1-12-2024

Relationship of Child Maltreatment, Self-Esteem, Trait Emotional Intelligence, and Trust in Romantic Relationships

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Walden University
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Abstract

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Trust in Romantic Relationships

by

Philip E. Thorsen

MS, Auburn University, 2006

BS, Cedarville University, 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

February 2024

Abstract

Adult romantic partners must sustain a level of trust in order to continually turn toward

each other in need fulfillment, but little attention has been given to how such trust is

sustained. The purpose of this study was to investigate how self-esteem and trait

emotional intelligence might work to sustain relationship trust when a person has a

background of childhood maltreatment. This study used the lens of the interdependence

theoretical perspective and risk regulation perspective. The research questions focused on

the extent to which self-esteem and trait emotional intelligence were associated with each

other and the extent to which these variables, in addition to childhood maltreatment,

predict relationship trust. Quantitative data were collected through surveys distributed

online from 260 participants recruited through Amazon Mechanical Turk. Correlational

and multiple linear regression analyses were used. The findings showed that self-esteem

and trait emotional intelligence mediated the association between childhood maltreatment

and adult romantic relationship trust. Self-esteem also moderated the indirect effect of

childhood maltreatment on adult romantic relationship trust through trait emotional

intelligence. Individuals with high self-esteem showed decreases in trait emotional

intelligence as levels of childhood maltreatment increased. Individuals with low self-

esteem showed increases in trait emotional intelligence as childhood maltreatment

increased. These results can be used for positive social change by counselors through

coaching emotional intelligence and self-esteem in people to help improve the quality of

their romantic relationships.

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Acknowledgments

   I would like to thank my family for their support throughout this journey. I would especially like to thank my wife, Marcia, for her support through attending residencies, and conversations about the process. I also want to thank Dr. Lee Stadtlander, my dissertation chairperson, for her direction and guidance over the past couple of years to bring this dissertation to completion. Thanks to Dr. Kimberley Cox who was my first dissertation chair and helped me to shape the first three chapters of this project. I also want to thank Dr. Leanne Lemke who was my advisor and mentor at Auburn University who helped me to develop the skills which have their fruition in this project.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Allie and Noah have been getting to know each other over the past several weeks. Both Noah and Allie enjoy each other's company and have been pleasantly surprised at the things they have in common. They both want the relationship to continue but are not sure how to move forward. Either one or both of them is going to have to take a step toward deeper intimacy, but there is always the risk that the bid will not be returned. Based on their past encounters, they suspect that their attempt at deeper intimacy will not be rejected, but they also need to have trust in each other's intentions. Trust is often defined as confidence in the goodwill of others, but trust forms a foundational core of the ongoing interactions of romantic partners. Considering the importance of trust for romantic relationships, very little attention has been given to how trust may be maintained or sustained through ongoing interactions (Simpson, 2007). The purpose of the present study was to examine possible means through which trust may be sustained under a threatening situation such as one's experience of childhood maltreatment.

Childhood experiences of maltreatment such as abuse or neglect have been found to decrease the positive experience of adult romantic relationships. Nguyen et al. (2017) found that newlyweds who had been abused as children reported lower levels of marital satisfaction. Other researchers found that childhood experiences of maltreatment were directly related to lower levels of trust in relationships (Gobin & Freyd, 2014). When experiences of childhood maltreatment threaten romantic partners' experience of the relationship, there may be personal resources that individuals could enlist to maintain trust in the relationship.

There are several factors that would affect the association between childhood maltreatment and adult romantic relationship trust. Researchers have found that higher levels of self-esteem have positive effects on romantic relationships (McCarthy et al., 2017). Other researchers found that unhelpful beliefs about oneself mediate the association between childhood maltreatment and adult romantic relationship trust (Baugh et al., 2019). Trait emotional intelligence is another resource that could possibly work to maintain trust in romantic relationships. *Trait emotional intelligence* is the ability to identify one's emotions as well as others' emotions, express emotions in a socially acceptable way, understand the causes and effects of emotions, and regulate emotions (Sarrionandia & Mikolajczak, 2020). Such abilities as are encompassed by trait emotional intelligence are related to higher levels of romantic relationship satisfaction (Malouff et al., 2014).

The purpose of the present study was to investigate whether some forms of childhood maltreatment are more related to romantic relationship trust than other forms. Furthermore, another purpose of this study was to investigate the associations between childhood maltreatment, adult romantic relationship trust, self-esteem, and trait emotional intelligence to determine whether some factors are more beneficial to the maintenance of trust than others. Such information about factors most instrumental in maintaining adult romantic relationship trust will be useful to clinicians involved in relationship or marital therapy, as well as professionals engaged in relationship education programs.

This introduction provides a summary of the research examining adult romantic relationship trust, childhood maltreatment, self-esteem, and trait emotional intelligence.

In Chapter 1, the purpose of the study, the specific research questions to be investigated, and the theoretical framework will also be summarized. The nature of the study, definitions of important terms, scope of the study, limitations, and significance will be described closer to the end of this chapter. First, I will discuss each concept of interest, beginning with trust.

Background

Trust

The benefits of trust are often promoted, but the lack of trust in romantic relationships can be especially deleterious to relationships. Trust is conceptualized as the expectation that one's romantic partner will meet one's needs in the present and the future (Rempel et al., 1985). Marriage partners low in trust have been found to disrupt the felt closeness of both partners following a conflict discussion (Kim et al., 2015). People lower in trust are less likely to self-disclose about themselves, which is often one way to build trust and intimacy in a relationship (McCarthy et al., 2017). Beyond the health of the relationship, trust in one's romantic partner has been found to be associated to physical and mental health as well (Schneider et al., 2011).

Childhood Maltreatment

Childhood maltreatment is likely to be the kind of betrayal that interferes with one's ability to trust in adult romantic relationships. *Childhood maltreatment* refers to physical abuse, emotional abuse, emotional neglect, sexual abuse, and physical neglect (Bernstein, et al., 2003). Negative self-schemas have been found to mediate the association between emotional maltreatment and trust (Baugh et al., 2019). Researchers

have also found that childhood physical and sexual abuse are associated with lower relationship satisfaction (Nguyen et al., 2017). Self-criticism and attachment avoidance have also been found to mediate the association between child emotional maltreatment and relationship satisfaction (Lassri et al., 2016). Other researchers found that participants reporting more experiences of exposure to violent trauma also reported lower levels of general and relational trust and were less likely to trust their partner in a game scenario (Gobin & Freyd, 2014). These research findings suggest that emotional, physical, and sexual abuse are key features of childhood maltreatment to investigate as related to romantic relationship trust. For the current study, I conducted analyses to test the associations between the reports of different forms of childhood maltreatment and romantic relationship trust. There is also evidence that self-esteem may play a role in adult relationships of people who experienced childhood maltreatment.

Self-Esteem

Self-esteem is defined as a global sense of one's self-worth (McCarthy et al., 2017). Higher levels of self-esteem are often associated with positive relationship outcomes. One longitudinal study showed that self-esteem had small to medium effects on life outcomes such as emotion and depression, as well as relationship and job satisfaction (Orth et al., 2011). Furthermore, another study showed that self-esteem of each romantic partner may contribute to partners' common relationship satisfaction (Erol & Orth, 2014). On the other hand, people with low self-esteem more often use indirect support seeking such as whining or inducing guilt to stimulate support from one's romantic partner, which results in more negative support (Don et al., 2019). People with

low self-esteem also tend to be less affectionate, experience reduced positive emotional reactions to affection, and do not perceive that their partners benefited from the affection (Luerssen et al., 2017). People with high levels of self-esteem and the personality trait of agreeableness have been found to be more likely to self-disclose to friends or romantic partners (McCarthy et al., 2017). Higher levels of self-esteem have been found to be related to better relationship outcomes, but research also shows that self-esteem can be affected by childhood maltreatment (Winstock, 2015).

Several researchers have found that childhood maltreatment is related to lower levels of self-esteem. Pacheco et al. (2014) found that children exposed to maltreatment of various forms also showed lower levels of self-esteem, social competence, and lower quality of peer relationships. Other researchers found that self-esteem acted as a mediator between childhood experience of maltreatment and mental well-being or pathology (Greger et al., 2017). Winstok (2015) further found that violence between parents as well as parent-to-child violence has been associated with self-esteem. A growth curve analysis also found that neglect is associated with self-esteem in two patterns: neglect is associated with a declining level of self-esteem, and it is associated with steeply increasing self-esteem that rises from an initially low level of self-esteem (Oshri et al., 2017). One purpose of the present study was to investigate whether there is a difference in the type of childhood maltreatment that may affect trust, as well as whether that association is mediated by self-esteem. This study also tested trait emotional intelligence as a mediator of the association between childhood maltreatment and romantic relationship trust, and this variable was also tested as a modifier of the mediated

relationship between childhood maltreatment and romantic relationship trust. The relationships of trait emotional intelligence with the other study variables will be described in the next section.

Trait Emotional Intelligence

Self-esteem can be viewed as a cognitive resource that is available to individuals, and trait emotional intelligence is another cognitive resource that might affect the association between childhood maltreatment and trust. Trait emotional intelligence is described as the ability to recognize one's own emotions as well as the emotions of other people, express emotions in a socially appropriate way, understand the causes and results of emotions, and regulate emotions when they are not appropriate, and use them successfully in relationships, thoughts, and actions (Sarrionandia & Mikolajczak, 2020). Research has consistently shown a link between trait emotional intelligence and mental and physical health (Martins et al., 2010). Higher levels of physical health, mental health, and life satisfaction were even found following an 18-hour emotional intelligence training program (Nelis et al., 2011). People high in emotional intelligence also have reported lower levels of drug and alcohol use (Riley & Schutte, 2003). High levels of emotional intelligence are also related to more positive moods and higher self-esteem, and these states are less impacted by negative mood statements (Schutte et al., 2002).

Research has shown that trait emotional intelligence is important for romantic relationship quality. A meta-analysis conducted by Malouff et al. (2014) showed a moderate association between trait emotional intelligence and relationship satisfaction. Other researchers found that trait emotional intelligence lead to more constructive

conflict resolution abilities leading to higher relationship satisfaction (Zeidner et al., 2013). Romantic partners reporting high levels of trait emotional intelligence have also reported high levels of romantic relationship satisfaction (Zeidner & Kaluda, 2008). Based on these research findings, it was reasonable to expect that trait emotional intelligence also would be associated with higher levels of romantic relationship trust.

Childhood maltreatment also has been found to be negatively associated with one's ability to regulate emotions (Rellini et al., 2012) which is key component of trait emotional intelligence. The purpose of the present study was to investigate the associations between childhood maltreatment, trust in romantic relationships, self-esteem, and trait emotional intelligence to determine which factors help to maintain relationship trust the best. I hypothesized that self-esteem and trait emotional intelligence mediate the association between childhood maltreatment and adult romantic relationship trust. I also hypothesized that self-esteem moderates the mediation effect of trait emotional intelligence between childhood maltreatment and adult romantic relationship trust.

Statement of the Problem

The problem that I sought to address in this research is a lack of knowledge about the association between childhood maltreatment and adult romantic relationship trust, and the possible cognitive resources upon which romantic partners may draw. If a person has experienced childhood maltreatment, does the type of childhood maltreatment have implications for levels of trust in adult romantic relationships? Furthermore, will the relationships of people who experienced childhood maltreatment benefit if they have self-esteem, or trait emotional intelligence? Do these cognitive resources allow individuals to

become closer, or does an individual remain distant, fearing pain similar to what they experienced as a child? Previous research has suggested that there are connections between childhood maltreatment and adult romantic relationship trust (Baugh et al., 2019). Self-esteem is a resource that individuals often use in romantic relationships (Murray et al., 2015). Trait emotional intelligence could work to support these resources, add to their impact, or counterbalance them. A study that investigates whether some forms of childhood maltreatment are more related to romantic relationship trust than other forms has not been conducted, nor has a study been conducted that investigates the mediation effects of self-esteem, or trait emotional intelligence in the relationship between childhood maltreatment and adult relationship trust. Tests of moderated mediation, such that self-esteem and trait emotional intelligence modify the mediated relationship between childhood maltreatment and adult romantic relationship trust, have not been conducted either.

Purpose of the Study

The purpose of this quantitative study was to test whether the different kinds of childhood maltreatment have varying relationships with adult romantic relationship trust. Another purpose for this study was to evaluate the relationships between childhood maltreatment, adult romantic relationship trust, self-esteem, and trait emotional intelligence. Adult romantic relationship trust was the criterion variable and childhood maltreatment was the predictor variable, with self-esteem and trait emotional intelligence as possible mediating variables. Moderated mediation was also investigated to determine

whether or not self-esteem and trait emotional intelligence act as modifiers of the mediated relationship between childhood maltreatment and adult relationship trust.

Research Questions and Hypotheses

The following research questions and hypotheses arose out of a review of the literature in the areas of trust, childhood maltreatment, trait emotional intelligence, and self-esteem.

Research Question 1: What is the association between childhood maltreatment and adult relationship trust?

$H_0$1: Childhood maltreatment is not associated with lower levels of adult relationship trust.

H_a1: Childhood maltreatment is associated with adult relationship trust.

Research Question 2: To what extent is there a difference in the relationship between subtypes of childhood maltreatment (emotional, physical, and sexual maltreatment) and adult romantic relationship trust?

$H_0$2: There will be no difference in the associations between childhood emotional maltreatment, physical maltreatment, and sexual maltreatment and adult romantic relationship trust.

H_a2: There will be a difference in the associations between childhood emotional maltreatment, physical maltreatment, and sexual maltreatment and adult romantic relationship trust.

Research Question 3: Does self-esteem mediate the relationship between childhood maltreatment and adult romantic relationship trust?

$H_0$3: Self-esteem does not mediate the relationship between childhood maltreatment and adult romantic relationship trust.

H_a3: Self-esteem does mediate the relationship between childhood maltreatment and adult romantic relationship trust.

Research Question 4: Does trait emotional intelligence mediate the relationship between childhood maltreatment and adult romantic relationship trust?

$H_0$4: Trait emotional intelligence does not mediate the relationship between childhood maltreatment and adult romantic relationship trust.

H_a4: Trait emotional intelligence mediates the relationship between childhood maltreatment and adult romantic relationship trust.

Research Question 5: To what extent does self-esteem influence the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence?

$H_0$5: Self-esteem will not moderate the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence.

H_a5: Self-esteem moderates the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence.

Theoretical Framework

The theoretical framework for this study is interdependence theory (Kelley, 1979). According to this theory, individuals in close relationships, such as romantic relationships, are affected by each other's actions. For example, when Noah arrives home in a bad mood due to work conditions, it is likely to affect Allie and vice versa. Within

this interaction, Murray et al. (2006) proposed a risk regulation system. By nature, romantic relationships involve a level of risk that one's partner will reject them in situations of dependence. An example might be, if Noah is feeling lonely and wants to share an evening together while Allie feels the need to get some extra work done, Allie could reject Noah's bid for closeness, or she might accept it. There is the risk. According to the risk regulation system there are three processes based on if/then rules. The first process is called appraisal and involves the rule that if one is dependent then there is appraisal of the partner's regard (Murray et al., 2006). This first appraisal process will be the focus of this study. When romantic partners are in a stable relationship there is the assumption of dependence, but perceptions of partner regard are based on conditions related to one's self, one's partner, and among the dyad.

In this first appraisal process, trust is the operationalization of perceived partner regard. If two people are in a romantic relationship, then there is a level of dependence but one's history of childhood maltreatment could affect the level of trust one holds in one's romantic partner. Because of this history of maltreatment, the individual may maintain distance and not risk closeness. If a person has high self-esteem, this person often perceives their partner as higher in regard and may trust their partner more (McCarthy et al., 2017). Self-esteem allows people to overcome the risk involved in greater closeness (Cameron et al., 2010). Trait emotional intelligence could work in a similar way such that with greater trait emotional intelligence the individual recognizes and manages one's own emotions which facilitates closeness and not distance. The relationships between these variables will be described in more detail in Chapter 2.

The risk regulation system provides a good framework for the current study because if a person has been hurt by close others (e.g., parents) in the past, they will be sensitive to the risks of closeness with a romantic partner. This study investigates the factors of self-esteem and trait emotional intelligence that might move a romantic partner closer rather than maintain distance. Perhaps these variables help the individual to move past the risk to closeness.

Nature of the Study

The purpose of this study was to investigate the relationships between variables, so quantitative analyses are appropriate. The dependent variable is adult romantic relationship trust, and the independent variable is the overall score of childhood maltreatment. Possible mediating variables are self-esteem and trait emotional intelligence. Moderated mediation effects among these variables in the relationship between childhood maltreatment and adult romantic relationship trust also will be investigated. The data were collected from romantic partners recruited through Amazon's Mechanical Turk. Two hundred, sixty participants were recruited to complete the Trust Scale (Rempel et al., 1985), the Childhood Trauma Questionnaire (Bernstein et al., 2003), and a global self-esteem measure (Rosenberg, 1965). Trait emotional intelligence was measured using a 33-item questionnaire (Schutte et al., 1998).

The data were analyzed using the PROCESS (Version 3) macro (Hayes, 2022) with IBM SPSS (Version 28; IBM, 2022) software. Correlations between the major variables were completed to establish the associations that were investigated through regression analyses.

Definitions

Adult romantic relationship: A person in an adult romantic relationship is defined as a person over the age of 18 who has been in the current relationship for longer than one month and has reached a level of mutual dependence with the other person.

Adult romantic relationship trust: Adult romantic relationship trust is the expectation of benefit through dependence on one's romantic partner, and feelings of security and reassurance in one's partner (Murray et al., 2013).

Childhood maltreatment: Childhood maltreatment refers to physical abuse, emotional abuse, emotional neglect, sexual abuse, and physical neglect (Bernstein et al., 2003).

Self-esteem: Self-esteem is defined as a global sense of one's self-worth (McCarthy et al., 2017).

Trait emotional intelligence: Trait emotional intelligence is the ability to identify one's emotions as well as the emotions of other people, express emotions well, and understand their causes and consequences (Sarrionandia & Mikolajczak, 2020).

Assumptions

This study was based on the assumption that the respondents would provide honest and accurate information. It was assumed the measures provide accurate information and construct validity. It was assumed the participants would be in stable, adult romantic relationships and complete their own questionnaires. Such assumptions are necessary in the course of quantitative research.

Scope and Delimitations

The present study is limited to individuals over the age of 18 in stable romantic relationships, and it is limited to one romantic partner, not the dyad. The study was also conducted online and not with face-to-face questionnaires. This study was limited to one romantic partner because of the difficulty of recruiting both partners in the online environment. There would also have been the potential for the initial romantic partner to possibly coerce the second partner to participate, which could affect the quality of the data collected. The data were collected online due to the societal emphasis on social distancing during the COVID-19 pandemic, and the online environment provides access to a sample that is more diverse than I would have collecting data face-to-face.

This study does not include attachment theory because there is a lot of research from that theoretical framework yet not much research integrating childhood maltreatment with the adult relationship literature from the interdependence theory framework.

Generalizability is an important consideration for this study. The findings of this study may be applied to individuals in different kinds of committed relationships, whether exclusively dating or married. Collecting data online also broadens the ages and backgrounds of potential participants, thereby increasing generalizability of the study. On the other hand, collecting data online limits generalizability to people who are competent in using computers and being online, and are able to afford consistent online access.

Limitations

This study is limited in several ways. One of the limitations is that I used the survey method and not an experimental method. An experiment could be useful to expose participants to a perceived risk to their relationship experimentally and then examine how trust might change, but an experiment was not used. Another limitation is that the surveys used were in English, limiting participants to individuals proficient in that language. Collecting survey data online also presents problems with participants not answering every question, or perhaps getting bored, or misunderstanding some questions. It was also possible that participants would not complete tasks correctly or may rush to complete the survey. I designed the survey tool, including attention checks, to prevent boredom or certain response sets and facilitate respondents providing high quality responses.

Another limitation is that the self-reports of participants' childhood maltreatment were looking back over the past, and it could be several years in between the events that took place and the person responding to the surveys. However, the measure proposed to assess maltreatment has shown good reliability across time (Bernstein et al., 2003).

This study only invited one member of a relationship dyad to participate. There are several insights that could have been gained from involving both partners of a dyad, but due to online data collection, getting data from both partners would not be feasible to obtain a sufficient data set.

Significance

This study fills a gap in the literature by providing information about how childhood maltreatment is related to trust in adult romantic relationships. Another gap in

the literature that the study addressed is understanding how individuals use cognitive resources such as self-esteem and trait emotional intelligence to overcome guardedness that they may have based on childhood maltreatment. The knowledge gained from the current research study could be used in education and therapeutic environments to improve romantic relationships. Individuals could receive coaching, or programs could be created to improve self-esteem. Individuals would benefit from trait emotional intelligence training, and these improvements in self-esteem and emotional intelligence could improve aspects of their romantic relationship and improve aspects of their lives. By positively impacting romantic relationships, families, children, and friendships, even workplaces might be positively affected, accomplishing aspects of positive social change.

Summary

Trust is an important part of adult romantic relationships, but how trust is related to childhood maltreatment has not been widely examined (Simpson, 2007). According to the risk regulation system, romantic partners appraise the dependence they have on their partner and then decide to move closer or maintain a distance (Murray et al., 2006). In romantic relationships, there is a certain level of dependence, but the resources used to overcome the perceived risk in relationships are not well understood. Individuals with a past of childhood maltreatment might establish a sense of self-esteem that helps them move closer into relationships. Perhaps trait emotional intelligence is a resource that individuals with a past of childhood maltreatment can use to build trust. In Chapter 2, sections about adult romantic relationship trust, childhood maltreatment, self-esteem, and

trait emotional intelligence will help explain the relationships between these variables in more depth.

Chapter 2: Literature Review

Trust is a key feature of romantic relationships, yet questions remain about how trust develops, and the processes used to protect trust. One experience early in life that could detract from success in adult romantic relationships is childhood maltreatment. The level of trust in adult romantic relationships could be affected by experiencing abuse or neglect. However, other resources could have a role in supporting trust, and the goal of this study was to address this possibility. The purpose of this quantitative study was to investigate the relationships between childhood maltreatment, adult romantic relationship trust, self-esteem, and trait emotional intelligence to better understand how trust might be maintained through cognitive resources.

Childhood maltreatment is related to levels of trust, and self-concept has been found to mediate this relationship (Baugh et al., 2019). Childhood maltreatment has also been found to negatively affect self-esteem (Pacheco et al., 2014) and individuals who have high self-esteem are more likely to be trusting (McCarthy et al., 2017). Childhood maltreatment also seems to have a negative impact on trait emotional intelligence (Moreno-Manso et al., 2017). Trait emotional intelligence also is related to higher levels of self-esteem (Schutte et al., 2002). The research described in this paragraph summarizes the interconnections between adult romantic relationship trust, childhood maltreatment, self-esteem, and trait emotional intelligence. These interconnections will be explained further in the literature review.

This literature review begins with a description of the literature search process followed by an explanation of the theoretical foundation for this study. An introduction to

research about adult romantic relationship trust comes next, including how the conceptualization of trust has developed. Information about trust will be followed by a review of research regarding childhood maltreatment, then self-esteem, and trait emotional intelligence.

Literature Search Strategy

An online digital search for literature was performed using PsycINFO and Sage Journals. The focus was on psychological literature beginning with the key terms *trust, self-esteem, childhood maltreatment,* and *emotional intelligence*. This initial search provided some insight into the literature, but to further narrow this search, *romantic relationships* was added for each key term, resulting in the following combinations: *trust and romantic relationships, self-esteem and romantic relationships, childhood maltreatment and romantic relationships,* and *trait emotional intelligence and romantic relationships.* The key terms were also used in pairs such as *self-esteem* and *trust*, *childhood maltreatment* and *trust*, and so on. Also, upon reviewing the results for the search for *emotional intelligence* the term *trait emotional intelligence* was recognized as the proper search tool and used. This literature search involved scouring the search results for relevant literature, using filters for peer-reviewed journals, and books. In order to set a wide net for these search results, filters were used for the date range from 2000 to 2020, with preference for research published in the last 5 years.

Theoretical Foundation

The theoretical foundation relevant to this study is interdependence theory (Kelley, 1979). According to this theory, interactions in intimate relationships are

motivated toward responding to the needs and outcomes of one's significant other

(Kelley, 1979). In such interactions, the participants in the relationship depend on each

other's responsiveness to needs and outcomes, which contributes to the interdependence

of the couple (Wieselquist et al., 1999). As an individual in the couple responds to the

other's needs and outcomes, they attribute this tendency to be a stable disposition for that

person, and relationship or marital satisfaction increase as a result of this ongoing

responsiveness and commitment to each other (Givertz et al., 2016).

　　　　Murray and Holmes (2009) further proposed in their model of interdependent

minds that this interdependence further progresses through conflict of interest situations

in which the risk of dependence is weighed against the benefit of closeness. In these

conflict of interest situations, trust is fundamental to overcoming sensitivity to the risk

that moves relationship partners into deeper dependence on each other, which also

increases commitment to each other (Shallcross & Simpson, 2012).

　　　　The emphasis on responsiveness that is inherent in interdependence theory is

important to this study because trust is assumed to be based on actions of one's partner

(Rempel et al., 1985). Research questions that focus on the relationship between adult

romantic relationship trust and childhood maltreatment, or trust and self-esteem or trait

emotional intelligence are based on the idea that the attitudes about romantic relationship

trust in one's romantic partner are based on perceptions of one's partner being responsive

to one's needs.

　　　　The risk regulation model (Murray et al., 2006) further conceptualizes the way

that couples move to deeper dependence. Murray et al. (2006) proposed that dependence

felt by partners contributes to perceptions of how they are regarded by each other, whether positively or negatively. The relationship between dependence and perceived partner regard is moderated by appraisal rules that include contingencies based on one's partner, based on oneself, and based on the dyad (Murray et al., 2008). The proposed study focuses on the self-based contingencies of self-esteem and trait emotional intelligence.

The risk regulation model (Murray et al., 2006) is an appropriate theoretical framework for this study because individuals who are sensitive to the risks of greater dependence on their romantic partners (i.e., those who experienced maltreatment during their childhood) are likely to respond differently in relationships than those who have not experienced childhood maltreatment (Gomillion & Murray, 2014). Other research has found that self-esteem operates to facilitate closeness of romantic partners in risky situations (Cavallo et al., 2012) and this research study builds on those research findings.

Trust

Trust is a multidimensional and complex construct that has been examined from several different perspectives. The conceptualizations of trust have been based on cooperation and interdependence in certain situations. Other conceptualizations view trust as arising out of ongoing interactions among specific individuals, and other conceptualizations view trust as a personal disposition (Simpson, 2007). Early investigations of trust used the prisoner's dilemma game and other mixed-motive scenarios in which aspects of interaction can be manipulated (Deutsch, 1958). In such mixed-motive games, partners are given choices to cooperate or compete. From this

research paradigm, several factors that allow interaction partners to cooperate and trust one another were distilled (Lave, 1965). When partners were able to communicate their cooperative intentions, either through direct communication or through tracking choices during ongoing interactions, cooperation continued, and trust grew (Lave, 1965). Also, when partners were confident that there was concern for one another, trust and cooperation grew (Deutsch, 1958).

The research investigating trust using the prisoner's dilemma paradigm yielded dispositional conceptualizations of trust and dyadic conceptions of trust. Wrightsman (1966) asserted that people have beliefs about how humans generally act, and trustworthiness is a basic component to those beliefs. Rotter (1971) also viewed trust as a basic component to social interaction and cooperation in society but focused more on overall beliefs that other people are likely to be reliable and helpful, no matter the situation.

Following these general conceptualizations of trust, researchers began moving toward trust in more specific relationships and situations. Johnson-George and Swap (1982) investigated trust directed toward a specific person and in particular situations. This other person was a friend or same-sex other, and the situations related to trustworthiness of the other to be reliable with personal confidences, material possessions, physical safety. In other research, Larzelere and Huston (1980) investigated trust in romantic relationships and measured trust as the degree to which the romantic partner can be believed and valued the welfare of one's partner. Furthermore, Rempel et al. (1985) focused on trust in romantic relationships but emphasized interdependence

between partners. Trust was conceptualized as how reliable and dependable one's partner could be and having faith in the prospect that the relationship would continue.

According to Rempel et al.'s (1985) conceptualization of trust, the actions of each partner occur as a part of an uncertainty reduction process. As each partner shows their dependability in relationship relevant situations, the trust within the relationship grows, contributing to other aspects of a quality romantic relationship (Holmes & Rempel, 1989). Following research based on this conceptualization of trust, there was a refocus on aspects of the situations most relevant to the development of trust. These situations involve a high degree of interdependence between partners, coordination of partner behaviors, and an exchange of some good between partners (Kelley et al., 2003). There has been renewed interest in these situations such that various situations may strain the relationship or strain trust (i.e., strain-test situations; Shallcross & Simpson, 2012).

A new development in the conceptualization of trust is a dual process model. This conceptualization holds that there is an automatic component and a reflective component for trust (Murray et al., 2012). This dual process model proposes an automatic or impulsive aspect of mind, outside of conscious awareness, and a deliberate mind that uses effort and consideration and is a part of conscious awareness (Hofmann et al., 2009). *Reflective trust* refers to the deliberate consideration that is based on the level of responsiveness that partners have demonstrated toward each other, and *automatic trust* is outside of awareness and is based on positive implicit attitudes towards one's partner (Murray et al., 2013). These two forms of trust are related such that as levels of reflective trust increase or decrease, the automatic trust will also vary.

Child Maltreatment and Relationship Quality

Trust is a key part of romantic relationships and may be influenced by other factors, such as childhood maltreatment. The association between trust and childhood experiences of maltreatment is a relatively unexamined connection. Trust is based on mutual responsiveness between partners (Rempel et al., 1985), and being abused as a child often influences how individuals approach romantic relationships. Findings by Nguyen et al. (2017) showed that members of newly wed couples who were abused as children reported decreasing levels of satisfaction in their marriages. They also found that this association was not moderated by reports of aggression, depression, substance abuse, or observed communication, suggesting that the impact of childhood abuse on adult intimate relationships is enduring. DiLillo et al. (2009) found further evidence for the connection between childhood maltreatment and adult intimate relationship outcomes. Childhood physical abuse, emotional abuse, and neglect predicted lower marital satisfaction in husbands, and neglect predicted lower satisfaction in wives. Childhood maltreatment also was related to lower levels of trust and increased aggression. Early experiences of maltreatment were found to be associated with lower levels of trust reported by participants and trust shown in an economics task called the trust game (Gobin & Freyd, 2014).

Paradis and Boucher (2010) also found that childhood maltreatment survivors reported higher levels of couple problems. A rare prospective study of childhood maltreatment conducted by Labella et al. (2017) showed that childhood abuse and neglect predicted lower levels of competence in romantic relationships and higher levels of

relationship violence. A literature review by Reyome (2010) also showed plentiful evidence that survivors of childhood emotional maltreatment report psychological and sociological difficulties such as the tendency toward poor peer relationships, lower romantic relationship quality, and greater relationship problems.

To better understand this association between childhood maltreatment and adult relationship outcomes, several researchers have investigated intervening variables. Miano et al. (2018) found that empathic accuracy was maintained for participants who had experienced childhood neglect. According to this line of research, when a relationship is potentially threatened by the thoughts or feelings of one's partner, empathic accuracy decreases so that the relationship is protected. In this study, Miano et al. (2018) found that partners who reported childhood neglect did not display this protective change in empathic accuracy. Bradbury and Shaffer (2012) found, in a similar way, that romantic partners' difficulties with emotion regulation mediated the association between childhood emotional maltreatment and relationship satisfaction.

Other researchers have found that the association between childhood abuse and adult marital relationship quality is mediated by the perception that family experiences have had a negative impact in participants' lives (Walker et al., 2009). Busby et al. (2011) further found that romantic partners who reported childhood abuse also perceived themselves and their partners as more neurotic and engaged in more negative communication such as criticism and contempt, than partners reported themselves.

The contribution of adult attachment to the association between childhood maltreatment and adult relationship quality has been another focus for researchers.

According to attachment theory (Riggs & Kaminski, 2010), early childhood experiences with one's primary caregivers provide a model upon which other relationships are based. When caregivers are responsive to the needs of the child, a "secure base" or secure attachment is established, but when caregivers respond inconsistently or with harshness or neglect, an insecure attachment is established. Insecure attachment may take the form of avoidant, ambivalent/anxious, or disorganized attachment (Rholes et al., 2016). Attachment is relevant because levels of trust have been found to be related to one's attachment model.

Riggs and Kaminski (2010) found that emotional abuse was a significant predictor of adult attachment anxiety and emotional abuse, and neglect significantly predicted attachment avoidance. Also, attachment anxiety and avoidance significantly predicted lower dyadic adjustment. Childhood sexual abuse also was a statistically significant predictor of decreased dyadic adjustment. Other researchers have had similar findings. Godbout et al. (2017) found that early exposure to family violence predicted attachment anxiety which predicted relationship aggression, which predicted lower relationship adjustment scores. Rholes et al. (2016) also found that childhood maltreatment predicted insecure attachment, and this attachment was related to anger, verbal aggression, and conflict aggression toward one's romantic partner. Other researchers have found that childhood maltreatment was negatively associated with self-esteem and emotional competence, which were associated with attachment. This research suggests that child maltreatment is related to levels of self-esteem.

Self-criticism, or the tendency to punish oneself or have negative self-views when expectations are not met, has been found to mediate the association between childhood maltreatment and features of satisfying relationships. Lassri and Shahar (2012) found that self-criticism mediated the association between childhood maltreatment and relationship satisfaction, commitment, and relationship efficacy. In addition, Lassri et al. (2016) tested a structural equation model in which self-criticism mediated the relationship between childhood maltreatment and avoidant attachment, which then predicted romantic relationship satisfaction. These researchers found their model fit the data well. In another study, Baugh et al. (2019) found that maladaptive self-schemas, or unhelpful beliefs about self, mediated the association between childhood maltreatment and trust. Psychological flexibility, which is the ability to accept negative emotions and experiences, and act consistent to values, also was found to mediate this association. Furthermore, Celik and Odaci (2020) found that self-esteem mediated the relationship between being abused as a child and depression, anxiety, and stress.

Self-Esteem

Findings that point to the role of self-schemas suggest that self-esteem could be an important factor in the association between child maltreatment and trust. In her chapter about self-esteem and intimate relationships, Murray (2006) wrote that individuals with low self-esteem often have more conflicted and uncertain views of themselves and display a lack of confidence in their partner's positive regard for them. Individuals with high self-esteem are more confident in the care of their partner and not as sensitive to small signs of rejection. Individuals with high self-esteem often have the motive to move

closer and approach their partners, while individuals with low self-esteem often are motivated to avoid or protect the self.

More recent research findings bear this out. Don et al. (2019) found that individuals with low self-esteem were more likely to use indirect support seeking strategies such as sulking, whining, or acting sad, to which their partners often responded with criticism, blaming, invalidation, or withdrawal. This negative support led individuals with low self-esteem to perceive their partners as less responsive. Perceptions of responsiveness are important for individuals with low self-esteem because these perceptions enable self-disclosure and investment in the relationship beyond the level of individuals with high self-esteem (Forest & Wood, 2011). Researchers further found that the limitations of expressivity could apply most for negative emotions (Gaucher, et al., 2012). Gaucher et al. (2012) found that when low self-esteem individuals were confident in the perceived regard of their partners, they were more willing to take the risk to express negative emotions that could damage the relationship.

The level of self-esteem also affects how individuals with low self-esteem view the relationship. Luerssen et al. (2017) found that low self-esteem individuals were especially guarded in expressing emotions, as was stated above. In addition, individuals with low self-esteem also believed that their partners did not draw benefits from their affection, though their partners reported improved positive emotion and relationship satisfaction. Kille et al. (2017) also found that individuals with low self-esteem have difficulty accepting complements from significant others, and in order to maintain their theory of self they must downplay or undermine the complement or the person.

Individuals low in self-esteem were better able to accept complements when they focused

on the low-level concrete features of the complement. Similar findings suggest that

individuals with low self-esteem are more accepting of complements when they received

regular criticism from their partners (Lemay & O'Leary, 2012). Individuals with low self-

esteem are skeptical of positive messages from others but are more likely to judge them

as authentic when negative messages also occur. Furthermore, Cameron et al. (2010)

found that as social risk increased, low self-esteem individuals perceived less acceptance

from their interaction partner, but high self-esteem individuals perceived more

acceptance in similar circumstances. On the other hand, researchers have found that

individuals with high self-esteem automatically direct attention away from negative traits

of a romantic partner when in a situation of uncertainty, but those with low self-esteem

do not remove these negative traits from their attention, potentially damaging the

relationship (Lamarche, & Murray, 2014). Together these research findings suggest that

due to the way low self-esteem individuals perceive and interact with social or

relationship partners, they bring about the rejection that they fear most. Levels of self-

esteem have been implicated in the operation of relationships, but they also play a role in

levels of trust.

  Other beliefs and cognitions interact with self-esteem to impact relationship

quality. Murray et al. (2009) found that when relationship partners were led to believe

they are irreplaceable, individuals with low self-esteem experienced an increase in trust.

When the feeling of being irreplaceable was thwarted trust decreased in both individuals

with low self-esteem and individuals with high self-esteem, but high self-esteem

individuals were able to compensate for this threat to the relationship with other

resources. Murray et al. (2015) also found that individuals with low self-esteem, who

reported a low level of trust, acted in less rejecting and selfish ways toward their partners.

McCarthy et al. (2017) found that trust and self-disclosure were affected by an interaction

between self-esteem and the personality trait agreeableness. They also found that when

trust was experimentally enhanced, the interaction between self-esteem and agreeableness

no longer predicted disclosure. These findings suggest that the positive regard of one's

partner interacts with levels of self-esteem to either nurture trust or work to erode it.

Cognitive resources also appear to have a similar influence. Researchers have

found that participants were more responsive to emotional disclosures when secure

mental representations were primed (Mikulincer et al., 2014). On the other hand, threats

to self-worth and the depletion of mental resources contributed to less responsiveness.

Furthermore, Cavollo et al. (2012) found that as cognitive burden increased during a

risky situation, low self-esteem individuals operated according to self-protection motives

and downplayed approach. Individuals with high self-esteem moved toward approach in a

similar situation.

Trait Emotional Intelligence

Emotional intelligence has received a lot of attention in the research literature,

and has been found to be associated with workplace and social functioning, academic

performance, and mental and physical health (Rivers et al., 2020). It is important to point

out that there are two prominent models of emotional intelligence. According to the

ability model, emotional intelligence is composed of four branches with four relationship

abilities. The branches are perceiving emotions, using emotions for facilitating thoughts, understanding emotions, and emotion regulation (Rivers, et al. 2020). Ability emotional intelligence is measured using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) composed of 141 tasks used to evaluate the ability of individuals to show the four branch abilities of emotional intelligence (Rivers et al., 2020).

The competing model of emotional intelligence, which was used for the current study, is the trait or mixed model of emotional intelligence. Trait emotional intelligence refers to dispositions of individuals to act in certain ways in emotion-laden situations (Sarrionandia & Miolajczak, 2020). Trait models are often referred to as mixed models because they include at least one of the emotional intelligence abilities (Rivers et al., 2020). In the current study the term trait emotional intelligence will continue to be used to prevent confusion.

The relationship between childhood maltreatment and trait emotional intelligence is well-founded. Moreno-Manso et al. (2017) found that adolescents who had experienced abuse when they were younger showed lower levels of emotional intelligence and empathy. Research has also shown that emotion regulation and intelligence mediated the relationship between childhood maltreatment and depression, symptoms of post-traumatic stress disorder, and physical health (Cloitre et al., 2019). Zhao et al. (2019) had similar findings of the mediating effects of emotional intelligence and social support in the relationship between childhood maltreatment and mental health. These relationships between childhood maltreatment, trait emotional intelligence, and depression and anxiety were confirmed by Zhao et al. (2021). Also, individuals who had

experienced childhood maltreatment, and reported symptoms of anxiety and depression, also reported higher levels of resilience with greater trait emotional intelligence, support from friends, and spirituality (Howell & Miller-Graff, 2014).

The connection between trait emotional intelligence and self-esteem was first investigated by Schutte et al. (2002). In their research they showed that trait emotional intelligence was positively associated with self-esteem. These researchers also found that when a negative mood was provoked in participants, individuals with higher trait emotional intelligence did not experience as large a decrease in self-esteem and positive mood as individuals low in trait emotional intelligence. Further research has shown that trait emotional intelligence works to increase self-esteem (Cheung et al., 2015a) and that self-esteem has a positive effect on trait emotional intelligence (Cheung et al., 2015b).

Other researchers have investigated the relationship between self-esteem, trait emotional intelligence, and symptoms of depression or anxiety. Guil et al. (2019) found that trait emotional intelligence mediated the relationship between self-esteem and both state and trait anxiety. Gardner and Lambert (2019) found that higher levels of self-esteem and trait emotional intelligence were associated with lower levels of depression.

The literature search did not reveal any studies of the relationship between trait emotional intelligence and adult romantic relationship trust, but research does show that trait emotional intelligence is associated with romantic relationship satisfaction and love. A meta-analysis using twenty-four studies found a moderate association between trait emotional intelligence and romantic relationship satisfaction of .32. Several studies used the actor-partner model to investigate how romantic partners affect each other in their

levels of trait emotional intelligence and romantic relationship satisfaction. In each study one's own trait emotional intelligence was related to one's own level of romantic relationship satisfaction (actor effects) and no partner effects were found (Wollny et al., 2020; Zeidner et al., 2013). Findings by Zeidner et al. (2013) also suggest that trait emotional intelligence might be more predictive of romantic relationship satisfaction than ability emotional intelligence. Zeidner and Kaluda (2008) also found that one's own level of trait emotional intelligence was related to one's own level of love and no partner effects.

Summary and Conclusion

This literature review has shown that trust and other aspects of romantic relationship success are associated with childhood maltreatment. There is also evidence that childhood maltreatment has a negative association with self-esteem, and self-esteem is often beneficial for romantic relationships. Childhood maltreatment also appears to have a negative relationship with trait emotional intelligence. Trait emotional intelligence appears to have a positive relationship with romantic relationship quality and it is reasonable to think that it is related to adult romantic relationship trust. This study fills the gap in the literature for how self-esteem and trait emotional intelligence are used as cognitive resources to reinforce trust in adult romantic relationships for people who experienced childhood maltreatment. In Chapter 3, I will describe how this study was conducted.

Chapter 3: Research Method

The purpose of this quantitative study was to test whether the different kinds of childhood maltreatment have varying relationships with adult romantic relationship trust. Another purpose for the study was to evaluate the relationships between childhood maltreatment, trust, self-esteem, and trait emotional intelligence. Adult romantic relationship trust was tested as the criterion variable, and childhood maltreatment was the predictor variable, with self-esteem and trait emotional intelligence as possible mediating variables. Moderated mediation also was investigated for whether self-esteem and trait emotional intelligence act as modifiers of the mediated relationship between childhood maltreatment and adult relationship trust. In this chapter, I describe the strategy for data collection, sampling, and recruitment. Further details about the instruments are provided as well as the data analysis plan. Finally, threats to validity and ethical concerns are discussed.

Research Design and Rationale

In this study, the proposed predictor variable was childhood maltreatment, and the criterion variable was trust in adult romantic relationships. The intervening variables to be investigated were self-esteem and trait emotional intelligence. I collected the data on these variables using a quantitative survey design. This design is the best strategy to collect the data needed to address my research questions because self-report surveys provide insights into how individuals are experiencing their romantic relationships.

Methodology

Population

The target population for this study was individuals aged 18 years and over who are in romantic relationships. I recruited participants from Amazon's Mechanical Turk crowdsourcing platform (https://www.mturk.com). Estimates as recently as 2018 show the active number of Mechanical Turk members in the United States as 226,500 (Robinson et al., 2019). Of members who have completed tasks, 83,160 were unique members, and 57,790 were new members (Robinson et al., 2019). This Mechanical Turk participant pool appeared to be large enough for the purposes of this study.

Sampling and Sampling Strategy

Recruiting the sample through the Mechanical Turk online community has several benefits, the first being there are no geographic limitations in collecting data online. I live in a rural area, and collecting a large enough sample size is difficult without tapping friends, coworkers, and students that I teach. Also, using online data collection removes the limitation of social distancing and other complications that have arisen due to the COVID-19 health crisis.

The survey was created in the online survey platform SurveyMonkey (https://www.surveymonkey.com) and then posted to Mechanical Turk. Members of the Mechanical Turk community were made aware of the survey task and completed the survey if they wanted to and if they matched the sampling criteria. The sampling frame was individuals aged 18 and older who are in stable relationships, which was defined as being exclusively together for one month or longer. Another criterion was that

participants needed to be competent English speakers. The predictor for this study is

childhood maltreatment, so some portion of the sample also should have some experience

of childhood maltreatment. This criterion was not included as part of the sample frame so

that the sample shows a broad degree of variability in this regard and potential

participants do not self-select out due to this criterion. The survey was posted to the

Amazon Mechanical Turk platform, and members of this community volunteered to

participate.

Several considerations are a part of the power analysis and the subsequent sample

size to be recruited. *Power* refers to the ability to rightfully conclude that a result was not

due to chance, decreasing the probability of a Type II error (Burkholder et al., 2020).

Burkholder et al. (2020) recommended that more power is better and suggested that the

power level should be at least .80. The level of power for a study is based on the alpha

level, effect size, and sample size (Meyers et al., 2006). There is an inverse relationship

between power and alpha level, so increasing alpha level (e.g., from .05 to .01) also

means decreasing levels of power; therefore, the two levels must be balanced (Meyers et

al., 2006). The alpha level determines the probability of making a Type I error, which is a

false positive conclusion (Burkholder et al., 2020). The third factor, effect size, refers to

the strength of the result—whether small, medium, or large—and should be based on the

relevant research (Burkholder et al., 2020). In this literature, I found very few power

analysis discussions, but Don et al. (2019) showed effect sizes ranging from low (.04) to

medium (.61). In order to have a smaller effect size, one's sample needs to be larger, so

for the purposes of this study the effect size used for power analysis was .30, which is a

small to medium effect size. The alpha level for the power analysis is .05 as a good

balance with the power level.

G*Power (Faul et al., 2009), a statistical power calculation software, was used for

this power analysis (www.psychologie.hhu.de). I set the settings for the a priori type of

power analysis, and the test family was F tests. The statistical test was linear multiple

regression, fixed model: R^2 duration from zero. I also entered three predictor variables

(childhood maltreatment, self-esteem, and trait emotional intelligence). The calculation

resulted in a sample size of 67 participants. The research in childhood maltreatment

literature suggests that around 30% of participants report some level of childhood

maltreatment (Godbout et al., 2017; Nguyen et al., 2017). This being the case, 223

participants needed to be recruited to have 67 who report childhood maltreatment.

Procedures for Recruitment, Participation, and Data Collection

Participants were recruited through Amazon's Mechanical Turk, a crowdsourcing

website that contacts individuals to perform tasks, such as completing research surveys or

experiments (Sheehan, 2018). I posted the survey for this study to Mechanical Turk, and

individuals were invited to complete this survey. Demographic information that were

collected included the kind of relationship (e.g., married or dating) and race or ethnic

group identity. Whether the participant is male, female, or non-binary and whether one's

partner is male, female, or non-binary was also in the demographic information, which

appeared at the end of the survey.

Several procedures were undertaken to ensure that attentive participants were

attracted to this study (Sheehan, 2018). To participate in this study, participants needed to

read the informed consent form. Special directions were provided near the end of this document to ensure that participants would not simply scroll to the bottom of the page and accept. Data were collected through online surveys, and then participants were asked whether they had any problems with the survey. Participants were also reminded that if any of the questions caused emotional pain they should seek a therapist to talk with or perhaps reach out to a hotline, the phone number of which was provided.

Instrumentation

The study survey was composed of several scales. The Trust Scale (Rempel et al., 1985) was developed as an 18-item scale composed of partner predictability, dependability, and faith in the partner for the future subscales. Participants responded to these items using a 7-point Likert scale (1= *strongly disagree* to 7= *strongly agree*). Trust scores were calculated by adding the item scores together. The Cronbach alpha for this measure was .85 (Rempel et al., 1985), and the Cronbach alpha was calculated in this study and will be presented in Chapter 4. This instrument has been published in the research literature, so permission for its use is not necessary.

The Trust Scale is appropriate for this study because it is based on a conceptualization of trust based on responsiveness of the couple to each other's needs (Rempel et al., 1985). Another reason to use this scale was that it has been found to be highly reliable across various situations and different samples. In one study involving individuals, the Cronbach's alpha for the Trust Scale was .81 (Baugh et al., 2019). Another study involving committed couples in the Netherlands found a Cronbach's alpha of .83 (Righetti & Visserman, 2018). Among a sample of couples drawn from

undergraduates at a large university, the Cronbach alpha for men ranged from .83 to .90 and .74 to .90 for women across two experiments (Campbell et al., 2010). In a study of married and cohabiting couples, the Cronbach's alpha was .89 for men and .91 for women (Shallcross & Simpson, 2012). The reliability of this measure and its utility among different samples of couples support the use of the measure.

The Childhood Trauma Questionnaire – Short Form (CTQ-SF; Bernstein, et al., 2003) has five scales including physical, sexual, and emotional abuse, as well as physical and emotional neglect with five questions for each subscale. Participants will respond to items on a 5-point Likert scale (1= *never true* to 5 = *very often true*). Higher scores for each subscale indicate higher scores on the respective construct. For the overall score, a higher score indicates higher levels of maltreatment. The CTQ-SF also includes three items that compose a Minimization/Denial validity scale used to detect underreporting of maltreatment (Bernstein et al., 2003). In this scale, a score of 1 or higher would be a sign that reporting bias might have occurred. The alpha coefficients for the five scales range from .61 for physical neglect to .95 for sexual abuse. Cronbach alphas were calculated in this study and will be presented in Chapter 4.

The CTQ-SF (Bernstein et al., 2003) has been used with several different samples and in different combinations of subscales. The samples for which this scale has been used include college undergraduates (Kapeleris & Paivio, 2011; Lassri et al., 2016), marriage partners (DiLillo et al., 2009), committed romantic relationships (Baugh et al., 2019), and relationship couples in Germany (Miano et al., 2018). The emotional abuse and emotional neglect subscales have been used separately (Kapeleris & Paivio, 2011)

resulting in alpha scores of .86 and .90, respectively. These two subscales have also been

used in a combined score of emotional maltreatment having an alpha of .82 (Lassri et al.,

2016) and .95 (Baugh et al., 2019). The abuse subscales (physical abuse, emotional

abuse, and sexual abuse) and neglect subscales (physical neglect and emotional neglect)

have also been combined, resulting in alpha scores of .88 for the neglect composite and

.85 for the abuse measure (Miano et al., 2018). One study of college students in Quebec,

Canada, conducted by Paradis and Boucher (2010), showed alpha coefficients of .60 for

physical neglect, .82 for physical abuse, .84 for emotional abuse, and .88 for emotional

neglect. The overall score combining the five subscales has also been used, resulting in

an alpha score of .81 (DiLillo et al., 2009). The diversity of the samples used and the

various combinations of subscales that have been used illustrate the flexibility of this

measure as well as its reliability.

　　One goal of this study was to investigate whether forms of maltreatment vary in

their relationship to trust or the other intervening variables. A literature review by

Reyome (2010) showed that children who experienced emotional maltreatment were

more likely to experience difficulties in peer and romantic relationships. DiLillo et al.

(2009) found that, for husbands, marital satisfaction was affected by experiences of

childhood physical abuse, psychological abuse, and neglect, but only neglect affected

satisfaction for wives. This research suggests different kinds of childhood maltreatment

could have varying relationships with adult romantic relationship trust. The CTQ-SF

(Bernstein et al., 2003) was valuable to this study because of its consistent reliability as

well as the flexibility to use each subscale separately or combine them in an overall

childhood maltreatment score. The overall childhood maltreatment score was used for the current study. This measure is published in the research literature, and permission for its use is not needed.

The Rosenberg Self-Esteem scale (Rosenberg, 1965) is composed of 10 items, and participants responded on a 5-point Likert scale (1= *strongly disagree* to 5= *strongly agree*). This measure is published in the research literature, and permission for its use is not needed.

The Rosenberg Self-Esteem Scale is the most widely used and well-validated measure of self-esteem (Robins et al., 2001). In studies of undergraduate college students, the alpha coefficients have been .90 (McCarthy et al., 2017) and .89 (Murray et al., 2009). In one study involving undergraduate students in stable relationships, the alpha coefficient was .88 (Don et al., 2019). In other research focusing on couples in stable relationships, the alpha coefficients were .90 (Luerssen et al., 2017) and .89 (Righetti & Visserman, 2018). In one longitudinal study of individuals ranging in ages from 16 to 97 and across the years between 1988 and 2000, the alpha coefficients ranged from .83 to .86 (Orth et al., 2011). This instrument is appropriate for this study because it is reliable with only 10 items and has shown durability in use with individuals and relationship couples.

Trait emotional intelligence was measured using the Emotional Intelligence Scale (Schutte et al., 1998). This scale is composed of 33 items related to the evaluation and expression of emotions, the regulation of emotion, and the ability to use emotion. Participants responded to these items on a five-point Likert scale (1 = *strongly disagree*

to 5 = *strongly agree*). Scores were the total of these items added together. The

Cronbach's alpha for this measure was .90 in the initial study (Schutte et al., 1998), and

the Cronbach's alpha also will be calculated in the current study. This measure also

showed good test-retest reliability and discriminant validity (Schutte et al., 1998). This

instrument has been published in the research literature so permission for its use is not

necessary.

The Emotional Intelligence Scale is appropriate for this study because it includes

the key elements of emotional intelligence. This measure also shows good utility across

various participant groups. In one study of emotional intelligence in adolescents the

Cronbach's alpha was .89 (Gardner & Lambert, 2019). The Cronbach's alpha for this

scale also reached .86 in a study of newlywed couples, and when the measure was

translated into Hebrew (Zeidner & Kaluda, 2008).

Data Analysis Plan

The data analyses were conducted using IBM SPSS (Version 28; IBM, 2022). The

PROCESS (Version 3) macro (Hayes, 2022) that is available for IBM SPSS was used to

conduct the tests of mediation and moderated mediation. Data were collected

electronically, so the data set was examined for missing data or possible response sets

because it was possible that participants might not complete tasks correctly or not use

sufficient time to complete the surveys. This procedure is reported in Chapter 4. A timer

was integrated into the surveys to know the time it took for participants to complete the

surveys and tasks. Descriptive statistics were calculated, including histograms, to search

for outliers and look for missing items. Depending on the amount of missing data,

listwise deletion for some cases that did not successfully complete the survey may be used. In other situations, in which the amount of missing data was small, expectation–maximization (EM) imputation of the missing values was used. EM provides more realistic values than the overfitting that may occur with other strategies (Tabachnick & Fidell, 2001). The decision to use imputation depends on the results of the descriptive analysis (Meyers et al. 2006). The final decision about how to deal with missing data was made as the data were evaluated.

Two assumptions for multivariate statistical analyses are for a normal distribution of variable values and homoscedasticity, which also assumes the normal distribution of the dependent variable across the independent variables (Meyers et al., 2006). I graphed data and conducted analyses of skewness to investigate whether the data violate these assumptions. Data transformations may be conducted as a result of these analyses in order to address violations of these assumptions. These processes will be reported in Chapter 4.

Research questions and hypotheses arose out of a review of the literature in the areas of adult romantic relationship trust, childhood maltreatment, trait emotional intelligence, and self-esteem.

Research Question 1: What is the association between childhood maltreatment and adult relationship trust?

$H_0 1$: Childhood maltreatment is not associated with lower levels of adult relationship trust.

$H_a 1$: Childhood maltreatment is associated with adult relationship trust.

The answer to Research Question 1 was found by conducting a bivariate correlation. This relationship was also tested through multiple linear regression analyses arising out of Research Questions 3 to 5.

Research Question 2: To what extent is there a difference in the relationship between subtypes of childhood maltreatment (emotional, physical, and sexual maltreatment) adult romantic relationship trust?

$H_0$2: There will be no difference in the associations between childhood emotional maltreatment, physical maltreatment, and sexual maltreatment and adult romantic relationship trust.

H_a2: There will be a difference in the associations between childhood emotional maltreatment, physical maltreatment, and sexual maltreatment and adult romantic relationship trust.

Research Question 2 was addressed through performing a simultaneous regression analysis and observing if one kind of maltreatment predicts adult romantic relationship trust more than the others.

Research Question 3: Does self-esteem mediate the relationship between childhood maltreatment and adult romantic relationship trust?
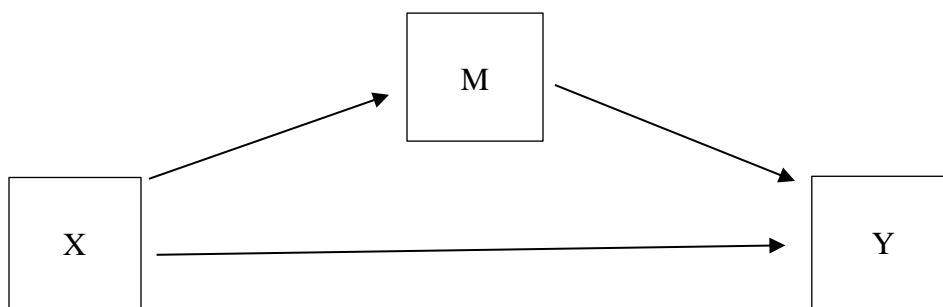
$H_0$3: Self-esteem does not mediate the relationship between childhood maltreatment and adult romantic relationship trust.

H_a3: Self-esteem does mediate the relationship between childhood maltreatment and adult romantic relationship trust.

Research Question 3 was addressed by first completing correlation analyses. Based on the correlational analyses, self-esteem was entered into a multiple linear regression analysis to test mediation effects using the PROCESS macro. PROCESS provides bootstrapping iterations as a confidence measure.

Figure 1

Mediation Model Tested

Research Question 4: Does trait emotional intelligence mediate the relationship between childhood maltreatment and adult romantic relationship trust?

$H_0 4$: Trait emotional intelligence does not mediate the relationship between childhood maltreatment and adult romantic relationship trust.

$H_a 4$: Trait emotional intelligence mediates the relationship between childhood maltreatment and adult romantic relationship trust.

Research Question 4 was addressed through performing correlation analyses. Based on the correlational analyses trait emotional intelligence was entered into a multiple linear regression analysis to test the mediation effects using the PROCESS macro. PROCESS provides bootstrapping iterations as a confidence measure.

Research Question 5: To what extent does self-esteem influence the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence?

$H_0$5: Self-esteem will not moderate the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence.

H_a5: Self-esteem moderates the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence.

Research Question 5 was addressed through testing models provided by the PROCESS macro. A variable which multiplies the childhood maltreatment scores with the self-esteem scores was calculated and then this variable was entered in a multiple linear regression analysis with the trait emotional intelligence and self-esteem variables. Support for the alternative hypothesis was found by comparing the variance results of the regression analysis.

Figure 2

The Model of Moderated Mediation
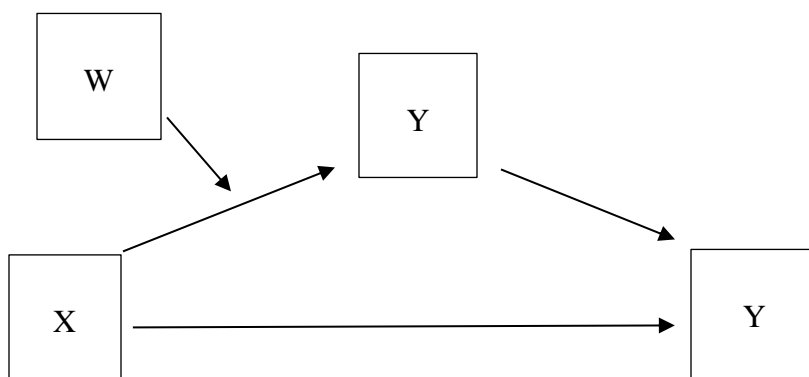
Threats to Validity

       Threats to internal validity are concerned with whether the changes observed between the independent variables and outcome variables are due to the independent variable or other factors (Burkholder et al., 2020). Several threats to internal validity were related to the survey, and participants' experiences completing the survey. The history threat could have an impact as participants complete the survey. While they answered the survey questions, they may have been reminded of certain events contributing to how they responded to other measures of the survey. Maturation is another similar concern. As participants completed the questions, they might have changed because of the question content. The order in which participants completed the surveys could have also been related to contextual threats to internal validity.

       Other relevant threats to internal validity regard researcher bias and participant issues of selection and mortality. Throughout the materials provided to the participants during recruitment and informed consent, I was careful that my biases about expected findings were not revealed. If the materials provided too much information about the goals of the study, participants could be influenced to respond to survey items in certain ways. It was also possible that participants who volunteered for this study did so for reasons that set them apart from individuals who chose not to participate. Participants who chose to withdraw also could have self-selected out for certain reasons.

       Threats to external validity are related to achieving similar findings across different contexts (Burkholder et al., 2020). A primary concern in this regard is how participants recruited through Mechanical Turk were different from participants recruited

through other strategies. Were these participants significantly different from participants recruited in a community, for example? The pool of participants available through Mechanical Turk is about 75% Caucasian and more politically liberal but is more diverse than typical college samples (Sheehan, 2018). These characteristics do improve the generalizability of the findings in some ways, but if the initial sample is missing an important level of diversity, the survey could be rereleased to Mechanical Turk and people who have already completed the survey are prevented from completing it again. In the second release of the survey, I could make a more specific sample frame. This strategy was not used in the current study but could be used in future research studies.

Another potential threat to external validity is treatment variation (Burkholder, et al., 2020). Perhaps participants did not remember being maltreated as children, or maybe they embellished their reports of mistreatment because of a handful of notable maltreatment experiences that they had. It would be unethical to intentionally evoke memories of maltreatment further than presenting the survey items. On the other hand, the childhood maltreatment survey already includes two items to judge the social desirability of individuals completing the survey. These items could be used to evaluate the quality of participants' responses.

Ethical Procedures

The APA guidelines for ethical treatment of human subjects, as enforced by the Walden University Institutional Review Board (IRB), were followed throughout this study. My IRB approval number for this study was 10-21-22-0528178. One ethical consideration for this study is respect for participants (Burkholder et al., 2020).

Participants were provided with informed consent during the recruitment process and reminded throughout the study that they may withdraw from the study at any time without any penalty. Withdrawal of participants while completing this survey could have been an issue because of the discomfort that some participants might feel as they answer questions about childhood maltreatment, but few such cases were observed in the data.

Another important ethical concern is anonymity and confidentiality of the data. The data were collected electronically through Amazon's crowdsourcing website Mechanical Turk. This is a secure website through which individuals are recruited to complete tasks such as surveys. Participants provided their user identification numbers to make sure that no one participated more than once, and participants I assigned a separate identifying number according to their order of participation for the data analysis process.

Debriefing is also important to the ethical treatment of participants. Considering that participants responded to items about childhood maltreatment, participants were provided with resources in the consent letter and the follow-up website to ensure participants were not emotionally harmed.

Summary

In Chapter 3, I described the quantitative nature of this study. Childhood maltreatment was the independent variable, adult romantic relationship trust was the dependent variable, and self-esteem and trait emotional intelligence were investigated as intervening variables. The CTQ-SF (Bernstein, et al., 2003), Trust Scale (Rempel et al., 1985), Rosenberg's Self-Esteem Scale (Rosenberg, 1965), and the Emotional Intelligence Scale (Schutte et al., 1998) were used to measure these variables. Considering the

sensitive nature of childhood experiences of maltreatment, care was taken so that

completing the survey related to this experience did not interfere with the rest of the

research procedure. Also, ethical considerations were taken for the emotional reactions

that some participants might have had to survey items. Because these data were collected

through the Mechanical Turk internet community the concern about anonymity and

confidentiality should be mitigated. This study was meant to address research questions

about relationships between childhood maltreatment, adult romantic relationship trust,

self-esteem, and trait emotional intelligence using regression analyses. The results of

these analyses testing my hypotheses will be reported in Chapter 4.

Chapter 4: Results

The purpose of this quantitative study was to test whether the different kinds of childhood maltreatment have varying relationships with adult romantic relationship trust. Another purpose was to evaluate the relationships between childhood maltreatment, adult romantic relationship trust, self-esteem, and trait emotional intelligence. Adult romantic relationship trust was the criterion variable, and childhood maltreatment was the predictor variable, with self-esteem and trait emotional intelligence as possible mediating variables. Moderated mediation was also investigated for whether self-esteem acts as a modifier of the mediated relationship between childhood maltreatment and adult relationship trust. In this chapter, I describe the pilot study I conducted, followed by a presentation of the data collection methods, data cleaning process, and the results of the data analyses associated with each of the research questions.

Pilot Study

Five participants completed the SurveyMonkey survey used to collect data in the present study. This pilot study was conducted to find grammar errors or typos, whether or not the survey contained clear instructions, and how long it would take participants to complete the survey. Pilot study responses were collected separately from the main study data and were not included in the main study data set or analysis. The members of the pilot study did not report any grammar errors or typos and indicated that the instructions were clear and helpful. The pilot study participants also reported that it took them around 20 minutes to complete the survey.

Data Collection

The survey was posted to SurveyMonkey, and data collection took place over 2 weeks, facilitated through the Amazon Mechanical Turk website. The first page of the survey was the consent form, where potential participants were asked if they understood the consent form and if they clicked "yes," they were allowed to continue to the survey. Participants were paid $4 for their time in completing the survey. Participants were also asked if they were in a dating relationship and whether they were proficient in English. Several attention-check questions were inserted throughout the survey to ensure that participants were paying attention. After participants completed the demographic questions at the end of the survey, they were given the opportunity to report any problems that they had with the questions or any part of the survey, and no problems were reported.

The initial data set included 271 participants, but upon review of the data, I found that 10 participants did not complete large portions of the survey, so I removed these participants. As a part of the criteria for being included in the study, participants needed to be proficient in English and needed to be in dating relationships. One person reported not being proficient in English and was also removed from the data set. Four participants reported not being in a dating relationship at the beginning of the survey, but in the demographics section at the end, they reported being married, living with their partner, or exclusively dating, so these participants remained in the data set. Perhaps there was some confusion about the initial criteria question. This resulted in a data set of 260 participants, which according to my power analysis was a sufficient number to run my analyses.

Results

Descriptive Statistics

The sample that was collected showed a broad range of age and relationship type. Table 1 provides a summary of the sample characteristics. The age of the sample ranged from 18 to 69 years old ($M = 34.58$ years, $SD = 9.96$). The age range with the largest number of participants was from 30 to 34 years old (35.8%), followed by age 25 to 29 years (18.1%). The overwhelming majority of participants were White (84.6%), while Asian people were 8.5% of the sample, African American participants were 2.7%, and Hispanics were 2.3% of the sample. Most of the sample was married (61.9%), while participants who were exclusively dating made up 22.3% of the sample. There were 11.9% of participants living with their partner, and 3.5% of participants were engaged to their partner.

Another concern about recruitment was whether a significant number of participants would report some level of childhood maltreatment. Bernstein & Fink (1998) provided cutoff scores for evaluating the severity of the maltreatment that was reported. Results showed that more than half of the sample reported severe maltreatment in physical abuse (61.5%), sexual abuse (60%), and physical neglect (65.4%). A little less than half of participants (40.8%) reported severe levels of emotional abuse and only 12.7% of the sample reported severe levels of emotional neglect. According to cross-cultural meta-analyses conducted by Stoltenborgh et al. (2015), the prevalence of emotional neglect is a little higher at 18.4%, but the prevalence of sexual abuse was 13%, physical abuse was 22.6%, emotional abuse was 36.3%, and physical neglect was 16.3%.

Table 1

Demographic Characteristics of the Sample (N = 260)

Variables	*n*	%
Gender		
Male	176	67.7
Female	83	31.9
Participant's age		
18 to 24	16	6.2
25 to 29	47	18.1
30 to 34	93	35.8
35 to 39	43	16.5
40 to 44	21	8.1
45 to 49	15	5.8
50 and over	23	8.8
Missing	2	0.8
Race or ethnicity		
African American	7	2.7
Hispanic	6	2.3
Asian	22	8.5
White	220	84.6
Prefer not to say	1	0.4
Missing	4	1.5
Kind of relationship		
Exclusively dating	58	22.3
Living together	31	3.5
Engaged	9	3.5
Married	161	61.9
Missing	1	0.4

These data indicate that the prevalence of childhood maltreatment among the current sample was much higher than other data have shown. The concern was that enough people in the sample would report higher levels of childhood maltreatment, but it could be that my problem is too many participants reported higher levels of childhood

maltreatment. This higher level of childhood maltreatment could have an impact on the external validity of the findings of this study.

Other issues of external validity could arise because of other characteristics of the sample. The racial or ethnic composition of the sample is largely White and most of the sample is married. These findings may not apply well to racial or ethnic minorities, or individuals in non-married relationships.

Missing Data

Following examination of the sample characteristics, it was important to address the issue of missing data. The Trust Scale was examined first. The overall trust score was calculated by summing the scores for all 17 items. Then, descriptive analyses were conducted for each Trust Scale item and the overall score, and missing data were found. In preliminary analyses of correlations between the three subscales of the Trust Scale (Predictability, Dependability, and Faith), I found that the Predictability subscale was negatively correlated with other trust subscales and positively correlated with maltreatment scales. Conceptually this did not make sense. When Rempel et al. (1985) first examined the Trust Scale, they found that the predictability questions were better indicators of volatility. As a result, four of the five items that make up the predictability subscale were reverse coded, then analyses were conducted again. These analyses showed the expected positive correlations between each of the subscales and the negative correlations with maltreatment. I conducted an analysis of the missing data and found that the missing data appeared to be random ($X^2 = 219.8$, $df = 205$, $p = .227$). For the MCAR test of randomness, the null hypothesis was that the data were missing at random. When

the significance level does not reach an alpha value of .05, then the null hypothesis is not rejected (Njeri-Otieno, n.d.). In this case the chi-square value did not reach statistical significance; therefore, I could conclude that the data were missing at random. I conducted an EM imputation of the missing values. EM provides more realistic values than the overfitting that may occur with other strategies (Tabachnick & Fidell, 2001).

After the imputation procedure was completed, the trust score was evaluated for the assumption of normality and reliability. Meyers et al. (2006) suggested that the conservative threshold for rejecting the assumption of normality of the trust score is ±0.5 and ±1.0 for the more liberal threshold. The skewness for the trust score was -.043 and the kurtosis was .961. These values show that the trust score data did fall in a normal distribution. The reliability of the Trust Scale also was evaluated, and the reliability of the trust score was .88 ($M = 103.6$, $SD = 10.2$).

I then turned my attention to the CTQ-SF. This measure provided subscales for emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect, as well as an overall score. Descriptive analyses were conducted, and missing data were also found for these scales. Little's MCAR test for missing at random (Njeri-Otieno, n.d.) showed that data were missing at random for this scale as well ($X^2 = 497.17$, $df = 476$, $p = .24$). I decided to go forward with another EM imputation.

The skewness, kurtosis, and reliability of the childhood maltreatment scales were then evaluated. As described earlier, skewness and kurtosis statistic values of less than one provides evidence that the assumption of a normal distribution can be sustained (Meyers, et al., 2006). For the overall CTQ-SF score, the skewness was -.73 and kurtosis

was -.42. Both statistics indicate a relatively normal distribution for these scores. The skewness value for the emotional abuse subscale was .002, and the value for kurtosis was -.89. For the physical abuse subscale skewness was -.15 and kurtosis was -1.1, and for sexual abuse skewness was -.07 and kurtosis was -1.1. The skewness for emotional neglect was .21 and kurtosis was -.42, and for physical neglect skewness was -.74 and kurtosis was .15. These skewness and kurtosis values are within tolerance for the assumption of a normal distribution of data. The overall CTQ-SF and subscales also showed desirable levels of reliability. The Cronbach's alpha for the total CTQ-SF (25 items) was .92, $M = 67.71$, $SD = 18.36$. The reliability values for the subscales were .86 for emotional abuse ($M = 14.01$, $SD = 5.30$) for five items; for physical abuse $\alpha = .89$, $M = 14.11$, $SD = 5.43$ for five items; sexual abuse $\alpha = .92$, $M = 13.80$, $SD = 5.92$; emotional neglect $\alpha = .80$, $M = 12.59$, $SD = 4.18$ for five items; and physical neglect $\alpha = .50$, $M = 13.12$, $SD = 3.52$ with five items.

The score for trait emotional intelligence was calculated and descriptive analyses of these scores were conducted. These analyses revealed 32 missing scores, indicating the presence of missing data. I ran an analysis of the missing data to determine whether the missing data were random. The results of this analysis showed a Chi-square of 694.1, $df = 661$, $p = .180$, which indicated that the missing data were random. I did not want to remove these cases from the data set, so I decided to conduct an EM imputation of the missing values. The skewness for the emotional intelligence score was -.72 and kurtosis was 1.5. These values are within tolerance for a normal distribution. The reliability for the emotional intelligence score was .90 ($M = 125.87$, $SD = 14.04$).

I then turned my attention to the self-esteem scale. After I ran descriptive statistics, I found that there were data missing for six cases. I ran a test for the missing data and found that they were not missing at random (X^2 = 104.7, df = 53, p < .01). One participant did not answer both Questions 2 and 6 accounting for the lack of randomness, I suspect. I decided to go forward with replacing the missing data using EM. Afterward, the skewness for the self-esteem scale was .55 and kurtosis was .70, which are within tolerance to assume a normal distribution. The reliability of the self-esteem scale was .64, M = 32.6, SD = 5.2.

Table 2

Means, Standard Deviations, and Correlations of Variables

Variable	*M*	*SD*	Childhood maltreatment	Trust	Self-Esteem	Emotional Intelligence
Childhood maltreatment	67.71	18.35	-			
Trust	58.68	7.57	-.50**	-		
Self-Esteem	32.64	5.16	-.50**	.39**	-	
Emotional intelligence	125.87	14.04	-.25**	.41**	.35**	-

*p < .05. **p < .01. ***p < .001.

Research Question 1

The first research question asked to what extent childhood maltreatment and adult romantic relationship trust are associated with each other. A Pearson correlation was computed using the total childhood maltreatment score and total trust score and the result was a negative correlation between the two variables, r = – .50, p < .001. This correlation indicated that increases in childhood maltreatment were met by decreases in adult

romantic relationship trust. According to this finding, I rejected the null hypothesis that

childhood maltreatment is not correlated with adult romantic relationship trust and

retained the alternative hypothesis.

Research Question 2

In addition to the first research question there was also the question as to whether

there was a difference between correlations between adult romantic relationship trust and

the different subtypes of childhood maltreatment, such as emotional and physical

maltreatment, physical and emotional neglect, and sexual maltreatment. I expected adult

romantic relationship trust to be more highly correlated with emotional maltreatment than

the other forms of maltreatment. Trust was negatively correlated with each of the five

subscales of childhood maltreatment. Trust was negatively correlated with emotional

abuse $r = -.38$, $p < .001$, and with physical abuse $r = -.39$, $p < .001$. Trust was also

negatively correlated with sexual abuse $r = -.41$, $p < .001$. Emotional neglect was also

negatively correlated with trust $r = -.26$, $p < .001$ and physical neglect was negatively

correlated with trust $r = -.44$, $p < .001$.

In addition to the correlational analyses, these associations were tested using

simultaneous regression. Each subscale for childhood maltreatment was regressed on

adult romantic relationship trust as the dependent variable. The overall variance predicted

by the childhood maltreatment subscales was statistically significant ($R = .55$, $p < .001$).

The results in Table 2 show that emotional neglect was the strongest predictor of

romantic relationship trust. The null hypothesis for Research Question 2 was that there

would be no differences in the associations between adult romantic relationship trust and

the different kinds of childhood maltreatment. According to these results, I rejected the

null hypothesis, and retained the alternative hypothesis that adult romantic relationship

trust has different associations with each of the different subtypes of childhood

maltreatment. It appeared that emotional neglect was the best predictor of adult romantic

relationship trust controlling for the other subscales of childhood maltreatment.

Table 3

Simultaneous Regression Results for Childhood Maltreatment Subscales and Adult
Romantic Relationship Trust

Variable	B	β	*SE*	*p*
Constant	76.45		1.87	
Emotional abuse	.006	.004	.166	.972
Physical abuse	-.169	-.121	.169	.318
Sexual abuse	-.374	-.293	.138	.007
Emotional neglect	-.550	-.304	.108	<.001
Physical neglect	-.258	-.120	.169	.129

Research Question 3

Research question 3 asked whether self-esteem mediated the relationship between

childhood maltreatment and adult romantic relationship trust. According to Baron and

Kenny (1986), complete mediation occurs when the independent variable predicts the

dependent variable, the independent variable significantly predicts the mediating variable

(path a), the mediating variable significantly predicts the dependent variable (path b), and

when the mediating variable enters the relationship between the independent and

dependent variable the total effect reduces significantly to non-significance. In the new

paradigm promoted by Hayes (2022), the overall model is tested for statistical

significance rather than each path. This test of significance is conducted through the

percentile bootstrapping method with a confidence interval of 95% (Hayes, 2022).

Bootstrapping is a resampling procedure in which a statistic of interest is calculated over

and over, in the case of the PROCESS macro 5000 times, and inferences are made based

on confidence intervals provided. This strategy provides much more flexibility and yields

inferences that are more likely to be accurate than other strategies (Hayes, 2022). In the

old paradigm of Baron and Kenny, each pathway is tested separately but this is not

necessary using the PROCESS macro created by Hayes.

In line with the Baron and Kenny (1986) paradigm, an initial test of the direct

effect of childhood maltreatment on adult romantic relationship trust showed that

childhood maltreatment was a statistically significant predictor of adult relationship trust.

The degree that childhood maltreatment predicted adult relationship trust was $b = -.21$,

$t(259) = -9.30$, $p < .001$. Using the PROCESS macro in the current study, the results

showed that the overall model was statistically significant, meaning that self-esteem did

mediate the relationship between childhood maltreatment and adult romantic relationship

trust. The results for each path are provided in Figure 3. The results showed that path a

between childhood maltreatment and the mediator, self-esteem was statistically

significant, $F(1, 258) = 85.68$, $p < .001$, $R^2 = .25$. The degree to which childhood

maltreatment predicted self-esteem in this model was $b = -.14$, $t(258) = -9.26$, $p < .001$,

95% CI [-.17, -.11]. The results also showed that the degree that childhood maltreatment

and the mediator self-esteem predicted the dependent variable adult romantic relationship

trust was significant, $F(2, 257) = 48.78$, $p < .001$, $R^2 = .28$. The degree to which self-

esteem predicted trust was $b = .26$, $t(257) = 2.92$, $p < .01$, 95% CI [.09, .44]. Childhood

maltreatment as a predictor of adult romantic relationship trust, controlling for the mediator self-esteem, was also significant, $b = -.17$, $t(257) = -6.71$, $p < .001$, 95% CI [-.22, -.12].

Figure 3

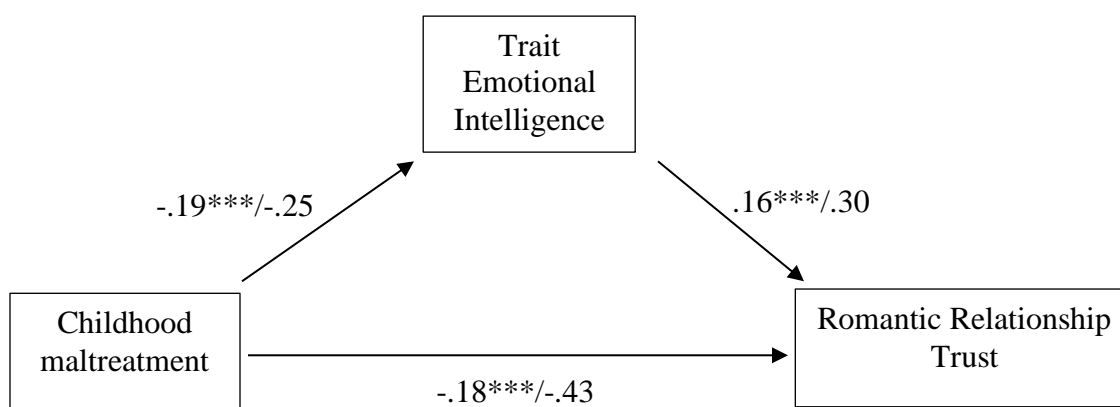*Coefficients for Paths for Research Question 3*
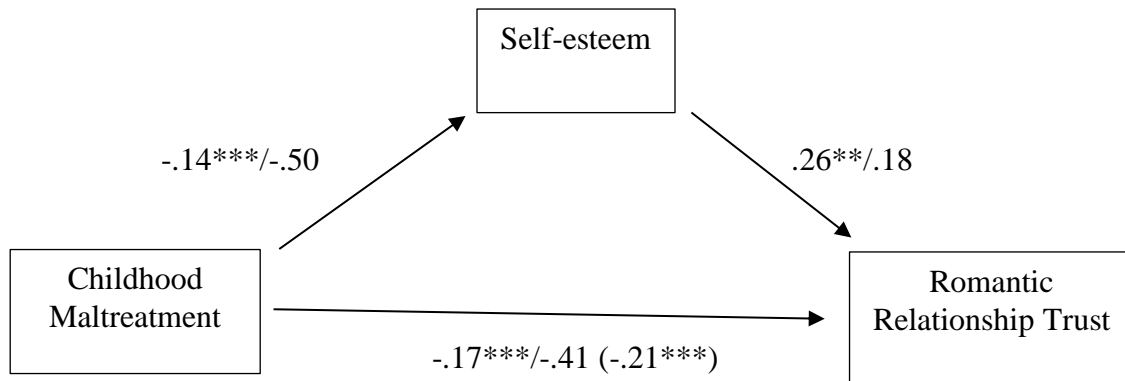
Note. The non-mediated relationship between childhood maltreatment and adult romantic relationship trust is found in parentheses. The standardized estimates are also shown for each path.

* $p < .05$. **$p < .01$. ***$p < .001$.

The results of the bootstrap resampling confidence intervals showed that self-esteem did mediate the relationship between childhood maltreatment and adult romantic relationship trust. The overall test of the model was statistically significant, but considering that both the indirect effect and direct effect were significant, partial mediation might be a better description. According to these results, I rejected the null hypothesis that self-esteem does not mediate the relationship between childhood maltreatment and adult romantic relationship trust and retained the alternative hypothesis.

Research Question 4

Research question 4 asked whether trait emotional intelligence mediated the relationship between childhood maltreatment and adult romantic relationship trust. The results showed that the model was statistically significant, according to Hayes' (2022) criteria using the PROCESS macro. More specifically, the results showed that path a between childhood maltreatment and the mediator, trait emotional intelligence was statistically significant, $F(1, 258) = 185.82$, $p < .001$, $R^2 = .06$. The degree that childhood maltreatment predicted trait emotional intelligence in this model was $b = -.19$, $t(258) = -4.07$, $p < .001$, 95% CI [-.28, -.10]. The results also showed that the degree that childhood maltreatment and the mediator trait emotional intelligence predicted the dependent variable adult romantic relationship trust was significant, $F(2, 257) = 65.44$, $p < .001$, $R^2 = .34$. The degree that trait emotional intelligence predicted adult romantic relationship trust was $b = .16$, $t(257) = 5.79$, $p < .001$, 95% CI [.11, .22]. Childhood maltreatment as a predictor of adult romantic relationship trust, controlling for the mediator trait emotional intelligence also was significant, $b = -.18$, $t(257) = -8.14$, $p < .001$, 95% CI [-.22, -.13].

Figure 4

Model Coefficients for Research Question 4

Note The unstandardized coefficients are provided as well as the standardized

coefficients for each path.

*$p < .05$. **$p < .01$. ***$p < .001$.

  According to these results, trait emotional intelligence mediated the relationship

between childhood maltreatment and adult romantic relationship trust. The overall test of

the model using the bootstrapping confidence intervals was statistically significant but

considering that both the indirect effect and direct effect were significant, partial

mediation might be a better description. According to these results, I rejected the null

hypothesis that trait emotional intelligence does not mediate the relationship between

childhood maltreatment and adult romantic relationship trust, and retained the alternative

hypothesis.

Research Question 5

  Research Question 5 asked to what extent did self-esteem influence the indirect

effect of childhood maltreatment on adult romantic relationship trust through trait

emotional intelligence. According to the index of moderated mediation provided in

PROCESS (Hayes, 2022), this model was statistically significant. More specifically, the

results showed that path a between childhood maltreatment and the mediator, trait

emotional intelligence was statistically significant, $F(3, 256) = 16.35$, $p < .001$, $R^2 = .16$.

The degree that childhood maltreatment predicted trait emotional intelligence in this

model was $b = .76$, $t(256) = 2.8$, $p < .01$, 95% CI [.23, 1.30]. The interaction term

between self-esteem and childhood maltreatment also was statistically significant, $b = -$

$.03$, $t(256) = - 3.13$, $p < .01$, 95% CI [-.04, -.01].

Figure 5

Model Coefficients for Research Question 5
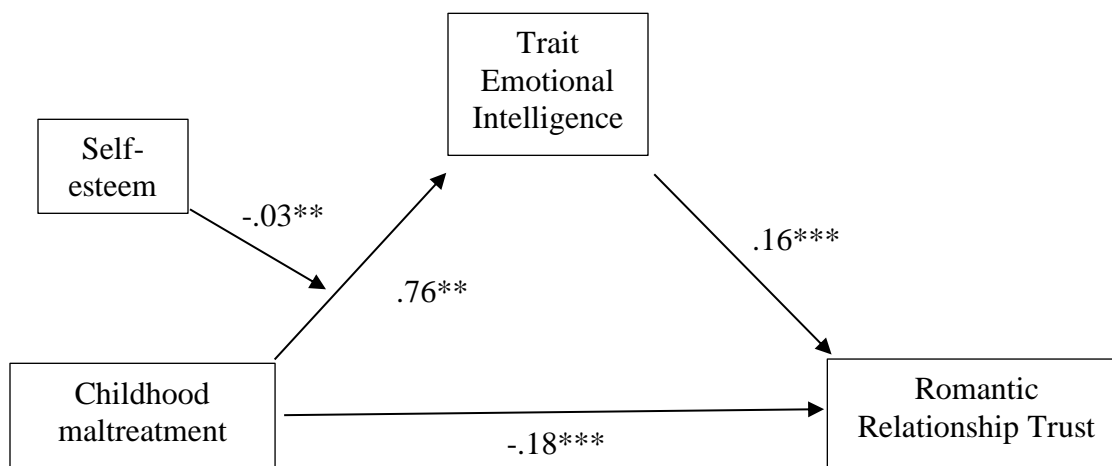
* $p < .05$. **p $< .01$. ***p $< .001$.

The results also showed that the degree that childhood maltreatment and the

mediator trait emotional intelligence predicted the dependent variable adult romantic

relationship trust was significant, $F(2, 257) = 65.44$, $p < .001$, $R^2 = .34$. The degree to

which trait emotional intelligence predicted adult romantic relationship trust was $b = .16$,

$t(257) = 5.79$, $p < .001$, 95% CI [.11, .22]. Childhood maltreatment as a predictor of adult romantic relationship trust, controlling for the mediator trait emotional intelligence, was also significant, $b = -.18$, $t(257) = -8.14$, $p < .001$, 95% CI [-.22, -.13].

According to the bootstrapping confidence interval results, self-esteem does moderate the mediating effect of trait emotional intelligence between childhood maltreatment and adult romantic relationship trust. The overall test of the model was statistically significant but considering that both the indirect effect and direct effect are significant, partial mediation might be a better description. According to these results, I rejected the null hypothesis that self-esteem does not influence the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence and retained the alternative hypothesis.

Upon further examination of the results shown in Figures 4 and 5 of the testing of these two different models, the addition of the interaction term between childhood maltreatment and self-esteem appears to have changed the value of this path from a negative to positive. This path between childhood maltreatment and trait emotional intelligence still has a negative valence, however, because multiplying the coefficient -.03 by .76 will yield a negative value. To gain a better understanding of the moderation effect of self-esteem, the relationship between childhood maltreatment and trait emotional intelligence for three different levels of self-esteem was graphed. Figure 6 shows how self-esteem scores at the mean and one standard deviation above and below the mean vary based on levels of childhood maltreatment. In individuals with low self-esteem scores on trait emotional intelligence increased as childhood maltreatment also increased.

For individuals high in self-esteem, trait emotional intelligence decreased as childhood maltreatment scores increased. A simple slopes tests revealed a significant negative association between childhood maltreatment and trait emotional intelligence for high levels of self-esteem, $B = -.20$, $SE = .07$, $t = -3.1$, $p < .05$. The other slopes were not statistically significant (see Table 4). I hypothesized that self-esteem would moderate this indirect effect between childhood maltreatment and trait emotional intelligence. These results of a greater moderating effect for higher self-esteem as compared to mean or lower levels of self-esteem was unexpected. Yet, results showing differences at varying levels of self-esteem are also found in the literature, as will be discussed in Chapter 5.

Figure 6
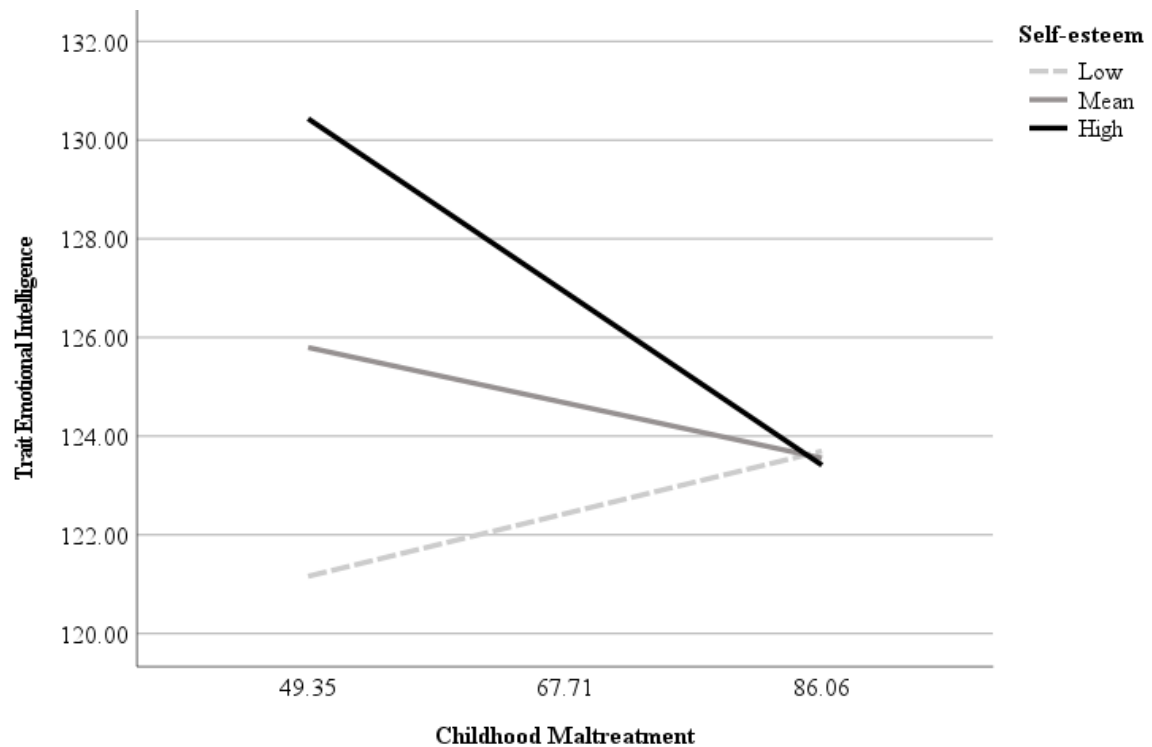
Moderation Effect of Self-Esteem

Table 4

Results of the Simple Slopes Analysis

Moderator levels Self-esteem	Estimate	Effect	*SE*	95% confidence interval		*t*	*p*
				Lower	Upper		
Mean – 1 *SD*	28.92	.03	.06	-.09	.15	.54	.59
Mean	31.00	-.02	.05	-.12	.09	-.37	.71
Mean + 1 *SD*	38.2 4	-.20	.-7	-.33	-.07	-3.10	.00

Summary of Findings

Data were collected from 260 participants through Amazon Mechanical Turk.

Hypotheses were tested using correlational and multiple regression analyses. Childhood

maltreatment was found to be negatively correlated with adult romantic relationship trust,

meaning as levels of maltreatment during childhood increased, levels of trust in adult

romantic relationships decreased. Out of the five subscales of childhood maltreatment

(physical abuse, emotional abuse, sexual abuse, emotional neglect, and physical neglect),

emotional neglect and sexual abuse were statistically significant predictors of adult

romantic relationship trust. Self-esteem and trait emotional intelligence mediated the

relationship between childhood maltreatment and adult romantic relationship trust. Self-

esteem also moderated the mediation effect of trait emotional intelligence between

childhood maltreatment and adult romantic relationship trust. These results,

interpretations, and implications for social change will be further discussed in Chapter 5.

Additionally, a discussion of the strengths and limitations of the study, theoretical

considerations, recommendations for future action and research, and a summary of the

study will conclude Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to test the association between childhood maltreatment and adult romantic relationship trust, and whether the types of childhood maltreatment had varied relationships with adult romantic relationship trust. In evaluating the association between childhood maltreatment and adult romantic relationship trust, another goal of this study was to explore self-esteem, and trait emotional intelligence as mediators for this association. Moderated mediation was also investigated for whether self-esteem acted as a modifier of the mediated relationship between childhood maltreatment and adult relationship trust.

My findings were that childhood maltreatment was negatively associated with adult romantic relationship trust. Of the types of childhood maltreatment, emotional neglect was the best predictor of adult romantic relationship trust. The results of the current study also showed that self-esteem and trait emotional intelligence mediated this association. I also found that self-esteem moderated the indirect effect of trait emotional intelligence between childhood maltreatment and adult romantic relationship trust.

Interpretation of the Findings

Childhood Maltreatment and Adult Romantic Relationship Trust

The focus of this research study was the association between childhood maltreatment and adult romantic relationship trust. The results of this study showed that childhood maltreatment was negatively associated with adult romantic relationship trust. These findings were consistent with previous research showing that childhood maltreatment was negatively associated with relationship satisfaction (Nguyen et al.,

2017) and with research by Baugh et al. (2019), who found that a childhood maltreatment score combining emotional abuse and emotional neglect was negatively associated with adult romantic relationship trust. However, the findings of the current study differed from those of Baugh et al. in that the researchers combined emotional abuse and emotional neglect scores for their total score, whereas my findings suggested that emotional neglect was a better predictor of adult romantic relationship trust than emotional abuse. One explanation for this finding is that the emotional neglect questions and the Trust Scale questions ask about caring behaviors in response to a person's needs, which could inflate this association. Other research (Reyome, 2010) emphasized the significance of emotional maltreatment for relationships and my findings supplement this research by showing the importance of emotional neglect. Further research about the significance of emotional neglect for adult relationships is warranted.

Self-Esteem

In the current study, I found that self-esteem was negatively correlated with childhood maltreatment, and positively correlated with adult romantic relationship trust, and self-esteem mediated the relationship between childhood maltreatment and adult romantic relationship trust. These findings were consistent with the research literature showing that people who were confident in their own value were confident that their romantic partners value them (Don et al., 2019). These findings were also consistent with those of Baugh et al. (2019) who found that maladaptive self-schemas mediated the association between childhood emotional maltreatment and adult romantic relationship

trust. It appeared that high self-esteem could be a resource that individuals used to overcome a background of childhood maltreatment.

The effect that the interaction between self-esteem and childhood maltreatment had on trait emotional intelligence was an interesting finding that is consistent with the literature but is worth further scrutiny. Individuals high in self-esteem showed a statistically significant decrease in trait emotional intelligence as levels of childhood maltreatment increased. These findings suggested that individuals with high self-esteem also had high levels of trait emotional intelligence when childhood maltreatment was low, but decreases in trait emotional intelligence as levels of childhood maltreatment increased suggested that they were unable to use trait emotional intelligence to deal with the maltreatment.

The literature regarding self-esteem shows that individuals with high self-esteem often perceive their relationships and their world differently than individuals with low self-esteem, and these findings are consistent with this literature. In the current study, individuals with high self-esteem showed decreasing levels of emotional intelligence as the level of childhood maltreatment increased. Research by Ford (2017) found that in situations of rejection, mindfulness meditation reduced harmful physical and mental responses in people with low self-esteem. People with high self-esteem showed increases in negative responses. The meditation appeared to interfere with the way people with high self-esteem support themselves when rejected. In a similar way, Wang et al. (2021) found that people with high self-esteem experienced a decrease in relationship satisfaction when partners gave more attention to smartphones (phubbing), whereas this

relationship was not significant for people low in self-esteem. People with high self-esteem appear more threatened by a romantic partner giving more attention to their smart phone than people with low self-esteem do. In the current study, individuals with high self-esteem increasingly depended on their positive self-view to cope with increasing levels of childhood maltreatment and used trait emotional intelligence less and less. This finding is consistent with research that shows people with high self-esteem interpret threats differently than people with low self-esteem, and use self-esteem as a source of support rather than other resources.

Trait Emotional Intelligence

Another goal of this research was to investigate the role that trait emotional intelligence played in the association between childhood maltreatment and adult romantic relationship trust. The current study adds to the research literature that there was a positive association between trait emotional intelligence and adult romantic relationship trust. Previous research (Malouff et al., 2014) showed a positive association between trait emotional intelligence and relationship satisfaction, but this was the first study, to my knowledge, showing a positive association between trait emotional intelligence and adult romantic relationship trust. My findings that trait emotional intelligence acts as a mediator between childhood maltreatment and adult romantic relationship trust was also consistent with previous research in which trait emotional intelligence mediated the association between childhood maltreatment and anxiety and depression (Zhao et al., 2021).

The current research study also investigated the role of self-esteem in moderating the indirect effect of childhood maltreatment on adult romantic relationship trust through trait emotional intelligence. I found that self-esteem did act as a moderator of the indirect effect of trait emotional intelligence. Individuals with high self-esteem showed decreases in trait emotional intelligence as childhood maltreatment increased. On the other hand, individuals with low self-esteem showed increases in trait emotional intelligence as childhood maltreatment increased. Trait emotional intelligence could be more helpful to individuals with low self-esteem because they use trait emotional intelligence as a way to cope with being maltreated by other people. The opposite could be true for how individuals with high self-esteem used trait emotional intelligence. Perhaps people with high self-esteem lose their emotional intelligence abilities as childhood maltreatment increases and depend on their self-esteem as their primary coping tool. Based on the work of Cheung et al. (2015a, 2015b) I had expected that self-esteem might have an additive effect on trait emotional intelligence, but it appeared, in the current study, that trait emotional intelligence might help compensate for lower levels of self-esteem in individuals who have experienced childhood maltreatment. Perhaps trait emotional intelligence acts as a buffer for individuals with low self-esteem as a result of their background of childhood maltreatment.

Theoretical Framework

Within the theoretical framework of interdependence theory (Kelley, 1979), Murray et al. (2006) proposed the risk regulation system. By their nature, romantic relationships involve a level of risk about whether the partners in the relationship will

have their needs met. The first process in the risk regulation system (Murray et al., 2006)

is the appraisal process. Once romantic partners are dependent on one another, then they

appraise the regard of their romantic partner. The participants in this study reported being

in romantic relationships, meaning that they were mutually dependent on one another to

have their relationship needs met. Coming from a background of childhood maltreatment,

romantic partners need to manage the threat of closeness they feel when they were abused

by a close family member in the past. In the self-based contingencies component of the

appraisal process in the risk regulation system (Murray et al., 2006), the results of the

current study showed that under this risk of closeness and dependence, individuals use

their trait emotional intelligence and, to some extent, self-esteem to overcome the risk of

closeness and perceive that their partners have regard for them and their needs, through

the trust that they feel.

Limitations

There were several limitations of this study. One limitation is that the data were

collected through surveys on an internet platform. When using surveys, there is the

possibility that participants misinterpreted the questions or engaged in response sets and

not pay attention to the questions. Several attention-check items were used throughout the

survey to engage the participants, but this strategy is not fool-proof (Robinson, et al.,

2019).

Another limitation of this study was the level of childhood maltreatment reported.

One concern prior to conducting this study was that the level of childhood maltreatment

would be too low. Upon evaluating participants' responses compared to the cutoff scores

provided by the childhood maltreatment measure authors, the level of maltreatment reported was abnormally high. It is possible that participants overreported their level of childhood maltreatment. This measure is drawing from the past, so participants could have made mistakes in their recollections. It also is possible that the population from which I recruited experiences maltreatment at a higher rate than other populations.

Recommendations

Based on the findings of the current research study, the next step would be to collect data from both romantic relationship partners. This would allow researchers to investigate the interdependence of the romantic partners' childhood maltreatment experiences. For example, if both romantic partners have experienced significant amounts of childhood maltreatment, does trait emotional intelligence benefit both partners? Does the process to trust in a romantic partner look the same for both partners? Experimental designs also could be used to investigate such questions. Using experimental manipulations to augment trust or undermine trust provides a situation in which the risk management system could be investigated directly (McCarthy et al., 2017). Diary methods in which romantic partners recount relationship relevant events, how they felt about those events, and how they reacted, also could provide insights into risk regulation processes.

Another direction that is important to pursue is implicit partner evaluations. The newest conceptualization of trust in romantic relationships proposes that there is a reflective or deliberate aspect of trust and an automatic, implicit form of trust (Murray et al., 2013). In the broader literature, such implicit attitudes towards one's romantic partner

are referred to as implicit partner evaluations, and developments in this area of research are important because it is possible to tap attitudes that may be outside of conscious awareness and, therefore, free of the bias that a person might explicitly show regarding his or her romantic partner (McNulty, & Olson, 2015). These implicit partner evaluations may be another cognitive resource that romantic partners may use to maintain trust in their relationships.

Positive Social Change

The current study showed that trait emotional intelligence and self-esteem mediated the relationship between childhood maltreatment and adult romantic relationship trust. These findings suggest that educators and clinicians could use training activities and programs to enhance self-esteem and trait emotional intelligence (Rivers et al., 2020), to help people with troubled backgrounds to have successful romantic relationships. Efforts to improve romantic relationship trust and the overall satisfaction in romantic relationships would improve mental and physical health of the individuals receiving the treatment (Schneider et al., 2011).

Conclusion

Trust is an important part of adult romantic relationships, but processes that facilitate trust are not well understood (Simpson, 2007). Trust could also be difficult to establish between romantic partners if one has experienced childhood maltreatment (Nguyen et al., 2017). The present study had two objectives. The first was to examine the association between adult romantic relationship trust and the different kinds of childhood maltreatment and determine whether one kind of childhood maltreatment has a stronger

association to adult romantic relationship trust than another. The second objective was to investigate whether different cognitive resources, such as self-esteem and trait emotional intelligence, mediated the relationship between childhood maltreatment and adult romantic relationship trust.

In the current study, 260 participants were recruited through the internet platform Amazon Mechanical Turk to complete a survey with measures of childhood maltreatment, self-esteem, trait emotional intelligence, and adult romantic relationship trust. The results showed that childhood emotional neglect was the best predictor of adult romantic relationship trust. I also found that self-esteem and trait emotional intelligence mediated the association between childhood maltreatment and adult romantic relationship trust. Self-esteem also acted as a moderator of the indirect effect of trait emotional intelligence between childhood maltreatment and adult romantic relationship trust. These findings suggested that self-esteem and trait emotional intelligence do act as cognitive resources for romantic partners who have experienced childhood maltreatment.

Based on these results, individuals who have experienced childhood maltreatment may be able to trust their adult romantic partners because of higher levels of self-esteem and trait emotional intelligence. The results of the current study indicated that the romantic relationships of individuals who have experienced childhood maltreatment would benefit through educational or therapeutic interventions that improve self-esteem and trait emotional intelligence.

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