific variables together. However, the research surrounding each variable shows the connection between them and why this study is critical to the advancement of psychology in this area.

#### **Problem Statement**

There has been an increase of awareness into childhood peer victimization, or bullying, as suicide and mass school shootings have increased (Sommer et al., 2014). Social dynamics are arguably one of the most common factors in the decision of a perpetrator to begin planning a school shooting event (Sommer et al., 2014). Perpetrators of school shootings have most often experienced intense conflicts and problematic relations with peers or teachers prior to the violent event (Sommer et al., 2014). The U.S. Secret Service found evidence of bullying, ostracism, and social rejection in over two-thirds of the 37 cases reported in the Safe School Initiative (Sommer et al., 2014). The Secret Service report indicated that experiencing bullying has a significant impact on an individual's decision to plan a school shooting (Sommer et al., 2014). Sommer et al. (2014 also noted that a shooter's perception of themselves as marginalized in the social

world and feeling undesired is one of the major factors contributing to their decision to complete a school shooting.

Peer victimization has long been acknowledged as a public health concern with long lasting effects on well-being (Fredrick et al., 2021). Interpersonal factors such as peer victimization have predicted depression and social anxiety later in life that will directly impact well-being (Hatchel et al., 2019). Social desirability refers to how individuals will respond or react to situations in a manner that they feel will be more likely to be socially accepted. Researchers have determined that there is a relationship between social dynamics and school violence (Sommer et al., 2014). There has been a recent increase in research and interest in multiple facets of self-esteem. One of these facets is relational self-esteem. Relational self-esteem is the part of one's self-concept that is rooted in interpersonal attachments (Du et al., 2017). Interpersonal attachments consist of aspects of oneself shared with significant individuals as well as defining an individual role within those relationships (Du et al., 2017).

Another factor in life satisfaction or well-being is social desirability. Social desirability, or presenting as adhering to social norms, is a term that can be used to describe an individual's need to be socially valuable (Bale & Archer, 2013). A connection has yet to be formed between the role of social desirability and relational self-esteem. Social desirability describes how an individual wants to present themselves to others. Relational self-esteem quantifies an individual's confidence within social relationships. Based on definition, an individual's social desirability will have a direct relationship with their relational self-esteem. Researchers have shown that both aspects play a role in a

person's interpreted well-being (Bale & Archer, 2013; Du et al., 2017). As there is a negative correlation between childhood peer victimization and lasting well-being, this poses a question as to the impact childhood peer victimization has upon social desirability and relational self-esteem. The impact upon these two concepts can directly influence an individual's social relational well-being. Thus, a gap exists regarding whether childhood peer victimization impacts social desirability and relational self-esteem levels in adulthood.

#### **Purpose of the Study**

The purpose of this quantitative study was to examine the relationship between childhood peer victimization and adult social desirability and relational self-esteem by using a descriptive correlational design. Van Geel et al. (2018) showed that a history of childhood peer victimization impacts general self-esteem in young adults. In this study, I looked specifically at relational self-esteem and social desirability to advance the knowledge and understanding of the long-term social implications of childhood peer victimization.

#### **Research Question and Hypotheses**

Research Question 1 (RQ1): Does childhood (e.g., individuals under the age of 18) peer-victimization affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?

Null Hypothesis ( $H_01$ ): Childhood peer victimization is not correlated to social desirability and relational self-esteem in adults.

Alternative Hypothesis ( $H_11$ ): Childhood peer victimization is correlated to social desirability and relational self-esteem in adults.

Research Question 2 (RQ2): Does age affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?

Null Hypothesis ( $H_02$ ): Age is not correlated to social desirability and relational self-esteem in adults.

Alternative Hypothesis ( $H_12$ ): Age is correlated to social desirability and relational self-esteem in adults.

Research Question 3 (RQ3): Does gender affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?

Null Hypothesis ( $H_03$ ): Gender is not correlated to social desirability and relational self-esteem in adults.

Alternative Hypothesis ( $H_13$ ): Gender is correlated to social desirability and relational self-esteem in adults.

#### **Theoretical Framework**

The theoretical underpinnings that support this study was the social learning theory by Bandura (1979). Social learning theory focuses on the processes through which goal mechanisms operate (Bandura, 1979). This theory asserts that most of human behavior is goal directed. Further, human behavior regulation occurs through response consequences. Decisions about behavior typically stem from the anticipated benefits of executing the behavior. In other words, future consequences become current regulators for behavior (Bandura, 1979). Social learning theorists additionally argue that motivating

factors for evaluating consequences are often social in nature. Behavioral decisions are often made with social judgments and outcomes in mind (Bandura, 1979). Therefore, the social experiences of the individual directly impact their behavioral regulation in a positive or negative way.

The logical connections between the framework presented and the nature of this study include reflective self-awareness (see Bandura, 1979). Experience affects cognition (Bandura, 1979). Social experiences can impact the reflective thoughts that someone has about themselves or their self-esteem. Social experiences can also alter an individual's social desirability as it could change their need to present as socially valuable. I used this theory to determine if the experience of childhood peer victimization affects levels of the cognitive variables of social desirability and relational self-esteem in adults.

#### **Nature of the Study**

In this study, I used a quantitative, descriptive correlational design by employing a cross-sectional survey design with multiple empirical measures. I chose a descriptive correlational design to establish a relationship between the variables, and it will provide a static picture of the participant's experience. I used this design to determine if a relationship exists between experienced childhood peer victimization and the adult's current level of social desirability and relational self-esteem. I measured the individual's experience of childhood peer victimization utilizing the California Bullying

Victimization Scale Retrospective (CBVS-R; see Green et al., 2018a). Additionally, I measured the individual's current relational self-esteem using the Relational Self-Esteem Scale (RSES; see Du et al., 2012a). Furthermore, I measured the examinee's current

social desirability utilizing the Marlowe-Crowne Social Desirability Scale (M-C SDS; see Crowne & Marlowe, 1960). Additionally, I used age and gender as independent variables to determine their correlation with social desirability and relational self-esteem in adulthood. Age and gender information was collected through demographic questions within the questionnaire. Participants for this study were at least 18 years of age, residing in the United States, and were recruited through an online crowdsourcing method, social media, and the Walden University student participant pool. Participants completed the questionnaire via an online survey service.

#### **Definitions**

The following is a list of operational definitions used in this study:

Childhood peer victimization: A child's repeated exposure to "peer interactions that convey harmful intent, produce harmful effects, and are sanctioned (often implicitly) by peer groups" (Elledge et al., 2016).

Relational Self-Esteem: One's sense of self-worth based on the relationship with significant people around them such as family and close friends (Du et al., 2017; Li et al., 2021).

Social Desirability: An individuals need to be socially valuable or a person's tendency to present themselves in a more favorable manner (Bale & Archer, 2013; Dar-Nimrod et al., 2018).

#### **Assumptions**

I made several assumptions in this study. First, I assumed that there would be a broad sample of adults who had experienced childhood peer-victimization. I also

assumed that the participants would have sufficient reading comprehension skills to understand survey questions and would not respond with an overly negative or positive response bias and would not respond to survey items in an inconsistent manner. My third assumption was that the participants would answer the survey questions truthfully. I assumed that the sample population would contain all ages and gender. Finally, I assumed that the sample obtained would represent the general population.

#### **Scope and Delimitations**

I used a descriptive correlational design to determine if there is a correlation between experienced childhood peer victimization and present levels of social desirability and relational self-esteem. By examining the adult population, I provided insight into the long-term implications of childhood peer victimization. I collected data through a survey on an online crowdsourcing website, social media, and the Walden University student participant pool. Childhood peer victimization is associated with mental health concerns including depression and anxiety (Fredrick et al., 2021; Hatchel et al., 2019). Understanding the long-term implications of childhood peer victimization can improve therapeutic treatment strategies for treatment of mental health concerns correlated to a history of childhood peer victimization.

This study had two delimitations. First, I used adult participants and used a retrospective approach to evaluate childhood peer victimization as using a population of children would have created ethical concerns because children are a vulnerable population. I used a quantitative approach, in which participants did not have an opportunity to explain their responses. While information is valuable in establishing

correlations, often context can be used to delineate the experience and specific details further. There was limited context available in the quantitative approach.

#### Limitations

There are a few limitations that impacted this study. First, this is a nonfunded research project and data were obtained through volunteers. Second, I used a crowdsourcing website, social media, and the Walden University student participant pool to obtain participants which could have limited the geographic location of the participants and not be an adequate representation of the general population. Finally, I evaluated the relatively new concept of relational self-esteem, which meant there was limited research available on this topic for me to review. I attempted to mitigate the limitations of this study. First, the selected online crowdsourcing site was chosen as it is widely used and well-known, allowing for the highest chance of gaining participants from a wide geographic area. Additionally, participants were advised of the benefits of this research which can entice participation. Finally, ongoing research about relational self-esteem was conducted to ensure as much background was included as possible.

#### **Significance**

This study is significant as it is an original contribution to the field of clinical psychology. There is limited research on the long-term impacts that childhood peer victimization can have on self-esteem. No research studies have been located that investigate a possible connection between childhood peer victimization and social desirability. In this study I gathered data that can be used to develop treatment methods for those who were subjected to childhood peer victimization. With greater understanding

of the long-term implications of childhood peer victimization, treatment can be tailored to address the specific aspects of functioning (i.e., social desirability and relational self-esteem) which can improve overall well-being. The mental health implications (i.e., depression and anxiety) that can develop after being victimized by a peer in childhood, can be better addressed when the individual symptoms of these conditions are well-known. The improvement in treatment methods would lead to more successful outcomes and improved well-being from those who were victimized.

#### **Summary**

The purpose of this study was to increase the understanding of long-term implications of childhood peer victimization. Peer victimization has been connected to a decrease in well-being and an increase in depression and anxiety (Fredrick et al., 2021; Hatchel et al., 2019). By gaining more understanding of the social implications of childhood peer victimization improvement can be made in treatment strategies which will positively promote social change and provide victims with improved well-being. I used social learning theory to create an adequate framework based on symbolic conditioning (see Bandura, 1977). I examined symbolic conditioning to determine if the experience of childhood peer victimization affects levels of the cognitive variables of social desirability and relational self-esteem in adults. I quantitively analyzed the data through the use of a descriptive correlational design to evaluate the relationship between experienced childhood peer victimization and current levels of social desirability and relational self-esteem.

In the upcoming chapters, I will focus on a more detailed description of childhood peer victimization, relational self-esteem, and social desirability through a literature review and a discussion of needed research. Additionally, there will be an in-depth description of the sample population and the methodology that I used to collect and analyze data.

#### Chapter 2: Literature Review

#### Introduction

Peer victimization has long been acknowledged as a public health concern with long lasting effects on well-being (Fredrick et al., 2021). Interpersonal factors such as peer victimization have predicted depression and social anxiety later in life that will directly impact well-being (Hatchel et al., 2019). Social desirability refers to how individuals will respond or react to situations in a manner that they feel will be more likely to be socially accepted. Researchers have determined that there is a relationship between social dynamics and school violence (Sommer et al., 2014). There has been a recent increase in research and interest in multiple facets of self-esteem. One of these facets is relational self-esteem. Relational self-esteem is the part of one's self-concept that is rooted in interpersonal attachments (Du et al., 2017). The interpersonal attachments consist of aspects of oneself shared with significant individuals as well as defining an individual role within those relationships (Du et al., 2017).

Social desirability, or presenting as adhering to social norms, is a term that can be used to describe an individual's need to be socially valuable (Bale & Archer, 2013).

Social desirability describes how an individual wants to present themselves to others.

Relational self-esteem is an individual's confidence within social relationships. An individual's social desirability has a direct relationship with their relational self-esteem.

Researchers have shown that both aspects play a role in a person's interpreted well-being (Bale & Archer, 2013; Du et al., 2015). Relational self-esteem is an intrinsic value and

social desirability is a measurable way for the individual to extrinsically influence their social relationships and improve their relational self- esteem.

As there is a negative correlation between childhood peer victimization and lasting well-being, this poses a question as to the impact upon social desirability and relational self-esteem. The impact upon these two items can directly influence an individual's social relational well-being. There is a lack of research about whether childhood peer victimization impacts social desirability and relational self-esteem in adulthood.

The purpose of this quantitative study was to examine the relationship between childhood peer victimization and adult social desirability and relational self-esteem.

There is research that shows a history of childhood peer victimization impacts general self-esteem in young adults (van Geel et al., 2018). I looked specifically at relational self-esteem and social desirability to advance the knowledge and understanding of the long-term social implications of childhood peer victimization. I examined the potential relationship between adult's social perception of others and themselves and a history of childhood peer victimization.

The research review process will be highlighted in the following sections. I will discuss my research search strategies and the scope of the literature review, key words, and databases. I will provide the theoretical foundation and the research that supports the theory. I will also review the relevant current literature.

#### **Literature Search Strategy**

To evaluate the recent research on childhood peer victimization, social desirability, and relational self-esteem, I used multiple search databases and key words. I used APA PsychInfo, Sage Journals, and EBSCO search engine throughout the research process. All these databases were accessible through the Walden University library. I also used Google Scholar. The key words that I used in the search process were *social desirability, childhood peer victimization, bullying, retrospective bullying, self-esteem, relational self-esteem, social popularity, school shooting, school violence, interpersonal peer violence, social isolation, social learning theory, age, gender, and Bandura.* All research completed for this study are from peer-reviewed journals or published books. A majority of the research was conducted within the last 6 years (2017-2023). Some of the research obtained for the theoretical foundation and validation of assessment measures was outside of this time frame.

There is limited research available on the long-term social implications of childhood peer victimization. In order to adequately evaluate previous research, continuous searches surrounding each variable and their pairings was conducted. I used this search strategy to evaluate correlation of all variables and further identify the gap in the research.

#### **Theoretical Foundation**

According to Bandura (1977), human behavior can change and adapt from direct experience or observation of other's behavior. Bandura (1979) also asserted that a majority of human behavior is goal directed. Social learning theory focuses on the

processes through which goal mechanisms operate (Bandura, 1979). Within this theory of behavior being goal directed, comes the evaluation of consequences and benefits from behaviors as motivating factors. Future consequences become current regulators for behavior (Bandura, 1979). Social learning theory also asserts that motivating factors for evaluating consequences are often social in nature (Bandura, 1979). The social consequences of criticism, ostracism, embarrassment, and harassment often regulate an individual's behavior. The fear of these consequences can influence how someone choses to present themselves or their social desirability. Furthermore, their intrinsic interpersonal value, or relational self-esteem, can be an additional factor influencing how they react to social consequences. If an individual has low relational self-esteem, they can try to present themselves in a more desirable manner to avoid the social consequences which would worsen their mental well-being. These behavioral decisions are often made with social judgements and outcomes in mind (Bandura, 1979). Therefore, the social experiences of the individual directly impact their behavioral regulation in a positive or negative way.

Social learning theory paradigms explain how behavioral responses are required and how behavioral expression is regulated (Bandura, 1977, 1979). Symbolic conditioning occurs when an emotional response is expressed without a direct physical experience as a stimuli (Bandura, 1977). Based on an individual's experiences, they may develop strong emotions surrounding that experience and these emotions can later be expressed in a new situation. Symbolic conditioning of negative stimuli such as verbal abuse can create negative behavioral reactions in future circumstances (Bandura, 1977).

Emotional responses can then be expressed intrinsically and extrinsically (Bandura, 1977). The extent of the emotional expression depends on the individual and their level of cognitive control.

Previously, researchers have used social learning theory as a foundation to evaluate social learning regarding prestige bias. Researchers asserted that social learning occurs through the observation and copying of others in social situations (Atkisson et al., 2012). Prestige bias can be defined as copying others that have a more prestigious status within a social group (Atkisson et al., 2012). Research indicates that when exposed to prestigious individuals, people will copy their behavior in attempts to learn to be more prestigious themselves (Atkisson et al., 2012). This behavior is similar to social desirability bias which occurs when an individual presents themselves in a more socially desirable manner.

Additionally, social learning theory has previously been applied as the foundation for research surrounding childhood obesity and self-esteem. Research indicates children learn the behaviors and eating habits associated with obesity most often from their family members (Fidanci et al., 2017). Additionally, researchers evaluated the effects of obesity and eating habits on self-esteem and found that obese children often experience lower levels of self-confidence (Fidanci et al., 2017). While the researchers used social learning theory to analyze childhood obesity and general self-esteem, they found that their sample population most often exhibited poor self-esteem relating to their social experiences (Fidanci et al., 2017).

Social learning theory was a strong foundation for my study in a few ways. I examined the long-term social effects of childhood peer victimization. I used the theory of symbolic conditioning to specifically examine whether an individual's exposure to childhood peer victimization as a stimulus has conditioned their intrinsic emotional expression and extrinsic behavioral expression into adulthood. I evaluated the examination of adult intrinsic emotional expression through the concept of relational self-esteem. I evaluated extrinsic behavioral response through their social desirability. I identified a relationship between the stimulus and intrinsic emotional expression and extrinsic behavioral expression over time. I expanded the research of social learning theory by more closely studying specific stimuli and intrinsic emotional expression and extrinsic behavioral expression.

#### **Literature Review Related to Key Variables**

#### **Peer Victimization**

Peer victimization can be defined as a child's repeated exposure to "peer interactions that convey harmful intent, produce harmful effects, and are sanctioned (often implicitly) by peer groups" (Elledge et al., 2016, p.691). Elledge et al. (2016), asserts that social risk is both a cause and consequence of peer victimization. Low peer acceptance and peer rejection are social risk factors peer victimization in children (Elledge et al., 2016). Elledge et al. (2016) examined if teacher student relationship quality predicted childhood peer victimization in the spring term controlling for victimization and social risk in the fall term. The researchers discovered that a child's social preference scores are directly correlated to having a quality relationship with their

teacher. This relationship can be a mitigator for a child's social desirability concerns while in school. The researchers recommended further study into this topic, specifically studies seeking to determine the mechanisms involved in using a quality student teacher relationship as a protective factor against childhood peer victimization (Elledge et al., 2016).

Arseneault (2018) conducted a research review on the persistent and pervasive impact of childhood peer victimization and the implications for future policy and practice. Arseneault (2018) identified areas of concern in adults who experienced childhood peer victimization. The areas of concern were mental health, physical health, and socioeconomic outcomes (Arseneault, 2018). Arsenault (2018) found that longitudinal studies are instrumental in establishing the extent to which being a childhood peer victimization victim is a contributing factor of mental health problems (Arseneault, 2018). The research indicated that the few longitudinal studies conducted identify psychological distress in childhood victims in the early 20s as well as into the 50's (Arseneault, 2018). This may indicate that the effects of childhood peer victimization persist throughout the adult lifespan of the victims and greatly impacts their ability to function as adults. Arseneault (2018) further posited that further research be conducted on understanding the longitudinal impact of childhood peer victimization on their overall wellbeing, socioeconomic wellbeing, and their physical health.

#### Age and Gender

According to Oncioiu et al. (2023), the age peer-victimization begins as well as the length of time it occurs directly correlates to mental health outcomes in early adulthood. They examined children starting at age 6 through the age of 17 collecting annual data regarding peer victimization and the same participants were screened at the age of 20 for mental health comorbidities (Oncioiu et al., 2023). The onset, frequency, and duration of peer victimization directly correlated to both internal and external mental health symptoms at the age of 20 (Oncioiu et al., 2023).

Another factor of concern regarding childhood peer victimization are differences in gender. Chen et al. (2023) examined the impact of security on childhood peer victimization, moderating for gender. The research indicated that males feeling insecure are more likely to become victims of childhood peer victimization versus females (Chen et al., 2023). The assumption was made that when insecurity is present, females will use prosocial strategies to feel more secure whereas males with engage in aggression and other antisocial strategies to gain security (Chen et al., 2023). Currently, there is no available research on gender difference for long-term implications of childhood peer victimization.

#### Implications of Peer Victimization

Mental Health Symptoms and Disorders. Peer victimization has been identified as a public health concern and psychological researchers have been working towards documenting concurrent and long-term effects on overall well-being (Fredrick et al., 2021). Peer victimization is a predicting factor of developing anxiety and depression (Hatchel et al., 2019). Presently, there are increased opportunities for children to experience peer victimization both in person and online (Hatchel et al., 2019). Peer victimization is an act of aggression from similar aged peers that does not require a

power imbalance and may not be intentional or reoccurring (Fredrick et al., 2021; Hatchel et al., 2019) Peer victimization can be biologically entrenched in a developing youth which may impact their ability to regulate the stress response system, which may leave them at risk for long-term mental health issues (Hatchel et al., 2019; Iffland & Neuner, 2022). Multiple studies indicate adolescent peer victimization impacts a person with internalizing symptoms into early adulthood (Brendgen et al., 2019; Hatchel et al., 2019). The prior studies acknowledge the limited empirical research that has been conducted on the implications of online bullying (Hatchel et al., 2019). Additionally, researchers recommended further study into the retrospective evaluation of childhood peer victimization as it relates to mental health problems and revictimization risk factors in young adults (Fredrick et al., 2021). In my study, I further addressed the gap in research by evaluating the retrospective view of childhood peer victimization experience and present-day adult reporting of their relational self-esteem and social desirability.

Hatchel et al. (2019), utilized only self-report measures to collect data for their study. This approach to data collection may have introduced error into the results due to possible recall bias. Recall bias is the concern that people may not accurately remember the details of events from their past. When recall bias is present in a retrospective study, this can produce inaccurate and unreliable data. The researchers asked their subjects to complete the questions pertaining to peer victimization first, which can also lead to the individual feeling more distressed, therefore inflating the results on the symptom inventories (Hatchel et al., 2019). However, the use of retrospective reports for emotion inducing memories have been found to be consistent and salient throughout the use of

multiple reports (Hatchel et al., 2019). This finding further indicates that retrospective reports, while at risk for recall bias, do produce consistent and reliable data. This research is valuable as it demonstrates a correlation between childhood peer victimization and adult mental health symptoms of anxiety and depression (Fredrick et al., 2021; Hatchel et al., 2019). Factors associated with anxiety and depression include concerns of self-image and social connection. The present study evaluated further the social dynamics of these conditions and whether or not they correlate to the experience of childhood peer victimization. This study also utilized retrospective self-reports to obtain childhood peer victimization data. This data has been shown over time to be valid but potentially influenced by recall bias.

Suicidality. In 2015, suicide was the second leading cause of death for young people between the ages of 18 and 24 (Mitchell et al., 2018). Mitchell et al. (2018), found that up to 40% of youth have been victimized by their peers and of that only 2% were strictly cyberbullied. This gives the impression that if a child is victimized online, they are more than likely victimized in person as well. Victims of peer victimization are at an increased risk for poor social and financial outcomes in adulthood (Mitchell et al., 2018). Mitchell et al. (2018), discovered that children that were cyberbullied are associated are more prone to having suicidal ideations. The researchers also discovered that the presence of internalizing depressive symptoms (i.e. low self-esteem, concentration problems, feeling of being unvalued) increases the rate of suicidal ideations in these children (Mitchell et al., 2018). Even in the technologically advanced era of today, it is likely that children are being victimized both in person and online, not just strictly online

(Hatchel et al., 2019). Therefore, a conceptual connection can be formed between childhood peer victimization and suicidality (Mitchell et al., 2018). This concept is further likely if the presence of internalizing depressive symptoms occurs. Within this study, examining the long-term social implications of childhood peer victimization can aid in further understanding the detriment of this experience and how it may correlate to poor outcomes regarding suicidality. As a major health concern, this current study advanced the knowledge and understanding of long-term internalizing social dynamics.

School Shootings. There has been an increase of awareness into childhood peer victimization, or bullying, as suicide and mass school shootings have become an increasing social concern. Researchers have found that a primary motivating factor in the decision of a perpetrator to plan a school shooting are their social relationships (Sommer et al., 2014). Oftentimes, it is the perpetrators relationships with their peers and teachers that are problematic. These relationships have often experiences intense conflict in multiple forms (i.e. physical assault, verbal bullying, or social ostracism) (Sommer et al., 2014). Additionally, the U.S Secret Service provided study results of their Safe School Initiative. These results indicate bullying, ostracism, and social rejection were motivating factors in over two-thirds of the 37 cases reported of school shootings. (Sommer et al., 2014). The Secret Service further asserted that experiencing bullying had a significant impact on an individual's decision to plan a school shooting (Sommer et al., 2014). Furthermore, the Safe School Initiative study indicated that the shooter's perception of themselves was marginalized within the social world and they were often feeling

undesired (Sommer et al., 2014). The researchers reported this as one of the major underpinnings leading to school shootings (Sommer et al., 2014).

Neurocognitive Symptoms and Psychosocial Adjustment. Iffland and Neuner (2022) assert that childhood peer victimization is associated with altered attentional processes with regard to processing of threatening information. Individuals who have experienced childhood maltreatment have an enhanced sensitivity to detect threatening cues from emotionally ambiguous faces (Iffland & Neuner, 2022). The researchers found that retrospective childhood peer victimization makes a significant contribution to the prediction of attentional biases (i.e. detecting threatening information, ambiguous faces) even long after the childhood victimization (Iffland & Neuner, 2022). This discovery further validates those individuals who have been victimized are at risk for revictimization. Through their retrospective study on childhood peer victimization, Iffland and Neuner (2022), discovered that childhood peer victimization significantly and independently predict psychopathology. They also discovered that rates of peer victimization in schools are between 10-20% (Iffland & Neuner, 2022). Researchers expressed concern and the need for further research in this area considering the link between childhood peer victimization and psychopathology as an adult (Iffland & Neuner, 2022). The data obtained in this research was valuable to the current study as it highlights the crisis of internalizing dysfunction in those that were victimized by peers as children. Researchers established a connection between childhood peer victimization and the development of various psychopathologies but there was no consideration of social components that are also associated with psychopathology. This study examined these

two specific variables (i.e., relational self-esteem, social desirability) that can be associated to various types of psychopathologies (i.e., depression, anxiety, suicidality).

It is necessary to obtain information about childhood peer victimization in adults to understand their current psychosocial adjustment (Arseneault, 2018; Nishina & Parra, 2019). Retrospective reports of childhood peer victimization are moderately concordant with the individual's past experiences and reports (Nishina & Parra, 2019). Nishina and Parra (2019), report minimal research that links retrospective reports to current psychopathology recall bias. While report bias cannot be eliminated, it is currently understood that the impact is minimal and not significant to devalue the use of retrospective peer victimization reports. Nishina and Parra's (2019), study on plausible psychosocial mechanisms associated with recalling past experiences of victimization demonstrated that "on average, students tend to be concordant when reporting past peer victimization with a very slight tendency to underreport." Their study compared 6<sup>th</sup> grade students' reports and the same reports from the students in 12<sup>th</sup> grade (Nishina & Parra, 2019). This research pertains to this study as it reviews the significance of retrospective peer victimization scales and their benefit even with a low potential for recall bias.

**Self-Esteem.** One concept that has been considered in relation to childhood peer victimization is self-esteem. Van Geel et al. (2018), conducted a metanalysis to determine if low self-esteem predicted peer victimization or if peer victimization predicted low self-esteem. Their study showed that these two variables are transactional in nature; meaning, there is a link to low self-esteem predicting peer victimization and also peer victimization predicting low self-esteem (van Geel et al., 2018). This study examined general explicit

self-esteem. The researchers suggested that further research be conducted on additional indices of self-esteem in relation to childhood peer victimization (van Geel et al., 2018). Additional review of the literature was not indicative of research to address the authors' recommendations. The current study filled this gap in the literature by examining the relationship between childhood peer victimization and relational self-esteem, another indicator of self-esteem.

**Physical Health Symptoms.** According to Brendgen et al. (2019), approximately 8% of self-identified girls and 12% of self-identified boys were victims of childhood peer victimization. They also found a connection to peer victimization and internalizing problems in young adulthood (Brendgen et al., 2019). The study examined the association between peer victimization in adolescence and later mental or physical health issues in young adulthood mediated by revictimization in the workplace (Brendgen et al., 2019). Interpretation of the results by the authors indicated that being a victim of childhood peer victimization is associated with lower overall health in young adulthood (Brendgen et al., 2019). They did not find a significant correlation when moderating for revictimization in the workplace. Brendgen et al. (2019), utilized self-report measures (i.e., Children's Depression Inventory, Cumulative Family Adversity Score, Victimization by Peers in School Questionnaire, Workplace Harassment Questionnaire, SCL-90-R) for victimization as they are considered valid and reliable. The researchers suggested further research into the long-term implications of childhood peer victimization (Brendgen et al., 2019). Specifically, they recommend evaluating across the entire childhood versus only the adolescence period. The current study evaluated for all peer

victimization in children throughout their entire primary school experience. This research further supports the use of retrospective self-reports to quantify the childhood peer victimization experience.

#### **Relational Self-Esteem**

Li et al. (2021) and Du et al. (2017), define relational self-esteem as one's sense of self-worth based on the relationship with significant people around them such as family and close friends. Relational self-esteem was initially identified through the use of neuroimaging techniques (Li et al., 2021). The neuroimaging helped demonstrate that the personality system has corresponding neural mechanisms within the brain (Li et al., 2021). Moreover, the neuroimaging identified the bilateral temporoparietal junction within the brain as being associated to relational self-esteem (Li et al., 2021). This location identified differently than that of personal self-esteem which is an overall concept of one's self-worth (Li et al., 2021). This research solidified relational self-esteem as a separate concept from personal self-esteem. As this is relatively new research, further in-depth analysis of relational self-esteem in correlation to other factors is limited. The current study evaluated relational self-esteem with a self-report measure to look for correlation to childhood peer victimization.

According to Du et al. (2017), there is a strong link between self-esteem and subjective well-being (i.e., one's interpretation of their overall mental health). They utilized social identity theory to determine that the relational self is related to subjective well-being (Du et al., 2017). Previous research denoted that individuals who feel more connected and related to those close them were more likely to exhibit optimal functioning

(Du et al., 2017). To further the connection, it was also determined that those with secure attachments have higher levels of psychological well-being (Du et al., 2017). The results of this study show that the pursuit of self-worth through relationship might make people feel happier, more positive, and more satisfied within their lives (Du et al., 2017). As researchers have identified relational self-esteem as a predictor of wellbeing, this study intends to further this research literature by looking at a potential correlation between childhood peer victimization and relational self-esteem. By identifying circumstances that impact relational self-esteem, further understanding of overall well-being can be made.

# **Social Desirability**

Social desirability can be defined as an individual's need to be socially valuable (Bale & Archer, 2013). Social desirability bias occurs when an individual attempts to present themselves in a more favorable manner or create a positive impression (Williams et al., 2019). Furthermore, individuals can also try to present a negative impression indicating they are presenting themselves more unfavorably. Through psychological personality assessment, indications that an individual is attempting to present themselves more positively can be observed on positive impression management scales (Williams et al., 2019). Williams et al. (2019) researched personality impression management with an inpatient population as compared to the diagnostic criteria for personality disorder in the DSM-5. Their research indicated that the inpatient population typically presented with a very low positive impression and actually had a higher score on negative impression management (Williams et al., 2019). They discovered a correlation between social desirability bias and traits of personality disorders. Williams et al. (2019) recommends

further research in understanding the potential correlations between social desirability and psychological well-being. The current study evaluated the impact of childhood peer victimization with an adult's social desirability. This study helped increase understanding of where social desirability bias initiates and how it relates to current psychological functioning.

### Mental Health Symptoms

Narr et al. (2019) asserts that the strength of childhood friendships influences the amount of social anxiety and desirability experienced by an adult. Their research evaluated the quality of peer relationships in childhood and longitudinally re-evaluated the participants as adults to measure their social anxiety and social desirability (Narr et al., 2019). The researchers indicated that individuals with close positive peer relationship as children experience less social anxiety and social desirability bias in adulthood (Narr et al., 2019). According to Narr et al. (2019), further research expanding their work and specifically looking at how different types of peer relationships predict markers of psychological well-being is warranted. The present research study evaluated the social desirability in adults who previously experienced childhood peer victimization. This study expanded upon the work of Narr et al. (2019), be evaluating a negative peer relationship and some potential long-term implications.

## Self-Esteem

Moreover, Dar-Nimrod et al. (2018), researched coolness as a trait and its relation to the Big Five, action orientation, self-esteem, and social desirability. Their study found a positive correlation to coolness and self-perceived social desirability as well as self-

esteem (Dar-Nimrod et al., 2018). This indicates the higher the believed coolness of a participant, the higher their self-esteem and social desirability. The research shows that individuals who believe they are cool have higher levels of social desirability and self-esteem (Dar-Nimrod et al., 2018). This represents individuals that have obtained a status, and that status is intrinsically valuable to them, and they want to keep up the status with how they portray themselves to others. The current study evaluated individuals who were the victims of childhood peer victimization and inherently not viewed as socially cool and how this impacts their social desirability and self-esteem as adults.

According to Bale and Archer (2013), "self-esteem functions as an interpersonal monitor of the extent to which an individual is either valued or devalued by others as a relational partner." Their research indicated that the higher the quality of the interpersonal relationship, the higher the individual's self-esteem. Bale and Archer (2013), also assert that self-esteem is sensitive to an individual's desirability as an interpersonal partner (i.e., significant other). According to this, the opposite would be expected. Specifically, A low-quality relationship should produce low self-esteem which thereby would also be sensitive to an individual's desirability. The current study examined this concept. Was there a correlation between the negative relationship experienced through childhood peer victimization and relational self-esteem and social desirability?

## **Summary and Conclusions**

Research has shown a distinct connection between childhood peer victimization and school shootings. This social problem warrants additional research to aid in the

understanding and production of bullying prevention and treatment strategies.

Specifically, the research literature reviewed indicated correlations between childhood peer victimization and general self-esteem, coolness, and mental well-being. As such, there is a gap in the research warranting the current study. This study aimed to understand the relationship between childhood peer victimization and the long-term social implications on relational self-esteem and social desirability.

Research indicates self-esteem is multifaceted trait. One of these areas is relational self-esteem which was established within the last several years. Relational self-esteem pertains to how individual's view themselves within a relationship or group of other people. As this is a novel concept there is limited research available on the topic. Social desirability has been researched for the last few decades. Recently it has been discovered that social desirability is much more than a response bias but is also a personality trait.

The upcoming chapter will focus on the methodology that will be used in this study. There will be discussion on the population, the sample size, the methods used for data analysis, scope, and limitation, as well as any ethical considerations.

## Chapter 3: Research Method

#### Introduction

Childhood peer victimization or bullying impacts many children throughout their development. The purpose of this study was to examine the relationship between childhood peer victimization and relational self-esteem and social desirability in adulthood. There is research that shows a history of childhood peer victimization impacts general self-esteem in young adults (van Geel et al., 2018). i examined a relatively new concept of relational self-esteem and social desirability as the relate to childhood exposure to peer victimization, age, and gender. Understanding the long-term implications of childhood peer victimization may result in advancement of prevention and treatment strategies for those that have been impacted. In this chapter, I will provide the rationale for the selected research design, sampling method, methodology, and the ethical procedures followed.

### **Research Design and Rationale**

I conducted this study using a quantitative approach to examine the independent variables of childhood peer victimization, age and gender, and the dependent variables of relational self-esteem and social desirability. This method was preferred as there is limited research on some of the variables and this will allow for examination of potential relationships. I collected data using an online Likert Scale survey as this quantitative approach allows for the investigation of the relationship between the variables. The use of an online survey is an inexpensive, efficient, and flexible method for gathering quantitative data.

## Methodology

# **Population**

The sample population for this study included adult volunteers aged 18 years or older who reside in the United States. The volunteers were obtained via a crowdsourcing website that uses workers to complete tasks as well as through social media sharing as well as through social media and the Walden University student participant pool (Amazon Mechanical Turk, n.d.). Participation in the survey was strictly voluntary and the participants could have opted out prior to or in the process of the survey by not completing the survey.

# **Sampling and Sampling Procedures**

There is limited research on this study's topic; therefore, the sample size was calculated through a power analysis. I conducted the power analysis using the G\*Power analysis program. The standards for power analysis for a Multivariate Multiple Regression Analysis were utilized (Geert van den Berg, n.d.). For the calculation, an effect size of 0.25 (i.e., medium), an error probability of 0.05, and a predictor count of 3 was used. G\*Power indicated a total sample size of 73 participants.

# Procedures for Recruitment, Participation, and Data Collection

A link for the survey was provided on an online crowdsourcing website, on social media, and to the Walden University student participant pool. The volunteers were able to click the link and be taken directly to the survey. Within the survey, I included an informed consent that explained the nature of the study, possible risks, and potential

benefits. The first portion of the survey collected basic demographic information to include, gender, age, residential status and the type of childhood peer victimization experienced. The survey was comprised of multiple scales to include, the California Bullying Victimization Scale-Retrospective (see appendix A) (Green et al., 2018a), the Relational Self-Esteem Scale (see appendix C) (Du et al., 2012a), and the Marlowe-Crowne Social Desirability Scale (see appendix B) (Crowne & Marlowe, 1960).

An easy and inexpensive way to conduct a survey was through the use of an online survey platform. Therefore, I used a cloud-based online survey company to conduct the survey for this study. The service the online company provides is secured through data encryption, secured data centers, password, two factor authentication, and routine vulnerability and security tests (*Data Privacy & Security: Protecting Your Data n.d.*)

### **Instrumentation and Operationalization of Constructs**

I used three instruments in this study. The California Bullying and Victimization Scale-Retrospective was used to measure experienced childhood peer victimization (see Green et al., 2018a) which established a significance level of p < .001 in a 4-year stability evaluation. The Relational Self-Esteem Scale was used to measure present day relational self-esteem (Du et al., 2012a) which established a significance level of p < .001 in multiple comparison models. The Marlowe-Crowne Social Desirability measured a present day social desirability bias (Crowne & Marlowe, 1960) and was validated through multiple control and experimental groups with a significance level of p < .01.. All of these instruments are available to education and research purposes without the

requirement of special permissions (Crowne & Marlowe, 1960; Du et al., 2012a; Green et al., 2018a).

# California Bullying and Victimization Scale-Retrospective

According to Green et al., (2018b), there are limited retrospective self-report measures that quantify childhood peer victimization. Green et al. (2018b) developed and examined the California Bullying Victimization Scale Retrospective (CBVS-R) to assist in evaluating the long-term implications of childhood bullying victimization. Their research identifies this self-report measure as valid but with concerns of report stability over time. The study evaluated 1209 first year students across four universities. The researchers also administered the CBVS-R to the same students in their fourth year. They observed that the reports of childhood bullying were the same over time but the severity fluctuated from one report to the next (Green et al., 2018b). The test-retest reliability indicated (K=.38) and concurrent validity compared to Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder (GAD-7) indicated F=24.9, p<.001 (Green et al., 2018b). Regarding convergent validity, bullying victimization classification on the CBVS-R was moderately and significantly associated with higher depression (r=.23, p<.001) and anxiety (r=.23, p<.001; Green et al., 2018b). The CBVS-R was developed as a retrospective version of the California Bullying Victimization Scale (CBVS) and the CBVS-R includes eight scales (i.e., teased, rumors, ignored, hit, threatened, sexual comments, property, and internet; Green et al., 2018b). For the purpose of this study, the CBVS-R was used to quantify childhood bullying victimization with the understanding that severity is perceptual at the time of administration.

#### **Relational Self-Esteem Scale**

The relational self is a portion of self-identity that is formed between the self and their significant others, such as family and friends (Du et al., 2012b). Du et al. (2012) developed the Relational Self-Esteem Scale (RSES) to quantify individual differences in relational self-esteem. The researchers used the Rosenberg Self-Esteem Scale and Triandis and Gelfand's Scale on Individualism and Collectivism to norm and validate the RSES. The study was conducted on a sample of 156 students in China from the ages of 17-29 (Du et al., 2012b). The RSES's internal consistency indicated a Cronbach's alpha reliability of .86 (Du et al., 2012b). The RSES has construct validity compared to the Rosenberg Self-Esteem Scale and Triandis and Gelfand's scale on Collectivism (r=.52, p<.001; Du et al., 2012b). The Relational Self-Esteem Scale produces an individual score and the higher the score, the higher the individual's relational self-esteem (Du et al., 2012b). When considering social dynamics, relational self-esteem is identified as a more stable indicator of self-esteem within relationships (Du et al., 2012b, 2017). Within this study, the RSES was used to quantify individuals' self-esteem within their relationships which was compared to the other variables of childhood peer victimization and social desirability.

## Marlowe Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale is a forced choice self-report measure that is designed to quantify a person's tendency to present themselves in a more favorable manner (Dar-Nimrod et al., 2018). According to Marlow (1962), human verbal behavior is controlled through the use of operant conditioning techniques. Operant

conditioning can be used to influence moral social behavior. Exposure to a modeled social behavior is sometimes enough to elicit the same response from an individual (Bandura & McDonald, 1963). In 33% of cases operant conditioning would then elicit the moral social behavior desired (Bandura & McDonald, 1963). The Marlowe-Crowne Social Desirability Scale (M-C SDS) was developed through the use of operant conditioning and social learning theory (Marlowe, 1962). Marlowe (1962) found that with operant conditioning, the need for social approval changes. The M-C SDS has internal consistency indicated by Kuder-Richardson formula 20 producing .88 as the result (Crowne & Marlowe, 1960). Additionally, a test-retest correlation of .89 was obtained (Crowne & Marlowe, 1960). Regarding construct validity, when compared to the Edwards Social Desirability Scale r=.35 p<.001 further indicated adequate construct validity (Crowne & Marlowe, 1960). In this study, I used the Marlow Crowne Social Desirability Scale to measure the need for social approval in adults that experienced childhood peer victimization. I was able to identify long-term operant conditioning effects related to social approval.

### **Data Analysis Plan**

## **Main Variables**

In this section, I will present the main variables investigated to answer the study research questions. I used the Relational Self-Esteem Scale (Du et al., 2012a) to evaluate self-esteem, and the Marlowe-Crowne Social Desirability (Crowne & Marlowe, 1960) to construct social desirability. These are the two outcomes (dependent) variables for the study. Childhood peer victimization as measured by the California Bullying

Victimization Scale Retrospective (CBVS-R) served as the predictor (independent) variable (Green et al., 2018a). I used the demographic component of the data collection tool to gather age and gender, which were additional predictor factors that I examined as categorical variables.

# **Research Questions and Hypotheses**

- RQ1: Does childhood (e.g., individuals under the age of 18) peer-victimization affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?
  - H<sub>0</sub>1: Childhood peer victimization is not correlated to social desirability and relational self-esteem in adults.
  - H<sub>a</sub>1: Childhood peer victimization is correlated to social desirability and relational self-esteem in adults.
- RQ2: Does age affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?
- $H_02$ : Age is not correlated to social desirability and relational self-esteem in adults.
  - H<sub>a</sub>2: Age is correlated to social desirability and relational self-esteem in adults.
- RQ3: Does gender affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?
- $H_03$ : Gender is not correlated to social desirability and relational self-esteem in adults.

H<sub>a</sub>3: Gender is correlated to social desirability and relational self-esteem in adults.

I analyzed the data in this study using IBM Statistical Package for Social Sciences (SPSS) version 28 (IBM Corp, 2020). For descriptive analysis, all outcome and predictor variables were presented using descriptive statistics; normally distributed data by the mean and standard deviation (SD) and skewed distributions by the median and interquartile range (IQR). Binary and categorical variables were presented using counts and percentages. For RQ1, I conducted a Pearson correlation analysis at the 0.05 level of significance to see if childhood peer-victimization affects adult levels of social desirability and relational self-esteem. For RQ2 and RQ3, I used a one-way multivariate analysis of variance (one-way MANOVA) to see if there are any trends in the two continuous dependent variables of social desirability and relational self-esteem in adults across independent groups of age and gender. For RQ2 and RQ3, I used childhood peer victimization to adjust the means of the groups of categorical independent variables (age and gender). The covariate in a MANOVA is normally simply included to provide a better assessment of the differences between groups of the categorical independent variable on the dependent variables. I'll controlled for childhood peer victimization because I believed that adult levels of social desirability and relational self-esteem on age and gender will be influenced by the amount of childhood peer victimization the adult experienced.

## **Pearson Correlation Analysis**

Pearson correlation analysis is a statistical technique for determining the strength and direction of a linear relationship between two continuous variables (Schober et al., 2018). Pearson correlation coefficient (*r*) is a value between -1 and 1. A positive correlation suggests that the two variables are positively connected, which means that if one variable increases, so does the other. A negative correlation shows that the two variables are inversely related, which means that if one variable rises, the other tends to fall. A correlation coefficient of 0 shows that the two variables have no linear relationship. The absolute value of r indicates the strength of the correlation. A correlation coefficient close to 1 or -1 implies a strong linear association, whereas one close to 0 indicates a weak linear association (Schober et al., 2018).

I investigated if childhood peer victimization influences adult levels of social desirability and relational self-esteem in the current study, specifically RQ1. Because I used Pearson's correlation for analyzing data, I ensured that the data I analyzed could be examined using Pearson's correlation. The data must always meet specific assumptions in order to use Pearson's correlation conclusively and achieve acceptable results. Although Pearson's correlation is highly robust, it is generally a good practice to evaluate the quality of the results by assessing the degree of deviation from these assumptions. The four assumptions were as follows: (a) the variables are measured at the interval or ratio level (i.e., they are continuous), (b) the variables have a linear relationship, (c) there are no significant outliers, and (d) the variables are approximately normally distributed.

RQ1 variables are continuous in nature since they will be built from several scales and will involve summing the individual Likert scale questions. For example, the Relational Self-Esteem Scale and the Marlowe-Crowne Social Desirability will be used to derive the two dependent variables of relational self-esteem and social desirability. The predictor (independent) variable will be childhood peer victimization as measured by the California Bullying Victimization Scale Retrospective (CBVS-R), which is also continuous in nature.

A linear relationship between the dependent variables and the independent variable is required (Laerd Statistics, 2018), and this assumption was verified by constructing scatter plots and then visually analyzing these scatter plots for linearity.

Box plots were used to identify outliers in the dataset and examine them. Box plots show the distribution of a dataset visually and identify potential outliers. Data points outside the whiskers are considered outliers and are shown as individual points.

As the last assumption for valid Pearson correlation results, the variables should be approximately normally distributed (Laerd Statistics, 2018). I made a histogram (with a superimposed normal curve) to test this assumption, and a normal distribution often creates a symmetric "bell curve" shape in a histogram.

If one or more of the Pearson correlation coefficient assumptions are violated, the correlation test results may be inaccurate and invalid. Non-parametric options for Pearson correlation include Spearman's rank correlation coefficient and Kendall's tau correlation coefficient. Non-parametric approaches are less susceptible to non-linear relationships, outliers, and non-normal distributions.

#### The MANOVA

The one-way multivariate analysis of variance (one-way MANOVA) is used to evaluate if there are any differences in more than one continuous dependent variable between independent groups. The two dependent variables for RQ2 and RQ3 that used MANOVA were relational self-esteem and social desirability. The independent variable of age was divided into six groups (18-28, 29-38, 39-48, 49-58, 59-68, 68 and older), while the independent variable of gender was divided into three (male, female, other). I used childhood peer victimization to control the means of the groups of categorical independent variables (age and gender) for RQ2 and RQ3. For example, I used a one-way MANOVA to determine whether there were variations in relationship self-esteem and social desirability among the six defined age groups (RQ2) or among the three defined gender groups (RQ3), both adjusted to the level of childhood peer victimization. The oneway MANOVA is an omnibus test statistic that cannot determine which specific groups were significantly distinct from one other; it can only state that at least two groups were different. Because my independent variables of age and gender contain more than three groups, it is critical to determine which of these groups differ from one another. To determine which group is statistically different from the other, I applied the Bonferroni post-hoc test.

MONOVA was utilized for inferential analysis, including research questions two and three, to determine the relationship between the independent variables, age, and gender, and the dependent variables, relational self-esteem, and social desirability.

However, in order to utilize MANOVA decisively and achieve accurate results, some

assumptions must always be met. It is usual practice to measure the degree of deviation from these assumptions in order to assess the quality of the results: i) the two dependent variables must be assessed at the interval or ratio level (i.e., they must be continuous); ii) the independent variable must be composed of two or more categorical, independent groups; iii) there is a requirement for observation independence, which means that there is no relationship between the observations in each group or between the groups; iv) there are no significant outliers; v) the variables are approximately normally distributed; vi) the variables have a linear relationship; vii) variance-covariance matrices are homogeneous; and viii) there is no multicollinearity.

RQ2 and RQ3 are both continuous dependent variables because they were constructed from different scales and involved summing the individual Likert scale questions. The Relational Self-Esteem Scale and the Marlowe-Crowne Social Desirability Scale, for example, was utilized to derive the two dependent variables of relational self-esteem and social desirability.

For assumption two, the age independent variable of RQ2 was separated into six groups (18-28, 29-38, 39-48, 49-58, 59-68, 68 and older), while the gender independent variable of RQ3 was divided into three (male, female, other).

The assumption that there is a need for homoscedasticity of variances was evaluated using a normal P-P plot and variance inflation factor (VIF) values, all of which were easily obtained using SPSS (Laerd Statistics, 2018).

The independence of observations should be tested using the Durbin-Watson statistic (Laerd Statistics, 2018).

Box plots were used to identify and investigate outliers in the dataset. Box plots visually depict the distribution of a dataset and indicate probable outliers. Outliers are data points that fall outside the whiskers and are displayed as solitary points.

I created a histogram (with a superimposed normal curve) to test the assumption that the variables are approximately normally distributed (Laerd Statistics, 2018). In a histogram, a normal distribution frequently produces a symmetric "bell curve" pattern.

A linear relationship between the dependent variables and the independent variable is necessary (Laerd Statistics, 2018), and this assumption was validated by creating scatter plots and visually inspecting them for linearity.

The final assumption was that the data does not exhibit multicollinearity, suggesting that the two independent variables are not associated with each other. Because they represent opposing sides of the coin (opposite each other), the identical homoscedasticity test was applied in assumption seven.

### Threats to Validity

This study was conducted through the use of self-reports. This data collection strategy poses a threat to the validity of the study. Self-reports can be influenced by recall bias (Hatchel et al., 2019). Green et al., (2018), gave the California Bulling and Victimization Scale-Retrospective to first year college students and then had the students take the survey again in year four of college. The researchers found that the report of peer victimization was consistent over time but the severity of the victimization changed from the first report to the second, where it declined (Green et al., 2018b). Additionally, the use of an online crowdsourcing website was a threat to internal validity as the members

of the site may not represent the general population (*Amazon Mechanical Turk*, n.d.). By collecting demographic information and grouping the sample population by age and gender for analysis, I attempted to mitigate this concern by ensuring a general population collection.

### **Ethical Procedures**

This study was thoughtfully considered and planned out. At no point during the conduction of this study was any human life put at risk. This study was reviewed by the Walden University Internal Review Board prior to its commencement. The survey that was utilized during data collection included a thorough informed consent. Within the consent the participant was informed of the nature of the study, any risks, and the potential benefits. The participants were all be volunteers and they could have withdrawn their participation at any point prior to the completion of the survey. All data was collected and submitted anonymously allowing participants to maintain confidentiality.

### **Summary**

The purpose of this study was to examine the relationship between childhood peer victimization and relational self-esteem and social desirability. A demographic questionnaire, the California Bullying and Victimization Scale-Retrospective, the Relational Self-Esteem Scale, and the Marlowe-Crowne Social Desirability were administered to all 102 participants. Each participant was a volunteer obtained through an online crowdsourcing website, social media, and the Walden University participant pool. The data was analyzed through a MANOVA to identify potential relationships. The study was reviewed by the Walden University Review Board prior to the collection of data.

# Chapter 4: Results

#### Introduction

This quantitative study aimed to evaluate the relationship between childhood peer victimization and adult social desirability and relational self-esteem using a descriptive correlational design. A history of childhood peer victimization affects general self-esteem in young adults, according to research, and this study looked specifically at relational self-esteem and social desirability to advance knowledge and understanding of the long-term social consequences of childhood peer victimization. I investigated the relationship between early peer victimization, age, and gender, as well as a relatively new concept of relational self-esteem and social desirability. Understanding the long-term impacts of childhood peer victimization will improve preventative and therapeutic initiatives for those impacted to move forward.

In this chapter, I present, explain, and discuss the research as well as the study's findings. This chapter contains descriptive information on the study's population as well as a full summary of the statistical analysis results. Sections will include the introduction, research questions and hypotheses, and data collection. Subsections include a discussion of the sample population, reliability test, assumption analysis, study results, and the summary.

# **Research Questions and Hypotheses**

RQ1: Does childhood (e.g., individuals under the age of 18) peer victimization affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?

- H<sub>0</sub>1: Childhood peer victimization is not correlated to social desirability and relational self-esteem in adults.
- H<sub>a</sub>1: Childhood peer victimization is correlated to social desirability and relational self-esteem in adults.
- RQ2: Does age affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?
  - H<sub>0</sub>2: Age is not correlated to social desirability and relational self-esteem in adults.
  - H<sub>a</sub>2: Age is correlated to social desirability and relational self-esteem in adults.
- RQ3: Does gender affect levels of social desirability and relational self-esteem in adults (e.g., individuals over the age of 18)?
  - H<sub>0</sub>3: Gender is not correlated to social desirability and relational self-esteem in adults.
  - H<sub>a</sub>3: Gender is correlated to social desirability and relational self-esteem in adults.

### **Data Collection**

# **Sample Population**

This study's sample population consisted of adult volunteers aged 18 and up who were residents of the United States. The participants were recruited through Amazon Mechanical Turk, a crowdsourcing platform that uses people to fulfill tasks as well as social media platforms, and the Walden University student participant pool. Participation

in the survey was entirely voluntary, and participants could opt out before or during the survey by not completing it.

The proposed minimum sample size as computed using the G\*Power software was 73. This minimum size was exceeded by 26, recruiting 99 participants, representing 35.6% more data points. Over 62% of the participants were under the age of 40, making this a very young cohort. Females dominated the group, accounting for 57.6% of the participants (Table 1).

 Table 1

 Demographic Characteristics of Participants

	Frequency	Percent	
Age Group (Years)			
18 - 28	23	23.2	
29 - 38	39	39.4	
39 - 48	18	18.2	
49 - 58	7	7.1	
59 - 68	9	9.1	
Over 69	3	3.0	
Gender			
Male	41	41.4	
Female	57	57.6	
Reside in USA			
No	4	4.0	
Yes	95	96.0	

# **Reliability Test**

To evaluate the association between childhood peer victimization and adult social desirability and relational self-esteem, I conducted a quantitative, descriptive correlational study using various empirical measures. In the study, three instruments were used to collect data, which was then utilized to create multiple scales to reflect the

dependent variables and how they are associated with the independent variables. To assess self-esteem, I used the Relational Self-Esteem Scale (see Du et al., 2012a), and I used the Marlowe-Crowne Social Desirability (see Crowne & Marlowe, 1960) to build social desirability. These were the study's two outcomes (dependent) variables. The predictor (independent) variable was childhood peer victimization as measured by the California Bullying Victimization Scale Retrospective (CBVS-R; see Green et al., 2018a). I used the data collecting tool's demographic component to collect age and gender, which were additional predictor factors investigated as categorical variables. I used multiple-question Likert scales to create the two dependent variables of self-esteem and social desirability, as well as the independent variable of childhood peer victimization.

Before employing the scales composed of connected individual questions, it was necessary to ascertain their consistency and reliability. One method was to evaluate the scale's internal consistency-reliability or the extent to which individual items differ or how closely linked they are as a group. Lee Cronbach developed Cronbach's alpha (or coefficient alpha) in 1951 is the most frequent measure of internal consistency (measures reliability). Cronbach's alpha normally varies from 0 to 1: a 1.0 alpha value reflects excellent measurement consistency, while a 0.0 alpha value represents no measurement consistency. Cronbach's alpha values of 0.70 or higher are frequently cited as acceptable (Gravesande et al., 2019).

According to the reliability test results provided in Table 2, all three scales had Cronbach's alpha values of 0.70 or higher and were thus declared reliable for analysis.

 Table 2

 Reliability Tests Using the Cronbach's Alpha Statistic

Variables	N of	N of	Mean	Cronbach's
	Cases	Items		Alpha
Childhood Peer Victimization	92	8	.549	.854
Social Desirability Bias	88	33	.680	.823
Relational Self-Esteem	87	8	3.356	.793

## **Assumption Analysis**

The study included three research questions (RQs), and in addressing the RQs, two statistical approaches were used which assisted with the analysis's findings. The Pearson product-moment correlation coefficient was the method of choice for RQ1, while the one-way multivariate analysis of variance (one-way MANOVA) was implemented for RQ2 and RQ3. Pearson correlation analysis is a statistical technique used in RQ1 to determine the strength and direction of a linear relationship between two continuous variables. The one-way multivariate analysis of variance (one-way MANOVA) is frequently used to determine whether there are any differences between independent groups in more than one continuous dependent variable. Relational self-esteem and social desirability were the two dependent variables for RQ2 and RQ3 that were subjected to MANOVA analysis. Age and gender were the independent categorical variables respectively for RQ2 and RQ3 and in both RQs, I used childhood victimization as a control variable.

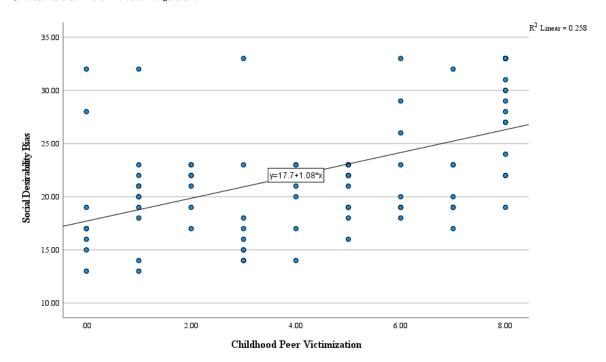
However, while using both Pearson's correlation and MANOVA to evaluate data, I needed to guarantee that the data I wanted to study could be analyzed with both statistics techniques. This is due to the fact that in order to employ the methodologies

conclusively and produce acceptable results, the data must always match specified assumptions. Although Pearson's correlation and MANOVA are both extremely robust, it is generally a good practice to assess the quality of the results by measuring the degree of divergence from these assumptions. The common assumption tested for the two techniques were: (a) the variables had a linear relationship; (b) there were no significant outliers; (c) the variables were approximately normally distributed; (d) there was a requirement for observation independence, which meant that there was no relationship between the observations in each group or between the groups; (e) variance-covariance matrices were homogeneous; and (f) there was no multicollinearity.

I used scatter plots to test the assumption that linear relationships existed between the dependent variables and the independent variable, and then the scatter plots were visually assessed to determine linearity. Childhood victimization was the independent variable, whereas relational self-esteem and social desirability were the dependent factors. The scatter plots for the linear relationships showed no U-shaped patterns or discernible orders (Figures 1 and 2).

Figure 1

Scatter Diagram Showing the Linear Relationship Between Social Desirability Bias and Childhood Peer Victimization



The assumption that there should be no significant outliers was evaluated using box plots (Figure 3). The box plots show the data distribution based on five critical values: minimum, first quartile, median, third quartile, and maximum. The box indicates the interquartile range (IQR), while the line within the box shows the median. The "whiskers" extend from the box to the smallest and largest observations within a given range, which is frequently 1.5 times the IQR. Outliers are points that fall outside of this range. There were no outliers found in this study.

Figure 2

Scatter Diagram Showing the Linear Relationship Between Relational Self-Esteem and Childhood Peer Victimization

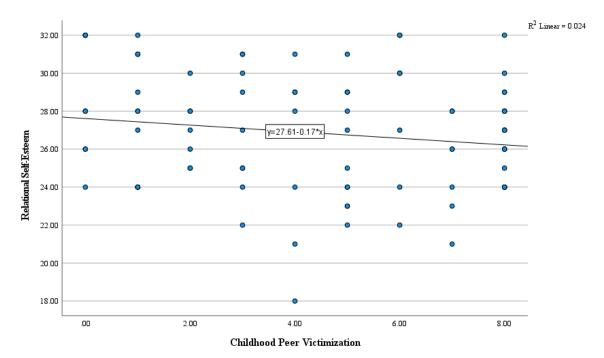
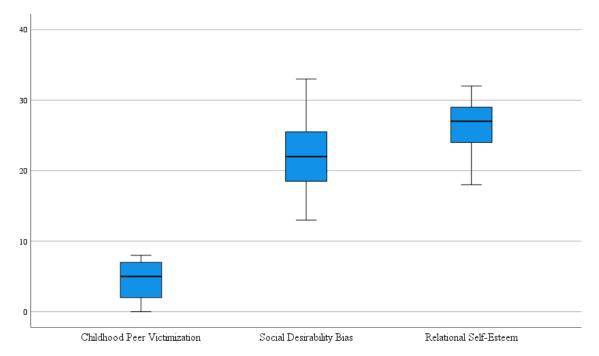


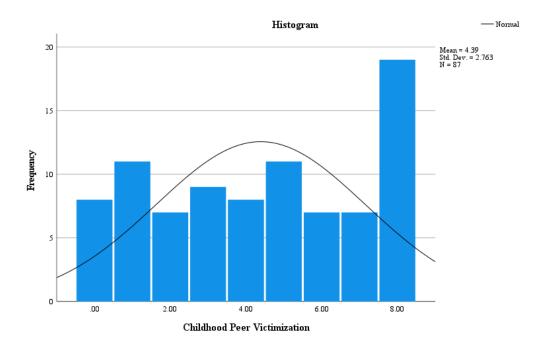
Figure 3

Box Plots Showing Data Distribution Among Main Variables

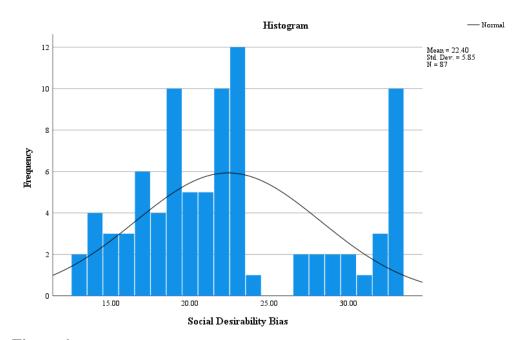


The third assumption, that the variables should be roughly normally distributed, was checked through the creation of histograms (with a superimposed normal curve). A normal distribution is characterized by a bell-shaped curve, with data symmetrically distributed around the mean. The histograms generated in the study showed bell shapes for the normal curve (Figures 4, 5, and 6).

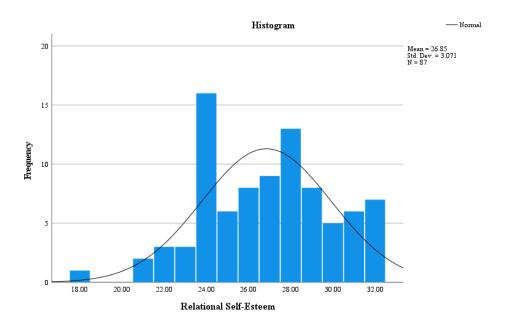
**Figure 4**Histogram of Childhood Peer Victimization



**Figure 5** *Histogram of Social Desirability Bias* 



**Figure 6**Histogram of Relational Self-Esteem



To test the assumption of observational independence, the Durbin-Watson statistic was applied. The Durbin-Watson statistic is based on the assumption that data observations are independent of one another, which means that one observation's value has no effect on the value of another. This statistic has a value range of 0.0 to 4.0, with 2.0 indicating that there is no connection between the residuals. Values less than 1.0 and greater than 3.0 are considered undesirable and indicate the existence of serial correlation in the model (Chen, 2016). There were two dependent variables for this study and so I calculated two scores, each with all the independent variables (age, gender, and childhood peer victimization); the score with social desirability bias as the dependent variable was 2.022, while the score with relational self-esteem was 1.864, indicating that the assumptions were not violated.

The assumption that reported variances must be heteroscedastic was tested using residual scatter plots (Figures 7 and 8), which demonstrates that the dispersion of residuals around the regression line must be constant across the whole range of the predicted dependent variable. The visual assessment for heteroscedasticity was strengthened by highlighting the uneven variance of the residuals. The scatter plots revealed no discernible trends.

Figure 7

Scatter Plot Regression Standardized Predicted Value – Social Desirability Bias

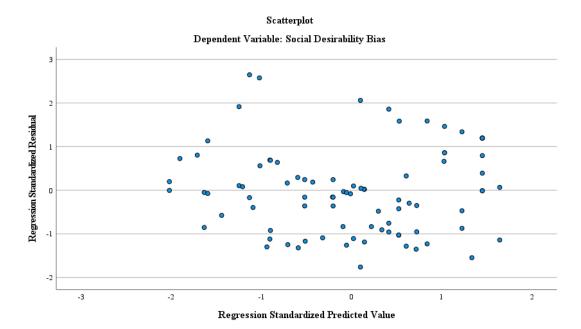
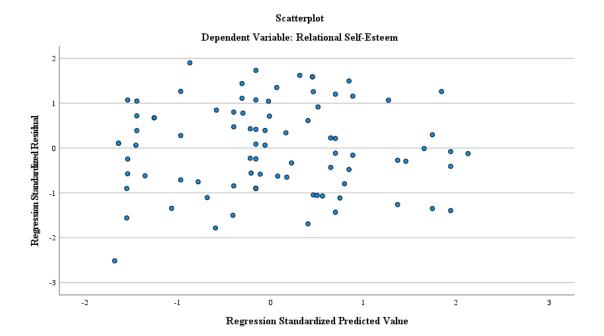


Figure 8

Scatter Plot Regression Standardized Predicted Value – Relational Self-Esteem



The Variance Inflation Factor (VIF) was used to evaluate the last assumption that the data did not exhibit multicollinearity, which implies that no two independent variables should be associated. As measured by the VIF, multicollinearity increases the variance of the predicted regression coefficient for an independent variable. A VIF score of 1 show that there is no multicollinearity between the variables, but a value of 5 or above indicates that there is significant multicollinearity between the variables, and the assumption is not met (Vatcheva et al. 2016). The VIF values in this study were between 1.048 and 1.076, indicating that this assumption was not violated (Table 3).

**Table 3**Collinearity Statistics

	Dependent Variable: Social Desirability Bias		Dependent Variable: Relational Self-Esteem	
	Tolerance	VIF	Tolerance	VIF
Childhood Peer Victimization	.952	1.050	.953	1.049
Age	.932	1.073	.930	1.076
Gender	.954	1.048	.949	1.054

## **Results**

The IBM Statistical Package for Social Sciences (SPSS) version 28 was used to analyze the data. All outcome and predictor variables were presented using descriptive statistics, the mean and standard deviation (SD), for descriptive analysis. For RQ1, I recommended using a Pearson correlation analysis at the 0.05 level of significance to determine whether childhood peer victimization was correlated with adult levels of social desirability and relational self-esteem. I recommended conducting a one-way multivariate analysis of variance (one-way MANOVA) for RQ2 and RQ3 to see if there were any trends in the two continuous dependent variables of social desirability and relational self-esteem in adults across independent groups of age and gender while controlling for childhood peer victimization.

This section presents the statistical analysis results for each of the study research questions after providing a descriptive analysis of the primary variables.

## **Descriptive Statistics of Main Variables**

The descriptive statistics of the main dependent variables are shown in Table 4 below. Most of the skewness and kurtosis values were within the  $\pm$  1, indicating that most probably the pattern of responses is considered a normal distribution. The standard

deviations are also relatively small indicating that the responses were not dispersed from each from the mean.

**Table 4**Descriptive Statistics

	n	Min	Max	M	SD	Mdn	Kurt	Skew
Childhood Peer								
Victimization								
Male	41	0	8	4.561	2.656	5	-1.330	004
Female	57	0	8	4.035	2.725	4	-1.335	.039
18 – 28 Years	22	0	8	4.273	2.898	4.5	-1.497	040
29 – 38 Years	39	0	8	5.026	2.680	5	-1.161	366
39 – 48 Years	18	0	8	3.500	2.640	3	-1.049	.421
49 – 58 Years	7	2	7	4.000	1.633	4	1.162	.964
59 – 68 Years	9	0	7	3.444	2.744	3	-1.505	.007
Over 69 Years	3	1	2	1.667	.577	2		-1.732
Total	98	0	8	4.255	2.695	4	-1.309	.013
Social Desirability Bias								
Male	36	14	33	23.917	5.920	22.5	-1.060	.285
Female	51	13	33	21.412	5.650	20	185	.759
18 – 28 Years	22	13	33	22.136	5.471	21.5	202	.504
29 - 38 Years	33	15	33	25.182	6.116	23	-1.494	.038
39 – 48 Years	15	13	33	20.867	5.866	22	.486	.791
49 – 58 Years	6	14	23	18.833	3.817	19	-1.749	133
59 – 68 Years	8	16	23	18.625	2.875	17	-1.671	.693
Over 69 Years	3	17	23	20.000	3.000	20		.000
Total	87	13	33	22.448	5.862	22	715	.533
Relational Self-Esteem								
Male	36	22	32	27.167	2.793	27	887	.127
Female	50	21	32	26.800	3.051	26.5	898	.022
18 – 28 Years	21	24	32	27.571	2.293	28	172	.173
29 – 38 Years	33	23	32	26.879	2.826	27	-1.181	.317
39 – 48 Years	15	22	32	26.400	2.720	26	.176	.666
49 – 58 Years	6	21	31	27.000	4.000	28	-1.339	591
59 – 68 Years	8	21	32	26.125	4.643	25.5	-2.075	.248
Over 69 Years	3	26	31	28.333	2.517	28		.586
Total	86	21	32	26.954	2.934	27	878	.041

# **Research Question 1**

The first question was whether childhood peer victimization influenced levels of social desirability and relational self-esteem in adults (those over the age of 18). A Pearson correlation coefficient was performed to evaluate the relationship between childhood peer victimization and social desirability bias. There was a significant strong positive correlation between childhood peer victimization and social desirability bias, r = 0.508, p < 0.001 (Table 5).

A Pearson correlation coefficient was performed to evaluate the relationship between childhood peer victimization and relational self-esteem. The results indicated that the relationship between childhood peer victimization and relational self-esteem was a weak negative correlation that was not significant, r(85) = -.156, p = .149 (Table 5).

Table 5

Pearson Correlations

	1	2	3
1. Childhood Peer Victimization			
2. Social Desirability Bias	.508**		
3. Relational Self-Esteem	156	046	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## **Research Question 2**

The inquiry sought to assess the impact of age on levels of social desirability and relational self-esteem in adults (those over the age of 18). A one-way MANOVA was used to see if there were differences in relationship self-esteem and social desirability among the six age groups. The model's dependent variables were relational self-esteem

and social desirability. The independent variable was the six age group categories (18-28, 29-38, 39-48, 49-58, 59-68, 68 and older). Childhood peer victimization was included as a covariate in the model. The four one-way multivariate statistics MANOVA results provided were Wilks' lambda, Pillai's trace, Lawley-Hotelling trace, and Roy's largest root (Table 6). There was no statistically significant difference in levels of social desirability and relational self-esteem in adults among the various age groups, F (10, 158) = 1.171, p = .314; Wilk's  $\Lambda = .867$ , partial  $\eta 2 = .069$ .

**Table 6** *MANOVA of Age* 

	Value	F	Hypothesis df	Error df	p	d
Pillai's Trace	.135	1.156	10	160	.324	.067
Wilks' Lambda	.867	1.171a	10	158	.314	.069
Hotelling's Trace	.152	1.185	10	156	.305	.071
Roy's Largest Root	.139	2.220b	5	80	.060	.122

a. Exact statistic

## **Research Question 3**

The final research question was to evaluate if gender impacted levels of social desirability and relational self-esteem in adults (those over the age of 18). To determine whether there were variations in relationship self-esteem and social desirability among males and females, a one-way MANOVA was implemented. The dependent variables in the model were relational self-esteem and social desirability. The gender of the individuals (male, female) was the independent variable. Childhood peer victimization was included in the model as a covariate. Wilks' lambda, Pillai's trace, Lawley-Hotelling

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

trace, and Roy's largest root were the four one-way multivariate statistics MANOVA results presented. There was a statistically non-significant difference in levels of social desirability and relational self-esteem in adults among the various gender groups, F (2, 84) = 1.600, p = .208; Wilk's  $\Lambda$  = .962, partial  $\eta$ 2 = .038.

The tests of between-subjects effects of gender on relational self-esteem did not show any statistical differences, F(1,85) = .630, p = .429 (Figure 9). There was no change in social desirability across the two genders, F(1,85) = 2.672, p = .106 (Figure 10). As a result, I concluded that there were no changes in how various genders experienced relational self-esteem and social desirability bias, with early peer victimization remaining constant.

Figure 9

Estimated Marginal Means of Relational Self-Esteem

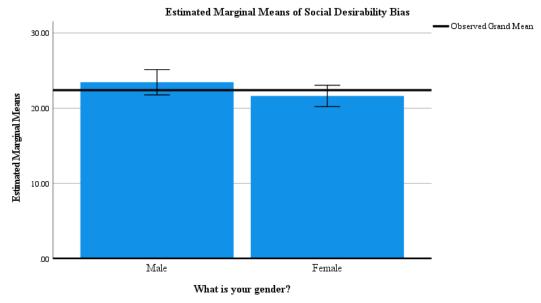


Covariates appearing in the model are evaluated at the following values: Childhood Peer Victimization = 4.3953

Error bars: 95% CI

Figure 10

Estimated Marginal Means of Social Desirability



Covariates appearing in the model are evaluated at the following values: Childhood Peer Victimization = 4.3953

Error bars: 95% CI

## **Summary**

The findings of this study may provide insight into the long-term consequences of being victimized by peers as a child, allowing mental health providers to better understand how to treat these previously victimized individuals. Improving the treatment of peer victimization in childhood can help to prevent other, more serious mental health issues in adulthood. The chapter presented the study's findings, which included a summary of the sample population's demographic characteristics, descriptive statistics for the main variables, statistical assumptions analysis, and statistical analysis findings organized by research questions. The findings of the various inferential investigations revealed a significant strong positive association between childhood peer victimization

and social desirability bias. Childhood peer victimization and relational self-esteem had a weak negative relationship that was not statistically significant. My research revealed that there were no differences in how different genders experienced relational self-esteem and social desirability. There was no statistically significant variation in adults' measures of social desirability and relational self-esteem across age groups.

The findings from the research study analysis will be presented, discussed, and critiqued in the following chapter, Chapter 5. The chapter will cover the findings' interpretation, the study's limitations, potential implications for empirical research, and recommendations for future research. Finally, the chapter will bring the research investigation to a close.

# Chapter 5: Discussion, Conclusion, and Recommendations

#### Introduction

The purpose of this study was to explore the relationship between age, gender, and childhood peer victimization as predictors of social desirability and relational self-esteem in adults. According to Hatchel et al. (2019), long-term implications of childhood peer victimization include mental and physical health concerns such as, depression, anxiety, and increased response of the bodies stress system as well as increased release of stress hormones. Many of the known implications of childhood peer victimization carry symptoms of social functioning and it has not been clearly known the social implications of childhood peer victimization. By understanding the social aspects experienced by those who were victimized by peers as children, treatment can be tailored to promote healthy social skills, relationships, and improved overall well-being. In this chapter, I discuss the results of the study, implications, potential limitations, as well as recommendations for future research.

## **Interpretation of the Findings**

As discussed within the literature review, there has been recent research on the mental health implications of those that experienced childhood peer victimization establishing a positive correlation between victimization and mental illnesses such as depression and anxiety (see Iffland & Neuner, 2022; Hatchel et al., 2019). Additionally, previous research indicates those with depression and anxiety experience a multitude of social implications such as isolation, withdrawal, and interpersonal difficulties. In this study, I expanded on the previous research by evaluating the relationship between

childhood peer victimization, age, and gender with social desirability and relational selfesteem.

#### **Childhood Peer Victimization**

Findings from the current study reveal a strong positive correlation between childhood peer victimization and social desirability. This finding indicates the more experienced childhood peer victimization the higher the social desirability further suggesting that victims try to present themselves as more socially desirable. Therefore, childhood peer victimization is a predictor of social desirability in adults. Moreover, the current study revealed a weak negative correlation between childhood peer victimization and relational self-esteem that was not significant. Findings indicate childhood peer victimization is not a predictor of relational self-esteem in adults. Through the application of social learning theory, it can be assumed that experiencing childhood peer victimization results in victims trying to present themselves in a more valuable manner.

## Age

Further, the findings from the current study revealed no significant correlation between age and social desirability and relational self-esteem while controlling for childhood peer victimization. This finding indicates no significant difference in reported social desirability and relational self-esteem across the various adult age groups.

Therefore, this study revealed age is not a predictor of social desirability and relational self-esteem in adults when controlling for childhood peer victimization. Considering social learning theory, this finding indicates life experience gained through age does not affect social desirability and relational self-esteem.

#### Gender

I evaluated the impact of gender on levels of social desirability and relational self-esteem in adults. Findings from the study indicate a significant correlation between gender and levels of social desirability and relational self-esteem. After post-hoc comparison, I determined there was no change in social desirability or relational self-esteem levels across gender groups. There was only one participant who identified their gender as 'other' and this data point was not included as there were not enough participants to identify variance.

#### Limitations

This study had several limitations. First, this was a nonfunded research project and I obtained data from volunteers. Second, I conducted the study via social media and online crowdsourcing which limited its scope to residents of the United States. It is unknown where the participants resided geographically within the United States. Third, there is limited research available on the topic of relational self-esteem which limited the research review of this variable. Finally, there was limited participation across age and gender groups. This study was heavily completed by participants aged 18 to 40, limiting the application to older populations. There were limited participants that identified their gender outside of the male/female option limiting the application to other gender identities. Attempts to mitigate the limitations of the study were made. First, I used the online crowd-sourcing site that is widely used and well-known, allowing for the highest change of gaining participants from a wide geographic area. Additionally, to entice participation, participants were advised of the benefits of this research. Finally, ongoing

research about relational self-esteem was conducted to ensure as much background was included as possible.

#### Recommendations

While some findings of this study were conclusive, there are gaps left in the research that warrant future study. Future researchers should focus on levels of relational self-esteem within other gender groups outside of male/female to further assess the correlation with more participants in other gender groups needed for reliable analysis. Additionally, further research within the over 40-year-old population is needed to verify any difference in age and childhood peer victimization experienced. Finally, expanding this research into other geographic areas outside of the United States is recommended.

# **Implications**

This study indicated a significant correlation between childhood peer victimization and social desirability in adults. This information can be used by treatment providers to address social distress and interpersonal relationships within their treatment protocols to improve patient well-being. Regarding social learning theory, the findings of this study further support that experiences influence behavior. Those that have been victimized by peers in childhood are more likely to present themselves in a more positive or valuable fashion. This indicates a type of cognitive distortion that would be beneficial for practitioners to address in cognitive behavioral therapy modalities. Helping patients understand this distortion and its origin will aid in cognitive reframing therefore producing a change in behavior. This change may result in the introduction of new coping skills and better prepare the patient for problematic interactions with others.

Additionally, by understanding this cognitive distortion, patients may be able to confront their social fears and anxiety instead of avoiding them.

#### **Conclusions**

The purpose of this study was to investigate the relationship between childhood peer victimization, age, and gender with levels of social desirability and relational self-esteem in adults. The findings of this study indicate childhood peer victimization does predict social desirability levels in adults. Further, this indicates that the amount of childhood peer victimization experienced heavily impacts the social presentation of the victims. While this study did not show a significant correlation between childhood peer victimization and relational self-esteem in adults this information remains valuable. This suggests that relational self-esteem levels may be influenced by other factors that warrant further investigation. Additionally, this study found age does not predict social desirability and relational self-esteem in adults. The lack of correlation indicates social desirability and relational self-esteem may be constant and not influenced by age.

Further, the findings in this study do not indicate a correlation between gender and relational self-esteem in the male and female genders. There were not enough participants that identified in the other gender category to reliably analyze for correlation.

Through this study, I was able to investigate gaps in the literature, identified in Chapter 2, regarding long-term implications of childhood peer victimization.

Additionally, completion of this study allowed me to identify areas where further research is needed. I hope this study and its findings prompt future research into

childhood peer victimization, age, and gender and social characteristics such as social desirability and relational self-esteem.

#### References

- Amazon Mechanical Turk. (n.d.). https://www.mturk.com
- Arseneault, L. (2018). Annual Research Review: The persistent and pervasive impact of being bullied in childhood and adolescence: implications for policy and practice.

  \*Journal of Child Psychology and Psychiatry, 59(4), 405–421.

  https://doi.org/10.1111/jcpp.12841
- Atkisson, C., O'Brien, M. J., & Mesoudi, A. (2012). Adult learners in a novel environment use prestige-biased social learning. *Evolutionary Psychology: An International Journal of Evolutionary Approaches to Psychology and Behavior*, 10(3), 519–537.
- Bale & Archer. (2013). Self-Perceived Attractiveness, Romantic Desirability and Self-Esteem: A Mating Sociometer Perspective. *Evolutionary Psychology*, 11. https://doi.org/10.1177/147470491301100107
- Bandura, A. (1977). Social Learning Theory. Prentice Hall.
- Bandura, A. (1979). Self-referent mechanisms in social learning theory. *American Psychologist*, 34(5), 439–441. <a href="https://doi.org/10.1037/0003-066X.34.5.439.b">https://doi.org/10.1037/0003-066X.34.5.439.b</a>
- Bandura, A., & McDonald, F. (1963). Influence of Social Reinforcement and the Behavior of Models in Shaping Children's Moral Judgments. *Journal of Abnormal and Social Psychology*, 67(3).
- Brendgen, M., Poulin, F., & Denault, A.-S. (2019). Peer victimization in school and mental and physical health problems in young adulthood: Examining the role of

- revictimization at the workplace. *Developmental Psychology*, *55*(10), 2219–2230. https://doi.org/10.1037/dev0000771
- Chen, X., Shao, J., Pu, X., & Wang, Z. (2023). Childhood maltreatment and adolescents' peer victimization: The effect of security, school connectedness and gender.

  \*Children and Youth Services Review, 148, 106843.\*

  https://doi.org/10.1016/j.childyouth.2023.106843
- Chen Y. (2016). Spatial Autocorrelation Approaches to Testing Residuals from Least Squares Regression. *PloS one*, *11*(1), e0146865.

  https://doi.org/10.1371/journal.pone.0146865
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests.

  \*Psychometrika\*, 16(3), 297–334
- Crowne, D. P., & Marlowe, D. (1960). Marlowe-Crowne Social Desirability Scale.

  \*PsycTESTS. APA PsycTests. https://doi.org/10.1037/t05257-000
- Dar-Nimrod, I., Ganesan, A., & MacCann, C. (2018). Coolness as a trait and its relations to the Big Five, self-esteem, social desirability, and action orientation. *Personality and Individual Differences*, *121*, 1–6. https://doi.org/10.1016/j.paid.2017.09.012
- Data Privacy & Security: Protecting Your Data. (n.d.). SurveyMonkey. https://www.surveymonkey.com/mp/data-privacy/
- Du, H., King, R. B., & Chi, P. (2012a). Relational Self-Esteem Scale. *PsycTESTS*. APA PsycTests. https://doi.org/10.1037/t36497-000

- Du, H., King, R. B., & Chi, P. (2012b). The development and validation of the Relational Self-Esteem Scale: Relational Self-Esteem Scale. *Scandinavian Journal of Psychology*, *53*(3), 258–264. https://doi.org/10.1111/j.1467-9450.2012.00946.x
- Du, H., King, R. B., & Chi, P. (2015). *Relational Self-Esteem Scale* [dataset]. American Psychological Association. https://doi.org/10.1037/t36497-000
- Du, H., King, R. B., & Chi, P. (2017). Self-esteem and subjective well-being revisited:

  The roles of personal, relational, and collective self-esteem. *PLoS ONE*, *12*(8).

  APA PsycInfo. https://doi.org/10.1371/journal.pone.0183958
- Geert van den Berg (n.d.) Effect Size in Statistics—The Ultimate Guide. Retrieved March 5, 2023, from https://www.spss-tutorials.com/effect-size/
- Elledge, C., Elledge, A., Newgent, R., & Cavell, T. (2016). Social Risk and Peer Victimization in Elementary School Children: The Protective Role of Teacher-Student Relationships. *Journal of Abnormal Child Psychology*, 44, 691–703.
- Fidanci, B. E., Akbayrak, N., & Arslan, F. (2017). Assessment of a Health Promotion Model on Obese Turkish Children. *Journal of Nursing Research (Lippincott Williams & Wilkins)*, 25(6), 436–446. CINAHL Plus with Full Text. https://doi.org/10.1097/JNR.000000000000238
- Fredrick, S. S., Jenkins, L. N., & Dexter, C. M. (2021). Resiliency in Young Adulthood and Associations among Retrospective Peer Victimization and Internalizing Problems. *Journal of Child & Adolescent Trauma*, *14*(3), 367–379. Academic Search Complete.

- Gravesande, J., Richardson, J., Griffith, L. et al. (2019). Test-retest reliability, internal consistency, construct validity and factor structure of a falls risk perception questionnaire in older adults with type 2 diabetes mellitus: a prospective cohort study. *Arch Physiother* 9, 14. https://doi.org/10.1186/s40945-019-0065-4
- Green, J. G., Oblath, R., Felix, E. D., Furlong, M. J., Holt, M. K., & Sharkey, J. D. (2018a). California Bullying Victimization Scale–Retrospective. https://doi.org/10.1037/t67808-000
- Green, J. G., Oblath, R., Felix, E. D., Furlong, M. J., Holt, M. K., & Sharkey, J. D. (2018b). Initial evidence for the validity of the California Bullying Victimization Scale (CBVS-R) as a retrospective measure for adults. *Psychological Assessment*, 30(11), 1444–1453. https://doi.org/10.1037/pas0000592
- Hatchel, T., Subrahmanyam, K., & Negriff, S. (2019). Adolescent Peer Victimization and Internalizing Symptoms During Emerging Adulthood: The Role of Online and Offline Social Support. *Journal of Child & Family Studies*, 28(9), 2456–2466. SocINDEX with Full Text.
- Iffland & Neuner. (2022). Peer Victimization Influences Attention Processing Beyond the Effects of Childhood Maltreatment by Caregivers. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.784147
- Laerd Statistics. 2018. Pearson's Product-Moment Correlation using SPSS Statistics |

  Laerd Statistics. [online] Available at: https://statistics.laerd.com/spsstutorials/pearsons-product-moment-correlation-using-spss-statistics.php

- Li, J., Zeng, M., Liu, M., Zhao, X., Hu, W., Wang, C., Deng, C., Li, R., Chen, H., & Yang, J. (2021). Multivariable pattern classification differentiates relational self-esteem from personal self-esteem. *Social Cognitive & Affective Neuroscience*, 16(7), 726–735. Academic Search Complete.
- Marlowe, D. (1962). Need for social approval and the operant conditioning of meaningful verbal behavior. *Journal of Consulting Psychology*, 26(1), 79–83. https://doi.org/10.1037/h0046129
- Mitchell, S. M., Seegan, P. L., Roush, J. F., Brown, S. L., Sustaíta, M. A., & Cukrowicz, K. C. (2018). Retrospective cyberbullying and suicide ideation: The mediating roles of depressive symptoms, perceived burdensomeness, and thwarted belongingness. *Journal of Interpersonal Violence*, 33(16), 2602–2620. https://doi.org/10.1177/0886260516628291
- Narr, R. K., Allen, J. P., Tan, J. S., & Loeb, E. L. (2019). Close Friendship Strength and Broader Peer Group Desirability as Differential Predictors of Adult Mental Health. *Child Development*, 90(1), 298–313. https://doi.org/10.1111/cdev.12905
- Nishina, A., & Parra, L. A. (2019). Discrepancies Between Retrospective and Actual Self-Reports of Peer Victimization Six Years Earlier. *Journal of Research on Adolescence (Wiley-Blackwell)*, 29(3), 724–735.
- Oncioiu, S. I., Boivin, M., Geoffroy, M.-C., Arseneault, L., Galéra, C., Navarro, M. C., Brendgen, M., Vitaro, F., Tremblay, R. E., Côté, S. M., & Orri, M. (2023). Mental health comorbidities following peer victimization across childhood and

- adolescence: A 20-year longitudinal study. *Psychological Medicine*, *53*(5), 2072–2084. https://doi.org/10.1017/S0033291721003822
- Schober P, Boer C, Schwarte LA. (2018). Correlation Coefficients: Appropriate Use and Interpretation. Anesth Analg. 2018 May;126(5):1763-1768. doi: 10.1213/ANE.0000000000002864. PMID: 29481436
- Sommer, F., Leuschner, V., & Scheithauer, H. (2014). Bullying, Romantic Rejection, and Conflicts with Teachers: The Crucial Role of Social Dynamics in the Development of School Shootings A Systematic Review. *International Journal of Developmental Science*, 23.
- van Geel, M., Goemans, A., Zwaanswijk, W., Gini, G., & Vedder, P. (2018). Does peer victimization predict low self-esteem, or does low self-esteem predict peer victimization? Meta-analyses on longitudinal studies. *Developmental Review*, 49, 31–40. https://doi.org/10.1016/j.dr.2018.07.001
- Vatcheva, K. P., Lee, M., McCormick, J. B., & Rahbar, M. H. (2016). Multicollinearity in Regression Analyses Conducted in Epidemiologic Studies. *Epidemiology*(Sunnyvale, Calif.), 6(2), 227. https://doi.org/10.4172/2161-1165.1000227
- Williams, M. M., Rogers, R., Sharf, A. J., & Ross, C. A. (2019). Faking Good: An Investigation of Social Desirability and Defensiveness in an Inpatient Sample
  With Personality Disorder Traits. *Journal of Personality Assessment*, 101(3), 253–263.