2016

Childhood Abuse and Neglect, Global Emotional Functioning, and Emotional Regulation in a Comunity Sample of Adults

Deborah Isaacs
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Deborah Isaacs

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

Review Committee
Dr. Sandra CaramelaMiller, Committee Chairperson, Psychology Faculty
Dr. Sandra Mahoney, Committee Member, Psychology Faculty
Dr. Elisha Galaif, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2016

Abstract

Childhood Abuse and Neglect, Global Emotional Functioning, and Emotional Regulation in a Community Sample of Adults

by

Deborah Isaacs

MS, Walden University, 2007

BA, University of North Carolina Asheville, 1992

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2016

Abstract

Emotional impairment can lead to emotional disorders or dysfunction. Childhood abuse or neglect can be used to predict disorders and dysfunction. Missing from the literature was research exploring a direct relationship between a history of abuse or neglect and future emotional impairment. This quasi-experimental study served to examine whether histories of childhood abuse or neglect can be used to predict future emotional impairment using the Mayer and Salovey model of emotional functioning. A community sample of 138 adults from rural Wyoming completed retrospective reports of childhood trauma and current measures of emotional functioning, and 42% of the sample reported a history of childhood emotional abuse. Hierarchical regression analyses indicated childhood emotional abuse was not a valid predictor of impaired emotional functioning, while the covariates of physical neglect and sexual abuse were significant predictors. A history of childhood physical neglect could be used to predict lower measures in emotional understanding and global emotional functioning, while sexual abuse in males could be used to predict lower measures in emotional regulation and global emotional functioning. The new knowledge that childhood abuse or neglect can impair emotional functioning during adulthood provides a pathway for researchers to further explore the detrimental impact of childhood abuse and neglect on emotional functioning during the developmental years. In addition, for those individuals with a history of childhood abuse or neglect, positive social change may stem from gains in emotional understanding, emotional regulation, and global emotional functioning through improved interventions, preventative methods, and efficacious treatments.

Childhood Abuse and Neglect, Global Emotional Functioning, and Emotional Regulation in a Community Sample of Adults

by

Deborah Isaacs

MS, Walden University, 2007

BA, University of North Carolina Asheville, 1992

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

August 2016

Dedication

This project is dedicated to my children, Austin, McKenna, and Abby. They kept our home running and helped out whenever needed. They served as my light throughout this long process. I finished this because of their help, love, and faith. I also dedicate this project to Joan Lipson, my second Mom, and Dave Lipson. Their belief in me kept me going and helped me achieve a life-long dream.

Acknowledgments

I would like to thank Dr. Sandra Caramela-Miller, who served as my chair. Her patience throughout this project, extremely swift turnaround on reviews, and suggestions for improvements made the project possible. I would also like to thank my second committee member, Dr. Sandra D. Mahoney. The suggestions provided by Dr. Mahoney improved the quality of my work. Additionally, I would like to especially thank the university research review member, Dr. Elisha Galaif, for the time she gave in reviewing my work, as well as providing clarity on this project. I would also like to thank Dr. Travis Sands for his edit of my work. I would like to particularly acknowledge Dr. Gregory Wheeler, a mentor and friend, whose wise words helped shape my work and kept the thought processes flowing. I would also like to thank Multi-Health Systems Publishing and Pearson Assessments for allowing their instruments of measure to be utilized in this project. Finally, I would like to thank all of the community residents who participated in this research. This project would not have been possible without their contributions.

Table of Contents

List of Tables iv

Chapter 1: Introduction to the Study 1

Introduction 1

Background 4

Problem Statement 7

Purpose of the Study 9

Research Questions and Hypotheses 10

Theoretical Foundation 13

Nature of the Study 15

Definitions 17

Assumptions 20

Scope and Delimitations 23

Limitations 25

Significance 27

Social Change Implications 28

Summary 30

Chapter 2: Literature Review 32

Introduction 32

Literature Search Strategy 35

Theoretical Foundation 36

Literature Review Related to Key Variables and/or Concepts 43

Alternative Models of Emotional Functioning 47
Individual and Specific Emotional Skills 49
Childhood Abuse and Neglect 54
Childhood Emotional Abuse 64
Methodology 81
Summary and Conclusions 84
Chapter 3: Research Method 89
Introduction 89
Research Design and Rationale 90
Methodology 95
Target Population 95
Sampling and Sampling Procedures 95
Procedures for Recruitment, Participation, and Data Collection 96
Instrumentation and Operationalization of Constructs 99
Threats to Validity 111
Ethical Procedures 113
Summary 115
Chapter 4: Results 117
Introduction 117
Data Collection 118
Baseline Descriptive and Demographic Characteristics 121
Hierarchical Regression Results 132

Summary 141

Chapter 5: Discussion, Conclusions, & Recommendations 143

Introduction 143

Interpretation of Findings 145

Childhood Abuse and Neglect 145

Childhood Emotional Abuse 149

Significant Results 153

Limitations of the Study 155

Recommendations 160

Positive Social Change 165

Conclusion 170

References 174

Appendix A: American Humane Association Fact Sheet 192

Appendix C: Informed Consent 194

Appendix D: Participant Demographics 199

Appendix F: CTQ Permission 201

List of Tables

Table 1. Demographics of Current Sample……...122

Table 2. Ethnicity & Age of Participants…….....123

Table 3. Income & Education of Participants…….....124

Table 4. Frequency & Severity Rates of Abuse in Sample.....127

Table 5. MSCEIT v2.0 Reliability Coefficients……129

Table 6. Hierarchical Regression Results: Model 1….……135

Table 7. Hierarchical Regression Results: Model 2……..137

Table 8. Hierarchical Regression Results: Model 3……..140

Chapter 1: Introduction to the Study

Introduction

The Department of Health and Human Services (DHHS, 2015a) reported in their annual publication concerning childhood maltreatment rates, that over 3 million potential incidents of childhood abuse and neglect were reported in the United States in 2013. Of these, over 1,800,000 incidents were screened in, investigated, and acted upon by Child Protective Services (DHHS, 2015a). While many of the reported incidents involved the same child, the final individual count provided by the DHHS (2015a) indicates that over 670,000 children were victimized through abuse or neglect in 2013, many repeatedly. Furthermore, the DHHS (2015a) stated that of these incidents, over 59,000 reports concerned childhood emotional abuse specifically. These numbers reflect only incidents which were screened in and acted upon by Child Protective Services, suggesting the rates are likely much higher, as emotional abuse could be considered inherent in other forms of childhood trauma, such as sexual abuse (DHHS, 2015b; Rus & Galbeaza, 2013). According to the DHHS (2015b), emotional abuse is possibly the most underreported and prevalent type of childhood maltreatment, typically accompanying all other forms of abuse or neglect.

The majority of previous research has explored the impact of physical abuse and sexual abuse, with limited available research on childhood emotional abuse. Current research consistently indicates that childhood emotional abuse is detrimental to long-term functioning, and correlates with multiple emotional disorders and dysfunctional patterns of behavior (Shi, 2013; Spinazzola et al., 2014). A significant factor inherent in the

dysfunctions that have been linked to a history of childhood emotional abuse appears to be impairment in emotional functioning (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015; Smith & Flannery-Schroeder, 2013).

Prior to this study, limited research has focused on exploring the direct association between a history of childhood abuse and neglect, and measures of emotional functioning in adults who have traumatic histories. The results from this study, which examined the emotional functioning of adults who suffered through childhood abuse or neglect, have the potential to contribute to positive social change by providing insight into how childhood abuse and neglect can impact emotional development, and possibly lead to later difficulties in emotional functioning during adulthood. This study also provides clinically valuable information that can be used to open a gateway in the development of efficacious interventions focused on the emotional functioning of those with childhood abuse or neglect histories, and preventative methods for children currently in a traumatic environment.

In Chapter 1, background information relevant to the typically long-term and negative impact of childhood emotional abuse and neglect is presented, as well as information about emotional functioning theories. Included is a description of the current literature that has examined disorders or maladaptive behaviors and reported correlations between low measures on emotional functioning instruments and dysfunction (Dvorak et al., 2014; Hertel, Schultz, & Lammers, 2009; Motahari & Rahgozar, 2011; Rajappa, Gallagher, & Miranda, 2012). A discussion concerning the absence of available research on the association between childhood abuse and neglect, and emotional functioning

during adulthood, serves to support why this knowledge is important to behavioral science. The research questions facilitated inquiry into whether the independent variable (IV) of emotional abuse may be used to predict impairment of adult global emotional functioning. Global emotional functioning is a composite of the individual emotional skills of emotional perception, emotional utilization, emotional understanding, and emotional regulation. Adult global emotional functioning served as the dependent variable (DV), along with emotional regulation skills as an additional DV. The Mayer and Salovey (1997) model of emotional functioning served as the theoretical foundation behind the research, and the primary propositions in the theory are delineated, along with the rationale for selecting this theoretical framework, and the sample population that was utilized in the study. Subsequently, an overview of the quasi-experimental quantitative design of the study, including the constructs that served as the study variables is provided, and then a discussion of the instruments utilized to obtain measures of emotional functioning and childhood abuse and neglect: the Mayer-Salovey-Caruso-Emotional-Intelligence-Test ([MSCEIT V2.0]; Mayer, Salovey, & Caruso, 2002), and the Childhood Trauma Questionnaire ([CTQ]; Bernstein & Fink, 1998) follow. These are presented in relationship to the study variables and outcomes.

As previous research consistently reported significant positive correlations between childhood emotional abuse and dysfunction, researchers have presumed that emotional abuse is detrimental to long-term functioning (Bruce, Heimberg, Blanco, Schneire, & Leibowitz, 2012; Groleau et al., 2012; Iffland, Sasen, Catani, & Neuner, 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall, Galae, Wood, & Kerr, 2013;

Negele, Kaufhold, Kallenbach, & Leuzinger-Bohleber, 2013; Racine & Wildes, 2015; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). In this chapter, details relevant to why the Mayer and Salovey (1997) model of emotional functioning was the appropriate model for examining the global emotional functioning of adults with childhood histories of abuse or neglect are provided. Further, the boundaries of the research are distinguished, and an explanation is provided for why childhood abuse and neglect are such important and relevant topics of study.

This research is important to social science and carries the potential for social change because the findings may be useful for developing efficacious interventions and preventative methods in relation to the long-term impact of childhood abuse and neglect. Because the paucity of available research on the topic of childhood emotional abuse and the need for additional research compelled this study, the chapter concludes with a discussion of anticipated social changes that may be brought about by it.

Background

Emotional functioning skills include being able to correctly perceive or recognize one's own emotions and the emotions of others, utilize emotional perception to guide behavior and make decisions, understand emotions and correctly name them, and manage or regulate one's own emotions and emotional responses in a beneficial way to reach goals (Mayer & Salovey, 1997, pg. 10). As defined by Mayer and Salovey, *global emotional functioning* refers to a composite of the individual emotional skills that present an overall picture of emotional health.

With the development of theoretical constructs of emotional functioning (Mayer & Salovey, 1997) and the subsequent development of instruments to obtain measurements (Mayer et al., 2002), global emotional functioning can be examined and clinically measured. Research examining the emotional functioning of adults with dysfunction suggests adequate emotional skills are a requisite for healthy functioning, while impaired emotional skills contribute to the development of emotional disorders and other difficulties (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et al., 2012).

In relation to childhood abuse and neglect, current research suggests that childhood emotional abuse is as detrimental to emotional functioning as other forms of childhood maltreatment, possibly imposing impairment above and beyond that imposed by other forms (Bruce et al., 2012; Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Spinazzola et al., 2015). Emotional disturbances, including depressive disorders such as major depressive disorder, dysthymia, and anxiety, are reported to positively correlate with an abusive history (Bruce et al., 2012; Iffland et al., 2012; Negele et al., 2015; Shapero et al., 2014; Shi, 2012; Spinazzola et al., 2014). Additionally, suicidal behaviors, eating disorders, and substance abuse disorders significantly correlate with childhood emotional abuse (Groleau et al., 2012; Karagoz & Dag, 2015; Marshall et al., 2013; Racine & Wildes, 2015). Current research suggests that individuals reporting a history of childhood abuse or neglect may experience difficulty effectively perceiving, understanding, utilizing, and regulating their emotions, resulting in long-term emotional struggles and difficulty

successfully adapting to their environment (Karagoz & Dag, 2015; Smith & Flannery-Schroeder, 2013).

Research exploring dysfunction in association with emotional functioning processes, sans childhood abuse and neglect as variables of interest, has indicated that decreased measures of emotional functioning are associated with dysfunction (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et al., 2012). Individuals with substance abuse disorders and major depressive disorder score lower in their ability to understand emotions and use emotions to facilitate thought, with both groups scoring lower on global measures of emotional functioning (Hertel et al., 2009). Low measures on emotional functioning instruments represent impaired emotional functioning and are risk factors that can be used to predict depression and problems with both drugs and alcohol (Hertel et al., 2009). Impaired emotional regulation is also a significant factor in research exploring suicidal behaviors and bipolar disorder (Hertel et al., 2009; Motahari &Rahgozar, 2011; Rajappa et al., 2012).

While both a history of childhood emotional abuse and lower measures of emotional functioning were found to be significant factors in depression, substance abuse, suicidal behaviors, eating disorders, and bipolar disorders (Dvorak et al., 2014; Groleau et al., 2012; Hertel et al., 2009; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Motahari & Rahgozar, 2011; Marshall et al., 2013; Negele et al., 2015; Rajappa et al., 2012; Smith & Flannery-Schroeder, 2013), the research examining a potentially direct link between childhood abuse or neglect and impaired emotional functioning during adulthood is limited. A history of childhood abuse and neglect may be

a potential pathway to impairment. The goal of this research was to help fill the gap by statistically analyzing a retrospective measure of childhood trauma (Bernstein & Fink, 1998) and measures of adult global emotional functioning (Mayer et al., 2002), as well as emotional regulation, in groups of participants with and without histories of childhood abuse or neglect. Hierarchical regression analyses were conducted on the data to help clarify whether childhood emotional abuse significantly predicted lower measures of emotional functioning. The results serve as a foundation for additional research, and the potential development of improved methods of intervention and prevention of childhood abuse and neglect.

Problem Statement

Literature on individuals with traumatic childhood environments has indicated that childhood emotional abuse significantly correlates with multiple emotional disorders and dysfunctional patterns of behavior (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015; Groleau et al., 2013; Shi, 2913; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014), yet there is an absence of available research exploring whether a history of childhood abuse or neglect can be used to significantly predict emotional impairment during the adult years. Many of the same disorders and dysfunctions that correlate with childhood emotional abuse also correlate with emotional impairment in the research that explored emotional functioning, but did not include childhood abuse or neglect as variables of interest (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et al., 2012). The significant correlations in current research between

dysfunction and a history of childhood abuse or neglect highlight the importance of this topic to behavioral science.

Of the research that examined specific emotional skills in relation to childhood abuse and neglect, none included a comprehensive model of emotional functioning as the basis for the research, and studies have typically examined only one aspect of emotional functioning, such as emotional regulation (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015; Racine & Wildes, 2015). The absence of available literature exploring whether childhood abuse and neglect can significantly predict global emotional impairment left a void in the literature related to this topic. This research helps to fill the gap in current literature through the analyses of emotional functioning measures in both those with and without a history of childhood abuse or neglect.

In this research a statistical examination was made of emotional functioning measures (Mayer et al., 2002) completed by research participants, to determine whether childhood abuse or neglect impairs adequate emotional development, and can be used to predict deficits in emotional functioning in later years. The literature related to the global emotional functioning of adults with traumatic childhood histories shows impaired emotional skills as a common factor, with difficulties related to perceiving emotional input, utilizing emotional stimuli, understanding the language of emotions, or regulating emotional responses (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015; Shapero et al., 2014; Smith & Flannery-Schroeder, 2013). Because emotional impairment can lead to emotional disorders or dysfunctions, the knowledge that childhood abuse or neglect can be used to predict emotional impairment may lead to the development of interventions

and treatment based on various aspects of emotional functioning such as improving emotional understanding or managing emotions. In addition, a focus on the detrimental and predictive nature of childhood abuse or neglect on the development of adequate emotional functioning may lead to increased research on the topic and new preventative methods for children currently in a traumatic environment.

Purpose of the Study

Previous research has demonstrated that a history of childhood abuse and neglect are significantly associated with mood disorders and dysfunctional patterns of behavior (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Negele et al., 2015; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2015). There was a lack of available research investigating the potential for childhood abuse or neglect to predict global emotional dysfunction in adults with a traumatic childhood. The purpose of this quasi-experimental, quantitative study was to explore whether childhood abuse or neglect could be utilized as predictors of lower measures of emotional functioning in adults by statistically analyzing retrospective measures of childhood trauma (Bernstein & Fink, 1998) and performance-based measures of emotional functioning (Mayer et al., 2002) in adults with and without traumatic environmental histories.

In this research information on the constructs of childhood abuse and neglect were collected from all participants by administering a retrospective screener, the CTQ (Bernstein & Fink, 1998). This information, consisting of measures of childhood

emotional, physical, and sexual abuse, as well as physical and emotional neglect, served as the IV and covariates in the research. Measures of adult global emotional functioning, a DV, were obtained from all participants through the administration of the MSCEIT V2.0 (Mayer et al., 2002). Global emotional functioning is a composite of emotional perception, emotional utilization, emotional understanding, and emotional regulation (Mayer & Salovey, 1997). There was limited research examining the impact of childhood abuse or neglect on a focused and narrowly defined construct of emotional regulation, and none utilizing the Mayer and Salovey model; therefore, emotional regulation, as defined by Mayer and Salovey (1997), also served as a DV in the research. Hierarchical regression procedures were conducted on all data to determine whether childhood abuse or neglect can validly predict impairment, during adulthood, of global emotional functioning and a clearly defined construct of emotional regulation.

Research Questions and Hypotheses

Mayer and Salovey (1997) define adequate global emotional functioning as correctly perceiving emotional cues, utilizing the emotional input to facilitate behavior in a beneficial manner, understanding emotions and emotional labels, and regulating emotional responses. Impairment of these emotional skills has been found in the emotional disorders and dysfunctional patterns of behavior that correlate with a history of childhood emotional abuse (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Marshall et al., 2013; Negele et al., 2015; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2015). During the review of scholarly research, there

appeared to be no current literature available that explored whether a history of childhood abuse or neglect can be utilized to validly predict global emotional impairment during adulthood, although adequate emotional functioning has been demonstrated to be a requisite to overall healthy functioning and a greater quality of life (Bruce et al., 2012; Hertel et al., 2009; Mikolajczak et al., 2013).

The MSCEIT V2.0 (Mayer et al., 2002), a performance-based instrument utilized to assess global emotional functioning and individual emotional skills, provided a tool for exploring the predictive validity of childhood abuse or neglect on the development of impairment in global emotional functioning during adulthood. The CTQ (Bernstein & Fink, 1998), a retrospective instrument of measure for assessment of childhood trauma, provided information from participants on their childhood histories. Research question one inquired into whether impairment in adult global emotional functioning, a DV, can be predicted when the IV, childhood emotional abuse, is present in adult participants.

Research Question 1: Does childhood emotional abuse predict impairment in adult global emotional functioning?

$H_0{}^1$: Childhood emotional abuse, measured retrospectively and serving as the IV, will not significantly predict impairment in adult global emotional functioning, which serves as a DV and is measured through a performance-based assessment.

$H_A{}^1$: Childhood emotional abuse, measured retrospectively and serving as the IV, will significantly predict impairment in adult global emotional functioning, which serves as a DV and is measured through a performance-based assessment.

The impact of childhood abuse and neglect on emotional regulation skills has been explored to a limited degree in the available literature (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015). Results from these studies indicated that childhood emotional abuse and neglect negatively affects emotional regulation. The construct of emotional regulation (Gratz & Roemer, 2004) utilized in the research conducted by Kargoz and Dag (2015) and Bradbury and Shaffer (2012) varied from emotional regulation as defined in the Mayer and Salovey (1997) model, comprising a broader area of emotional processing, therefore emotional regulation, as defined by Mayer and Salovey (1997), served as an additional DV. Research question two inquired into whether childhood emotional abuse can be validly utilized as a predictor of impaired emotional regulation during the adult years.

Research Question 2: Does childhood emotional abuse predict impairment in adult emotional regulation skills?

H_0^2: Childhood emotional abuse, serving as the IV and measured retrospectively, will not significantly predict impairment of emotional regulation skills, which serves as a DV and is measured through a performance-based assessment.

H_A^2: Childhood emotional abuse, serving as the IV and measured retrospectively, will significantly predict impairment of emotional regulations skills, which serves as a DV and is measured through a performance-based instrument.

During the development and standardization of the MSCEIT V2.0, Mayer et al. (1999) reported that females tended to score approximately .5 standard deviations above males on measures of emotional functioning therefore gender functioned as a moderating

variable. Research question three inquired into whether there will be a significant difference between male and female participants in measures of emotional functioning.

Research Question 3: Will measures of emotional functioning differ significantly between male and female participants?

H_0^3*:* There will be no significant difference between genders on measures of emotional functioning obtained through the administration of a performance-based instrument of emotional functioning, and serving as the DVs.

H_A^3*:* There will be a significant difference between genders on measures of emotional functioning obtained through the administration of a performance-based instrument, and serving as the DVs.

Theoretical Foundation

Salovey and Mayer developed a theoretical model of emotional functioning in 1990, later editing and refining the model (Mayer & Salovey, 1997). As is delineated in Chapter 2, the Mayer and Salovey model (1997) consists of four branches, with each branch of the model composed of a set of skills related to different aspects of emotional functioning. According to Mayer and Salovey, the branches of the model include emotional perception skills on the lowest branch, emotional utilization skills on the second branch, emotional understanding skills on the third branch, and emotional regulation skills on the fourth branch. Theoretically, the greater the emotional skills a person has, the higher the measure of global emotional functioning, and the greater the quality of life (Brackett, Rivers, & Salovey, 2011; Mayer & Salovey, 1997).

Mayer and Salovey (1997) conceptualize their model as being cumulative in nature. In other words, each branch builds on the one before it, so if there are inadequate skills in relation to understanding emotions, located on branch three of the model, it is likely that there will also be inadequate skills related to regulating emotions, which is located on branch four of the model. Global emotional functioning refers to total emotional functioning, which is a composite of the individual emotional skills included in the model (Mayer & Salovey, 1997). An implication of this cumulative model of emotional functioning is that emotional skills are developmental in nature, with the adequate development of earlier skills serving as a requisite for the adequate development of later skills (Brackett et al., 2011). Deficits in any of the various emotional skills result in a deficit in global emotional functioning (Mayer & Salovey, 1997).

The model developed by Mayer and Salovey (1997), based entirely on emotional functioning processes, provides a cohesive and detailed model of the steps involved in global emotional functioning as well as clarity in defining individual emotional skills. A core feature of the model presented by Mayer and Salovey, relevant to answering the research questions, is the proposition that everyone differs in their interpretation and utilization of emotional experiences, and these differences can be measured. In addition, the cumulative model developed by Mayer and Salovey suggests that emotional skills are accrued during developmental years, implying vulnerability to external factors, such as childhood abuse or neglect.

The development of the MSCEIT V2.0 (Mayer et al., 2002) as an instrument of measure for emotional functioning in conjunction with the model, allowed for an

examination of the differences between adults in global emotional functioning and emotional regulation, as explored in this study. Utilizing the Mayer and Salovey (1997) model of emotional functioning as the theoretical framework behind the research, and the MSCEIT V2.0 (Mayer et al., 2002) as the instrument of measure, provided an avenue of exploration for this quantitative study by clearly delineating emotional processes that may be impacted by childhood abuse or neglect, and by providing a method of assessment through a standardized instrument.

Nature of the Study

For this research a quasi-experimental quantitative design was used in which retrospective measures of childhood abuse and neglect (Bernstein & Fink, 1998) and performance-based measures of adult emotional functioning (Mayer et al., 2002) were analyzed to determine whether a history of childhood emotional abuse can be validly used as a predictor of lower measures of emotional functioning during adulthood. The majority of available research cited in this study on the topic of childhood abuse or neglect and emotional skills has utilized a quantitative, correlational design. Because the focus of this research was on childhood abuse and neglect, an experimental design would have been unethical. A survey study, or self-report instrument, was deemed inadequate for the research in terms of assessing emotional skills. A performance-based assessment, such as the MSCEIT V2.0 (Mayer et al., 2002), requiring a demonstration of emotional knowledge and functioning, provided increased reliability and validity to the results, as well as additional clarity and information on the relationship between traumatic environmental histories and current levels of emotional functioning.

Childhood emotional abuse, measured retrospectively through the administration of the CTQ (Bernstein & Fink, 1998), served as the IV. Given that the CTQ also assesses a history of childhood physical abuse, sexual abuse, physical neglect, and emotional neglect, the measures obtained on these additional forms of trauma served as independent covariates. The DVs in this research were adult global emotional functioning, a composite measure of the individual emotional skills included in the Mayer and Salovey (1997) model, as well as the individual skill of emotional regulation, as defined by Mayer and Salovey and measured through the MSCEIT V2.0 (Mayer et al., 2002). A sample of adults recruited from two rural counties in the western United States served as research participants.

In order to obtain information on childhood emotional abuse and the emotional functioning of participants, the MSCEIT V2.0 (Mayer et al., 2002), the CTQ (Bernstein & Fink, 1998), and a demographic questionnaire were administered to participants. In addition to a demographic examination, initial analyses of the information collected included determining the proportion of participants from the sample who reported a history of childhood abuse or neglect. With data collected from 168 participants, independent sample groups, consisting of those reporting childhood emotional abuse and those absent a history of emotional abuse, were drawn for further statistical analyses. Within-group statistical analyses were conducted on the CTQ (Bernstein & Fink, 1998) responses obtained from the group reporting abuse or neglect to determine the proportion of those participants reporting childhood emotional abuse in comparison to other forms of environmental trauma.

Hierarchical multiple regression procedures were conducted to determine whether a history of childhood abuse or neglect significantly predicted impairment in adult emotional processing in participants. Additionally, regression analyses were used to examine the specific impact of childhood emotional abuse, as well as to control for the potentially confounding factors related to the covariates, as well as gender and age. In-depth details regarding demographic requisites for participation, information on instruments and the associated coefficients, statistical methods of analyses, and other details on the nature of this research are included in Chapter 3.

Definitions

Alexithymia: The inabilities to distinguish between the physiological sensations of emotions and the emotions themselves, express emotions, label emotions, and engage in fantasies, instead tending to utilize a cognitive and external thinking style (Smith & Flannery-Schroeder, 2013).

Childhood emotional abuse: The construct of childhood emotional abuse defined by Bernstein et al. (2003) in association with the development of the CTQ (Bernstein & Fink, 1998) was utilized in this research as the IV. Bernstein et al. (2003) define emotional abuse as verbal attacks by an older person or adult that degrades or humiliates a child, resulting in a negative impact on their sense of self-worth or well-being (p. 175). Childhood emotional abuse refers to emotional abuse that occurs from birth to 17 years of age.

Childhood emotional neglect: Emotional neglect during childhood was defined as a failure to provide for a child's basic psychological and emotional needs, such as feeling

loved, supported, and nurtured (Bernstein et al., 2003, p. 175). Emotional neglect is included as a construct of measure in the CTQ (Bernstein & Fink, 1998), and serves as an independent covariate.

Childhood physical abuse: The construct of childhood physical abuse was defined by the CTQ (Bernstein & Fink, 1998) which was used to assess childhood trauma. Physical abuse is defined as physical assaults that place a child at risk of bodily injury or result in bodily injury by an older person or adult (Bernstein et al., 2003, p.175). Physical abuse served as an independent covariate in the research.

Childhood physical neglect: Physical neglect during childhood was defined as failing to meet a child's physical needs, such as a failure to provide shelter, food, clothing, health care, and safety (Bernstein et al., 2003, p. 175). Physical neglect served as an independent covariate in the research.

Childhood sexual abuse: Sexual abuse during childhood is defined as sexual conduct between a minor and an older person (Bernstein et al., 2003, p.175). Sexual abuse items are included in the CTQ (Bernstein & Fink, 1998), and sexual abuse served as an independent covariate in the research.

Emotional functioning: The different aspects of emotional processes defined in Mayer and Salovey's (1997) model of emotional intelligence theory, as well as overall emotional health. The definitions of the emotional skills, developed by Mayer and Salovey (1997) and used in this study, include emotional perception, emotional understanding, emotional regulation, and emotional utilization, which together provide a picture of global emotional health.

Emotional perception: The skills involved in correctly perceiving emotions, as defined by Mayer and Salovey (1997, p.11). These skills include recognizing emotional sensations physically, in thought, and in feelings, as well as identifying emotion in others. Identifying the emotional content in objects, sound, or other mediums through such activities as observation is another aspect of emotional perception. Accurately expressing emotions and the needs associated with emotions, as well as recognizing whether the observed emotional expressions are sincere, are also skills associated with emotional perception. Emotional perception contributes to the global emotional functioning measure, which served as a DV.

Emotional regulation: One's skill at regulating responses to the emotions being felt, as well as controlling automatic responses to emotional experiences (Mayer & Salovey, 1997, p. 11). Mayer and Salovey include tolerating negative emotional experiences in order to achieve a beneficial outcome following an emotional event as an additional skill associated with emotional regulation. Emotional regulation served as a DV in the research, and also contributes to global emotional functioning, which served as an additional DV.

Emotional understanding: As defined by Mayer and Salovey (1997), emotional understanding refers to the level of skill one has in correctly understanding the emotions being experienced by the self and others as they occur, and being able to correctly name the emotions being experienced (p. 11). Emotional understanding contributes to the global emotional functioning measure that served as a DV in the research.

Emotional utilization: Mayer and Salovey (1997) define emotional utilization as the way in which emotions are used to guide behavior (p. 11). Emotional utilization includes using the emotional information obtained through emotional perception to focus attention on issues which may need to be resolved. Included are the skills related to generating or anticipating emotional responses in order to understand decisions and, utilizing the emotional information perceived in both the self and others to beneficially engage in goal-directed behavior. Emotional utilization is an emotional skill that contributes to global emotional functioning that served as a DV in the research.

Global emotional functioning: Mayer and Salovey (1997) define global emotional functioning, or emotional intelligence, as a composite of emotional perception, emotional utilization, emotional understanding, and emotional regulation (p. 12). Global emotional functioning refers to overall emotional health, much as an intelligence quotient provides a general picture of total cognitive functioning. Global emotional functioning served as the primary DV in the research.

Assumptions

While causality could not be definitively attributed to a history of childhood emotional abuse, the literature reviewed consistently indicated that emotional abuse is detrimental to long-term functioning and potentially associated with impaired emotional skills (Bradbury & Shaffer, 2012; Groleau et al., 2012; Karagoz & Dag, 2015; Shi, 2013; Spinazzola et al., 2014). It is presumed that the significant correlations reported in the research are indicative of a critical link between the variables of emotional abuse and emotional impairment, dysfunctional patterns of behavior and other disorders. In

addition, the CTQ (Bernstein & Fink, 1998) is a screener that takes approximately five minutes to complete. The brevity of the instrument may have limited a definitive and absolute acknowledgment of abuse or neglect; however, the CTQ is used often in research exploring childhood abuse and neglect, and was therefore considered to be an adequate instrument of measure for the research. In addition, due to the brevity of the instrument, the use of the CTQ limited intrusion into the histories of participants, possibly minimizing distress in relation to the topic.

In relation to the DVs associated with emotional functioning, several theories related to the importance of emotions and emotional experiences in adequate functioning have been developed (Bar-on and Parker, 2000; Goleman, 1995; Mayer & Salovey, 1997). The Mayer and Salovey model (1997) was the most appropriate of these models for this research due to its comprehensive focus on emotions, absent personality traits, or other constructs that could have potentially confounded results. The model of emotional intelligence developed by Mayer and Salovey (1997) clearly defines different aspects of emotional functioning, providing an in-depth perspective of the skills involved in emotional processing, and yielding a picture of global emotional health. The Mayer and Salovey (1997) model appeared to be an adequate representation of the emotional skills involved in emotional functioning, and thus the appropriate model to serve as a basis for this research.

The MSCEIT V2.0, which was the instrument of measure in this research, was developed by Mayer et al., (2002) in conjunction with the Mayer and Salovey (1997) model of emotional functioning, thus contributing clarity to the research by providing

measures of the constructs clearly delineated in the model. Based on the reported standardization criteria (Mayer, Salovey, Caruso, & Sitarenios, 2003) in which the sample was comprised of ethnically diverse participants, the MSCEIT V2.0 (Mayer et al., 2002) was an appropriate instrument of measure for the targeted population. Because the MSCEIT V2.0 (Mayer et al., 2002) is a performance-based instrument requiring a demonstration of emotional knowledge and functioning (Mayer et al., 2003), it was assumed that the information obtained through administration of the instrument would be an acceptable representation of the emotional functioning skills of participants.

It is also assumed that participants were open and truthful in their disclosures concerning childhood abuse or neglect. In research conducted by Goldsmith and Freyd (2005), participants showed difficulty acknowledging a history of childhood emotional abuse, dependent upon how the construct was defined. However, participants appeared to have limited recognition that their childhood environments were indicative of emotional abuse, rather than an unwillingness to disclose abuse (Goldsmith & Freyd, 2005). The instrument utilized to assess childhood abuse and neglect in this research, the CTQ (Bernstein & Fink, 1998), asks about specific environmental behaviors associated with emotional abuse instead of asking for an absolute acknowledgement of emotional abuse. Therefore, it is expected that responses related to childhood abuse or neglect represented an accurate historical reflection. Bernstein and Fink (1998) report that in the standardization processes associated with development of the CTQ, statistical analyses of the validity of the minimization and denial scales indicated social desirability responses

are uncommon, also potentially increasing the accuracy of the information provided for this research.

Scope and Delimitations

Childhood emotional abuse was chosen as the IV in this research because it was often excluded as a variable of interest in the literature even though it was consistently associated with dysfunction, often above and beyond that caused by other forms of abuse (Bruce et al., 2012; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). While a unitary, bounded, and cohesive construct of emotional abuse is not prominent in current available research, emotional abuse is defined as any action directed toward a child that impairs his or her emotional development or sense of self-worth (Bernstein et al., 2003; DHHS, 2015b). Although a history of emotional abuse correlates with multiple emotional disorders, available research has examined only specific aspects of emotional functioning, such as emotional regulation, in relation to emotional abuse, and the definitions provided in the available research for emotional regulation are broad (Bradbury & Shaffer, 2012; Gratz & Roemer, 2004; Karagoz & Dag, 2015). During the literature review there appeared to be no research based on a comprehensive model of emotional functioning that examined the global emotional functioning of adults with childhood histories of abuse or neglect.

In research focused solely on the emotional skills of adults in relation to dysfunction, sans the variable of childhood abuse or neglect, impaired emotional functioning was associated with multiple forms of disorders and dysfunctional patterns of behavior (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et

al., 2011). Many of the same dysfunctions that correlated with impaired emotional skills were also associated with childhood emotional abuse, suggesting that impaired emotional processing may have been a significant factor inherent in the dysfunctions associated with childhood emotional abuse (Larsson et al., 2013; Marshall et al., 2013; Negele et al., 2015; Shapero et al., 2014; Spinazzola et al., 2014).

This research, which examined the emotional skills of adults with childhood histories of abuse or neglect, has potential clinical value in terms of understanding the etiology of presenting dysfunctions, and in broadening intervention options through the incorporation of emotional functioning assessments and emotional skills training as an aspect of treatment. The dearth of research examining the relationship between childhood abuse or neglect and later emotional processing suggested a previously unexplored topic that is relevant to multiple areas of study in behavioral science.

The Mayer and Salovey (1997) model of emotional functioning is considered to be a model of intelligence by its developers. While the concept that emotional processes function as a form of intelligence adds weight to the benefits of examining the impact of childhood abuse or neglect, the primary focus of this study was to examine emotional functioning processes in those with a traumatic environmental childhood, rather than to champion emotional processing as an additional form of intelligence. The theory posited by Mayer and Salovey (1997) provides an excellent look at the emotional skills involved in functioning, whether or not they are accepted as an additional intelligence. Therefore, the research involving support for emotional functioning as an intelligence is minimal in the literature review so as not to confuse the reader or divert focus from the impact of

childhood abuse or neglect. This is also why the term *emotional functioning* is used throughout this dissertation instead of *emotional intelligence*.

The population targeted for the research included adults recruited in two rural counties in the U.S. state of Wyoming. As is discussed in Chapter 3, participants were drawn from primarily Caucasian, rural populations, given that over 90% of the populations in these counties were reported to be Caucasian by the United States Department of Commerce ([USDC]; 2014). This may limit generalization of results to other cultures. Unfortunately, access to a broader base of potential participants was limited due to the need for utilizing a sample in a remote location. While participants for the research project recruited from rural areas somewhat limited diversity, the literature indicated that the rates and detrimental impact of childhood abuse and neglect are consistent across cultures, making this research relevant to all populations (Affifi et al., 2015; Chinawa, Aronu, Chukwu, & Obu, 2014; Mahram, Hosseinkhani, Nedjat, & Aflatouni, 2013 Xiangming et al., 2015).

Limitations

Childhood abuse and neglect are difficult topics, and a research participant might not be willing or able to disclose abuse or neglect, even anonymously, for multiple reasons. Additionally, emotional abuse is difficult to define and difficult for some to recognize (Goldsmith & Freyd, 2005; Morelen & Schaffer, 2012). The measure of childhood emotional abuse in this research was based on the CTQ (Bernstein & Fink, 1998), a screener, and although the CTQ is a validated instrument used often in research on childhood trauma, it is somewhat limited. Because clinical interviews were not

included in the collection of data, this may have limited clarity in defining emotional abuse, possibly resulting in a decreased number of participants reporting childhood emotional abuse who might otherwise report emotional abuse on a broader instrument of measure. The CTQ (Bernstein & Fink, 1998) also includes measures of physical and sexual abuse, as well as physical and emotional neglect. Since these variables were controlled for in the statistical analyses of the data, potential biases are minimized in terms of attributing impairment to childhood emotional abuse, as opposed to other forms of childhood trauma. In addition, the information collected from participants was obtained anonymously, which helped reduce the potential for self-report and social desirability bias.

Sampling bias may be another potential limitation of this research. The sample utilized for the research consisted of those from primarily Caucasian locales in rural locations. Because the sample population utilized in the study potentially represented less diversity than samples from more urban regions, generalization to a larger population may be limited. However, childhood abuse and neglect were consistently found to be detrimental to long-term functioning in all populations discussed in the literature, suggesting childhood abuse and neglect are world-wide problems, and possibly minimizing these limitations (Affifi et al., 2015; Chinawa et al., 2014; Mahram et al., 2013; Xiangming et al., 2015).

Additional limitations relate to social desirability and recall bias. Childhood abuse and neglect are difficult topics for many, and the difficulty with disclosing a history of abuse or neglect may have limited the validity and reliability of the data obtained. In

addition, Hassan (2005) has reported that recall bias may have a significant impact on retrospective instruments of measure. The CTQ (Bernstein & Fink, 1998) is a retrospective instrument for childhood trauma, and its use may have limited the validity of results.

Significance

The discovery that childhood abuse or neglect may be used to predict adult emotional impairment provides relevant and clinically valuable information in terms of interventions, preventative methods, and avenues of study. There is a lack of research examining the potentially long-term and negative impact childhood abuse or neglect has on the development of adequate emotional functioning. This research may aid in the development of preventative measures for childhood abuse or neglect based on parental training in the area of emotional development. Research indicates that emotional skills can be developed during childhood by parental knowledge of the various aspects involved in emotional functioning, coupled with the parental training of the child on emotions (Saxena & Aggarwal, 2010). In addition, family communication patterns can impact the development of skilled emotional functioning (Keaten & Kelly, 2008).

According to Keaten and Kelly, conversation-oriented communication, in which families encourage open discussion about emotions and feelings, appears to correlate with an increased ability to recognize emotions, as well as to understand and manage emotional experiences. An aspect of emotional abuse, defined by the American Humane Association ([AHA]; nd), is verbal assault, which could effectively negate the potential

development of emotional regulation, emotional understanding, and emotional utilization, and thus global emotional health, potentially leading to long-term emotional impairment.

The knowledge provided by this study may also serve as a guide for interventions that incorporate emotional functioning skills as an aspect of treatment for those children currently in an abusive or neglectful environment and those adults with a history of childhood abuse or neglect. In addition, the discovery that childhood abuse or neglect may be used to predict emotional impairment provides a direction for additional research, and a potentially significant contribution to research on childhood abuse and neglect.

Social Change Implications

As noted, childhood emotional abuse is an underreported and prevalent societal problem associated with multiple dysfunctions and the development of psychopathology (Bruce et al., 2012; DHHS, 2015a; DHHS, 2015b; Iffland et al., 2012; Larsson et al., 2013; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). While current research has reported a significant association between childhood emotional abuse and disordered behaviors in which emotional impairment is suggested (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015; Smith & Flannery-Schroeder, 2013), there appeared to be no available research that examined the potential of a history of childhood emotional abuse to predict global emotional impairment during adulthood. This research project examined the statistical causal relationship between childhood abuse and neglect and adult emotional functioning, and offers potential for social change in multiple areas relevant to social science.

Childhood emotional abuse is often overlooked as a variable of interest in research examining childhood abuse and neglect, even though emotional abuse is frequently reported to more strongly and significantly correlate with dysfunction than other forms of abuse or neglect (Shi, 2013; Spinazzola et al., 2014). The difficulty with conducting research and intervening in emotionally abusive environments is often attributed to the lack of a definitive construct for childhood emotional abuse (Morelen & Schaffer, 2012; Schpiegel, Simmel, & Huang, 2013). Information that childhood abuse or neglect can be used to predict impairment in the development of adequate emotional functioning skills in adulthood highlights the magnitude of the impact of early environmental trauma. This knowledge could serve as an impetus for additional research on the specific and negative impacts of childhood abuse or neglect, and potentially lead to a focus on developing a viable and comprehensive construct that clearly defines acts indicative of emotional abuse for purposes of continuity in research and intervention.

Emotional impairment significantly correlates with multiple dysfunctional patterns of behavior (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et al., 2012) and some research indicates childhood emotional abuse may be an etiological factor (Karagoz & Dag, 2015; Shi: 2013; Spinazzola et al., 2014). Knowledge that childhood abuse or neglect presents a significant causal relationship to emotional impairment may lead to the development of assessment and treatment focused on the emotional functioning of those children in a dysfunctional environment who are experiencing social service interventions, as well as for adults seeking treatment who are suffering with the residual effects of an abusive or neglectful childhood history. The idea

that integration of emotional skills assessment and guidance as a treatment option could produce a decline in emotional impairment, potentially decreasing the risk of progression to clinical dysfunction, may engender positive societal change by inducing recognition that adequate emotional functioning is vital to an acceptable quality of life (Mikolajczak et al. (2013).

This research may also impact the development of efficacious preventative methods by directing attention to a need for the provision of education on emotional functioning and childhood abuse or neglect. As noted by Keaten and Kelly (2008), adequate emotional skills can be learned by children through parental training on emotions and communication. With over 670,000 valid reports of childhood abuse and neglect reported in 2013 by Child Protection Services, and 59,000 of these concerning emotional abuse alone (DHHS, 2015), the information that childhood emotional abuse can be used to predict future emotional impairment may emphasize the importance of increasing the focus on the significant detriment associated with childhood abuse and neglect. In addition, it may lead to the development of parental training on emotional functioning and communication as appropriate interventions or preventative measures (Keaten & Kelly, 2008).

Summary

Research examining childhood emotional abuse has reported significant correlations between childhood emotional abuse and negative outcomes during adulthood, including emotional disorders (Iffland et al., 2012; Negele et al., 2015; Shapero et al., 2014; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al.,

2014), disordered eating pathology (Groleau et al., 2013; Racine & Wildes, 2015), and dysfunctional behaviors (Karagoz & Dag, 2015; Marshall et al., 2013). Impaired emotional functioning is implicated in many of the disorders associated with a history of childhood abuse or neglect, including emotional inhibition and difficulties with emotional regulation (Iffland et al., 2012; Karagoz and Dag, 2015; Racine & Wildes, 2015; Spinazzola et al., 2014). Research examining emotional functioning in those with disorders or dysfunctional patterns of behavior, absent the inclusion of childhood emotional abuse as a variable of interest, has shown a significant association between emotional disorders and impairment in emotional processing in many of the same disorders found in those with childhood histories of abuse or neglect (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et al., 2012).

There was a lack of available research examining a direct association between a history of childhood emotional abuse and adult global emotional functioning, and very limited research examining any specific aspect of emotional functioning in relation to a history of childhood abuse or neglect. Research on emotional regulation in association with childhood emotional abuse was available during the literature review, however the construct of emotional regulation (Gratz & Roemer, 2004) varied greatly between studies, and was usually assessed through a self-report instrument of emotional functioning, lacking the clarity of the construct included in the Mayer and Salovey (1997) model.

The purpose of this project was to help fill a gap in the research by examining global emotional functioning and emotional regulation in adults reporting a history of childhood abuse or neglect to determine whether childhood emotional abuse can be used

as a valid predictor of impairment in emotional functioning in later years. This research was quantitative in nature with childhood emotional abuse, measured retrospectively (Bernstein & Fink, 1998), serving as the IV, and physical and sexual abuse, as well as physical and emotional neglect, serving as covariates. Adult global emotional functioning and emotional regulation, assessed through a performance-based instrument (Mayer et al., 2002), served as the DVs.

Chapter 2 of this dissertation includes an in-depth review of the literature that highlights the negative impact of childhood emotional abuse on general functioning, and the impact of childhood emotional abuse on various aspects of emotional processing. The limited research associated with the impact of childhood emotional abuse is discussed, as well as the research currently available on the association between dysfunction and impairment in emotional skills. Included in the discussion is an examination of the development of emotional functioning theory, with a specific focus on the model chosen as the theory for this project. Research implies healthy emotional functioning is a requisite to successful environmental adaptation, and research suggesting that childhood abuse or neglect may impair the development of adequate emotional skills is included.

Chapter 2: Literature Review

Introduction

A history of childhood abuse or neglect is significantly associated with multiple forms of emotional and behavioral disorders during adulthood, and impaired emotional skills are implicated in the associated dysfunctions (Karagoz & Dag, 2015; Groleau et al., 2013; Racine & Wildes, 2015; Shapero et al., 2014). The purpose of this research was to

statistically analyze information on emotional functioning collected from participants with a history of childhood abuse or neglect and those without, to determine whether childhood emotional abuse can validly predict future emotional impairment. Included in the dysfunctions associated with childhood emotional abuse are mood and anxiety disorders, and dysfunctional patterns of behavior such as eating disorders and substance abuse disorders, as well as increased suicide risk (Groleau et al., 2013; Marshall et al., 2013; Negele et al., 2015). The majority of available literature reviewed for this dissertation examined a history of childhood abuse or neglect in relation to specific dysfunctions or behavioral presentations, with limited available research exploring the direct pathway between childhood abuse or neglect and dysfunction.

Research that placed a primary focus on the emotional functioning of those with mood disorders or dysfunctional patterns of behavior, sans childhood abuse or neglect as variables of interest, indicated that impaired emotional skills positively correlate with the dysfunctions that were studied, such as depression and anxiety, substance abuse disorders, and increased suicide risk (Dvorak et al., 2014; Hertel et al., 2009; Motahari & Rahgozar, 2011; Rajappa et al., 2012). These same impairments, found in the literature on those with a history of childhood emotional abuse (Karagoz & Dag, 2015; Negele et al., 2015; Shi, 2013; Spinazzola et al., 2014), suggest that emotional abuse may be a potential factor implicated in the etiology of dysfunctions associated with emotional impairment. This research explored whether childhood emotional abuse potentially impacts the development of the emotional skills needed for adequate functioning during adulthood.

This discussion of the literature review begins with a focus on the theoretical construct of emotional functioning that served as the foundation for the research. It includes an in-depth examination of the Mayer and Salovey (1997) model of emotional functioning, including the emotional skills of emotional perception, emotional utilization, emotional understanding, and emotional regulation that are delineated in the theory and that comprise global emotional functioning. In relationship to the Mayer and Salovey model of emotional functioning, Correlations between differential measures of emotional functioning, absent the variables of childhood abuse or neglect, are presented. The rationale for using the Mayer and Salovey (1997) model of emotional functioning and the MSCEIT V2.0 (Mayer et al., 2002) as the instrument of measure for an examination of emotional functioning during the adult years will follow.

Following the discussion of the theoretical construct behind the research, the available literature related to alternative models of emotional functioning and emotional impairment is presented to emphasize the consistency of research suggesting that emotional processing impairment is a significant factor in dysfunctional patterns of behavior and emotional disorders. The discussion also includes research reviewed in relation to specific emotional skills, absent a comprehensive model of global emotional functioning. Here an examination of the research that has explored impaired emotional functioning in relation to a variety of emotional disorders and dysfunctional patterns of behavior, sans the variable of childhood abuse or neglect, is presented. The limited research examining emotional regulation, utilizing a different construct, in association with childhood abuse or neglect is also included. A parallel is drawn between the

dysfunctions found in the research that are associated with low measures of emotional functioning, and in those who have suffered childhood emotional abuse.

Next, childhood abuse and neglect, the cumulative nature of multiple traumas, and the difficulties associated with defining emotional abuse as a unified, bounded construct is discussed. Emotional abuse is described in multiple ways in the literature and the array of definitions is one of the primary obstacles to intervention, and to providing clarity in the research focused on childhood emotional abuse. Literature based on the impact of emotional abuse during the developmental years of childhood will highlight the potentially devastating impact emotional abuse imposes on general functioning. The research included in the discussion of childhood abuse and neglect consistently indicates that emotional abuse is detrimental to healthy emotional functioning during adulthood. In this review of the literature on childhood abuse and neglect, the concept that emotional impairment is one of the potentially long-term impacts of a history of childhood abuse or neglect, and is associated with the development of dysfunctional patterns of behavior and mood disorders, is underscored.

Literature Search Strategy

The majority of research and literature reviewed in Chapter 2 was obtained from available peer-reviewed journal articles. The databases used included Psyc ARTICLES, Psyc BOOKS, Mental Measurements Yearbook, Sage Publications, and Academic Search Premiere. While the majority of research cited was retrieved from peer-reviewed journals, any information included concerning the theoretical foundations of this project, such as theories based on emotional functioning, was obtained from a review of the

books written by the theories' authors (Bar-On & Parker, 2000; Goleman, 1995; Mayer & Salovey, 1997). The search terms or keywords used in developing the literature review were *child abuse, childhood neglect, childhood emotional abuse*, *childhood trauma*, *emotional intelligence, emotional maltreatment*, *emotional management*, *emotional neglect*, *emotional perception, emotional regulation*, *emotional understanding, emotional utilization, global emotional functioning*, *psychological abuse*, and *psychological maltreatment.*

The majority of research included in the literature review spans the time period from 2012 through 2016, although in areas where little to no current research was available, earlier articles have been included. For example, developmental literature related to the impact of childhood emotional abuse was limited, and the most recent developmental information has been included in order to highlight the potential detriment associated with childhood emotional abuse. In addition, little research was available exploring the link between childhood abuse or neglect, and the various emotional skills included in a comprehensive model of emotional functioning. In this case, the most recent research available was included to provide a view of the association between a history of childhood emotional abuse and later emotional functioning, as it stood.

Theoretical Foundation

The primary theory used as the foundation for this project was the theory on emotional intelligence by Salovey and Mayer, first published in 1990 and then edited, refined, and republished in 1997 by Mayer and Salovey. According to Mayer and Salovey (1997), emotional intelligence includes the skills of accurately perceiving and

appraising emotional stimuli, utilizing emotions to facilitate thought, correctly understanding emotions and emotional labels, and regulating emotional reactions to advance personal growth, intellectually and emotionally. In conjunction with their theory on emotional functioning, the MSCEIT V2.0, a standardized instrument of measure, was developed to assess specific emotional skills and global emotional functioning (Mayer et al., 2002).

Mayer and Salovey (1997) conceptualized their model of emotional functioning as having four branches, each consisting of different aspects related to emotional processing, with the skills on each branch building on the one before it, cumulating in a representation of global emotional functioning. The lowest branch of the model, emotional perception, concerns the various aspects related to accurately perceiving, analyzing, and expressing emotions. As defined by Brackett et al. (2011), perception of emotion means that a person is capable of perceiving their emotions accurately through physiological states and thoughts. As emotional skills increase, emotion can be detected accurately in others, in language, in works of art, and in other increasingly complex areas through correctly observing and interpreting the presented cues, such as color or behavior. Brackett et al. provided the example of being able to correctly interpret the emotions of others, whether false or honest emotional expressions, as an increased level of skill. Accurate perception of emotional cues increases the measurable level of emotional skill in this area, as does the ability to appropriately express emotional needs (Mayer & Salovey, 1997).

The second branch of the Mayer and Salovey (1997) model, the utilization of emotions and emotional experiences to facilitate thought, concerns the skills one has in using emotions or emotional experiences to enhance or improve thought and facilitate action in oneself and others. Salovey, Mayer, Caruso, and Lopes (2003) posit that the second branch encompasses areas related to utilizing emotions to focus attention and direct thought in a rational manner. In terms of increasing complexity, utilization of emotions includes such processes as using emotional information to prioritize issues, and generating emotions for problem solving, memory processes, and communication (Brackett et al., 2011). In relation to prioritizing issues, an example would be utilizing the emotional distress felt over a particular issue to focus on and resolve the problem effectively in order to reduce the emotional distress being experienced (Mayer & Salovey, 1997). In terms of generating emotions to direct actions, examples provided by Salovey et al. (2003) include using emotional experiences to aid in other activities, such as creativity, or utilizing mood swings to engage in multiple points of view on an issue when making decisions or judgments. Brackett et al. (2011) suggested that the most complex process associated with the second branch of the emotional functioning model is the skill needed to use various emotional states to alter thinking styles in order to improve functioning.

Branch three of the Mayer and Salovey (1997) model, emotional understanding, involves the skills related to correctly understanding and analyzing emotions in oneself and others, as well as being knowledgeable of how this information can be used to achieve goals. The initial skill listed on branch three of the model relates to how an

individual is able to recognize the different relations among emotions, as well as name them (Mayer & Salovey, 1997). For example, fear and anger provoke similar physiological responses. Mayer and Salovey noted that recognition of the differences suggests increased emotional skill in the area of emotional understanding. On this branch of the model, Mayer and Salovey also include the skill of interpreting and understanding why certain emotions occur, or what preceded them and led to the emotional experience. The skills involved in understanding the complexity of emotions, that they may blend with each other or occur simultaneously, and the skills associated with recognizing that emotions may transition into other emotions, such as happiness evolving to contentment, are also included on branch three as functions of emotional understanding (Mayer & Salovey, 1997). Salovey et al. (2003) suggested that someone who is high in emotional understanding is emotionally expressive, understands various emotional terms, and understands the relationship and differences among emotional labels and events.

The fourth branch of the Mayer and Salovey (1997) model of emotional functioning, emotional regulation, involves the skill of managing emotions in oneself and others for the purpose of personal growth. Salovey et al. (2003) suggested that emotion regulation involves the skill of controlling automatic emotional responses while experiencing various emotions and determining whether a particular emotional response is appropriate and beneficial to the situation. Included on this branch are the skills of remaining open to emotional experiences whether positive or negative, and utilizing an emotional experience to reflect or detach from the emotion, dependent upon its usefulness (Mayer & Salovey, 1997). According to Brackett et al. (2011), monitoring and

analyzing the appropriateness of emotions in any given situation is considered indicative of complex and well-developed emotion regulation skills. The final skill included on the fourth branch concerns the management and regulation of the emotions being personally experienced, as well as those experienced by others (Mayer & Salovey, 1997). As noted by Salovey et al. (2003), skilled emotional regulation involves moderating or enhancing emotional experiences without altering the accuracy of the experience. In other words, if intense anger is being experienced, the emotion can be moderated without denying the anger, therefore increasing the chances of a beneficial outcome through controlled emotion regulation (Salovey et al., 2003). According to Salovey et al., this fourth branch is the most complex and developed in the model, involving the most advanced emotional skills and building on all of the branches before it, suggesting that emotional functioning is an accrued, developmental process. Global emotional functioning refers to a composite of all of the individual emotional skills, which is considered an indicator of total emotional health (Mayer & Salovey, 1997).

While there appeared to be no current research available during the literature review that explored the emotional functioning of those with a childhood history of abuse or neglect using the Mayer and Salovey (1997) model of emotional functioning as the avenue of exploration, the model was utilized to examine mood disorders and dysfunctional patterns of behavior in previous research. Hertel, et al., (2009) examined the emotional functioning of 19 participants diagnosed with bipolar disorder, 31 participants diagnosed with major depressive disorder, and 35 participants diagnosed with substance abuse disorder, as well as 94 controls who had never been diagnosed with

a mental disorder. The MSCEIT v2.0 (Mayer et al., 2002) was administered to all participants. Hertel et al. (2009) reported that the emotional regulation, emotional understanding, and global emotional functioning scores of the groups with disorders was lower than the scores of the control group absent a history of disorders. Significantly lower scores were found on the measures of emotional understanding and global emotional functioning in the experimental group (Hertel et al., 2009).

In addition, Hertel et al. (2009) reported that the group with depressive disorder displayed more difficulty understanding emotions than the group of controls, and the group of participants with bipolar disorder scored lower on understanding and regulating emotions, as well as overall emotional functioning. The substance abuse disorder group scored lower on measures of understanding, regulating, and using emotions, as well as global emotional functioning. In addition, Hertel et al. (2009) noted that the substance abuse group displayed the largest impairments in emotional functioning measures.

While Hertel et al. (2009) provided research that suggests a link between emotional functioning and substance dependence, the question of whether childhood abuse or neglect play a part in the relationship was not answered, as neither was included as a variable. As is discussed later in the review of childhood abuse and neglect research, an emotionally abusive history can be used to predict both alcohol dependence and severity (Karagoz & Dag, 2015). Additional research indicates that childhood emotional abuse is a significant factor in bipolar disorder and depressive disorder in those with an abusive past (Larsson et al., 2013; Negele et al., 2015). No other current research utilizing the Mayer and Salovey model (1997) as a base for examining emotional

functioning in relation to childhood abuse and neglect or disorders appeared to be available during the review of the literature.

The Mayer and Salovey (1997) model offered a valuable construct to serve as the theoretical foundation for this research that examined the long-term impact of childhood abuse and neglect. The model offers a comprehensive picture of emotional processing, from initial emotional activation through the resultant emotional response, as well as clearly defining aspects of each emotional skill involved in global emotional functioning (Mayer & Salovey, 1997). Additionally, the Mayer and Salovey model is theorized to be cumulatively developmental in nature, suggesting that external factors, such as childhood abuse or neglect, may impact the development of adequate emotional skills (Salovey et al., 2003). As noted in the childhood emotional abuse definition provided by the DHHS (2015b), emotional abuse may thwart emotional development during childhood.

Due to the clarity of the Mayer and Salovey (1997) model, and the narrow scope focused entirely on emotional processes, there is less potential for confounding variables than with other models based on emotional functioning that include personality traits or factors from areas other than those typically associated with the emotions (Bar-On & Parker, 2000; Goleman, 1995). The clear focus on emotional processes that the Mayer and Salovey (1997) model offers contributed coherence to this project, as well as narrowing the focus on the impact of childhood abuse and neglect. In addition, the instrument of measure, the MSCEIT V2.0 (Mayer et al., 2002), developed in conjunction with the model, is a performance-based instrument requiring a demonstration of emotional knowledge. The use of the MSCEIT V2.0 in this research may have decreased

the chances of extraneous variables confounding results, as opposed to a self-report instrument that might have introduced increased subjectivity (Mayer, Salovey, & Caruso, 2008). The reliability and validity coefficients, as well as other information related to the MSCEIT V2.0 (Mayer et al., 2002) is discussed in the methods section of Chapter 3.

In the limited previous research utilizing the Mayer and Salovey (1997) model, impaired emotional functioning was implicated in mood disorders and dysfunctional patterns of behavior (Hertel et al., 2009). While the theory does not appear to have been previously used to explore the impact of childhood abuse or neglect, the model developed by Mayer and Salovey (1997), and the instrument of measure developed in conjunction with theory (Mayer & Salovey, 2002), offered a method for a quantitative exploration of whether childhood abuse or neglect potentially thwarts the development of adequate emotional functioning skills and global emotional functioning during adulthood. The lack of available research examining the impact of childhood abuse and neglect, utilizing a clearly delineated model of emotional functioning (Mayer & Salovey, 1997), as well as a performance-based assessment (Mayer et al., 2002), makes this research particularly relevant and valuable in relation to providing clarity and additional understanding of the potential long-term and negative impact childhood abuse and neglect exert.

Literature Review Related to Key Variables and/or Concepts

The literature review focused on research exploring the IV of childhood emotional abuse, and the DV of adult global emotional functioning, as well as research related to aspects of both variables, such as multiple forms of abuse, and independent emotional skills. All of the research reviewed on both variables utilized a quantitative,

correlative design due to ethical limitations imposed by the topic of choice. In the literature reviewed, measurements of childhood abuse and neglect were all obtained through the use of retrospective instruments, with the exception of research that used archived data (Spinazzola et al., 2014). Self-report instruments were relied on to obtain information on emotional functioning (Dvorak et al., 2014; Karagoz & Dag, 2015; Motahari and Rahgozar, 2011; Rajappa et al., 2012), with the exception of the research conducted by Hertel et al. (2009), who used the MSCEIT V2.0 (Mayer et al., 2002), a performance-based instrument.

While the majority of scholarly literature reviewed utilized statistical correlation in the analyses of the data, regression procedures were utilized in some of the research to examine the predictive validity of childhood emotional abuse on the constructs utilized as DVs. This previous research explored the predictive nature of childhood emotional abuse on depression, trauma symptoms, alexithymia, disordered eating patterns of behavior, and emotional regulation (Bruce et al., 2012; Groleau et al., 2013; Karagoz & Dag, 2015; Spinazzola et al., 2014). A defined construct of adult global emotional functioning was not utilized as a DV of interest by researchers in any of these studies, and the construct of emotional regulation that was used (Gratz & Roemer, 2004) is broader in scope than the Mayer and Salovey (1997) construct of emotional regulation, and the tool functions as a self-report instrument.

In relation to the theoretical foundation behind this project (Mayer & Salovey, 1997), the literature review yielded no available research that examined how individuals with a childhood history of abuse or neglect score on the associated instrument of

measure (Mayer et al., 2002). Moreover, there appeared to be no available research exploring childhood abuse and neglect that utilized alternative, comprehensive models of emotional functioning as a theoretical foundation (Bar-On & Parker, 2000; Goleman, 1995). The available research that explored the impact of childhood abuse and neglect on specific aspects of emotional functioning as the DV, such as emotional regulation, defined the construct in broader terms than that provided by the Mayer & Salovey (1997) model, thus reducing the clarity of results (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015).

Many of the previous researchers that utilized childhood abuse and neglect as variables of interest focused on constructs associated, to varying degrees, with aspects of functioning related to emotional processing, but the DVs of focus were typically associated with alternative behavioral science constructs, such as emotional disorders or dysfunctional patterns of behavior (Groleau et al., 2012; Iffland et al., 2012; Larsson et al., 2013; Negele et al., 2015; Racine & Wildes, 2015; Smith & Flannery-Schroeder, 2013). Nevertheless, the information generated in these studies related to the emotions provided information that potentially highlights the negative impact childhood abuse or neglect has on various aspects of functioning, in which inadequate emotional skills cannot be definitively excluded as a contributor to the dysfunctions.

Although a screener, the CTQ (Bernstein & Fink, 1998), was the primary instrument used to assess childhood abuse and neglect in the majority of the research reviewed on childhood trauma (Bradbury & Shaffer, 2012; Bruce et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Negele et al.,

2015; Shi, 2013; Smith & Flannery-Schroeder, 2013). The common use of the CTQ (Bernstein & Fink, 1998) in the research increases clarity on the impact of childhood emotional abuse because the construct of emotional abuse is uniform throughout these studies, and provides a continuum of knowledge on the impact of childhood emotional abuse. Aside from the research conducted by Hertel et al. (2009), none of the available literature exploring emotional functioning used a performance-based instrument of measure to assess global emotional functioning. Self-report instruments of measure may introduce increased levels of participant subjectivity, imposing limitations on the research, as opposed to a performance-based instrument that requires a demonstration of emotional knowledge and functioning (Salovey et al., 2003).

All of the research reviewed on childhood emotional abuse reported significant positive correlations between dysfunction and emotional abuse (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2012; Marshall et al., 2013; Negele et al., 2015; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Spinazzola et al, 2014; Smith & Flannery-Schroeder, 2013). The research reviewed and cited in this dissertation on emotional functioning, sans the variable of childhood abuse or neglect, consistently reported significant positive correlations between dysfunction and inadequate emotional skills (Dvorak et al., 2014; Hertel et al. 2009; Motahari and Rahgozar, 2011; Rajappa et al., 2012). There is consensus in the published research that emotional abuse is detrimental to adequate functioning in a multitude of ways, with emotional impairment implicated as a contributor in the dysfunctions. No research appeared to be available that explored

whether childhood emotional abuse is a significant predictor of later emotional processing impairment. The lack of available research in the literature that comprehensively explored the potentially predictive nature of childhood abuse or neglect on later emotional functioning left a possible pathway to impairment unexplored, and led to this research project.

The following literature review begins with a discussion of the research that utilized an alternative model of emotional functioning as the theoretical foundation behind the research (Motahari & Rahgozar, 2011). This literature is included in the discussion because it highlights the importance of adequate emotional skills to healthy functioning, even though this model (Bar-On & Parker, 2000) was not chosen as the theoretical foundation for this research. While there was variance in the defined model and construct associated with emotional processing, the researchers utilizing alternative models of emotional functioning indicated that low measures of emotional functioning significantly correlate with dysfunctional patterns of behavior (Motahari & Rahgozar, 2011).

Alternative Models of Emotional Functioning

An area of research utilizing an alternative, comprehensive model of emotional functioning (Bar-On & Parker, 2000) is related to suicide risk. Motahari and Rahgozar (2011) explored the relationship between levels of emotional functioning and suicide risk in a convenience sample of 30 participants with a history of suicidal behaviors, and 30 participants absent a suicidal history. The Emotional Quotient Inventory ([EQI]; Bar-On, 2004) was the instrument used by the researchers to obtain measures of emotional

functioning. The EQI is a self-report instrument used to measure emotional and social functioning (Bar-On, 2004), and is based on the model of emotional functioning developed by Bar-On and Parker (2000).

The variable measures included in the EQI (Bar-On, 2004) instrument relevant to this research project are emotional self-awareness, stress tolerance, and impulse control. Motahari and Rahgozar (2011) define the construct of emotional self-awareness as the ability to understand the emotional self. Stress tolerance is defined as the ability to adequately cope with stressful emotions without avoiding them, and impulse control is defined as the ability to control emotions and resist impulses (Motahari & Rahgozar, 2011). These variables are similar to aspects of emotional regulation and emotional understanding defined in the Mayer and Salovey (1997) model.

Motahari and Rahgozar (2011) reported that a history of suicide attempts significantly correlated with impaired emotional awareness, stress tolerance, and impulse control, as well as significantly lower global scores on the EQI (Bar-On, 2004), indicating overall emotional impairment. Following additional regression analyses, Motahari and Rahgozar (2011) suggested that measures of emotional awareness, stress tolerance, and impulse control, can be used to predict suicidal behaviors. Although Motahari and Rahgozar (2011) did not include childhood abuse or neglect as variables in their research, impairment of emotional awareness, the ability to manage emotions or impulse control, and the skill of tolerating stressful emotions, as well as increased suicide risk, all significantly correlate with a history of childhood emotional abuse (Karagoz & Dag, 2015; Marshall et al., 2013).

The research by Hertel et al. (2009) and Motahari and Rahgozar (2011) appeared to be the only available research utilizing comprehensive models of emotional functioning to examine dysfunction. Hertel et al. (2009) reported significant correlations between emotional impairment and major depressive disorder, bipolar disorder, substance dependence disorders, non-productive coping strategies, and problem behaviors. Motarai and Rahgozar (2011) reported that emotional impairment can be utilized to predict suicidal behaviors. While childhood abuse or neglect were not included as variables in these studies, suicidal behavior, substance dependence, bipolar disorder, and depressive disorder strongly and significantly correlate with a history of childhood abuse and neglect, as is reviewed later in the section on childhood emotional abuse (Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Negele et al., 2015;).

Individual and Specific Emotional Skills

Some previous research was available that examined specific emotional skills in relation to overall health and differential levels of functioning, absent a comprehensively defined model of emotional functioning as the theoretical base, or childhood abuse or neglect as variables of interest (Dvorak et al., 2014; Rajappa et al., 2012). These articles are included in the review because they indicate that impaired emotional functioning, primarily emotional regulation as defined by Gratz and Roemer (2004), plays a central part in dysfunctional moods and behaviors (Dvorak et al., 2014; Rajappa et al., 2012). In these studies, the Difficulties in Emotion Regulation Scale ([DERS]; Gratz & Roemer, 2004) was used to obtain measures of emotion regulation on six dimensions, including level of emotional awareness, level of clarity on emotions being experienced, non-

acceptance of negative emotions, ability to control impulses when experiencing negative emotions, ability to pursue goals when experiencing negative emotions, and ability to access effective strategies when under emotional duress.

The dimensions of the DERS (Gratz & Roemer, 2004) define several different aspects of emotional processing as delineated by Mayer and Salovey (1997), but they are subsumed under the category of emotional regulation (Gratz & Roemer, 2004). For example, the dimension of continued pursuit of goals when emotionally stressed, measured by the DERS (Gratz & Roemer, 2004), is similar to the branch of emotional regulation in the Mayer and Salovey (1997) model, and the dimension of clarity in the DERS (Gratz & Roemer, 2004) aligns with aspects of the branch labeled understanding in the Mayer and Salovey (1997) model. While the Mayer and Salovey model offers increased specificity and clarity in defining emotional processing, the following research on emotional regulation, provided significantly valuable information to the databases on the importance of adequate emotional functioning.

Rajappa, et al. (2012) utilized the DERS (Gratz & Roemer, 2004) to assess emotion regulation in relation to suicidal behaviors. Groups included participants with a history of suicide attempts and past or current suicidal ideation, and a control group absent suicidal tendencies. Rajappa et al. (2012) wanted to determine if impaired emotional regulation correlated with suicide attempt history and whether impairment in emotional regulation could be utilized to predict suicidal ideation. Rajappa et al. (2012) utilized a convenience sample of participants and administered the Beck Scale for Suicidal Ideation (Beck & Steer, 1993), the Beck Hopelessness Scale (Beck & Steer,

1988), and the Prime MD Patient Health Questionnaire (Spitzer, Kroenke, & Williams, 1999) to 96 university undergraduates. Interviews were conducted to assess mood and anxiety disorders in participants (Rajappa et al., 2012). Of these participants, Rajappa et al. developed four groups for analyses, including a group of 20 participants with a history of a single suicide attempt, a group of 17 participants reporting multiple suicide attempts, a group of 17 reporting current suicidal ideation, and a group of 42 participants absent a suicidal history and serving as a control group.

Rajappa et al. (2012) reported that the groups of participants with a history of suicide attempts displayed significantly different measures in emotion regulation than the control group. According to Rajappa et al., participants who had attempted suicide multiple times displayed significant impairment in non-acceptance of negative emotions in comparison to controls. Both the multiple attempt group and the single attempt group displayed significant impairment in the ability to access effective emotional coping strategies when under emotional duress in comparison to controls (Rajappa et al. 2012). Additionally, Rajappa et al. noted that participants who had made multiple suicide attempts scored significantly higher on the hopelessness measure and the suicidal ideation measure than controls.

Rajappa et al. (2012) stated that participants who reported current suicidal ideation scored significantly higher on measures of hopelessness and participants who reported a single historical attempt displayed significantly higher measures of suicidal ideation (Rajappa et al., 2012). Rajappa et al. also reported that impairment in the ability to access effective strategies when emotionally stressed statistically predicts suicidal

ideation. In additional regression analyses, Rajappa et al. found that hopelessness mediated the relationship between ineffective strategies and suicidal ideation. The research by Rajappa et al. (2012) suggests that accessing effective emotional strategies and the non-acceptance of negative emotions are significant factors in suicidal ideation. These constructs are similar to emotional utilization and emotional understanding in the Mayer and Salovey (1997) model of emotional functioning. As is discussed later, childhood abuse and neglect significantly correlate with suicidal behaviors (Marshall et al., 2013).

Additional previous research, also utilizing the DERS (Gratz & Roemer, 2004) as the instrument of measure for emotional functioning, was conducted by Dvorak et al. (2014). This research involved examining the relationship between emotional regulation and substance disordered behaviors. Dvorak et al. administered the DERS (Gratz & Roemer, 2004) to 1758 participants recruited on a university campus listserv. The Modified Daily Drinking Questionnaire (Dimeff, Baer, Kivlahan, & Murlatt, 1999), which assesses daily alcohol consumption, and the Young Adult Alcohol Consequences Questionnaire (Read, Kohler, Strong, & Colder, 2006), which obtains measures of consequences related to alcohol consumption, were administered to all participants by the researchers (Dvorak et al., 2014). Significant positive correlations were reported by Dvorak et al. between the number of drinks consumed a week, and the likelihood and frequency of alcohol-related consequences. Dvorak et al. noted that impairment in the emotional regulation aspects defined as non-acceptance of negative emotions and

emotional impulse control difficulties were significantly and positively associated with the number of alcohol-related consequences endorsed by participants.

Additionally, Dvorak et al. (2014) reported that difficulty engaging in goal directed behaviors when experiencing emotional stress and impaired emotional clarity positively correlated with alcohol-related consequences, as well as the frequency of occurrence of alcohol-related consequences. Overall, Dvorak et al. (2014) noted that impaired emotional regulation, as defined by Gratz and Roemer (2004), is a significant factor in substance-related dysfunctional behaviors. The emotional regulation variables that produced significance in the research by Dvorak et al. are similar to, and included in, the constructs of emotional understanding, emotional utilization, and emotional regulation in the Mayer and Salovey (1997) model of emotional functioning used in this research.

Additional research that utilized the DERS (Gratz & Roemer, 2004) in an examination of emotional regulation impairment that included childhood abuse and neglect as variables (Karagoz & Dag, 2004) is discussed in the following review of literature related to childhood abuse and neglect. Results from the research by Dvorak et al. (2014) and Rajappa et al. (2012) on emotional regulation indicate that impaired emotional processing is significantly associated with dysfunctional behaviors and mood. The focus of the literature review will now shift to the research on childhood abuse and neglect, in which it will be seen that the same disorders and dysfunctional patterns of behavior that were discussed in association with the literature on impaired emotional

functioning are also found in the research exploring the impact of childhood emotional abuse.

Childhood Abuse and Neglect

As noted by the DHHS (2015b), the majority of researchers examining childhood emotional abuse theorize it typically occurs in conjunction with all other forms of abuse or neglect. Shi (2013) examined the prevalence and rates of different types of childhood abuse and neglect in a sample of 497 outpatients presenting with various clinical complaints. The CTQ (Bernstein & Fink, 1998) had been administered at intake to all participants upon their initial visit to the clinic where they were seeking services, and the Abuse Symptom Inventory (Briere, Elliot, Harris, & Cotman, 1995) was additionally administered by Shi (2013) to assess abuse symptoms (Shi, 2013). Shi reported that 74.7% of participants reported some form of childhood maltreatment and 55% of the sample reported two or more forms of childhood maltreatment. In relation to severity levels, 26.4% reported low to moderate levels of abuse or neglect, while 47.3% of those reporting maltreatment reported levels in the moderate to extreme range (Shi, 2013).

In relation to prevalence type, Shi (2013) noted that emotional neglect was reported most frequently by participants, followed by emotional abuse, physical abuse, physical neglect, and sexual abuse. The most frequent type of childhood maltreatment measured in the moderate to severe range was emotional abuse, followed by emotional neglect, physical neglect, physical abuse and sexual abuse (Shi, 2013). Shi reported that emotional abuse achieved the highest reported frequencies in the severe to extreme range in the sample (Shi, 2013). Participants reporting severe to extreme levels of abuse or

neglect also appeared to report more forms of maltreatment, with females reporting higher scores and more types of trauma than males (Shi, 2013). Shi stated that as measures of trauma severity and frequency increased in participant reports, impairment also increased.

Researchers have indicated that emotional abuse occurs as frequently and severely as other forms of abuse and neglect, and the impact of emotional abuse appears to be equivalent to, or greater than, other forms of trauma (Spinazzola et al., 2014). Spinazzola et al. (2014) explored the impact of childhood emotional abuse and emotional neglect, defined as psychological maltreatment, in relation to other forms of childhood abuse and neglect. The researchers were trying to determine the synergistic and predictive effects of childhood psychological maltreatment on functioning, including whether children with a history of psychological maltreatment had higher baseline levels of symptom severity, clinical risk factors, and functional impairment than children with other forms of abuse or neglect. Additionally, Spinazzola et al. (2014) examined whether children reporting sexual or physical abuse in conjunction with emotional abuse displayed significantly worse clinical outcomes than those absent a history of childhood emotional abuse.

Spinazzola et al. (2014) utilized archived data from the National Child Traumatic Stress Network Core Data Set (Layne, Briggs-King, & Courtois, 2014), which contained demographics and abuse assessment scores, among other information. Spinazzola et al. (2014) examined the data from 5616 children who reported exposure to one or more forms of childhood maltreatment, including psychological maltreatment (abuse and neglect combined), physical maltreatment (abuse and neglect combined) and sexual

abuse. Spinazzola et al. (2014) used the UCLA Posttraumatic Stress Disorder-Reaction Index (Steinberg et al., 2013) to obtain measures of post-traumatic stress in participant data. The Child Behavior Checklist (Achenbach & Rescorla, 2004) was used to determine symptomatology, including externalizing and internalizing behavioral tendencies (Spinazzola et al., 2014). Utilizing the Child Traumatic Stress Network Core Data Set (Layne et al., 2014), Spinazzola et al. (2014) developed research groups based on the types of childhood abuse or neglect assessed and present, as well as clinician ratings of the severity and types of mental disorders, behaviors, and distress symptoms that were reported in the data.

Spinazzola et al. (2014) reported that participants with a history of psychological maltreatment had significantly higher scores on severity indicators of internalizing behavioral problems, such as suicidality and substance abuse, in comparison to the physical maltreatment and sexual abuse groups. In addition, the psychological maltreatment group had significantly higher scores on severity indicators of disorders, such as depression, anxiety, dissociation, and acute stress disorder, than the sexual abuse group (Spinazzola et al., 2014). In a comparative examination of the data with physical or sexual abuse, the group with psychological maltreatment reported equivalent or higher frequencies than sexual or physical maltreatment groups on measures of risky behaviors, disorders, functional impairments, symptoms of distress, and behavioral problems (Spinazzoli et al., 2014). When Spinazzoli et al. compared the group with a history of physical maltreatment to the group with a history of psychological maltreatment, they found that the group reporting childhood psychological maltreatment had significantly

higher odds of presenting with behavioral problems at home, depression, generalized anxiety, acute stress disorder, and problems related to attachment, as well marginally higher odds of engaging in self-harming behaviors, and skipping school or daycare.

Spinazzola et al. (2013) noted that in comparison to the group reporting a history of sexual abuse, the psychological maltreatment group showed higher frequencies on the majority of impairment measures. Statistically, the predictive validity of psychological maltreatment was similar to physical maltreatment and sexual abuse effects combined, and significantly greater in predicting higher scores on measures of depression, acute stress disorder, generalized anxiety disorder, and substance abuse disorder measures (Spinazzola et al., 2014). According to Spinazzola et al., the predictive effects of childhood sexual abuse and physical maltreatment were greater in magnitude and frequency when a history of psychological maltreatment was also present. Spinazzola et al. (2014) noted that psychological maltreatment was the most frequent form of childhood trauma in the sample, and whenever psychological maltreatment co-occurred with other forms of maltreatment, the impact was much more severe than when physical maltreatment and sexual abuse occurred alone (Spinazzola et al., 2014).

The research by Shi (2013) and Spinazzola et al. (2014) not only indicate that emotional trauma is as frequent and severe as other forms of childhood abuse and neglect, but that the associated detriment is equal to or greater than that contributed through other forms. In addition, childhood abuse and neglect, as examined by Spinazzola et al. (2014), appears to exert a cumulative dose-response effect. The presence of multiple types of trauma, as well as increased severity, is associated with greater

impairment. In other words, the multiplicity of childhood abuse and neglect may produce a synergistic and significantly detrimental effect on functioning.

Defining childhood emotional abuse. Although receiving much less attention in the literature, previous research suggests the frequency and impact of childhood emotional abuse is as significant and detrimental as other forms of childhood abuse or neglect (Shi, 2013, Spinazzola et al., 2014). Additionally, emotional abuse is considered to be inherent in other forms of trauma (DHHS, 2015b). Of the 670,000 children victimized through abuse and neglect in 2013, only 59,000 of these concerned emotional abuse specifically (DHHS, 2015a). Physical and sexual abuse have been the topic in the majority of research, and the differences in report and intervention rates is extreme. This is likely due, in part, to the lack of a clearly-defined and cohesive construct for childhood emotional abuse (Morelen & Schaffer, 2012; Shpiegel et al., 2013).

One of the difficulties with intervening in childhood emotional abuse cases is the lack of a bounded construct for childhood emotional abuse (Morelen & Schaffer, 2012; Shpiegel et al., 2013). In the examination of research on childhood emotional abuse it quickly became apparent that emotional abuse is defined in multiple ways in the literature. Key terms used such as emotional abuse, emotional maltreatment, emotional neglect, psychological abuse, and psychological maltreatment are often used interchangeably. The large number of definitions for childhood emotional abuse not only makes research more difficult, but decreases clarity in what acts or behaviors constitute emotional abuse. Additionally, many of the definitions provided throughout the literature are vague, providing generalized descriptions or terms of emotional abuse, which make it

more difficult to designate specific behaviors as emotionally abusive, as well as more problematic in terms of intervention planning. The harm is often evident with other forms of childhood abuse, while emotional abuse is more difficult to assess and make definitive conclusions about (Morelen & Schaffer, 2012).

The Federal Child Abuse Prevention and Treatment Act (CAPTA) is used to set the minimum standards for defining childhood abuse and neglect (DHHS, 2003). In a fact sheet published by the DHHS (2015b), childhood emotional abuse is defined as patterns of behavior that result in impairment of emotional development and the child's sense of self-worth. These behaviors may include failure to provide support and guidance, love, and/or continuous criticism, rejection, or threats. Notably absent in the definitions provided by the DHHS (2015b) are specific boundaries or guidelines for defining emotional abuse for purposes of intervention or legal action. Adding to the lack of cohesion in defining emotional abuse is the fact that each state is responsible for providing its own definition of childhood abuse or neglect, according to CAPTA legislation (DHHS, 2003).

When the individual state statutes (DHHS, 2010) in association with childhood abuse and neglect are reviewed the ambiguity of legal definitions for childhood emotional abuse is obvious. Substantial boundaries and examples are provided for both physical and sexual abuse, but the majority of state statutes concerning emotional abuse consist of approximately one or two sentences (DHHS, 2010). Childhood emotional neglect is not included in any of the state statutes (DHHS, 2010). Many of the statutes simply note that emotional abuse is considered to have occurred when there is impairment to the child's

psychological health or mental injury is present, without including any acts definitive of emotional abuse injury (DHHS, 2010). Furthermore, mental injury is not defined in most of the state statutes however some do define mental injury as an impairment of a child's intellectual functioning, psychological functioning, or development (DHHS, 2010). The definition is so vague as to be of little use in determining what specifically constitutes childhood emotional abuse or how it is to be determined that it has occurred, severely limiting intervention. Some state statutes, such as Georgia and Washington, do not address childhood emotional abuse at all (DHHS, 2010). As stated by Morelen and Schaffer (2012), the lack of a clearly defined construct for emotional abuse poses problems in terms of mandated reporting requirements and beneficial intervention.

One definition of childhood emotional abuse that was found frequently in the review of the literature came from the American Humane Association ([AHA]; n.d.). The AHA defines emotional abuse as ignoring, rejecting, isolating, exploiting, corrupting, verbally assaulting, terrorizing, or neglecting a child (p. 1). Unlike many of the definitions provided throughout the literature, the AHA (n.d.) definition also includes examples of each behavior in order to provide some clarity for what constitutes childhood emotional abuse (see Appendix A). While the AHA (n.d.) definition was used frequently in the literature and provided a broader scope for defining emotional abuse, again the specific boundaries for making a determination of the presence of childhood emotional abuse were not included. According to the AHA (n.d.), emotional abuse is a pattern of behavior, rather than an occasional lapse in good parenting, as the AHA stated that most parents occasionally lose control and lash out at their children. Shpiegel et al. (2013)

suggested that the chronicity of parental emotionally abusive behaviors, as well as the observable impact on the child, such as stress reactions, should be factored in when determining whether emotional abuse is occurring.

While a unified construct of emotional abuse is sorely needed for intervention purposes and clarity in research, the goal of this research was to focus on the impairment of global emotional functioning in adults in relation to a history of childhood emotional abuse. As noted by the DHHS (2015b) in defining childhood emotional abuse, emotional abuse may impair a child's emotional development. Although emotional abuse is not clearly defined in the literature, the multitude of definitions, as well as the multitude of significant associations between childhood emotional abuse and dysfunction, highlight an acknowledgment that emotional abuse is damaging to a child and a topic worthy of investigation (Groleau et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Iffland et al., 2012; Marshall et al., 2013; Negele et al., 2015; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). In this research, the definition of childhood emotional abuse was provided by the developers of the CTQ (Bernstein et al., 2003), because this instrument of measure was the most frequently used in previous research and results from this research study add to the base of knowledge that utilizes the same construct for childhood emotional abuse.

Emotional abuse during developmental years. Childhood emotional abuse occurs during the developmental years of an individual's life. According to Marshall (2010), emotional abuse during different time periods in a child's life is associated with the development of different problems. Marshall noted that infants who experience

emotional abuse have decreased chances of meeting developmental milestones and display attachment difficulties. Additionally, infants and toddlers may display externalizing behaviors and show aggression if emotionally abused, while preschoolers may exhibit avoidance, noncompliance, and negative affect, also displaying increased internalization, externalization, and aggression (Marshall, 2010).

According to Marshall (2010), emotional abuse experienced during middle childhood and the early adolescent years may result in depressive symptoms, increased aggression, conduct and socio-emotional problems, as well as low self-esteem. Marshall further suggested that emotional abuse occurring during the adolescent years may result in a display of dissociation, suicidal behaviors, substance disordered behavior, and personality disorders. In addition, emotionally abused children may show depression and a negative inferential style in comparison to non-abused children (Marshall, 2010).

Iwaniec, Larkin, & Higgns (2006) also noted that the timing of emotional abuse during a child's life has important developmental consequences in relation to emotional and general functioning. In addition to impaired attachment abilities, low-self-esteem, limited self-control, and emotion regulation difficulties, Iwaniec et al. (2006) noted that emotional abuse during adolescence thwarts a child's ability to integrate the emotional experiences that typically occur during adolescence. A failure to develop adequate emotional skills, such as a lack of self-control or emotional regulation, may limit a child's ability to develop increasingly complex emotional skills, resulting in impairment of global emotional health. In addition to the most common type of impairment displayed depending on the age of abuse, Iwaniec, Larkin, & McSherry (2007) suggested that the

timing of abuse also affects the level of impairment displayed. For instance, adolescence and toddlerhood are times of growing independence and a critical time for the development of personal identity, as well as self-esteem. The experience of emotional abuse during these times significantly and negatively impacts the abilities required to develop a positive self-identity (Iwaniec et al., 2007).

As stated by Goldsmith and Freyd (2005), environments in which a child is emotionally abused are not conducive to the development of emotional awareness. Goldsmith and Freyd suggested that children in an emotionally abusive environment may deny or dissociate from the abuse in order to maintain the security provided by the illusion that their parents can be trusted. Additionally, expressing negative emotions in an abusive environment can be detrimental to the self, as this expression may arouse additional abuse (Goldsmith & Freyd, 2005). One potential result, as noted by Goldsmith and Freyd, is that the expression of negative emotional experiences in an abusive environment may lead to a belief that the child failed to correctly interpret the emotional experience and that the fault lies in the child themselves. In other words, an emotionally abused child may assume the emotional abuse is accurate and deserved, resulting in self-blame, which provides a sense of security to the child that they have some control over the environment (Goldsmith & Freyd, 2005). Theoretically, based on developmental research, childhood emotional abuse could potentially contribute to impairment in the development of emotional processing skills, thus leading to mood and behavior disorders later in life.

As is discussed later, many of the dysfunctional patterns of behavior and disorders discussed in the developmental literature, including impaired self-reference, depression, anxiety, bipolar disorder, substance abuse disorders, and dissociation were found in the literature review of research related to childhood emotional abuse, suggesting a potential for impairment during development that continues through adulthood (Groleau et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Iffland et al., 2012; Marshall et al., 2013; Negele et al., 2015; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). In light of the developmental information provided by Marshall (2010), Iwaniec et al. (2006), Iwaniec et al. (2007), and Goldsmith and Freyd (2005) related to childhood emotional abuse and development, as well as the literature review associated with emotional abuse which follows, if appropriate intervention does not occur in children who have experienced abuse, it may be possible that these dysfunctions could continue into the adult years, potentially leading to increased pathology.

Childhood Emotional Abuse

The limited available research that included an exploration of the direct relationship between emotional functioning processes and childhood abuse and neglect suggests that emotional skills are impaired when a history of childhood emotional abuse is present. Karagoz and Dag (2015) examined the relationship between emotional regulation, childhood abuse and neglect, and self-mutilating behaviors in 79 male substance-dependent patients at an inpatient facility. Karagoz and Dag (2015) used the DERS (Gratz & Roemer, 2004) to obtain measures of emotional regulation, and the CTQ

(Bernstein & Fink, 1998) to assess childhood abuse and neglect in an experimental group of 28 participants who frequently self-mutilated, as well as a control group.

Karagoz and Dag (2015) reported that participants who frequently self-mutilated obtained significantly higher CTQ (Bernstein & Fink, 1998) scores on the emotional abuse, emotional neglect, and physical abuse subscales. Following statistical regression procedures, Karagoz and Dag (2015) reported the IV of childhood emotional abuse predicted impairment in emotional regulation, as defined through the DERS (Gratz & Roemer, 2004). Childhood emotional abuse significantly predicted impairment in accessing effective emotional strategies and engaging in goal directed behavior if under emotional duress, as well as the ability to utilize impulse control when negatively aroused emotionally (Karagoz & Dag, 2015).

In addition, Karagoz and Dag (2015) reported that the greater the level of trauma, the greater the impairment. Kargoz and Dag noted that childhood sexual abuse did not significantly correlate with high DERS (Gratz & Roemer, 2004) scores, and that frequent mutilators experienced more difficulty regulating impairment in emotional regulation than did the control group absent self-mutilating behavior. Karagoz and Dag reported that no significant differences were found between the experimental and control groups on the emotional regulation dimensions of understanding, awareness, and avoidance of negative emotions, as defined through the DERS (Gratz & Roemer, 2004).

Karagoz and Dag (2015) concluded that difficulties in accessing effective emotional strategies, controlling impulses when under emotional duress, and engaging in goal-directed behavior when experiencing negative emotions play a central part in self-

mutilating behaviors when childhood abuse or neglect is present. The variables that achieved significance in the research by Karagoz and Dag are similar to the Mayer and Salovey (1997) constructs of emotion regulation and emotional utilization. The research by Karagoz and Dag (2015) suggests that the presence of a history of childhood abuse or neglect negatively impacts different aspects of emotional functioning, potentially leading to dysfunctional methods of coping with emotional experiences.

Research examining the relationship between emotional regulation, relationship satisfaction, and childhood abuse and neglect was conducted by Bradbury and Shaffer (2012). The CTQ (Bernstein & Fink, 1998), the DERS (Gratz & Roemer, 2004), and the Relationship Assessment Scale (Hendrick, 1988) were administered by Bradbury and Shaffer (2012) to a convenience sample of 492 undergraduates. Following bivariate analyses, Bradbury and Shaffer reported that childhood emotional abuse, referred to as emotional maltreatment and including both emotional abuse and emotional neglect, was significantly associated with emotional regulation dysfunction, as well as less romantic relationship satisfaction.

Emotional regulation difficulties were also found to significantly correlate with less satisfaction in romantic relationships (Bradbury & Shaffer, 2012). In addition, Bradbury and Shaffer reported that childhood emotional maltreatment was a significant predictor of dissatisfaction in romantic relationships. The emotional regulation skills of non-acceptance of emotional responses, impaired emotional impulse control, and impaired emotional awareness mediated the relationship between childhood emotional maltreatment and romantic relationship satisfaction (Bradbury & Shaffer, 2012). The

study by Bradbury and Shaffer indicates that emotional regulation impairment significantly and detrimentally effects relationship satisfaction, and that childhood emotional maltreatment is a significant factor in both emotional dysregulation and relationship dissatisfaction.

Alexithymia is an atypical and extreme emotional impairment that potentially highlights the negative and severe consequences of childhood emotional abuse and neglect (Smith & Flannery-Schroeder, 2013). Alexithymia refers to an inability to recognize and verbally label emotions, distinguish between different emotions and related physiological sensations, and also includes a concrete, externally-oriented cognitive style (Smith & Flannery-Schroeder, 2013). Smith and Flannery-Schroeder examined potential relationships between somatic complaints, childhood emotional abuse and emotional neglect, referred to as childhood emotional maltreatment, and alexithymia. Smith and Flannery-Schroeder theorized that somatic complaints in those with a history of childhood emotional maltreatment are mediated by alexithymia. Smith and Flannery-Schroeder (2013) administered the CTQ (Bernstein & Fink, 1998), and the Psychological Maltreatment Inventory (Engels & Moisan, 1994), to assess childhood maltreatment (Smith & Flannery-Schroeder, 2013), to 270 undergraduate student participants. The Toronto Alexithymia Scale (Bagby, Parker, & Taylor, 1994) was used by the researchers to obtain measures of alexithymia, and the Somatization subscale of the Symptom Checklist-90 Revised (Derogatis, 1993) was utilized to assess somatic complaints.

Following statistical analyses, Smith and Flannery-Schroeder (2013) reported that there was a direct path between childhood emotional maltreatment and somatic

complaints in participants reporting a history of childhood emotional maltreatment. In addition, a history of childhood emotional maltreatment was significantly, strongly, and directly associated with alexithymia (Smith & Flannery-Schroeder, 2013). Smith and Flannery-Schroeder noted that physical and sexual abuse were only significantly predictive if childhood emotional abuse or neglect was also present. Supporting the research by Shi (2013) and Spinazzola et al. (2014) discussed earlier, the study on alexithymia by Smith and Flannery-Schroeder (2013) indicates that emotional maltreatment is a strongly significant form of trauma, producing a synergistic and predictive effect on dysfunction, as well as potentially yielding a significant and detrimental impact on long-term emotional functioning.

In additional research examining the relationship between functioning and childhood abuse, Shi (2013) analyzed childhood abuse in relationship to the presentation of trauma symptoms. Participants, comprised of 235 clinical outpatients, completed the CTQ (Bernstein & Fink, 1998) and the Abuse Symptom Inventory (Briere et al., 1995), which obtains measures of abuse symptoms, including anxious arousal, depression, defensive avoidance (in which emotionally painful thoughts or memories are avoided), intrusive experiences (such as flashbacks), dissociation, impaired self-reference (in which self-confidence and tolerance for stress are impaired), tension reduction behavior (which involves unhealthy coping methods for soothing negative internal states), sexual concerns, sexual behavior dysfunctions, and anger/irritability (Shi, 2013).

Shi (2013) reported that while emotional abuse did not obtain predictive value in relation to the abuse symptoms of sexual concerns and sexual behavior dysfunctions, a

history of childhood emotional abuse was the most significant form of maltreatment, predicting the remaining 8 out of 10 trauma symptoms. Shi (2013) further reported that physical abuse predicted the symptoms of anxious arousal and depression, while physical neglect, emotional neglect, and sexual abuse did not achieve predictive power with any of the symptoms. In the research by Shi (2013), a history of emotional abuse was the most significant form of childhood abuse or neglect in relation to emotional functioning processes and abuse symptoms.

Additional previous research included emotional disorders, such as depression and suicidal behaviors, as variables in an exploration of the impact of childhood abuse and neglect. Marshall et al. (2013) conducted a 5-year longitudinal study with 1634 illicit drug users, recruited as part of a larger study, to serve as participants in an examination of the relationship between childhood abuse and neglect and suicide risk. The CTQ (Bernstein & Fink, 1998) was administered to all participants and a complete history of suicide attempts and other risk factors were collected and controlled for in analyses of the data. For all types of childhood environmental trauma, Marshall et al. (2013) reported significant correlations between severity of abuse or neglect and suicidal behavior. Marshall et al. (2013) noted that the more severe the childhood abuse or neglect, for all scales, the greater the increase in suicidal behavior. When extreme sexual, physical, and emotional abuse were reported there was a significant increase in suicidal behavior, while extreme physical and emotional neglect did not produce significant results (Marshall et al., 2013). In the research by Marshall et al. emotional abuse was strongly and significantly associated with an increase in suicide attempts, as were physical and sexual

abuse, although during additional regression procedures, emotional and physical abuse lost significance as a predictive variable, while a history of sexual abuse retained predictive validity.

In an examination of the relationship between childhood emotional abuse and depression, Shapero et al. (2014) theorized that the relationship between childhood emotional abuse and depression could be accounted for by increased stress sensitivity to dependent life events, which in turn results in increased depressive symptoms. Shapero et al. conducted a 2-year longitudinal study examining the stress reactivity of 134 participants who presented with a high cognitive risk of depression and 147 participants who presented with a low cognitive risk of depression. Measures of cognitive risk or vulnerability to depression were obtained by Shapero et al. (2014) through administrations of the Cognitive Style Questionnaire (Alloy et al., 2000) and the Dysfunctional Attitudes Scale (Weismann & Beck, 1978). The Beck Depression Inventory (Beck, Rush, Shaw, & Emory, 1979) was administered by Shapero et al. (2014) every two weeks throughout the study to obtain depressive symptom measures, and the Life Events Scale and Life Events Interview (Safford, Alloy, Abramson, & Crossfield, 2007) were administered every six weeks to obtain information on negative life events that had occurred, such as a minor illness or some other dependent stressful life event (Shapero et al., 2014). Shapero et al. also administered the Lifetime Experiences Questionnaire (Rose, Abramson, & Kaupie, 2000), a retrospective self-report instrument utilized to obtain information on childhood abuse.

In the analyses of data, Shapero et al. (2014) controlled for the effects of cognitive style, physical abuse, and sexual abuse to determine the impact of childhood emotional abuse on increased stress sensitivity and increased depressive symptoms. Shapero et al. reported that childhood emotional abuse was the only form of childhood maltreatment that was significantly associated with increased stress reactivity to dependent life events in participants and also increased depressive symptoms. In addition, the more severe the emotional abuse the greater the stress sensitivity and depressive symptoms (Shapero et al., 2014). Stress sensitivity suggests impairment in the ability to manage emotions and results from the research by Shapero et al. indicate that childhood emotional abuse may be a significant factor.

Anxiety is another emotional dysfunction that has been examined in relationship to childhood abuse and neglect. Iffland et al. (2012) were interested in examining the relationship of childhood maltreatment to social anxiety. A final total of 995 participants, recruited in online advertisements by Iffland et al. completed German versions of the Social Phobia/Social Interaction Anxiety Scale (Heinrichs, Hahlweg, Fiegenbaum, Schroeder, & von Witzeleben, 2002) to assess levels of social anxiety, and the CTQ (Bernstein & Fink, 1998) to assess childhood abuse and neglect. The Brief Symptom Inventory (Derogatis, 1993) was utilized to assess psychopathology, including global severity, positive symptoms, and positive distress in respondents (Iffland et al., 2012). In addition, Iffland et al. included an examination of the impact of childhood emotional abuse received from peers as another independent variable in the research design.

During linear regression analyses, composite scores for low to severe measures of emotional abuse and neglect and low to severe measures of physical abuse and neglect were analyzed by Iffland et al. (2012) as independent variables, in relation to social anxiety levels and various psychopathology measures. The researchers determined that all forms of childhood maltreatment significantly correlated with social anxiety and psychopathology, although the correlations between childhood emotional abuse and the dependent variables were significantly higher than other forms of abuse and neglect (Iffland et al., 2012). Additional regression analyses indicated that when factors were controlled, physical abuse was not significantly associated with social anxiety, while emotional abuse was (Iffland et al., 2012). Iffland et al. noted that when emotional abuse was not controlled for in the analyses, physical abuse was significantly associated with psychopathology and social anxiety. Iffland et al. further reported that emotional abuse appeared to be a mediator in the relationship between childhood physical abuse, social anxiety, and psychopathology levels.

Additionally, Iffland et al. (2012) stated that participants reporting childhood emotional abuse obtained significantly higher scores on all of the Brief Symptom Inventory (Derogatis, 1993) measures than the participants absent childhood emotional abuse. Iffland et al. (2012) also noted all participants reporting emotional abuse obtained significantly higher scores on the global severity index, as well as the social anxiety and psychopathology measures. Emotional abuse from peers was found to independently correlate with social anxiety (Iffland et al., 2012). In summary, Iffland et al. concluded that childhood emotional abuse was the most significant type of maltreatment, producing

the largest effects on dysfunction, including social anxiety and psychopathology, as well as the global severity of symptoms.

Additional researchers examined the relationship between childhood emotional abuse and social anxiety disorder (SAD), with Bruce et al. (2012) statistically analyzing data from 156 outpatients who were seeking treatment for SAD. Bruce et al. explored the severity of social anxiety, disability, and quality of life in participants with a history of childhood abuse or neglect and a control group absent a traumatic history. The CTQ (Bernstein & Fink, 1998) was used by Bruce et al. to obtain measures of childhood abuse and neglect. Bruce et al. (2012) used the Liebowitz Social Anxiety Scale (Rodebaugh, Heimberg, Woods, Liebowitz, & Schniere, 2006) to assess the severity of participants' SAD, and 16 different domains of functioning, such as physical health and standard of living were assessed using the Quality of Life Inventory (Frisch, 1994). Bruce et al. (2012) utilized the Liebowitz Self-Rated Disability Scale (Schneier, et al., 1994) to obtain measures of participant disability.

Bruce et al. (2012) reported the demographic variables, including age, gender, race, education, marital status, employment status, or Hispanic ethnicity, did not significantly correlate with any of the childhood trauma variables, as measured by the CTQ (Bernstein & Fink, 1998). Following regression procedures, Bruce et al. (2012) reported that higher levels of emotional abuse, emotional neglect, and physical neglect could be used to predict significantly greater severity of SAD symptoms. Higher levels of emotional abuse, emotional neglect, and pysical abuse could be used to predict a significantly lower quality of life measure (Bruce et al., 2012). Bruce et al. added that

higher levels of emotional abuse and emotional neglect could be used to predict significantly higher levels of disability. Bruce et al. reported that the strongest predictor of the pretreatment severity of SAD symptoms, disability, and decreased quality of life was emotional abuse.

Depressive disorders have also been a topic of exploration in association with childhood abuse and neglect. Negele et al. (2015) conducted research to examine the relationship between childhood emotional abuse and chronic depression. Negele et al. explored the childhood histories of abuse and neglect in participants to determine the types of maltreatment that had occurred, as well as the frequency and severity of the reported maltreatment. Participants consisted of 349 individuals assessed with a major depressive episode or dysthymia lasting more than 12 months, and drawn from a study group of chronically depressed patients (Negele et al., 2015). Negele et al. used the German version of the CTQ (Bernstein & Fink, 1998) to assess childhood abuse and neglect.

Negele et al. (2015) separated participant data into four groups during data analyses. The four groups developed by Negele et al. included one absent childhood abuse and neglect, one reporting maltreatment on only one scale, one reporting maltreatment on two scales, and a fourth reporting maltreatment on three or more scales of the CTQ (Bernstein & Fink, 1998). Symptom severity between groups was assessed, and Negele et al. (2015) reported the multiple trauma group displayed significantly higher symptom severity than the other three groups. Negele et al. noted the presence of sexual and emotional abuse in a participant's history significantly increased symptom

severity, while other forms of maltreatment did not. Negele et al. (2015) reported that, overall, the multiplicity of various kinds of maltreatment was the most significant predictor of symptom severity in chronically depressed patients.

A history of childhood emotional abuse and neglect have also been implicated as significant factors in the presentation and severity of bipolar disorder. Larsson et al. (2013) examined the relationship between bipolar traits and a history of childhood maltreatment. Larsson et al. wanted to determine if childhood maltreatment was significantly associated with a more severe and detrimental course of the disorder, including earlier age of onset, number of hospitalizations, and number of illness episodes, and if so, did different types of maltreatment exert differential effects. In addition, Larsson et al. examined the relationship between the global assessment of functioning (GAF) in participants and childhood maltreatment histories. Larsson et al. conducted a clinical interview (First, Spitzer, Gibbon, & Williams, 1995) to confirm a diagnosis of bipolar disorder in 141 patients previously assessed with bipolar diagnosis, and administered the CTQ (Bernstein & Fink, 1998) to obtain measures of childhood abuse and neglect.

In the analyses of the data, Larsson et al. (2013) combined emotional abuse and neglect into a single independent variable, referred to as emotional abuse/neglect. Childhood sexual abuse was the second variable, and physical abuse was the third (Larsson et al., 2013). Larsson et al. reported that higher total scores on the CTQ (Bernstein & Fink, 1998) and higher scores on the emotional abuse/neglect scale was significantly associated with an earlier age of onset of bipolar disorder. Larsson et al.

(2013) reported that a one-unit increase in the emotional abuse/neglect scale score correlated with a 33% increase in earlier age of onset. Additionally, the GAF of participants significantly correlated with the CTQ (Bernstein & Fink, 1998) total score, as well as the emotional abuse/neglect score and the physical abuse subscale score. Larsson et al. (2013) added that emotional abuse/neglect significantly correlated with hypomanic episodes and hospitalizations, while physical abuse was significantly associated with depressive episodes and self-harming behaviors.

In addition, Larsson et al. (2013) reported the total CTQ (Bernstein & Fink, 1998) score, which is a composite score of the different forms of childhood abuse and neglect, was significantly associated with psychotic episodes, number of mood episodes, and hospitalizations, indicating that childhood maltreatment is significantly associated with a more severe form of bipolar disorder. Larsson et al. (2013) also noted the total CTQ (Bernstein & Fink, 1998) score was significantly associated with a lower GAF score, while more frequent and severe measures of maltreatment were associated with an earlier age of onset of bipolar disorder. Larsson et al. (2013) reported that emotional abuse/neglect was the only form of childhood maltreatment that independently and significantly correlated with an earlier age of onset of bipolar disorder, while both physical and emotional abuse/neglect were associated with a lower GAF score.

Dysfunctional patterns of coping have also been associated with a history of childhood abuse. Grouleau et al. (2012) examined disordered eating in relation to childhood abuse. Specifically, Grouleau et al. examined the relationship of childhood abuse to the bulimic symptoms of perfectionism, affective instability, depression, and

ineffectiveness. A total of 176 women diagnosed with an eating disorder participated in the research conducted by Grouleau et al. (2012). The Eating Disorders Examination (Fairburn & Cooper, 1993) was administered by the researchers to obtain disordered eating symptom measures, and Grouleau et al. administered the Eating Attitudes Test 26 (Garner et al., 1982) to obtain measures of the overall severity of eating disordered symptoms.

The Center for Epidemiological studies for Depression instrument (Weismann et al., 1977) was used by Groleau et al. (2012) to obtain measures of depressive symptoms, and the Ineffectiveness subscales of the Eating Disorder Inventory – 2 (Garner, 1991) were used to obtain measures of ineffectiveness or global self-esteem. Groleau et al. (2012) utilized the Childhood Trauma Interview (Bernstein et al., 1994) to assess childhood abuse or neglect, and the Affective Instability subscale of the Dimensional Assessment of Personality Pathology – Basic Questionnaire (Livesly, Jackson, & Schroeder, 1992) to obtain measures of affective instability in participants.

Groleau (2012) reported that age, gender, education and ethnicity were not significantly associated with reports of childhood abuse. Statistical analyses indicated that all types of abuse were significantly more common in the participants who had been diagnosed with an eating disorder than in controls who did not have an eating disorder (Groleau, 2012). Groleau et al. reported that childhood emotional abuse significantly correlated with depression, affective instability, and ineffectiveness, while significant correlations were not found between these symptoms and physical or sexual abuse.

Furthermore, a history of childhood emotional abuse could be used to predict affective instability and ineffectiveness (Groleau et al., 2012).

In further analyses, Groleau et al. (2012) found that affective instability and ineffectiveness mediated the relationship between childhood emotional abuse and the development of eating disordered patterns of behavior. Childhood emotional abuse also positively correlated with the severity of symptoms (Groleau et al., 2012). The study by Groleau et al. indicated that a history of emotional abuse can be used to validly predict affective instability. Affective instability in those with an emotionally traumatic history suggests difficulty, and potential impairment during development, of adequate emotional functioning processes. The result, as suggested in the research conducted by Groleau et al. (2012), is the development of dysfunctional patterns of behavior as a coping method for emotional experiences perceived as intolerable.

Racine and Wildes (2015) also examined the relationship between childhood abuse and disordered eating. Racine and Wildes administered the Structured Clinical Interview (First et al., 2007), the Eating Disorder Examination (Fairburn, Cooper, & O'Connor, 2008), the DERS (Gratz & Roemer, 2004), and the CTQ (Bernstein & Fink, 1998) to 188 patients diagnosed with anorexia nervosa. Racine and Wildes (2015) theorized that emotional dysregulation mediates symptom severity when a history of childhood abuse is present. Following statistical analyses of the data, Racine and Wildes reported that childhood emotional and sexual abuse significantly correlated with emotion dysregulation and anorexia nervosa symptom severity, and the magnitude of the

relationship between emotional abuse and symptom severity was significantly larger than the correlation between sexual abuse and symptom severity.

Racine and Wildes (2015) reported that emotional dysregulation mediates the relationship between anorexia nervosa symptom severity and both sexual and emotional abuse. When Racine and Wildes controlled for emotional dysregulation in analyses, childhood emotional abuse was no longer directly related to symptom severity, while sexual abuse maintained an independent direct relationship. Racine and Wildes noted that patients reporting childhood emotional abuse who presented with greater impairment in emotional regulation, also presented with greater anorexia nervosa symptom severity. The researchers suggested that childhood abuse results in impaired emotional regulation skills which lead to, and maintain, disordered eating patterns of behavior (Racine & Wildes, 2015).

Based on a history of working with patients who exhibit eating disorders, Waller, Corstorphine, and Mountford (2007) provided a clinical perspective on the relationship between eating disorders and a history of childhood emotional abuse. According to Waller et al. (2007), experiencing emotional abuse during the developmental years results in impairment in emotional expression and a negative self-concept. Waller et al. (2007) suggested a clear link between eating disorders and emotional abuse is that persons suffering from eating disorders have difficulty tolerating negative stressful emotions and the negative perceptions they have developed in relation to the self.

Waller et al. (2007) suggested that emotional invalidation is a primary component of childhood emotional abuse. In other words, when the victim expresses negative

emotion or emotion related to an unpleasant experience, the response of caregivers is often incongruent with the experience of the child (Waller et al., 2007). According to Waller et al., this incongruence develops into difficulty with recognizing and naming emotional states as they occur based on internal symptoms, and the child is forced to search externally for clues on how to respond to emotional experiences. An emotionally abused child does not learn to recognize differential emotions and tolerate negative emotional states, thus coping strategies for dealing with emotional experiences do not develop (Waller et al., 2007). Waller et al. added that invalidating environments, such as those in emotionally abusive households, may result in difficulty tolerating emotional distress, development of emotional inhibition, and secondary alexithymia in individuals exposed to this type of environment.

Waller et al. (2007) suggested patients presenting with disordered eating patterns tend to exhibit chaotic-dissociative functioning, or suppression of spontaneous emotional affect, indicating a pattern of emotional inhibition. Waller et al. added that children from emotionally abusive environments may present clinically as detached alexithymic, displaying difficulty identifying, expressing and managing emotions. Emotional inhibition, alexithymic tendencies, and somatic preoccupation may be the coping mechanisms utilized by victims of childhood emotional abuse in order to tolerate the emotionally abusive environment, and to cope with the difficulty they experience in assimilating emotional events (Waller et al., 2007). Waller et al. suggested that as a result of a chaotic emotional environment, dysfunctional patterns of eating may result from attempts to cope with overwhelming emotional experiences.

The discourse by Waller et al. (2007), based on a clinical history of working with those who have experienced eating disorders, provides insight on the potential association between childhood maltreatment and the development of emotional impairment. As theorized by Waller et al., childhood emotional abuse contributes to impairment in the development of adequate emotional functioning skills, possibly leading to additional dysfunctional patterns of behavior. Emotional invalidation, as described by Waller et al (2007), supports the earlier discussion by Goldsmith and Freyd (2005) concerning the impact childhood emotional abuse has on the development of emotional awareness and emotional understanding. As theorized by Goldsmith and Freyd, in an emotionally abusive environment the children's emotional experiences are incongruent with the perpetrator's actions, resulting in a failure to understand or learn from emotional experiences, and resulting in impairment of adequate emotional development.

Methodology

This research project was a quasi-experimental study in which standardized instruments were used to obtain measures of childhood abuse and neglect and emotional functioning, for statistical analyses, from a community sample of adults. Quantitative, quasi-experimental, and correlative designs were the methods of exploration in previous literature on all variables being examined in this research (Bruce et al., 2012; Dvorak et al., 2014; Groleau et al., 2012; Hertel et al., 2009; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2012; Marshall et al., 2013; Motohari and Rahgozar, 2011; Negele et al., 2015; Rajappa et al., 2012; Shi, 2013; Spinazzola et al, 2014; Smith & Flannery-Schroeder, 2013). The use of a quasi-experimental design in this research provides new

information and continuity to the literature on the relationship between childhood abuse and neglect and emotional functioning, while also satisfying traditional methods of investigation.

The CTQ (Bernstein & Fink, 1998) was the instrument used in this research to obtain information on childhood abuse and neglect for analyses. The CTQ (Bernstein &Fink, 1998) is a retrospective, self-report instrument and utilized frequently in previous research on childhood trauma (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Negele et al., 2015; Shi, 2013; Smith & Flannery-Schroeder, 2013). Because the developers of the CTQ (Bernstein & Fink, 1998) report satisfactory to excellent validity and reliability coefficients, and the CTQ is frequently used in research, the information obtained through the administration of the CTQ in this research adds to the available body of research on childhood abuse and neglect.

The MSCEIT V2.0 (Mayer et al., 2002), which was used to obtain information on emotional functioning from participants in this research, is a performance-based instrument, requiring a demonstration of emotional functioning knowledge (Mayer et al., 2003). Prior to this project, researchers using the MSCEIT V2.0 (Mayer et al., 2002) focused primarily on questions involving emotional intelligence. However, in the literature reviewed, the MSCEIT V2.0 was used to examine the emotional functioning of participants reporting dysfunctional patterns of behavior (Hertel et al., 2009) and yielded a comprehensive picture of the emotional functioning of participants, as well as producing significant results related to the relationship between emotional impairment

and dysfunction. While the majority of these researchers utilized self-report instruments of measure to obtain information on emotional functioning for analyses (Dvorak et al., 2014; Karagoz & Dag, 2015; Motahari and Rahgozar, 2011; Rajappa et al., 2012), the use of a performance-based instrument, such as that used in this research, increases the validity of results because participants have to demonstrate their understanding of emotions.

The analyses of data included multiple regression procedures, which were used to determine the predictive significance of childhood abuse and neglect on emotional functioning during the adult years. While the impact of childhood abuse and neglect on global emotional functioning during the adult years had not been explored in the literature reviewed, emotional regulation, defined differently than the construct developed by Mayer and Salovey (1997), was examined by researchers using regression procedures of analysis (Bradbury & Shaffer, 2012; Dvorak et al., 2014; Hertel et al., 2009; Karagoz & Dag, 2015; Motahari & Rahgozar, 2011; Racine & Wildes, 2015; Rajappa et al., 2012). Additionally, researchers have used regression procedures to examine the predictive significance of childhood emotional abuse on acute stress disorder, generalized anxiety disorder, suicidal ideation, lower quality of life, and depression (Bruce et al., 2012; Karagoz & Dag, 2015; Smith & Flannery-Schroeder; Spinazzola et al., 2014). In addition to answering the research questions asked in this project, the utilization of regression procedures for analyses aligns with previous research and provides new information. Overall, the quasi-experimental design, methods of collecting information through the administration of standardized instruments, use of a

community sample of participants, and regression procedures of analyses support the methodology of prior research, allowing for a valuable contribution to the databases and continuity to the topic of childhood abuse and neglect.

Summary and Conclusions

The significant correlations between childhood abuse and neglect and dysfunction in the literature reviewed suggests that emotional abuse has a potentially significant and detrimental impact on emotional development. In the review of research related to the prevalence and severity of different types of childhood maltreatment, Shi (2013) and Spinazzola et al. (2014) demonstrated that childhood emotional abuse produces synergistic and predictive effects, often imposing greater detriment than other forms of childhood abuse or neglect. Karagoz and Dag (2015) demonstrated that emotional abuse predicts impairment in various aspects of functioning related to emotional regulation, as did Bradbury and Shaffer (2012), while Smith and Flannery-Schroeder (2013) presented research suggesting childhood emotional abuse is significantly associated with atypical emotional impairment, as seen in alexithymia. Researchers also examined the impact of childhood abuse and neglect in studies that explored mood disturbances, such as anxiety and depression (Bruce et al., 2012; Iffland et al., 2012; Shapero et al., 2014; Negele et al., 2015). In these articles, Bruce et al. (2012), Iffland et al. (2012), and Shapero et al. (2014) demonstrated that a history of childhood emotional abuse significantly correlates with, or predicts, emotional dysfunction. The implication from these research studies is that a history of childhood emotional abuse is a potentially significant factor in the etiology of emotional impairment that can lead to increased dysfunction.

A major component of bipolar disorder is affective instability (American Psychiatric Association, 2013). Larsson et al. (2013) demonstrated that a history of emotional abuse and neglect are significantly associated with an earlier age of onset and lower GAF scores, suggesting that emotional development may be negatively impacted by environmental trauma, potentially resulting in impaired emotional development and increased severity of emotional dysfunction. Finally, Grouleau et al. (2012) and Racine and Wildes (2015) implicated a history of childhood abuse and neglect and emotional dysfunction as significant factors in the presentation of eating disorders. Researchers theorize that eating disorders are an attempt to cope with overwhelming emotional experiences (Waller et al., 2007; Goldsmith and Frey, 2005). Previous research examining childhood abuse and neglect overwhelmingly indicated that childhood emotional abuse is a highly significant factor in the presentation of emotional disturbances, the development of significant impairment, and a lower quality of life (Bruce et al., 2012; Larsson et al., 2013).

The literature review focused on the DV of global emotional functioning and associated aspects, as well as the IV of childhood emotional abuse. During the review of previous research, childhood emotional abuse was repeatedly suggested to be a significant and often underreported societal problem, typically accompanying all other forms of childhood maltreatment, and imposing a cumulatively detrimental impact (Bruce et al., 2012; DHHS, 2015b; Larsson et al., 2012; Smith & Flannery-Schroeder, 2013). In addition, it was seen that childhood emotional abuse often imposes greater

detriment than childhood sexual or physical abuse (Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014).

Childhood emotional abuse is often difficult to intervene in due to the lack of a blanket definition, the wide variance found within research in how the construct is conceptualized, the lack of definitive boundaries, and the sometimes complete absence of the construct in some state legal statutes (DHHS, 2010; Morelen & Schroder, 2012; Shpiegel et al., 2013). While the definition of emotional abuse in the literature often varies, regardless of how the construct is defined it is consistently implicated in adult dysfunction and impaired emotional processing. Research examining a direct, potentially predictive association between childhood abuse or neglect and current emotional functioning, based on a comprehensive model of emotional functioning, appeared to be lacking in the databases during the literature review.

The majority of literature reviewed on childhood abuse and neglect did not include global emotional functioning as a variable, although emotional abuse was examined in conjunction with emotional disorders or dysfunctional patterns of behavior that included impaired emotional functioning as a factor inherent in the related dysfunctions (Karagoz & Dag, 2015; Smith & Flannery-Schroeder, 2013; Racine & Wildes, 2015). No research based on a comprehensive model of emotional functioning appeared to be available during the literature review that examined the emotional functioning skills of those with histories of childhood abuse or neglect and also utilized a performance-based instrument of measure as used in this research (Mayer et al., 2002).

In addition, research that examined childhood emotional abuse in relation to specific emotional skills absent a comprehensive model of emotional functioning was scarce during the literature review, with only three current articles including an examination of specifically defined emotional skills in relation to a history of childhood emotional abuse (Bradbury & Shaffer, 2012; Karagoz & Dag, 2015; Racine & Wildes, 2015; Smith & Flannery-Schroeder, 2013). The variable of emotional regulation utilized in these studies varied from the Mayer and Salovey (1997) concept of emotional regulation, including a broader construct of emotional regulation, and functioning as an emotional self-perception instrument. Although there were few direct links between childhood abuse or neglect and emotional functioning during adulthood in the literature review, impaired emotional processing was implicated in the majority of previous research studies that were available.

The absence of a comprehensive examination of the association between adult global emotional functioning and childhood abuse and neglect left a void in the literature in relation to understanding potential links in the development of emotional impairment that can potentially lead to dysfunction. As noted by Saxena and Aggarwal (2010) and Keaten and Kelly (2008), identification, understanding, and management of emotions can be developed during childhood, suggesting pathways for the development of intervention and preventative methods. The lack of research examining the impact of childhood emotional abuse on the development of emotional skills represents a significant gap in the literature and indicates that an examination of global emotional functioning in adults who have experienced childhood abuse or neglect, based on a comprehensive model of

emotional functioning, is clinically valuable. The findings from this quantitative research may help to fill the gap found in the literature on the association between childhood emotional abuse and adult emotional functioning, as well as to increase focus on childhood emotional abuse, a largely unexplored, underreported, often overlooked, and important area of research.

As is delineated in Chapter 3, the research design was quantitative in nature and a community sample of participants was used to answer the research questions. Retrospective measures of childhood abuse and neglect (Bernstein & Fink, 1998), as well as measures of emotional functioning (Mayer et al., 2002), were collected from all participants to explore whether childhood abuse or neglect may be validly utilized to predict deficits in the development of emotional skills. Hierarchical regression procedures were conducted on the information obtained from participants to examine the exact association of childhood abuse and neglect to global emotional functioning and emotional regulation during the adult years, as defined by Mayer and Salovey (1997). The methods used in participant recruitment and the collection of data, as well as other factors associated with the methodology of this research are presented in Chapter 3.

Chapter 3: Research Method

Introduction

The purpose of this quantitative research was to explore global emotional functioning in adults who have a history of childhood abuse or neglect and in adults who do not, to determine whether a history of childhood emotional abuse is a valid predictor of impairment in emotional functioning during adulthood. Chapter 3 begins with a discussion of the constructs that served as variables in the research. Including ethical considerations related to the IV of emotional abuse, there are several reasons a descriptive, quasi-experimental, quantitative design was the most appropriate framework for examining the impact of childhood abuse and neglect on emotional functioning during the adult years. The target population utilized in the research is defined, as well as the methods of recruitment, and the data that were collected from research participants. Then participation criteria are explained and the rationale for exclusion of certain populations is included. Issues related to participant rights, such as informed consent, are included in the discussion, as well as those concerning confidentiality and the protection of data.

Information on the retrospective instrument that was used to obtain measures of childhood abuse and neglect, the CTQ (Bernstein & Fink, 1998), is presented as is information on the MSCEIT V2.0 (Mayer et al., 2002), a performance-based instrument that was used to obtain measures of emotional functioning processes. In the discussion on instrumentation, validity and reliability coefficients, and other information relevant to the MSCEIT v2.0 (Mayer et al., 2002) and the CTQ (Bernstein & Fink, 1998) is also

included. Additionally, information relevant to the development of the instruments and the appropriateness of the instruments to the research is included.

The limited diversity among participants is a factor that may threaten the external validity of results. While childhood abuse and neglect are significant societal problems and relevant to all populations, sample demographics in this research may pose threats to generalization, which are outlined. In this discussion of threats to external validity, a discussion of the difficulty with assessing childhood abuse and neglect is also included. Threats to internal validity include participant acknowledgement of abuse or neglect, the lack of a clearly defined construct for emotional abuse, and the limited amount of research utilizing the MSCEIT V2.0 (Mayer et al., 2002) as an instrument of measure in an examination of emotional disorders and dysfunctional patterns of behavior. All of these factors are delineated and the steps taken to minimize the potential impact are included.

Research Design and Rationale

Childhood abuse and neglect significantly correlate with multiple disorders and dysfunctional patterns of behavior that suggest impairment in emotional functioning (Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2012; Marshall et al., 2013; Negele et al., 2015; Shi, 2013; Spinazzola et al, 2014; Smith & Flannery-Schroeder, 2013), yet research exploring whether a history of childhood abuse or neglect can be used to significantly predict emotional impairment during the adult years appears to be severely limited. The purpose of this quantitative, quasi-experimental research was to examine the statistical causal relationship between a history of childhood

abuse and neglect, and impairment in global emotional functioning and emotional regulation. In this research information on childhood abuse and neglect and emotional functioning were collected from a community sample of adults for analyses.

The IV in this study was childhood emotional abuse, as defined through the CTQ (Bernstein & Fink, 1998), a retrospective screener utilized for assessing childhood maltreatment in adult respondents. Because the CTQ also obtains measures of physical and sexual abuse, as well as physical and emotional neglect, these variables were included as independent covariates. The DVs of global emotional functioning and emotional regulation in this study were defined through the Mayer and Salovey (1997) model of emotional functioning that served as the theoretical framework behind the research. The MSCEIT V2.0 (Mayer et al., 2002), a performance-based instrument developed in conjunction with the theory on emotional functioning developed by Mayer and Salovey (1997), was used to obtain measures of the DVs in adult participants.

Because global emotional functioning is a composite measure based on the individual skills of emotional perception, emotional utilization, emotional understanding, and emotional regulation, the MSCEIT V2.0 (Mayer et al., 2002) was administered in its entirety. Given the research that included an alternative construct of emotional regulation as a variable (Gratz & Roemer, 2004), emotional regulation, as defined by Mayer and Salovey (1997), also served as a DV. Mayer et al. (1999) reported that females tend to score approximately .5 standard deviations above males in measures of emotional functioning, therefore gender served as a moderating variable in the analyses. The age of participants also served as a moderating variable in statistical analyses. In addition to

gender effects in relation to emotional functioning, Mayer et al. (1999) noted that adults achieve higher scores on measures of emotional functioning than adolescents. While improved scores in older participants suggest that emotional functioning is a developmental process, the variable of age also necessitates the use of statistical regression procedures to eliminate potential confounding results related to the age of participants. The research questions inquired into the impact of childhood emotional abuse on global emotional functioning and emotional regulation, as defined by Mayer and Salovey (1997), as well as potential gender differences in emotional functioning.

Research Question 1: Does childhood emotional abuse predict impairment in adult global emotional functioning?

H_0^1: Childhood emotional abuse, measured retrospectively and serving as the IV, will not significantly predict impairment in adult global emotional functioning, which serves as a DV and is measured through a performance-based assessment.

H_A^1: Childhood emotional abuse, measured retrospectively and serving as the IV, will significantly predict impairment in adult global emotional functioning, which serves as a DV and is measured through a performance-based assessment.

Research Question 2: Does childhood emotional abuse predict impairment in adult emotional regulation skills?

H_0^2: Childhood emotional abuse, serving as the IV and measured retrospectively, will not significantly predict impairment of emotional regulation skills, which serves as a DV and is measured through a performance-based assessment.

H_A^2: Childhood emotional abuse, serving as the IV and measured retrospectively, will significantly predict impairment of emotional regulations skills, which serves as a DV and is measured through a performance-based instrument.

Research Question 3: Will measures of emotional functioning differ significantly between male and female participants?

H_0^3: There will be no significant difference between genders, serving as a moderating variable, on measures of emotional functioning obtained through the administration of a performance-based instrument, and serving as the DVs.

H_A^3: There will be a significant difference between genders, serving as a moderating variable, on measures of emotional functioning obtained through the administration of a performance-based instrument, and serving as the DVs.

An exploratory, quasi-experimental research design was used in this research to examine the impact of childhood abuse and neglect on adult emotional functioning. Specifically, determining whether emotional abuse is a valid predictor of later emotional impairment was explored. The use of standardized instruments to collect information allowed for a quantitative exploration of the research questions. Statistical regression procedures were conducted on the information obtained on the variables to determine if childhood abuse and neglect significantly predicted later emotional impairment. Participants were asked to complete a demographic questionnaire, the MSCEIT V2.0 (Mayer et al., 2002), and the CTQ (Bernstein & Fink, 1998) to provide information on levels of emotional functioning and childhood abuse and neglect. The information obtained from the CTQ (Bernstein & Fink, 1998) was analyzed to obtain a group

composed of adults reporting a history of childhood emotional abuse and a control group, comprised of adults without emotionally abusive childhood histories.

The pre-established cut-off scores provided by the developers of the CTQ provide categorical measures of no trauma, mild trauma, moderate trauma, and severe trauma (Bernstein & Fink, 1998). According to Powers, Ressler, and Bradley (2009), categorizing none to mild measures of abuse or neglect into one group, and moderate to severe measures of abuse or neglect into another group provides the strongest effects. Therefore, the measures of abuse and neglect in this research were likewise categorized as *trauma present* or *trauma absent* in the analyses of the data. The measures of abuse and neglect were statistically analyzed, in conjunction with the information on emotional functioning, to determine whether childhood abuse or neglect predicted impairment of global emotional functioning and emotional regulation during the adult years. As the design of choice for the research was not experimental or longitudinal in nature, time and resource constraints consisted of practical limitations such as participant availability and economic resources for the assessments being utilized.

Research on childhood abuse and neglect pose ethical limitations, negating the potential use of such designs as an experimental design. The majority of research reviewed for this study on childhood abuse and neglect and emotional functioning utilized descriptive, quantitative research designs (Groleau et al., 2012; Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2012; Marshall et al., 2013; Negele et al., 2015; Shi, 2013; Spinazzola et al, 2014; Smith & Flannery-Schroeder, 2013). The information generated through the use of a quantitative research design, as in this

research, offers additional clarity to the existing body of research on the constructs of childhood abuse and neglect and emotional functioning.

Methodology

Target Population

The target population for this research consisted of adults residing in two small, rural communities in the western state of Wyoming. A community sample of adults were recruited from this population to serve as participants. Because the targeted population size was unknown, a priori calculations were conducted to determine sample size (Soper, 2013).

Sampling and Sampling Procedures

This research was conducted in two rural communities in Wyoming. The community sample of participants were recruited using newspaper advertisements, online advertisements, and flyers posted on community bulletin boards. In order to reduce the chances of a Type I error by falsely rejecting the null hypotheses, the alpha level was set at .05, which is standard in behavioral science (Cohen, 1992). The power level for the two-sided test was set at .80, as is suggested by Cohen (1992), and limited the chances of committing a Type II error by falsely rejecting the alternative hypotheses. As noted by Cohen (1992), setting the power level at .80 also made the research more feasible in terms of obtaining an adequate number of participants without excess expenditure of resources. A priori calculations for multiple regression analyses were utilized to determine the needed sample size. With an unknown population number, a significance level of alpha .05, the power set as .80, and a confidence level of 95%, the number of

participants needed to obtain statistical significance was 116, composed of 58 reporting a history of childhood emotional abuse and 58 absent a history of childhood emotional abuse (Soper, 2013).

Procedures for Recruitment, Participation, and Data Collection

Following approval of the proposal by the Walden University Internal Review Board ([IRB]; #10-14-14-0102727), the first step was to advertise the research study. Flyers (see Appendix B) were posted on community bulletin boards at activity centers, senior centers, college campuses, grocery stores, and multiple other businesses frequented by community residents. In addition, the flyers were placed in the local newspapers and on the local online media information site to advertise this research study. The flyers and advertisements indicated that a graduate student in clinical psychology at Walden University was recruiting participants to serve anonymously in a dissertation study of adult emotional functioning and childhood trauma. The flyers and advertisements included contact information so anyone interested could contact the researcher to discuss the project, obtain a copy of informed consent, or schedule an appointment for participation.

When interested residents made contact, an informed consent document detailing the research was emailed to them if they had computer access (see Appendix C). If they did not, an informed consent document was mailed via the postal service, or provided at the site of data collection prior to participation. Informed consent documents also included contact information so that potential participants could contact the researcher with any questions they had prior to their decision to participate. Participants were asked

to retain the informed consent document for their records if they decided to participate in the research. Additional copies of the informed consent document were available at the time of data collection to document consent to participate in the study. Participation was anonymous and the demographic questionnaire presented to students during the acquisition of information related to the research included a request for the participant's age, gender, ethnicity, education, and income (see Appendix D).

Adults who agreed to participate were assigned a random number to be used for identification purposes in order to protect anonymity. The random number was used to identify all documents and assessments completed by the participant, including informed consent, both standardized assessments, and the envelope in which the data were placed following conclusion of participation. The collected data will be locked in a secure file cabinet for no less than 5 years.

The collection of data for analyses were obtained through individual administrations of the instruments by the researcher, including the demographic form, the CTQ (Bernstein & Fink, 1998), and the MSCEIT v2.0 (Mayer et al., 2002). A minimum of 58 participants were needed per group, for an overall minimum sample size of 116 participants (Soper, 2013). During the data collection phase of the research, each participant was treated as identically as possible, in order to protect the validity and reliability of the information obtained. The rooms used for all administrations of instruments and collection of data were the same for each group of participants. Instructions were presented to each individual in the same manner, utilizing standardized instructions for the administration of instruments.

Following the assignment of random identification numbers and the collection of informed consent, the first document presented by the researcher was the demographic questionnaire. Participants were asked to write the random number they were assigned on the demographic questionnaire, and all response forms provided, in order to maintain anonymity and protect the integrity of the data collection process. After the collection of demographic information, the MSCEIT V2.0 (Mayer et al., 2002) was administered online through a server provided by MHS Publishing, who later scored the administrations and provided data sets for analyses. As noted by Mayer et al. (2003), the hard copy format and the online format of the MSCEIT v2.0 (Mayer et al., 2002) yield equivalent reliability and validity coefficients.

At the conclusion of the emotional functioning assessment, the CTQ (Bernstein & Fink, 1998) was administered by the researcher, using standardized instructions. Total completion time for the collection of demographic information, the administration of the MSCEIT V2.0 (Mayer et al., 2002), and the CTQ (Bernstein & Fink, 1998) was approximately one hour for each participant. Participants placed the CTQ and the demographic form in a privacy envelope, labeled with their random identification number, when their participation was complete. These documents were immediately placed in a secure case at the conclusion of each individual's participation, and for the duration of the data collection process. Only the researcher and the researcher's supervisors had access to the information during the data collection phase.

Following the researcher's collection of the completed data, including the informed consent document, the MSCEIT V2.0 (Mayer et al., 2002) assessment, the CTQ

(Bernstein & Fink, 1998) protocol, and the demographic questionnaire, each individual participant was debriefed by the researcher. Participants were fully informed of the purpose for the research and the potential benefits related to their participation. They were allowed to ask any questions they had, and the researcher also had information for local mental health providers on hand in case a referral was requested. Participants were asked to keep a copy of the informed consent document so that they could contact the researcher with any questions they might later have in relation to the research. They were then compensated $10 for their time.

Instrumentation and Operationalization of Constructs

MSCEIT V2.0 (Mayer et al., 2002). The Multi-Factor Emotional Intelligence Scale (MEIS) was the first instrument developed by Mayer et al. in 1999 to obtain measures of emotional functioning. A research version, the MSCEIT RV1.1 followed, and then immediately after, the MSCEIT V2.0 was published by Mayer et al. in 2002. The MSCEIT V2.0 (Mayer et al., 2002) is the instrument that was used in this research to obtain measures of the DVs of global emotional functioning and emotional regulation. The MSCEIT V2.0 was developed for use with individuals aged 17 years and up (Mayer et al., 2002). The initial standardization sample consisted of 2112 participants, who were ethnically diverse and presented with a wide range of educational and socioeconomic backgrounds (Mayer et al., 2003). Published reliability measures associated with the MSCEIT V2.0 are reported as split-half reliability coefficients ranging from $r = .80$ to .91 for the branch areas associated with each emotional skill and $r = .91$ for the global assessment (Mayer et al., 2002). Published confirmatory factor analyses in the

standardization of the MSCEIT V2.0 ranged from .96 to .99, indicating very satisfactory validity for the instrument (Mayer et al., 2003). Due to the clearly defined emotional constructs the MSCEIT V2.0 (Mayer et al., (2002) is used to measure, the high reliability and validity coefficients, and the development of the instrument for use with those 17 years and up (Mayer et al., 2002), the MSCEIT V2.0 is an appropriate instrument of measure for research. Multi-Health Systems (MHS) owns the copyright to the MSCEIT V2.0 (Mayer et al., 2002), and a letter of permission for use of the instrument in the current study is included (see Appendix E).

In the review of the literature, no research appeared to be available that utilized the MSCEIT V2.0 (Mayer et al., 2002) as the instrument of measure in an examination of childhood abuse and neglect. The only article that appeared to be available, in which emotional impairment was examined in relation to dysfunction, researchers utilized the instrument in an examination of emotional or mental disorders. In the research review Hertel et al. (2009) administered the MSCEIT V2.0 (Mayer et al., 2002) to 85 participants with depressive disorder, bipolar disorder, or substance abuse disorders, and 94 controls who had never been diagnosed with mental health disorders. Split-half reliabilities for the sample were reported by Hertel et al. to range from .60 to .75, with the overall reliability reported as .77.

Because emotional intelligence is a relatively new concept in behavioral science, the majority of researchers that utilized the MSCEIT V2.0 (Mayer et al., 2002) in previous research focused on examining whether emotional intelligence, as conceptualized by Mayer and Salovey (1997), is indeed an additional form of intelligence

(MacCann, Joseph, Newman, & Roberts, 2014; Webb, DelDonno, & Killgore, 2014), or the role emotional intelligence has in leadership in the workforce (Cavazotti, Moreno, & Hickman, 2012). In these research studies, participants consisted of university student samples, clinical samples, and community samples.

The Multi-Factorial Emotional Intelligence Scale ([MEIS]; Mayer, Caruso, & Salovey, 1999), was the predecessor to the MSCEIT V2.0 (Mayer et al., 2002). The MEIS (Mayer et al., 1999) was first introduced in research supporting an argument that emotional functioning, as defined in the Mayer and Salovey (1997) model, equates to a form of intelligence. Mayer et al. (1999) argued that to be considered a model of intelligence, a construct must meet certain criteria, including measures of performance rather than self-report, inter-correlations between existing models of intelligence and the newer construct, and the measures of the skills being assessed should increase with age and experience. Participants utilized to examine the MEIS (Mayer et al., 1999) were 503 adults, most of who had higher education, and presented a very wide range of ethnic diversity. Mayer et al. reported that the ethnic composition of the sample roughly approximated that reported in the United States census. Males made up approximately 33% of the sample, with the rest of the sample female (Mayer et al., 1999).

In relation to examining the MEIS (Mayer et al., 1999) as a performance-based instrument, scoring methods, including general consensus scoring, scoring by two experts, and target scoring, which was based on interviewing the participants while engaged in activities in order to determine their mood state, was conducted and the results from all three methods were statistically compared. Mayer et al. (1999) reported

that there were significant inter-correlations between all scoring methods. Due to the agreement between scoring methods, some answers appeared more correct that others, thus supporting the contention by Mayer et al. (1999) that emotional functioning serves as a form of intelligence, as measured by the MEIS, a performance-based instrument. Mayer et al. further reported that female participants scored approximately .5 standard deviations above male participants on the MEIS.

Following results supporting the MEIS (Mayer et al., 1999) as an instrument of measure for intelligence, Mayer et al. wanted to examine whether emotional intelligence is comprised of one or multiple abilities. The MEIS was composed of 12 tasks to obtain measures of emotional understanding, emotional utilization, emotional perception, and emotional regulation. In a statistical examination of the data following administration to participants, Mayer et al. (1999) reported that the tasks of the MEIS loaded on three factors, including emotional understanding, emotional regulation, and emotional perception. Following hierarchical regression analyses, Mayer et al. reported that, in addition to the three factor loadings, the MEIS yielded a general factor or global measure of emotional functioning, a composite measure of the three factors. The next goal of the research by Mayer et al. was to determine how the MEIS performed in relation to other models of intelligence.

In an examination of the correlations between emotional functioning, as measured by the MEIS (Mayer et al., 1999) and verbal intelligence, as measured through the Army Alpha (Yerkes, 1921) test of intelligence, the correlation was $r = 0.36$, $p < .001$. According to Mayer et al. (1999), this correlation indicated that the MEIS was measuring

an additional form of intelligence, because the level of correlation indicated that emotional functioning inter-correlates with verbal intelligence, yet is also distinct. Mayer et al. (1999) stated that this analysis supported the second criteria for declaring emotional functioning as a form of intelligence. In relation to the third criteria that Mayer et al. posited as a requisite for a model of intelligence, age of participants was examined in conjunction with the scores obtained on the MEIS. Mayer et al. stated that measures of emotional functioning should increase with development and experience, therefore a sample of the adult participants should perform significantly better on the instrument than participants aged 12 through 16 years. In an examination of the data on the 229 adolescents who participated, Mayer et al. reported that adults scored significantly higher, supporting the developmental hypothesis, or requisite, for defining emotional processes as an intelligence.

Although the research met the criteria for a model of intelligence as defined by Mayer et al. (1999), the examination of the factor structure of the MEIS only supported a three-factor model of emotional functioning. The model of emotional intelligence developed by Mayer and Salovey (1997) incorporated four factors in association with emotional processes. The original items used to measure emotional utilization or assimilation, the fourth factor in the theory, inter-correlated with the emotional understanding factor, $r = .87$, making the two factors largely indistinguishable, and only resulting in support for a three-factor model. The inability of the MEIS (Mayer et al., 1999) to measure the four factors included in the theoretical construct developed by Mayer and Salovey (1997), as well as the use of only two emotions experts for scoring

items in the development of the MEIS (Mayer et al., 1999) resulted in questions being raised about the validity of the instrument (Roberts, Zeidner, & Matthews, 2001). Due to these issues, Mayer et al. (2002) developed a new instrument of measure, the MSCEIT.

The new performance-based instrument (Mayer et al., 2002) consisted of items that would be utilized to assess the emotional functioning of participants (Mayer et al., 2003). The goals of the research by Mayer et al. (2003) included determining whether expert scoring methods correlated with general consensus scoring for correct items, if the new test was reliable, and if the new instrument was consistent with the theoretical construct of emotional functioning developed by Mayer and Salovey in 1997. In relation to general versus expert scoring convergence, Mayer et al. (2003) utilized 21 emotions experts to compare their responses to items with the general consensus item responses. In addition, the factor structure of the MSCEIT V2.0 (Mayer et al., 2002) was examined through confirmatory factor analyses, utilizing one-, two-, and four-factor models.

As with the MEIS (Mayer et al., 1999), the performance-based MSCEIT V2.0 (Mayer et al., 2002) required individuals to determine the correct response to questions about different scenarios related to emotional functioning, as opposed to simply reporting subjective emotional perceptions (Mayer et al., 2003). In the examination of the reliability and validity of the MSCEIT V2.0 Mayer et al. (2003) statistically analyzed the results obtained through participant responses to determine the reliability of the different scoring methods. In the general consensus scoring method individual responses are measured against the total sample's responses, while in the second scoring method, the individual responses are measured against expert consensus responses (Mayer et al.,

2003). In addition, the instrument was administered in both an online format and through a hard copy presentation, so that Mayer et al. (2002) could examine the reliability of the different format presentations. Finally, Mayer et al. statistically examined the factorial validity of the instrument to ascertain whether it adequately measured the individual emotional constructs included in the theoretical model of emotional functioning developed by Mayer and Salovey in 1997.

Mayer et al. (2003) reported that in relation to the administration format, online versus item booklet, an examination of the response frequencies across methods yielded an inter-correlation coefficient of .987, indicating equivalency between presentation formats and supporting the validity of the instrument to provide information on emotional functioning, regardless of format presentation. In a comparison of each scoring method, in which each test was scored utilizing expert criteria or general criteria, Mayer et al. (2003) reported that the reliability inter-correlations between the two methods ranged from .96 to .98. The full-test split-half reliability coefficients of the MSCEIT V2.0 were .93 for the general scoring method and .91 for the expert scoring method (Mayer et al., 2003). In an examination of the reliability of the individual emotional skills measures, reliability coefficients ranged from .76 to .91, regardless of the method of scoring used (Mayer et al., 2003). In the confirmatory factor analyses of the MSCEIT V2.0., Mayer et al. (2003) reported that both a two-factor model (experiential, strategic) and a four-factor model (perception, regulation, utilization, understanding) yielded coefficients ranging from .96 to .99, dependent upon the statistical procedure used.

In order to determine the reliability of the MSCEIT V2.0 (Mayer et al., 2002), in relation to the current research project, full-test split-half reliability coefficients were determined. Mayer et al. (2003) reported that this method is the statistical procedure of choice due to the difference in tasks associated with each branch of the emotional functioning model that are being measured with the MSCEIT V2.0. Test-retest reliability coefficients were not utilized in the current research, however the test-retest reliability of the instrument is reported as .86 (Mayer et al., 2002).

Overall, Mayer et al. (2003) demonstrated that the MSCEIT V2.0 (Mayer et al., 2002) exhibited very good reliability, as well as internal and external validity. Regardless of the type of scoring method utilized, the online format and the booklet format both demonstrated equivalent reliability (Mayer et al., 2003). Additionally, Mayer et al. (2003) reported the confirmatory factor analyses conducted on the MSCEIT V2.0 (Mayer et al., 2002) indicated the instrument measured the emotional functioning constructs contained in the theoretical construct developed by Mayer and Salovey (1997) on emotional intelligence. Furthermore, the research indicated that the MSCEIT V2.0 (Mayer et al., 2002) functioned adequately as a performance-based instrument in obtaining measures of emotional processes (Mayer et al., 2003).

Although the purpose of the current research was not to support or refute emotional processes as a form of intelligence, the MSCEIT V2.0 (Mayer et al., 2002) provided a method to assess emotional functioning skills based on a comprehensive model of emotional functioning (Mayer & Salovey, 1997) that clearly delineates the processes involved. The standardization sample utilized in the development of the

MSCEIT V2.0, the demonstrated reliability and validity of the instrument, and the performance-based nature of the instrument made the MSCEIT V2.0 an appropriate instrument of measure for the current research.

CTQ (Bernstein & Fink, 1998). The CTQ was first introduced by Bernstein et al. (1994) in published research examining the validity and reliability of the new 70-item, self-report instrument that assessed childhood abuse and neglect. In 1998, a new 28-item version of the CTQ was introduced and has since been used in multiple studies assessing childhood abuse and neglect (Bernstein et al., 2003). The populations used for standardization of the CTQ were diverse in ethnicity, age, and socioeconomic status, consisting of 2200 participants, both male and female, and coming from both clinical and community samples (Bernstein & Fink, 1998). In addition, the CTQ is appropriate for use with ages 12 years and over, and contains denial/minimization potential scales to aid in determining whether respondents have underreported abuse or neglect (Bernstein & Fink, 1998). As the CTQ is widely used in research, has satisfactory to excellent reliability and validity coefficients, and is appropriate for a sixth grade reading level, the instrument is an appropriate instrument of measure for assessing childhood abuse and neglect in research (Bernstein & Fink, 1998). Pearson Assessments has the copyright to the CTQ, and has granted permission for use of the instrument in the current research (see Appendix F).

In standardizing the CTQ, Cronbach's alpha (Cronbach, 1951) was utilized to determine the reliability of the individual scales in the sample administrations (Bernstein & Fink, 1998). Reliability coefficients for internal consistency ranged from .83 to .94

across all samples on the factor of emotional abuse, indicating that the items adequately measure the construct. In relation to the test-retest reliability of the CTQ, intra-class correlations between the first and second testing was $r = .80$ for the construct of emotional abuse (Bernstein & Fink, 1998). Confirmatory factor analysis of the individual items used to assess emotional abuse produced coefficients ranging from .60 to .80 suggesting they are inter-correlated (Bernstein & Fink, 1998). Additionally, confirmatory factor analysis of the data across all three samples, utilizing the robust comparative fit index (RCFI), indicated that the five-factor structure of the CTQ was a good fit, with RCFI reported to range from .91 to .96 (Bernstein & Fink, 1998). The CTQ also showed good convergent validity with other sources of emotional abuse measures, including the Childhood Trauma Interview (Fink et al., 1993), Evaluation of Lifetime Stressors (Krinsley, Gallagher, Weathers, Kaloupek, & Vielhauer, 1997), and therapists' ratings, with correlations for the emotional abuse scale reported as .25, .48, and .66 respectively (Bernstein & Fink, 1998).

According to Bernstein and Fink (1998), the association between the minimization/denial subscales included in the CTQ and the Balanced Inventory of Desirable Responses (Paulhus & Robinson, 1991) indicates that the propensity to give desirable and exaggerated responses is uncommon, which helps minimize threats to the validity of this research in relation to the information collected from participants. In addition, the CTQ (Bernstein & Fink, 1998) was the instrument of measure for multiple research articles that examined childhood abuse and neglect and are cited in this research (Bradbury & Shaffer, 2012; Groleau et al., 2012; Karagoz & Dag, 2015; Larsson et al.,

2013; Marshall et al., 2013; Negele et al., 2015; Shi, 2013; Smith & Flannery-Schroeder, 2013).

The CTQ (Bernstein & Fink, 1998) was developed and standardized due to the lack of a valid and reliable instrument that was appropriate for assessing childhood abuse and neglect (Bernstein et al., 2003). Following the presentation of the original CTQ (Bernstein et al., 1994), which consisted of 70-items assessing childhood abuse and neglect, Bernstein et al. (2003) developed a shorter, 28-item version that only takes five minutes to complete, and published the research that included psychometric data related to the edited version. In addition to developing a shorter assessment for childhood abuse and neglect, another goal of the research conducted by Bernstein et al. (2003) was to examine the construct validity of the CTQ (Bernstein & Fink, 1998) through an examination of the criterion-related validity of the shorter instrument, and the measurement invariance across different populations.

While previous populations utilized by Bernstein et al. (1994) to obtain psychometric data on the initial CTQ involved clinical samples of participants, the data reported on the new research were based on both clinical and community samples (Bernstein et al., 2003). Data from 1978 participants were obtained from four samples derived from the populations targeted by Bernstein et al. (2003) for the research, including adolescent psychiatric inpatients, substance-abusing adult inpatients, substance-abusing adult community outpatiens, and normative community populations. In order to examine the criterion-related validity of the CTQ (Bernstein et al., 1998), Bernstein et al. (2003) used a subset of adolescent psychiatric impatient data obtained from earlier

research (Bernstein et al., 1994) in conjunction with therapist's ratings of these participant's histories of childhood abuse and neglect to serve as external validity criterion (Bernstein et al., 2003).

Bernstein et al. (2003) administered the original version of the CTQ (Bernstein & Fink, 1994) to clinical samples of participants. Exploratory factor analyses of the data yielded five distinct factors with overlapping and highly correlated loadings, including emotional and physical neglect, as well as emotional, physical, and sexual abuse (Bernstein et al., 2003). Five items from each factor with loadings greater than .50 were retained for the new version of the CTQ (Bernstein et al., 2003). All samples of participants were then administered the 28-item version of the CTQ that included 5 items for each category of childhood abuse and neglect, and 3 denial/minimization potential items. Bernstein et al. (2003) reported that the results from the confirmatory factor analyses conducted on data obtained from all four groups of samples indicated that the 28-item CTQ performed equivalently across both clinical and community samples. Alpha coefficients for the emotional abuse factor ranged from .84 to .89 across samples (Bernstein et al., 2003). Due to good discriminate and convergent validity, as well as the reduced time necessary to complete the assessment, the short version of the CTQ is a valuable instrument for research purposes (Bernstein et al., 2003).

In this research, the CTQ (Bernstein & Fink, 1998) was administered to a community sample of adults to obtain retrospective measures of childhood abuse and neglect. Hierarchical regression procedures were performed to determine if childhood abuse and neglect, as measured by the CTQ, was predictive of lower measures of

emotional processes in the sample. Because the CTQ (Bernstein & Fink, 1998) has been utilized often in research examining childhood abuse and neglect, and contains denial or minimization items, the instrument was considered an adequate instrument of measure for this research. In addition, the standardization of the instrument was based on an ethnically diverse population, and included both community and clinical samples of participants, increasing the appropriateness of the instrument for this research.

Threats to Validity

Issues related to the operational construct of childhood emotional abuse, which served as the IV in the current research, pose some threats to the external and internal validity of results. Because childhood emotional abuse is defined multiple ways in the literature, the operational construct defined in the development of the CTQ (Bernstein & Fink, 1998) was used for the current project. The construct of childhood emotional abuse, defined by Bernstein et al. (2003), and assessed through the CTQ (Bernstein & Fink, 1998), is somewhat limited. The CTQ is a five-minute screener that includes 28 items, and assesses for childhood emotional, sexual and physical abuse, as well as childhood physical and emotional neglect. Five items are included in the CTQ to assess each form of childhood trauma, imposing limitations on a broadly inclusive construct that adequately represents childhood emotional abuse. Interviews were not conducted in this research to more thoroughly assess childhood emotional abuse during the collection of data for analyses. Due to the lack of a unitary, comprehensive construct of emotional abuse in the research and instruments of measure, the external validity of the current research may be impacted by narrowing the definitive boundaries of childhood emotional

abuse to those incidents directly assessed by the CTQ (Bernstein & Fink, 1998). As the CTQ is used often in the research on childhood abuse and neglect, allowing for comparative analyses, these issues with validity may be decreased.

Sampling bias is another potential threat to the external validity of results. The sample population was drawn from rural, isolated communities where over 90% of the population is reported to be Caucasian (U.S. Census Bureau, 2010). As diversity would potentially be greater in a more urban location, generalization to a larger population may be limited, thus negatively impacting the external validity of these results. Childhood abuse and neglect appear to be an issue of concern in multiple cultures, so sampling bias threats may be minimized (Affifi et al., 2015; Chinawa et al., 2014; Mahram et al., 2013; Xiangming et al., 2015).

Threats to the internal validity of the project include self-report and social desirability biases, as well as issues surrounding the construct of childhood emotional abuse. Because the information collected through the administration of the CTQ was anonymously collected, the impact of providing socially desirable responses was minimized. In addition, the CTQ (Bernstein & Fink, 1998) contains a denial or minimization subscale to increase the validity of results and Paulhus (1991) reported that responses evidencing social desirability bias are uncommon. The internal validity of the information obtained may have been potentially threatened by the distress associated with acknowledging childhood abuse or neglect that could have resulted in non-disclosure. The difficulty with reporting emotional abuse or lack of awareness that childhood emotional abuse has occurred (Goldsmith & Freyd, 2005) increased the risks of issues

related to obtaining an accurate measure of emotional abuse, thereby increasing the risks to internal validity. Additionally, as in issues associated with external validity, the narrow construct that was used to assess childhood emotional abuse may have impacted the internal validity of results. Because the CTQ (Bernstein & Fink, 1998) is an instrument used often in research examining childhood abuse and neglect, responses related to social desirability are uncommon (Paulhus, 1991), and the instrument contains denial or minimization items, the risks to validity are decreased.

Ethical Procedures

A community sample was recruited for the current project following approval to conduct research by the Walden University IRB. The researcher's contact information was provided on the flyers, advertisements, and informed consent documents so potential participants could contact the researcher with any questions or concerns prior to deciding on participation, or following participation should they have questions. At the conclusion of the informed consent document, participants had the option of selecting "I agree" to acknowledge understanding and agreement to participate. Signatures were not required on the informed consent document to protect the confidentiality and anonymity of participants. Placing an x next to the "I agree" item at the end of the informed consent document and supplying their random identification number served as implied consent, and demonstrated that participants understood their rights and expectations. Participants were informed they could withdraw from participation at any time without penalty. In addition, participants were provided with the contact information for local mental health providers in the event emotional distress related to the topic of study was experienced.

Participants were also informed of the risks and benefits related to serving as a research participant. A potential risk associated with serving as a research participant could have been negative emotional arousal related to the collection of information on childhood abuse and neglect. The CTQ (Bernstein & Fink, 1998) is a 5-minute screener, asking three questions each on five forms of trauma, including physical, sexual, and emotional abuse, as well as physical and emotional neglect. While the CTQ is minimally invasive, there is still the possibility of adverse emotional arousal. In order to safeguard participant welfare, each participant was fully debriefed by the researcher, following their participation, and in the event a referral was requested the researcher had information available for local mental health providers. Other risks related to serving as research participants involved day-to-day inconveniences, such as issues involved with scheduling time to participate.

The potential benefits of serving as a research participant were related to the valuable contributions made through participation. By providing retrospective information on their childhood histories and demonstrating their knowledge of emotional functioning, participants were contributing to an increased understanding of the impact of childhood abuse and neglect on emotional functioning during the adult years. This contribution could potentially impact the development of new interventions and preventative methods, as well as expand the scientific databases by providing an avenue for future exploration in research. This information could also potentially increase focus on the importance of healthy emotional development in leading a productive, peaceful life, as well as benefit children currently in a traumatic environment.

The provision of contact information for the researcher, the availability of the researcher to answer questions and discuss the research both before and following the completion of the study, the provision of mental health services contact information, and the brevity of the childhood trauma instrument (Bernstein & Fink, 1998) should have minimized distress for participants. The sample size needed to obtain statistical significance was 58 participants absent a history of childhood emotional abuse and 58 participants reporting a history of childhood emotional abuse, with a minimum total of 116 participants needed to achieve statistical significance. As results were skewed and did not follow a normal distribution, appropriate statistical procedures were utilized to approximate a normal distribution in analyses of the data.

On the days of data collection, those who had agreed to participate were randomly assigned an identification number. They utilized the numerical identifier on all documents and assessments they completed to ensure participant anonymity and protect the integrity of the data collected. As information was collected it was stored in a locked file cabinet. In the analyses and dissemination of the information individual identifiers were not included. As required by Walden University the information collected will be securely stored in a locked cabinet for no less than a period of five years following the conclusion of this research.

Summary

This study was a quasi-experimental quantitative design and a community sample of participants was recruited. The collection of data for analyses was in a room that ensured the privacy of participant responses could be maintained. Data were collected

from each participant individually. The first data that were collected were demographics. Immediately following the collection of demographic information, the MSCEIT V2.0 (Mayer et al., 2002) was completed by participants. After data on emotional functioning were obtained the CTQ (Bernstein & Fink, 1998) was administered by the researcher, again using standardized instructions. Utilizing hierarchical regression models of analyses, the data were examined in order to determine whether childhood abuse or neglect were valid predictors of impairment in emotional functioning in later years.

The time frame involved in the collection of information from participants and the response rate of community participants is presented in Chapter 4. A discussion of the necessity for changing the convenience sample originally proposed for this research is provided, as well as the process of data collection with the revised sample of community participants. The characteristics of the community sample are presented and a comparison of how the sample in the current study relates to the larger population is described. Next, the severity rates and types of childhood trauma are discussed. Finally, the results from the hierarchical regression analyses conducted to examine the impact of childhood emotional abuse on emotional functioning measures is provided.

Chapter 4: Results

Introduction

The purpose of this research was to empirically examine the relationships between different aspects of emotional functioning and childhood abuse and neglect to determine if a history of childhood emotional abuse can be used as a valid predictor of emotional impairment during adulthood. A quantitative, quasi-experimental design was developed in which emotional regulation and global emotional functioning served as the DVs, while childhood emotional abuse served as the primary IV, along with physical abuse, sexual abuse, physical neglect, and emotional neglect as covariates. A standardized, performance-based instrument (Mayer et al., 2002), which obtains measures of emotional perception, emotional utilization, emotional understanding, emotional regulation, and global emotional functioning, was administered to a community sample of 138 adults recruited from two rural Wyoming counties. In addition, a retrospective measure of childhood trauma (Bernstein & Fink, 1998), including measures of emotional, physical, and sexual abuse, as well as physical and emotional neglect, was administered to all participants. Because Mayer et al. (2002) reported that females tend to score .5 standard deviations above males on measures of emotional functioning obtained through the MSCEIT, the impact of gender on emotional functioning measures was also examined.

Chapter 4 begins with a description of the procedures involved in data collection, including the necessity for amending the targeted population of adults enrolled in higher education to a community sample of adults. Next, the steps involved in collecting data

from each participant are outlined, including the collection of informed consent and demographic information, the order of administration for the standardized assessments, and the steps involved in the conclusion of participation. The demographic characteristics of the sample are described, including age, gender, ethnicity rates, educational levels, highest academic degrees obtained, and income levels. The frequency and severity rates of childhood abuse and neglect reported by participants are also provided, followed by the results from three hierarchical regression models developed to examine the predictive validity of childhood abuse and neglect on future emotional impairment.

Data Collection

As this research project was conducted in an isolated, rural community in Wyoming, a convenience sample of adults enrolled in higher education was originally targeted. After the original proposal was approved by the Walden University IRB, institutions of higher education located in three Wyoming counties were contacted and asked to participate in the research study. They were provided with the research proposal and additional information related to the collection of data. Approximately six months later, following scheduled IRB meetings at the institutions that were contacted, all three institutions declined to participate due to potential liability factors related to the topic of choice and possible negative emotional arousal in participants. Subsequently, a request for a change in procedure was made to the Walden University IRB asking that the original plan to utilize a convenience sample of adults enrolled in higher education be changed to adults recruited from two counties in Wyoming. The Walden University IRB

approved the change in procedure request and research commenced, with data collection occurring over the next six months.

Flyers were posted throughout two rural counties on community bulletin boards, in businesses, colleges, and other places frequented by residents. In addition, an advertisement was posted in two local newspapers and an online media site for the counties. Contact information, including phone number and email address, was displayed on the flyers and advertisements for those interested in participating. This allowed interested community residents to initialize contact to ask for more information, obtain a copy of informed consent, or schedule an appointment to participate. Approximately 255 residents responded to the advertisements and flyers via email or phone. Upon first contact, participants were offered an informed consent document, delivered through email or the postal service. Participants were also given the choice of coming to the data collection site to read the informed consent document prior to participation.

Following the provision of informed consent to 255 community residents who had expressed interested in the research, a total of 168 community residents consented to participate in the study. When participants arrived for their scheduled appointments, they were placed in a private room, provided an additional copy of informed consent for signature, and allowed to ask any questions they had about participation. If participants were interested in continuing, they were provided with the demographic questionnaire and upon completion, asked to place it in the privacy envelope along with the informed consent document. Participants were then provided a computer to complete the online version of the MSCEIT v2.0 (Mayer et al. 2002), which was preceded by standardized

instructions. Finally, participants were given standardized instructions for the administration of the CTQ (Bernstein & Fink, 1998) and asked to place the completed protocol in the envelope with the other forms. Participation took approximately 45 to 60 minutes for each participant.

The procedures for data collection were the same in both counties and followed the procedures outlined in Chapter 3, although an additional measure was added to limit social desirability bias through increased anonymity. Because data collection occurred in small, isolated communities where multiple residents are familiar with each other, prior to completing any documents participants were instructed to place any form they completed in the privacy envelope that had been provided and labeled with a random identification number. Participants were then instructed to close the clasp on the back of the envelope containing all completed documents at the conclusion of participation. When the envelope containing the completed documents was returned, participants were debriefed on the research and allowed to ask any questions they had. Participants were then compensated ten dollars for their time and their participation in the project was concluded.

Data collected from 30 participants were excluded in the analyses because three did not complete the MSCEIT v2.0 (Mayer et al., 2002) assessment, two did not complete the CTQ (Bernstein & Fink, 1998), two did not complete the demographic questionnaire, and 23 received a denial or minimization score greater than 1 on the CTQ (Bernstein & Fink, 1998). The CTQ is a screener and highly sensitive, including minimization or denial subscales utilized to obtain measures of the validity of respondents' reports. These

scores range from 0 (indicating minimal to no denial of trauma) to 4 (indicating significant denial or minimization of trauma). A minimization and denial score greater than 1 was considered to pose threats to the validity and reliability of the data by increasing the potential for factors related to significant levels of denial or minimization of childhood abuse and neglect to confound study outcomes, therefore these data were excluded from analyses. Of the 255 community residents who expressed interest in serving as research participants, the data from 54% (n = 138) were used in statistical analyses. This data included that from standardized assessments, the demographic questionnaire, and those CTQ (Bernstein & Fink, 1998) protocols with a score of 1 or less on the minimization and denial subscale.

Baseline Descriptive and Demographic Characteristics

Females comprised 58% of participants, and males made up 42% of the participants (see Table 1). Age and ethnicity of participants varied. The age of participants ranged from 18 to 82 years, with a mean age of 35.9 years (SD = 16.36). The largest percentile of participants was in the age range of 18 to 28 years. The majority of participants were Caucasian, with the second highest number of participants reporting Native American ethnicity. The number of participants from other ethnicities was limited.

Income and education varied among participants (see Table 1). The majority of participants earned less than $10,000 per year. Degrees from institutes of higher learning, including associate's degrees to post graduate work, were held by 36% of participants. A high school diploma was the highest degree held by the majority of participants (47.8%), followed by those with a Bachelor's degree (16.7%), a post-graduate degree (12.3%), an

Associate's degree (8.7%), a General Equivalency degree ([GED]; 7.2%), and no degree (7.2%).

Table 1

Demographics of Current Sample (N = 138)

Demographics				
Gender (n)	Age (n)	Ethnicity (n)	Income (n)	Education (n)
Female (80)	18 – 28 (64)	Caucasian (88)	<10,000 (70)	HS drop-out (18)
Male(58)	29 – 39 (23)	Native Am. (27)	10,000 – 20,000 (20)	HS graduate (10)
	40 – 49 (19)	African–Am. (5)	20,000 – 30,000 (4)	Some college (19)
	50 – 59 (21)	Hispanic Orig. (5)	30,000 – 40,000 (8)	College, Cur. (41)
	>60 (11)	Asian (3)	>40,000 (36)	College graduate (49)
		Other (10)		

The age range of participants (see Table 2) varied from that of the larger population, as reported by the USDC (2014). In the two counties utilized for data collection, the USDC reports the largest proportion of residents are over 60 years of age (19.2%), followed by those in the age range of 51 to 60 years (14.4%). Those in the age range of 18 to 28 years (14.2%), 29 to 39 years (12.5%), and 40 to 50 years (12%) comprise the balance (USDC,

2014). The ethnicity rates of participants who served in this research also varied in comparison to the population count reported by the USDC (2014) for the counties in which the research was conducted (see Table 2). The USDC reports that the populations in the counties targeted for data collection are approximately 80.7% Caucasian and 10.4% Native American, with additional ethnicities comprising the balance. In this research, 63.8% of participants were Caucasian, while Native Americans comprised 19.6% of the sample. The remaining 16.6% of participants were from additional ethnicities.

Table 2

Ethnicity and Age of Participants

	Ethnicity						
Age	Caucasian (%)	Native American (%)	African American (%)	Hispanic Origin (%)	Asian (%)	Other (%)	Total (%)
18-28	(29.7)	(7.3)	(3.6)	(1.5)	(1.5)	(2.8)	(46.4)
29-39	(7.2)	(6.5)	(0)	(.73)	(0)	(2.2)	(16.8)
40-49	(8.7)	(2.9)	(0)	(.73)	(.73)	(.73)	(13.8)
50-59	(10.9)	(2.9)	(0)	(.73)	(0)	(.73)	(15.2)
>60	(7.3)	(0)	(3.6)	(0)	(0)	(.73)	(8.0)
Total (%)	(63.8)	(19.6)	(3.6)	(3.6)	(2.2)	(7.2)	(100)

In comparison to the income report provided by the USDC (2014) for the two counties utilized in this research, income reported by participants varied from that in the

larger population (see Table 3.). In the two counties, the USDC (2014) reported that 5.4% of residents reported less than $10,000 income per year, while approximately 51% of participants in this study reported an income of less than $10,000 per year. Additionally, 26% of participants in this research reported over $40,000 income per year, while the USDC (2014) reports approximately 54.1% of residents earn over $40,000 per year in the two counties. Gender rates in the two counties are reported to be approximately 50% female and 50% male (USDC, 2014). In this study, approximately 57% of participants were female, while 42% were male.

Table 3

Education and Income of Participants

	Education					
Income $	High School Dropout %	High School Graduate %	Some College %	Current College Student %	College Graduate %	Total %
<10,000	12.3	2.9	5.1	26.1	4.4	50.7
10,000-20,000	.73	3.6	3.6	2.2	4.4	14.5
20,000-30,000	0.0	0.0	.73	.73	1.5	2.9
30,000-40,000	0.0	.73	3.6	0.0	1.5	5.8
>40,000	0.0	.73	.73	.73	23.9	26.1

Childhood abuse and neglect. The CTQ (Bernstein & Fink, 1998) has pre-established cutoff scores representing none, low, moderate, and severe levels for each form of childhood abuse or neglect. In order to examine the frequency and severity of each type of childhood abuse and neglect, the presence or absence of childhood trauma was coded for statistical analyses based on the subscale scores obtained for each category. In relation to the sample utilized in this research, and based on the pre-established cutoff scores provided by Bernstein and Fink (1998), during initial analyses, childhood abuse and neglect were coded as absent (= 0), low (= 1), moderate (= 2), or severe (= 3).

In coding the individual types of abuse and neglect for frequency and descriptive analyses, emotional abuse was considered absent if the subscale score obtained on the CTQ (Bernstein & Fink, 1998) was less than or equal to 8, with scores between 9 and 12 indicating low levels of emotional abuse. Moderate levels of emotional abuse were indicated when the score was between 13 and 15 and severe levels were indicated by a score greater than 15. Physical abuse was considered absent if the measure was less than or equal to 7, with a measure of 8 or 9 indicating low levels of physical abuse. A score between 10 and 12 on the physical abuse subscale indicated moderate levels of physical abuse, while a score over 13 indicated severe levels of physical abuse. Sexual abuse was considered absent if the score was less than or equal to 5 and low if the score was between 6 and 7. A score between 8 and 12 indicated moderate levels of sexual abuse, while a score of 13 or greater indicated severe sexual abuse.

Emotional neglect was considered absent if the score was less than or equal to 9 and low if the score was between 10 and 14. A score between 15 and 17 indicated moderate levels of emotional neglect, while a score equal to or greater than 18 indicated severe emotional neglect. Lastly, physical neglect was considered absent if the score was less than or equal to 7 and low if the score was between 8 and 9. When the score was between 10 and 12 on the physical neglect subscale, moderate levels of physical neglect were indicated and a score over 13 indicated severe levels of physical neglect.

At least one form of childhood abuse or neglect was reported by 84.8% of this sample, irrespective of the severity level (see Table 4). At least two types of abuse or neglect were reported by 79.5% of participants. In the current sample the most frequently reported type of childhood trauma in the moderate to severe range was emotional abuse.

Frequency and severity rates of childhood trauma. The scores and the levels of severity for all five childhood trauma types were analyzed for normality using the Shapiro-Wilk test. All five tests rejected the null hypothesis of normality with a $p = 0.000$. The comparison between these scores in terms of gender and county were constructed using the Mann-Whitney U non-parametric test between two independent samples. The Kruskal-Wallis H statistic was used for the comparison of multiple independent samples in terms of age group, ethnicity, income, and education level. In relation to reports of childhood abuse and neglect, there were no statistically significant differences between the samples obtained in the two separate Wyoming counties. Gender and county did not produce any statistically significant differences in terms of total reported number of childhood trauma types.

Gender differences were statistically significant for emotional abuse scores (p = 0.000) and emotional abuse severity levels (p = 0.000), sexual abuse scores (p = 0.000) and sexual abuse severity levels (p=0.000), emotional neglect scores (p = 0.002), and emotional neglect severity levels (p=0.001), but not for physical abuse or physical neglect severity levels. When gender was a differentiating factor, females scored higher than males across all types of abuse, thus exhibiting higher levels of severity.

Table 4

Report Rates of Abuse in Current Sample

	Level of Abuse (Range)					
Type	Absent n (%)	Low n (%)	Moderate n (%)	Severe n (%)	Mean (SD) n (%)	Moderate to Severe n (%)
Emotional Abuse	(<=8) 52 (37.7)	(9-12) 29 (21.0)	(13-15) 24 (17.4)	(=16) 33 (23.9)	11.6 (5.4)	57 (41.3)
Physical Abuse	(<=7) 73 (52.9)	(8-9) 30 (21.7)	(10-12) 12 (8.7)	(>=13) 23 (16.7)	8.7 (4.3)	41 (29.7)
Sexual Abuse	(<=5) 91 (65.9)	(6-7) 11 (8.0)	(8-12) 10 (7.2)	(>=13) 26 (18.8)	8.3 (6.2)	36 (26.1)
Emotional Neglect	(<=9) 64 (46.4)	(10-14) 42 (30.4)	(15-17) 18 (13.0)	(>=18) 14 (10.1)	11.2 (4.9)	32 (23.2)
Physical Neglect	(<=7) 74 (53.6)	(8-9) 19 (13.8)	(10-12) 22 (15.9)	(>=13) 23 (16.7)	8.6 (4.0)	45 (32.6)

Note. Range of scores based on CTQ cut-off points (Bernstein & Fink, 1998).

The variable of participant age was significant in relation to reports of childhood abuse and neglect. The age of all participants were clustered into five groups. Group one consisted of those participants between the ages of 18 and 28 years (n = 64) and group

two consisted of participants between the ages of 29 and 39 years (n = 23). Group three (n = 19) was composed of participants between 40 and 50 years, with group four (n = 21) consisting of participants between 51 and 60 years. Group five (n = 11) was composed of those participants over 60 years of age.

In the statistical analyses of the relationship between age and reports of childhood abuse and neglect, sexual abuse produced statistically significant differences (p = 0.048), with group three (40 – 50) scoring highest, followed by group two (29 – 39), group four (51 – 60), group five (>60) and lastly group one (18 – 28). When the samples were grouped by ethnicity, there were statistically significant differences (p = 0.025) between the reports of physical abuse, with African Americans scoring the highest, followed by Native Americans, other ethnicities, Caucasians, Hispanic origins, and Asians. These results should be approached with caution due to the limited diversity and small sample used in this research.

Age, ethnicity, and level of income of participants did not produce any statistically significant differences in relation to the total number of trauma types, or total number reported in the moderate to severe range. In contrast, the current level of education reported by participants produced a statistically significant difference (p = 0.001), with high school dropouts obtaining the highest measures of childhood sexual abuse, followed by those with some college, college graduates, high school graduates, and current college students.

MSCEIT v2.0. The reliability of the scores obtained through the application of the MSCEIT V2.0 in the current research was determined at the branch level and overall

through the application of the split-half reliability test, using the odd-even technique. The split-half test was chosen over the Cronbach's alpha measure of internal consistency due to item heterogeneity. The questions for each branch, as well as the overall test were split according to the odd-even technique, where every other question was assigned to the first half and the rest to the second half. This ensured that the two halves being tested were closer to being parallel. Two different tasks were performed for each branch scoring, and questions from both tasks were included in each half being tested. The reliabilities obtained for the un-scaled scores varied between 0.782 and 0.927. Reliability at the branch level and total scale level for the MSCEIT v2.0 was excellent (see Table 5).

Table 5

MSCEIT v2.0 Reliability Coefficients in Current Sample

Branch	Reliability
Perceiving	0.899
Utilizing	0.782
Understanding	0.791
Regulating	0.871
Total GEF	0.927

Note. GEF = Global emotional functioning.

The normality of the scores associated with each one of the four branches of emotional functioning and the global emotional functioning measure were tested using the Shapiro-Wilk test. All constructs, with the exception of emotional regulation ($p = 0.000$) exhibited a normal distribution. As a result, comparisons of scores in terms of

gender and county were constructed using the Mann-Whitney U non-parametric test between two independent samples. The Kruskal-Wallis H statistic was used for the comparison of multiple independent samples in terms of age group, ethnicity, income, and education level. During statistical analyses, measures of emotional perception did not achieve significance as a variable, therefore emotional perception was excluded in further analyses of the data.

Emotional functioning measures did not significantly differ between the two rural counties utilized in the research. Gender differences were statistically significant among participants. Measures of emotional utilization ($p = 0.001$), emotional regulation ($p = 0.004$), and global emotional functioning ($p = 0.003$) were significant, with females scoring higher than males in all three categories. The null hypothesis predicting there would be no differences on emotional functioning measures between genders was rejected. Due to the significant correlations between gender and emotional functioning measures, gender was included as a variable in additional regression models of analyses to further examine the predictive validity of gender in relation to measures of emotional functioning, as well as to limit potentially confounding factors that might result in a Type 1 error.

Because Mayer et al. (1999) reported age differences in measures of emotional functioning, the relationship between age and emotional functioning in the current research was also statistically examined. Analyses indicated that the age of participants was a significant factor in measures of emotional functioning obtained through the MSCEIT v2.0 (Mayer et al., 2002). Measures of emotional utilization ($p = 0.005$),

emotional understanding ($p = 0.000$), emotional regulation ($p = 0.003$), and global emotional functioning ($p = 0.001$) differed significantly across age groups. With the exception of the emotional utilization measure, participants in the age range of 51 to 60 years obtained the highest measures in all other measures, including emotional understanding, emotional regulation, and global emotional functioning, followed by those participants over 60 years of age. On measures of emotional utilization, participants between 40 and 50 years of age obtained the highest measures. Participants in the age range of 18 to 28 years obtained the lowest scores across all four measures of emotional functioning. The significance of age as a factor in measures of emotional functioning necessitated the inclusion of age as a variable in additional regression models of analyses.

Although the diversity and sample size in the current research was limited and results should be approached with strong caution, the ethnicity of participants, in relation to measures of emotional functioning, was also statistically examined. Participants endorsing 'other' as their ethnicity, obtained the highest measures in emotional understanding ($p = 0.000$), emotional regulation ($p = 0.000$), and global emotional functioning ($p = 0.000$). Participants endorsing Caucasian scored the highest in measures of emotional regulation ($p = 0.000$) and second highest in measures of emotional understanding and global emotional functioning.

The relationship between income and measures of emotional functioning was also statistically analyzed. When the income of participants was utilized as a variable, statistically significant differences in measures of emotional understanding ($p = 0.000$), emotional regulation ($p = 0.000$), and global emotional functioning ($p = 0.000$) were

obtained. Those earning more than $40,000 obtained the highest measures in emotional regulation and global emotional functioning, while those earning between $20,000 and $30,000 obtained the highest measures in emotional understanding. Participants earning less than $10,000 per year obtained the lowest measures across three categories of emotional functioning measures, including emotional understanding, emotional regulation, and global emotional functioning.

In the examination of the relationship between the highest educational degree obtained by participants and emotional functioning measures, significant differences were found in measures of emotional utilization ($p = 0.017$), emotional understanding ($p = 0.000$), emotional regulation ($p = 0.001$), and global emotional functioning ($p = 0.001$). Participants reporting a post-graduate degree obtained the highest measures in emotional understanding, while participants reporting only a high school degree obtained the lowest. Participants who reported a GED as their highest degree obtained the highest measures of emotional utilization, while high school graduates obtained the lowest. In relation to measures of emotional regulation and global emotional functioning, participants reporting a Bachelor's degree obtained the highest measures, while the lowest measures were obtained by those with a GED, followed by those participants reporting a high school diploma as the highest degree obtained.

Hierarchical Regression Results

In order to test the null hypotheses that emotional abuse does not serve as a significant predictor of emotional impairment during adulthood, the data collected from 138 participants through the administrations of the CTQ (Bernstein & Fink, 1998) and the

MSCEIT v2.0 (Mayer et al., 2002) were analyzed using hierarchical multiple regression analyses. Because Powers et al. (2009) noted that categorizing none to mild measures of abuse or neglect into one group and moderate to severe measures of abuse or neglect into another group provide the strongest effects, the measures of abuse and neglect in this research were likewise categorized dichotomously as abuse or neglect present and abuse or neglect absent in additional regression analyses of the data.

Childhood abuse or neglect measures of none to low levels were combined into one variable, *abuse or neglect absent* (= 0), while moderate to severe levels were combined into another variable, *abuse or neglect present* (= 1). The five trauma variables utilized as predictors in the regression models were sexual abuse, physical abuse, emotional abuse, physical neglect, and emotional neglect. In addition, an interaction term between gender and sexual abuse was added to the final model. The demographic variables of age and gender were also included in the regression analyses.

Three hierarchical regression models were conducted for each of the four constructs of emotional functioning measured by the MSCEIT v2.0 (Mayer et al., 2002) and examined in this research. These included emotional utilization, emotional understanding, and emotional regulation, as well as the composite measure of global emotional functioning. In model one, age and gender were entered. In model two, age and gender were included in the first step, and the trauma predictor variables, as measured by the CTQ (Bernstein & Fink, 1998), were added in the second step. The third model was similar, except an interaction term between gender and sexual abuse were added in the final step. All models fit the data well, with the change in R squared significant for each

model ($p < 0.000$), however the third model was the most appropriate model, explaining the largest amount of variance in measures of emotional functioning.

In the first regression model, in which emotional utilization functioned as the DV, gender and age both significantly contributed to predicting the emotional utilization score, explaining 13.9% of the variance (see Table 6). Male gender decreased the score by .255, while a change in the age group from younger to older increased the score by .235. When emotional understanding served as the DV in model one, age significantly contributed to the emotional understanding score, while gender was not a significant contributor. A change in the age group from younger to older increased the score by 0.386. The variable of age explained 16.7% of the variance in emotional understanding scores in model one.

When emotional regulation was entered as the DV in regression model one, the variables of age and gender were significant, explaining 13.9% of the variance in emotional regulation scores (see Table 6). Measures of emotional regulation increased by .282 when the age group of participants increased, and emotional regulation scores decreased .205 when the participant was male. When global emotional functioning served as the DV in regression model one, gender and age were also significant predictors of differences in global emotional functioning scores. Global emotional functioning measures increased .317 when the age group of participants increased, and decreased .212 if the participant was male. The demographic variables of age and gender explained 16.9% of the variance in global emotional functioning scores (see Table 6).

Table 6

Hierarchical Regression Model 1 Predicting Measures of Emotional Functioning (N = 138)

	Skills							
	Utilization		Understanding		Regulation		GEF	
Predictor	R2 Delta	Sig	R2 Delta	Sig	R2 Delta	Sig	R2 Delta	Sig
Age	.235	.005**	.386	0.00**	.282	.001**	.317	.000**
Gender	.255	.002**	-.100	.218	-.205	.014*	-.212	.010**
Total R2	.139		.167		.139		.169	

Note. GEF = Global emotional functioning.
$p < .05$. $p < .01$**

In the second regression model, age and gender were entered in the first step, and the five trauma variables assessed by the CTQ (Bernstein & Fink, 1998), including emotional abuse and neglect, physical abuse and neglect, and sexual abuse, were entered in the second step (see Table 7). Age and gender remained significant predictors of emotional utilization scores in the second model with measures of emotional utilization increasing .235 with an increase in the age group of participants. If the participant were male, measures of emotional utilization decreased by .265. None of the abuse or neglect variables included in model two achieved significance as predictors of emotional utilization scores. The demographic variables of age and gender explained 13.8% of the variance in emotional utilization scores in model two.

When emotional understanding served as the DV in regression model two, age and gender were significant predictors of emotional understanding scores, accounting for

16.7% of the variance in emotional understanding scores (see Table 7). Measures of emotional understanding increased .380 when the age group of participants increased, and decreased .265 when the participant was male. In addition, physical abuse, physical neglect, and sexual abuse all achieved significance as predictor variables of emotional understanding scores in model two. When the childhood abuse and neglect variables were entered in step two, an additional 10% of the variance in emotional understanding was explained. When a history of physical abuse was present, scores in emotional understanding decreased .175. When a history of physical neglect was present, scores in emotional understanding decreased by .177. When a history of sexual abuse was present, scores in emotional understanding decreased by .163. The demographic variables of age and gender, and the childhood trauma variables of physical abuse, physical neglect, and sexual abuse explained 26.7% of the variance in emotional understanding scores.

When emotional regulation scores served as the DV in regression model two, the demographic variables of age and gender were the only variables that achieved significance as predictors of emotional regulation scores (see Table 7). The emotional regulation score increased .247 if the age group of participants increased. In addition, measures of emotional regulation decreased .206 if the participant were a male. None of the childhood abuse and neglect variables achieved significance as predictors of emotional regulation scores. The demographic variables of age and gender explained 15.4% of the variance in emotional regulation scores in model two.

Table 7

Hierarchical Regression Model 2 Predicting Measures of Emotional Functioning (N = 138).

	Skills							
	Utilization		Understanding		Regulation		GEF	
Predictor	R2 Delta	Sig	R2 Delta	Sig	R2 Delta	Sig	R2 Delta	Sig
Age	0.235	.007**	.380	.000**	.247	.004**	.290	.001**
Gender	-.265	.004**	-.198	.020*	-.206	.024*	-.265	.003**
Emotional Abuse	.122	.216	.067	.461	.059	.544	.042	.655
Emotional Neglect	-.012	.906	-.058	.528	.065	.508	.020	.833
Physical Abuse	-.130	.153	-.175	.038*	-.171	.058	-.161	.065
Physical Neglect	-.035	.703	-.177	.040*	-.123	.182	-.181	.042*
Sexual Abuse	.081	.353	-.163	.045*	.046	.600	-.047	.575
Total R2	.138		.267		.154		.215	

Note. GEF = Global emotional functioning.
*$p < .05$. $p < .01$**.

When global emotional functioning served as the DV in regression model two, age and gender remained significant predictors of global emotional functioning measures accounting for 16.9% of the variability in scores (see Table 7). Global emotional functioning measures increased .290 when the age group of participants increased, and global emotional functioning scores decreased .265 when the participant was a male. In addition, physical neglect achieved significance as a predictor of global emotional

functioning scores, accounting for an additional 4.6% of the variability in global emotional functioning scores. The demographic variables of gender and age, and the trauma variable of physical neglect explained 25.2% of the variance in global emotional functioning scores in model two.

In regression model three, age and gender were added in step one, while all forms of childhood trauma assessed by the CTQ (Bernstein & Fink, 1998) were added in step two (see Table 8). In addition, the interactive term of sexual abuse and gender was added in step three. When emotional utilization served as the DV in model three, age retained value as a significant predictor of scores in emotional utilization. Scores of emotional utilization increased .222 when the age group of participants increased. Gender also retained significance as a predictor of emotional utilization scores. When the participant was male, scores of emotional utilization decreased by .206. None of the childhood trauma variables or the interactive effect of gender and sexual abuse achieved significance as predictors of emotional utilization scores. In model three, 15.7% of the variance in emotional utilization scores was explained by the demographic variables of age and gender.

When emotional understanding served as the DV in model three, age retained significance as a predictor variable (see Table 8). When the age group of participants increased, scores in emotional understanding increased by .373. In addition, physical neglect was a significant predictor of lower scores in emotional understanding. When a childhood history of physical neglect was present, scores in emotional understanding decreased by .175. Gender lost significance as a predictive variable of emotional

understanding in model three and none of the other trauma variables achieved significance as predictors of emotional understanding scores. The demographic variable of age and the presence of a history of physical neglect explained 27% of the variance in emotional understanding scores in model three.

When emotional regulation served as the DV in model three, age remained a significant predictor of emotional regulation scores (see Table 8). Scores of emotional regulation increased .277 when the age group of participants increased. In addition, the interactive term of gender and sexual abuse achieved significance as a predictor of emotional regulation scores, accounting for an additional 5% of the variance in emotional regulation scores. When a history of sexual abuse was present and the gender was male, scores decreased in emotional regulation by .268. None of the other childhood trauma variables achieved significance as a predictor of emotional regulation scores and gender alone lost significance as a predictor variable of emotional regulation in model three. The demographic variable of age, and the interactive term of gender and sexual abuse explained 20.4% of the variance in emotional regulation scores in model three.

When global emotional functioning served as the DV in regression model three, age and gender achieved significance as predictor variables (see Table 8). When the age group of participants increased, global emotional functioning scores increased by .273. When the participant was a male, global emotional functioning scores decreased by .188.

Table 8

Hierarchical Regression Model 3 Predicting Measures of Emotional Functioning (N = 138).

	Skills							
	Utilization		Understanding		Regulation		GEF	
Predictor	R2 Delta	Sig	R2 Delta	Sig	R2 Delta	Sig	R2 Delta	Sig
Age	0.222	.010*	.373	.000**	.227	.007**	.273	.001**
Gender	-.206	.033*	-.164	.066	-.118	.206	-.188	.038*
Emotional Abuse	.105	.281	.057	.527	.034	.716	.020	.824
Emotional Neglect	-.023	.814	-.064	.483	.048	.615	.005	..957
Physical Abuse	-.112	.215	-.165	.051	-.144	.101	-.137	.109
Physical Neglect	-.032	.728	-.175	.042*	-.118	.188	-.177	.043*
Sexual Abuse	.000	.997	-.116	.193*	.166	.076	-.059	.513
Gender/SA	-.180	.051	-.103	.229	-.268	.003**	-.235	.007**
Total R2	.157		.270		.204		.252	

Note. GEF = global emotional functioning; A = abuse; N = neglect; Gender/SA = interactive term of gender and sexual abuse.
*$p < .05$. **$p < .01$.

Physical neglect was also a significant predictor of the global emotional functioning scores, as was the interactive term of gender and sexual abuse. When a history of physical neglect was present, scores in global emotional functioning decreased by .177. When the participant was male and a history of sexual abuse was present, scores in global emotional functioning decreased by .235 (see Table 8). None of the other

variables in model three achieved statistical significance. The demographic variables of age and gender, as well as the trauma variable of physical neglect, and the interactive term of gender and sexual abuse explained 25.2% of the variance in global emotional functioning scores.

Summary

In this research statistical analyses were conducted on measures of emotional functioning processes and retrospective reports of childhood abuse and neglect obtained from a community sample of 138 adults recruited from two rural counties in the U.S. state of Wyoming. Age was a significant predictor of increased scores in all measures of emotional functioning. In addition, gender was a significant predictor of emotional utilization and global emotional functioning scores. The null hypothesis stating there would not be differences in measures of emotional functioning by gender was rejected.

When the childhood trauma variables of emotional abuse, physical abuse, sexual abuse, physical neglect, and emotional neglect were examined during hierarchical regression analyses, childhood emotional abuse did not achieve significance as a predictor of lower measures of emotional functioning in participants. The null hypotheses stating that emotional abuse would not predict impairment in emotional regulation and global emotional functioning were retained. The covariate of physical neglect was a significant predictor of lower scores in emotional understanding and global emotional functioning. In addition, interactive effects between a history of sexual abuse and gender were significant predictors of lower scores in emotional regulation and global emotional functioning when the participant was male.

Chapter five begins with a description of the frequency and severity rates of childhood abuse and neglect in the sample used in this research and compares them to the rates reported in previous research. This is followed by a discussion on childhood emotional abuse and potential factors related to the failure of emotional abuse to achieve significance as a predictor variable in this research. Next, the significance of other forms of childhood abuse and neglect as predictors of later emotional impairment is reviewed. This is followed by a discussion of the limitations of this research, including factors related to the construct of childhood emotional abuse, sample size, limited diversity, and instrumentation. Chapter 5 will conclude with recommendations for intervention and preventative methods, in relation to childhood abuse and neglect. This will include a discussion of the importance of adequate emotional functioning to an increased quality of life, and emotional skills training as an appropriate avenue of clinical treatment for those with a history of childhood environmental trauma.

Chapter 5: Discussion, Conclusions, & Recommendations

Introduction

Although the focus on childhood emotional abuse has increased in recent years, available research is limited on the impact of this type of childhood trauma. Previous research indicates that a history of emotional abuse imposes significant detriment on functioning (e.g., Shi, 2013; Spinazzola et al., 2014). In the available research related to emotional abuse, impairment in emotional processing is implicated as a factor in the disorders and dysfunctional patterns of behavior of those with a childhood history of emotional abuse or neglect (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., 2012; Karagoz & Dag, 2015; Racine & Wildes, 2015; Smith & Flannery-Schroeder, 2013). The purpose of this quasi-experimental, quantitative research was to examine the statistical causal relationship between a history of childhood abuse and neglect and measures of emotional functioning in adults, to determine if childhood emotional abuse is a valid predictor of lower measures of emotional regulation and global emotional functioning. In addition, gender was included as a variable of interested because Mayer et al. (1999) reported gender differences in emotional functioning measures as assessed by the MSCEIT (Mayer et al., 2002).

Adult participants were recruited from two rural counties in the U.S. state of Wyoming, and measures of emotional perception, emotional utilization, emotional understanding, emotional regulation, and a composite measure of global emotional functioning, as measured by the MSCEIT v2.0 (Mayer et al., 2002) were obtained from 138 participants. These measures of emotional functioning were statistically analyzed in

relation to retrospective reports of childhood abuse and neglect obtained from participants through administration of the CTQ (Bernstein & Fink, 1998). Emotional regulation and global emotional functioning served as the primary DVs in the study. Childhood emotional abuse served as the primary IV, while physical abuse, sexual abuse, physical neglect, and emotional neglect served as covariates. Hierarchical regression analyses were conducted to examine whether childhood emotional abuse is a significant predictor of lower measures of emotional functioning.

Initial analyses in this research indicated that gender was a significant factor in measures of emotional functioning, with female participants obtaining significantly higher measures in emotional functioning than males. The null hypothesis predicting there would be no gender differences in measures of emotional functioning was rejected. The inclusion of gender as a variable during regression analyses indicated that gender served as a significant predictor of differences in measures of emotional understanding and global emotional functioning, with female gender predicting higher measures on both scales. In addition, age was a significant factor in measures of emotional functioning during initial analyses, and achieved significance as a predictor variable in regression analyses. Measures of emotional utilization, emotional understanding, emotional regulation, and global emotional functioning increased when the age group of participants increased, and age could be validly used to predict higher scores on all measures.

In the statistical examination of measures of emotional functioning in relation to childhood trauma, a history of emotional abuse did not achieve significance as a predictor variable. The differences in measures of emotional functioning obtained from those with

an emotionally abusive past and those without did not significantly differ. The null hypotheses predicting that childhood emotional abuse would not serve as a predictor of impairment in emotional regulation and global emotional functioning were retained. As in previous research by Hertel et al. (2009), emotional perception did not achieve significance during initial analyses and was not included in further statistical examinations.

The covariate of childhood physical neglect achieved significance in measures of emotional understanding and global emotional functioning. Physical neglect could be validly used to predict lower scores in emotional understanding and global emotional functioning in participants. In addition, significant interaction effects between gender and a history of childhood sexual abuse were observed. A history of childhood sexual abuse in male participants could be used to predict lower scores in measures of emotional utilization and global emotional functioning.

Interpretation of Findings

Childhood Abuse and Neglect

The frequency and severity rates of childhood abuse and neglect reported in previous research and in the current sample emphasize the importance of this topic in research. While the rates of childhood abuse and neglect in the research vary, the DHHS (2015a) has reported that 670,000 cases of child abuse and neglect were substantiated in 2013. Actual report rates, including those cases lacking sufficient evidence, were significantly higher (DHHS, 2015a). A community sample of participants was recruited to serve in this project. In the review of literature, only one prior study (Iffland et al.,

2012) appeared to be available that used a community sample of participants and report rates of childhood abuse and neglect in this study's sample were higher.

Iffland et al. (2012) recruited 995 participants through online advertisements in order to examine the relationship between social anxiety disorder and childhood abuse and neglect. Approximately 70.6% of the sample utilized by Iffland et al. reported a history of at least one form of childhood trauma, while 49.8% reported a history of two or more forms. In comparison, approximately 84.8% of the community sample reported at least one type of childhood abuse or neglect, while 79.5% of participants reported a history of two or more forms in this research sample.

In a comparison of the types of childhood trauma reported between the community sample used by Iffland et al. (2012) and the sample used in this research, Iffland et al. stated that approximately 54.6% of participants reported moderate to severe levels of emotional abuse, and 39.7% reported a history of emotional neglect. Physical abuse was reported by 22.4%, physical neglect was reported by 48.6%, and sexual abuse was reported by 15.1% of community participants (Iffland et al., 2012). Those reporting moderate to severe levels of emotional abuse in this community sample of participants comprised 45.7% of the sample, while participants reporting moderate to severe levels of physical abuse comprised 44.2%. Sexual abuse in the moderate to severe range was reported by 26.1% of the sample. Physical neglect was reported by 32.6% of the sample, and emotional neglect was reported by 23.2% of the sample. This project thus adds to the available research that indicates how widespread and significant the issues of childhood abuse and neglect are.

In the literature reviewed for this research, all forms of childhood abuse and neglect were associated with dysfunction. As with childhood emotional abuse, physical abuse is significantly associated with social anxiety disorder, lower quality of life, lower GAF, self-harming behaviors, abuse symptoms, and abuse symptom severity presentation (Bruce et al., 2012; Karagoz & Dag, 2015: Larson et al., 2013; Shi, 2013). Childhood sexual abuse significantly increases symptom severity in chronic depression, is directly associated with anorexia nervosa, and can be used to predict increased suicide risk (Marshall, 2013; Negele et al., 2015; Racine & Wildes, 2015). All forms of childhood abuse and neglect, as well as severity, were significantly associated with increased suicide risk, eating disorders, social anxiety disorder, bipolar disorder, and psychopathology (Groleau, 2012; Iffland et al., 2012; Larsson et al., 2013; Marshall, 2013). The significant results in this study, which are discussed later, indicated that when a history of physical neglect was reported by participants or sexual abuse was reported by males, lower measures in emotional functioning could be predicted.

Previous research indicates that childhood abuse and neglect exert a synergistic and predictive effect on functioning, and the multiplicity of traumas may be the most significant indicator of dysfunction. Larsson et al. (2013) demonstrated that the total CTQ (Bernstein & Fink, 1998) score, a composite score of all types of abuse and neglect, as well as severity levels, were significantly associated with an earlier onset and more severe course of bipolar disorder. Additionally, Larsson et al. (2013) stated that the total CTQ score significantly correlated with GAF. Smith and Flannery-Schroeder (2013) suggested that the multiplicity of traumas may be the most important factor in

alexithymia. Both physical and sexual abuses predicted impairment when emotional abuse was present (Smith & Flannery-Schroeder, 2013).

Additional research by Spinazzola et al. (2014) indicated that, while the CTQ (Bernstein & Fink, 1998) subscale of emotional abuse produced the strongest effects, both physical abuse and sexual abuses were strongly associated with severe trauma symptoms, depression, anxiety, acute stress disorder, and dissociation. The impact of physical and sexual abuse was greater when emotional abuse was also present, again suggesting the multiplicity of trauma is a significant issue. Iffland et al. (2012), examining the relationship between childhood abuse and neglect and social anxiety, stated that while emotional abuse produced the strongest effects, all forms of trauma significantly correlated with social anxiety and psychopathology. Additionally, emotional abuse appeared to be a mediator in the relationship between physical abuse and dysfunction (Iffland et al., 2012).

Perhaps one of the most significant aspects of this empirical study was the report rate of childhood abuse and neglect in the community sample of participants. The prevalence of childhood abuse and neglect reported in this research, as well as that reported in previous research, are clear indicators of the significance of childhood abuse and neglect as global societal issues (Chinawa et al., 2014; Mahram et al., 2013; Shi, 2013; Xiangming, 2015). Additionally, previous research indicates that childhood abuse and neglect impose a synergistic and predictive effect on dysfunction. The more types of trauma and the greater the severity level, the greater the dysfunction (Iffland et al., 2012; Larsson et al., 2013; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al.,

2014). In the sample used in this research, 84.8% of community participants reported at least one type of childhood abuse or neglect, while 79.5% reported two or more forms. This study confirms the prevalence of childhood abuse and neglect reported in previous research, and suggests additional resources in research, intervention, and preventative methods be directed toward the issue of childhood abuse and neglect, as it is a significant social concern.

Childhood Emotional Abuse

While all forms of childhood abuse and neglect, as well as the multiplicity of traumas, have been reported to be significantly associated with later dysfunction, emotional abuse was the primary IV in this research. The DHHS (2015a) reports that 8.8% of interventions by Child Protective Services in 2013 concerned childhood emotional abuse and noted the rates are likely much higher. In the limited available research on childhood emotional abuse, the samples utilized from the populations targeted by researchers for study primarily consisted of clinical or convenience samples of participants (Bradbuty & Schaffer, 2012; Bruce et al., 2012; Groleau et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Negele et al., 2015; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Spinazzola et al., 2014). As in this research and the previous study by Iffland et al (2012) utilizing community samples of participants, childhood emotional abuse was the most frequently reported form of abuse, and also the type of trauma most frequently reported in the moderate to severe range by clinical and convenience samples. The rates of emotional abuse and the significance of this form of

abuse in previous research, as well as the rates reported in this research, highlight the importance of additional research on this specific form of childhood trauma.

While childhood emotional abuse did not achieve significance in this research, in previous research (Karagoz & Dag, 2015; Racine & Wildes, 2015) emotional abuse significantly predicted impairment in various aspects of emotional regulation, as measured by the DERS (Gratz & Roemer, 2004). The failure of emotional abuse to obtain significance as a predictor of lower measures of emotional regulation and global emotional functioning in this project may be related to the differences in the MSCEIT v2.0 (Mayer et al., 2002) and the DERS (Gratz & Roemer, 2004).

The DERS (Gratz & Roemer, 2004) is a self-report instrument that poses questions about how respondents react when they experience emotions. Results are based on the self-perception of participants (Gratz & Roemer, 2004). In comparison, the MSCEIT v2.0 (Mayer et al., 2002) is a performance-based instrument, in which various scenarios in the form of pictorial representations or verbal stories are given to respondents, who must then choose the appropriate associated emotion. The MSCEIT v2.0 (Mayer et al., 2002) requires a demonstration of emotional skills, rather than a self-reported perception of ability.

The DERS (Gratz & Roemer, 2004) is also broader in scope than the MSCEIT v2.0 (Mayer et al., 2002). The aspects of emotional regulation defined by the DERS (Gratz & Roemer, 2004), which obtained significance as DVs in the studies by Karagoz and Dag (2015) and Racine and Wildes (2015), included accessing effective emotional strategies, engaging in goal-directed behavior when under emotional duress, and

emotional impulse control. The constructs of engaging in goal-directed behavior and accessing effective emotional strategies, defined as emotional regulation in the DERS (Gratz & Roemer, 2004), roughly parallel aspects of emotional utilization, as defined by Mayer and Salovey (1997), while emotional impulse control, as defined by the DERS (Gratz & Roemer, 2004), aligns with aspects of emotional regulation in the Mayer and Salovey model (1997). Because this research appears to be the first research utilizing the MSCEIT v2.0 (Mayer et al., 2002) to assess emotional functioning in relation to early abuse or neglect, and the first utilizing a performance-based, comprehensive assessment of emotional functioning in an examination of childhood abuse and neglect, the new information provided by this study can serve as a guide for additional research.

Another potential factor related to the failure of childhood emotional abuse to achieve significance in the current study, as well as an issue discussed in the literature review, is the lack of a concise, bounded construct of childhood emotional abuse in the social sciences and the legal system (AHA, n.d.; DHHS 2015b; Schpiegel et al., 2013). The dichotomous nature of childhood physical and sexual abuse makes the presence of these forms of abuse easier to recognize and acknowledge. Events designated as criteria for the determination of a history of physical abuse and sexual abuse are much clearer than those designated for childhood emotional abuse (DHHS, 2015b). One incident of physical or sexual abuse meets the defined criteria, as well as providing increased clarity that abuse has occurred in clinical assessments, as well as for those individuals with an abusive childhood history. The presence of childhood emotional abuse, as well as the impact, is subtler.

As discussed earlier, previous researchers reported significant associations between childhood emotional abuse and depression, anxiety, alexithymia, stress sensitivity, social anxiety disorder, interpersonal relationship difficulties, increased internalizing behavioral problems, emotional inhibition, increased abuse symptoms and symptom severity, dissociation, eating disorders, acute stress disorder, substance abuse disorders, self-harming behaviors, increased suicide risk, decreased quality of life, earlier onset of bipolar disorder and more severe symptomatology, decreased quality of life, and a lower GAF (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). Many of the dysfunctions reported to be associated with childhood emotional abuse in previous research suggest the impact of emotional abuse may strongly relate to the disruption of internalization processes, leaving little external evidence, accumulating, and potentially leading to clinical dysfunction.

Waller et al. (2007) and Goldsmith and Freyd (2005) suggested that emotional invalidation and the failure to correctly integrate personal emotional experiences with external reality, thus achieving internal congruence, leads to maladaptive patterns of coping with negative emotional experiences. Multiple other factors that may have impacted the results, which are discussed in the limitation section that follows, make this research inconclusive in relation to the specific impact of childhood emotional abuse. Although childhood emotional abuse did not achieve significance in this study, the rates of emotional abuse reported by the community sample utilized in this research, as well as

the significant results reported in previous research on emotional abuse, cannot be ignored. The literature review discussed in chapter 2 and the rates of reported emotional abuse in the current community sample indicate the need for an additional focus in research on the specific impact of emotional abuse during childhood.

Significant Results

This project appears to be the first research utilizing the MSCEIT v2.0 (Mayer et al., 2002) to examine the potential for childhood abuse and neglect to impair emotional functioning skills during adulthood. In this research childhood physical neglect and childhood sexual abuse in males achieved significance as predictors of lower measures of emotional functioning, obtained through a performance-based, comprehensive instrument of measure (Mayer et al., 2002). The results from this research, that indicate childhood physical neglect can be validly utilized to predict difficulty in the ability to understand emotions and global emotional functioning, provides valuable information to the databases for researchers, possibly serving as a guide for additional studies. These results also provide new information for those facilities involved in child welfare, in which physical neglect is a focus for intervention or prevention. In addition, the results from this research, suggesting that childhood sexual abuse may predict difficulty in emotional regulation and global emotional functioning in males, provides a pathway for additional research on the impact of childhood abuse and neglect, and has potential to contribute to positive social change for future generations.

The significance of age as a factor in emotional functioning skills in the current project is important. An aspect of the Mayer and Salovey (1997) model of emotional

functioning is the proposition that emotional skills are cumulative and developmental in nature. In this research, age was a significant predictor of differences in emotional utilization, emotional understanding, emotional regulation, and global emotional functioning. These results support the theory that emotional functioning is an accrued, developmental process, as suggested by Mayer and Salovey (1997). The significance of age as a predictor of emotional functioning measures in this research is that emotional functioning, as with any developmental process, can be impacted by external stressors such as childhood abuse or neglect.

Additional significant results from this study are related to gender. In standardizing the MSCEIT v2.0 (Mayer et al., 2002), Mayer et al. (1999) reported that females score significantly higher in measures of emotional functioning. Female gender was a significant factor in increased measures of emotional functioning in this research. Additionally, income and education were significant factors, in relation to measures of emotional functioning. Measures of emotional functioning were higher in participants with increased income and academic histories. While specific interpretation of these results may be relevant for additional research, the discourse on income and education in relation to emotional functioning is more pertinent to the branch of social science focused on emotional intelligence, and discussed later, as income and education did not impact participant tendency to report childhood abuse or neglect.

Although a significant association between childhood sexual abuse and reported academic accomplishment was found during statistical analyses, the small sample size in this project does not allow for interpretation. Due to the small sample size, the significant

correlation between those stating they were high school dropouts and also reporting childhood sexual abuse may not be reliable. These results do, however, potentially provide increased motivation for research focused on the impact of childhood abuse and neglect, especially when coupled with previous research demonstrating that adequate emotional functioning is a requisite for an increased quality of life (Mikolajczak et al., 2013).

Limitations of the Study

A significant limitation of this research is the poor response rate and small sample size. A priori calculations indicated that a total of 116 participants were needed to obtain statistical significance (Soper, 2013). Of the 138 participants who contributed data in this study, 84.8% reported at least one form of childhood abuse or neglect, while 79.5% reported two or more forms. Prior research suggests the multiplicity and severity of childhood abuse and neglect may be the most significant indicator of impairment in functioning (Bruce et al., 2012; Larsson et al., 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). While gender was included as an interaction term in statistical analyses, the sample size limited the potential for examining interactive effects between different forms of abuse or neglect. Due to the high number of trauma reports in the sample used in this research, the exclusion of statistical analyses of trauma interaction effects, previous research indicating that emotional abuse is a significant factor in dysfunction, and the absence of available research examining emotional functioning using a comprehensive and performance-based instrument of measure, such as the

MSCEIT v2.0 (Mayer et al., 2002), questions about the impact of childhood emotional abuse on later emotional functioning remain.

Another limitation of this research relates to the data collection and analyses process. Clinical interviews to aid in the assessment of childhood abuse or neglect were not included, possibly limiting an absolute acknowledgement of abuse or neglect by participants. In this project, emotional abuse was defined through the CTQ (Bernstein & Fink, 1998), which was utilized as the instrument of measure for childhood abuse and neglect. The CTQ (Bernstein & Fink, 1998) is one of the most frequently used instruments in research on childhood abuse and neglect. A minimization or denial subscale is included in the CTQ screener to help ascertain the validity of responses, and alert the professional administering the assessment that additional screening, such as an interview, should be conducted. As noted by MacDonald et al. (2016), the minimization or denial subscale of the CTQ (Bernstein & Fink, 1998) is frequently omitted in research reports on childhood abuse and neglect.

Recently, MacDonald et al. (2016) examined the data from multiple independent projects in which the CTQ (Bernstein & Fink, 1998) was utilized as the instrument of measure. Data from 24 samples (n = 19,652) were collected by MacDonald et al. (2016) and statistically analyzed. MacDonald et al wanted to examine the frequency of minimization or denial of childhood abuse and neglect, when the CTQ (Bernstein & Fink, 1998) was used as the tool of measure. The researchers also examined the CTQ to explore whether the constructs of childhood abuse and neglect are continuous or dichotomous variables, and whether the minimization subscale accurately represents the

measure. McDonald et al. (2016) conducted an additional examination to determine if the minimization subscale moderates the relationships between the other subscales of the CTQ (Bernstein & Fink, 1998), dependent upon whether the respondent is a clinical or community participant (MacDonald et al., 2016).

MacDonald et al. (2016) reported that clinical respondents consistently reported more abuse and neglect than those from community samples. Community participants also scored significantly higher on the minimization scale than clinical respondents. MacDonald et al. reported that statistical analyses indicated that the trauma variables assessed through the CTQ (Bernstein & Fink, 1998) are continuous and accurately represent the minimization or denial of responses. In addition, MacDonald et al. (2016) reported the CTQ (Bernstein & Fink, 1998) subscales of emotional abuse and neglect are particularly sensitive to minimization or denial, and strongly cautioned that any protocols with positive results on the minimization subscales be excluded in research analyses.

In this project data were included in analyses if the minimization or denial score were 0 or 1. Protocols with a score above 1 on the minimization subscale were excluded from analyses to limit increased threats to the validity of results. Of the 138 CTQ (Bernstein & Fink, 1998) protocols included during statistical analyses in this research, 40 protocols had a score of 1 on the minimization or denial subscale. Of these 40 positive protocols, 27 indicated an absence (0) of childhood emotional abuse. Because MacDonald et al. (2016) reported that the CTQ minimization subscale is particularly sensitive to emotional abuse, the inclusion of the positive protocols during analyses in this research potentially limits the validity of results and possibly confounds results.

Since participants were not clinically interviewed during the data collection process, possibly decreasing the number of participants who would have otherwise provided a clear and precise acknowledgement of emotional abuse, the validity and reliability of results may be limited.

Self-report, social desirability, and recall bias may also threaten the validity of these results. The topic of childhood abuse and neglect are sensitive topics for many. The poor response rate to the current research and the failure to secure agreement from cooperating facilities to conduct the research with a convenience sample of adults enrolled in higher education highlight the discomfort associated with the topic. The discomfort associated with childhood abuse and neglect may have translated into a failure to acknowledge a history of childhood trauma for some participants in this research.

In addition, recall bias may have limited an absolute acknowledgement of childhood abuse or neglect. As noted by Hassan (2005), recall bias can impose significant threats to the validity of self-reported data. The instrument of measure (Bernstein & Fink, 1998) used to collect data on childhood abuse and neglect in this research was a self-report, retrospective instrument. The utilization of a self-report instrument may limit generalization of results to the larger population.

Another limitation relates to diversity. In standardizing the MSCEIT v2.0 (Mayer et al., 2002), the normative samples were comprised of Caucasian (58.6%), Asian (26.4%), African American (5.4%), Hispanic (4.9%), and Other (4.6%). The normative samples utilized in standardizing the CTQ (Bernstein & Fink, 1998) were comprised of Caucasian (65.6%), African American (14.4%), Hispanic (10.3%), and other (9.5%).

While the rate of Caucasian participants in the current study (63.8%) is similar to the rates used in standardizing the MSCEIT v2.0 (Mayer et al., 2002) and the CTQ (Bernstein & Fink, 1998), Native Americans were not included in either standardization sample, unless they were reported as 'other.'

In relation to the sample used in this project, the standardization samples used in validating the MSCEIT v2.0 (Mayer et al., 2002) and the CTQ (Bernstein & Fink, 1998) raise questions about whether the MSCEIT v2.0 (Mayer et al., 2002) and the CTQ (Bernstein & Fink, 1998) were the appropriate instruments of measure, as approximately 20% of the participants in this research sample were Native American. The proportion of Caucasian participants in the current sample, as well as in the instrument standardization samples, may be more representative of measures of emotional regulation in the majority than actual differences by ethnicity, as Caucasians scored higher in emotional regulation skills than other ethnicities on the MSCEIT v2.0 (Mayer et al., 2002) in this research. Again, the small sample size utilized in this study limits interpretation.

Another factor that may limit the generalization of results is the location where the study took place. Participants were recruited from two counties located in remote, rural locations in Wyoming. The estimated population count for 2015 for the two counties targeted in this project ranged from just over 40,000 to less than 97,000 (USDC, 2014). In relation to land size of the counties, the USDC also reported that the estimated population count for 2015 ranged from less than 5 persons to less than 35 persons per square mile. Generalization of current results to a more populous, urban area may be limited.

Sociodemographic variables may also have confounded results, limiting generalization. Previous research suggests socioeconomic factors may increase the risk of childhood trauma (Alink, Euser, IJzendoorn, & Bakermans-Kranenburg, 2013; Shulz et al., 2014). In the sample utilized in this research, 70% of participants earned less than $10,000 per year. Factors associated with low income may have contributed to results. Additionally, the multiplicity of traumas reported in the current sample may confound results. As noted by Iffland et al. (2012), Larsson et al. (2013), Shi (2013), Smith and Flannery-Schroeder (2013), and Spinazzola et al. (2014), the multiplicity of traumas may be the most significant indicator of dysfunction. As 74.5% of the sample used in this research reported multiple traumas, results may be more indicative of multiplicity effects. Finally, the inclusion of CTQ (Bernstein & Fink, 1998) protocols that were positive for minimization or denial in statistical analyses may have confounded results as well, also limiting generalization.

Recommendations

The small sample size utilized in this research did not allow for a statistical examination of interactive effects from multiple traumas. In addition, over 75% of participants reported more than one form of childhood abuse or neglect. Previous research indicates the multiplicity and synergistic effects of childhood trauma may be the most important indicator of dysfunction (Iffland et al., 2012; Larsson et al., 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014). In addition, the DHHS (2015b) suggested that emotional abuse typically accompanies other forms of abuse and neglect and is likely underreported. This research should be repeated with a much larger sample

size so that interaction effects between different forms of childhood trauma can be thoroughly examined. Because previous research overwhelmingly indicates that childhood emotional abuse is significantly associated with dysfunction (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014), repeating this study with a larger sample size, more representative of the larger population, may produce different results.

It is recommended that more resources be devoted to developing a clear and concise construct of emotional abuse for purposes of intervention and assessment. Whereas physical abuse leaves clearer evidence, the impact of emotional abuse is subtle and harder to detect. The current primary definitions of childhood emotional abuse utilized by agencies responsible for child welfare are sorely lacking in clarity for those charged with determining whether emotional abuse is occurring (AHA, n.d., DHHS, 2015b; DHHS, 2010; Schpiegel, et al., 2013). Shpiegel et al. pointed out that the chronicity of emotionally abusive parenting, as well as the onset of stress symptoms, should be considered in determining whether intervention is necessary. The implication is that emotional abuse is an ongoing, psychological stressor with visible impact. The developmental research discussed in this dissertation supports the theory (Iwaniec et al., 2007; Iwaniec et al., 2006; Marshall, 2010).

According to the research, the timing of emotional abuse in a child's life is associated with different symptomatic dysfunctions, such as attachment difficulties,

negative self-identity, and increased internalizing behavioral dysfunctions, among multiple others (Iwaniec et al., 2007; Iwaniec et al., 2006; Marshall, 2010). Additional research should be focused on the specific impact of childhood emotional abuse, because childhood emotional abuse was the most frequently reported form of abuse in this research and previous research, as well as the form of abuse most frequently reported in the moderate to severe range (Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2012; Marshall et al., 2013; Negele et al., 2015; Shi, 2013; Spinazzola et al, 2014). Because the definition of childhood emotional abuse is vague, and the impact can be subtle, investigators trained in recognizing and assessing for symptoms indicative of emotional abuse would be beneficial when suspected cases are reported.

In addition, childhood abuse and neglect predicts impairment in emotional development, as indicated by this research and previous research on childhood trauma (Karagoz & Dag, 2015; Racine & Wildes, 2015). When cases of childhood abuse or neglect are substantiated, an assessment of emotional functioning ability and emotional skills training could potentially be beneficial as an avenues of intervention. Emotional skills assessments and training may potentially benefit adults with a history of childhood abuse or neglect, as well as caretakers and children who have been the focus of interventions by child protective services due to reports of abuse or neglect. As noted by Saxena and Aggarwal (2010), parental knowledge and training can help develop adequate emotional functioning skills. Keaten and Kelly (2008) also reported that communication patterns in the family impact emotional functioning, and skills can be increased through training.

Previous research has demonstrated emotional skills training is beneficial to adolescents in relation to psychosocial adjustment (Ruiz-Aranda, Salguero, Cabello, Palomera, & Fernandez-Berrocal, 2012). Ruiz-Aranda et al. (2012) utilized the Mayer and Salovey (1997) model of emotional functioning to develop an emotional intelligence training program for adolescents. As part of the 2-year longitudinal study, differences in psychosocial measures between the experimental group, who received the training, and the control group, absent training, were statistically analyzed. Positive effects on self-esteem, somatization, depression, anxiety, and social anxiety were significantly greater in the experimental group, than in the control group (Ruiz-Aranda et al., 2012). Ruiz-Aranda et al. (2012) recommended integrating emotional skills training as part of the standard academic curriculum, due to the positive impact on psychosocial functioning observed in adolescent participants.

Another area that would benefit from additional research is an examination of gender effects in relation to childhood abuse and neglect. The report provided by the DHHS (2015a) indicates that abuse and neglect reports concerning children were approximately 50% male and 50% female in 2013. In this research with a community sample of adults, gender was a significant variable in relation to reports of childhood abuse and neglect, as well as in additional regression analyses. Females reported more emotional abuse, emotional neglect, and sexual abuse than males, as well as greater levels of severity. This finding was common in previous research (Iffland et al., 2012; Shi; 2013; Spinazzola et al., 2014). In addition, when sexual abuse was reported by males in this research, lower scores were predicted in emotional regulation and global emotional

functioning. What appears to be unknown is whether males tend to deny childhood abuse and neglect at a higher rate than females, whether gender perceptions of childhood abuse and neglect vary, whether societal gender expectations and social desirability bias impact abuse and neglect report rates, whether recall bias impacts report rates, or whether childhood abuse and neglect are actually more prevalent in females. Results from this research indicate this is an important topic because emotional impairment was predicted in both genders when physical neglect was present, and in males with a history of childhood sexual abuse. Future research should explore gender differences in report rates of childhood abuse and neglect, so that gender differences can be factored into assessments of childhood environmental trauma in research and clinical settings. Assuming males tend to report childhood abuse and neglect at a lesser rate than females, absent actual differences in abuse or neglect rates, the implication is that childhood abuse and neglect in males is being overlooked in assessments and potentially beneficial interventions.

Another recommendation relates to instrument standardization criteria. As discussed, the majority of participants the MSCEIT v2.0 (Mayer et al., 2002) and the CTQ (Bernstein & Fink, 1998) were normed on were Caucasian. Unfortunately, many instruments of measure in social science are standardized with the majority of participants from Caucasian ethnicity. Efforts should be made to expand the standardization criteria for instruments of measure, particularly in the area of emotional functioning, due to multi-cultural differences in emotional processing (Grossmann, Ellsworth, & Ying-Yi, 2012).

Finally, as discussed earlier, the MSCEIT v2,0 is a comprehensive instrument of measure for various skills related to the emotions and global emotional functioning. In this research the MSCEIT v2.0 (Mayer et al., 2002) yielded excellent reliability coefficients. An important aspect of the MSCEIT v2.0 is that it functions as a performance-based instrument, possibly providing a more accurate representation of the emotional skills of respondents. In addition, the individual branches in the model are clearly and narrowly defined.

The results from this research, in which age served as a significant predictor of emotional functioning, support the Mayer and Salovey proposition (1999) that emotions are an accrued, developmental process. Research utilizing the MSCEIT v2.0 (Mayer et al., 2002) in an examination of childhood abuse and neglect is absent in the databases. Previous research does demonstrate higher scores on the MSCEIT v2.0 are significantly associated with success (Kelton, 2015; Libbrecht et al., 2015). It is recommended additional research on childhood abuse and neglect be conducted using the MSCEIT v2.0 (Mayer et al., 2002) to provide much needed information to the databases on emotional development and processing during the early years.

Positive Social Change

This project offers potential for positive social change for individuals and families in which childhood abuse or neglect is present, clinicians working with those who report a history of childhood abuse or neglect, researchers, and those involved in intervention and preventative services related to childhood abuse and neglect. As noted in the previous research discussed in this dissertation, many of the dysfunctions that are associated with

childhood emotional abuse suggest the impact of emotional abuse may strongly relate to the disruption of internalization processes, leaving little initial external evidence, accumulating, and potentially leading to clinical dysfunction (Bradbury Shaffer, 2012; Groleau et al., 2012; Karagoz & Dag, 2015; Marshall et al., 2013; Racine & Wildes, 2015). In addition, the childhood abuse and neglect report rates in this study, based on a community sample of participants, confirms the rates reported in previous research indicating that childhood emotional abuse is the most frequently reported form of abuse and a significant societal issue. This research encourages additional focus on the specific impact of childhood emotional abuse in order to understand the specific impact of this form of trauma.

In addition, the results from this study, in which significantly lower measures of emotional ability could be predicted when there was a history of childhood physical neglect and when a history of childhood sexual abuse was present in males, suggest that childhood abuse and neglect interferes with the adequate development of emotional skills, as measured by the MSCEIT v2.0 (Mayer et al., 2002). Prior research indicates that impairment in emotional functioning processes is associated with the development of clinical disorders and dysfunctional patterns of behavior (Karagoz & Dag, 2015; Racine & Wildes, 2015).

The strong correlations in previous research between childhood abuse and neglect and dysfunction, as well as the results from this research, imply that childhood abuse and neglect may potentially be a direct factor in the etiology of presenting dysfunctions during adulthood in those with a childhood history of abuse or neglect. Emotional

competence has been demonstrated to be a significant component of overall health and quality of life (Mikolajczak et al., 2013). This information is clinically significant. The results of this study could potentially be used to guide assessments and provide an avenue of intervention for those presenting with dysfunction, who also report childhood abuse or neglect.

Often interventions that occur in relation to childhood abuse and neglect focus on treating symptoms or other aspects of the presenting dysfunction, such as alliance repair to help rebuild attachment trust, reflective functioning, based on learning how to understand others' perceptions, and motivational enhancement (Lawson, Davis, & Brandon, 2013). Results from this study imply that clinicians may also want to assess the emotional functioning skills of survivors of childhood abuse and neglect. A determination of whether the client is able to accurately understand emotions in the self and others, tolerate negative emotional distress while continuing to move forward productively, and utilize emotional experiences beneficially, could be very valuable as an aspect of treatment. Emotional skills training provided by clinicians may promote positive social change on an individual level that could transition into significant societal change for future generations.

Finally, an issue strongly relevant to this research involves the branch of social science that focuses on emotional intelligence. Emotional intelligence is a relatively new concept to behavioral science, coming to the forefront in the 90s (Bar-On, 2004; Goleman, 1995; Mayer & Salovey, 1997). Current research on the topic is primarily focused on the impact of current levels of emotional intelligence on leadership ability,

academic success, or in business, with an absence of research on the developmental requisites for adequate emotional intelligence during adulthood (Kelton, 2015; Libbrecht, Lievens, Carette, & Cote, 2014). Prior to this research, the MSCEIT v2.0 (Mayer et al., 2002) does not appear to have been utilized in research as an instrument of measure for emotional functioning in relation to childhood abuse and neglect.

Although 'emotional functioning' was used throughout this dissertation to retain focus on childhood abuse and neglect, the model the current research was based on is the model of emotional intelligence developed by Mayer and Salovey (1997). In defense of emotional functioning as a form of intelligence, Mayer and Salovey (1999) reported that measures of emotional functioning increase with the age of respondents. Results from this research support this proposition. All measures of emotional functioning included in analyses and obtained through the administration of the MSCEIT v2.0 (Mayer et al., 2002) significantly increased with the age of participants. Additionally, age could be validly used to predict higher measures.

As suggested by Mayer and Salovey (1999), age as a significant predictor of greater measures of emotional skills implies that emotional intelligence is an ongoing developmental process, much as cognitive intelligence is an ongoing process that accrues with age. This also implies that a beneficial developmental environment is necessary to encourage healthy emotional growth. No current research appeared to be available that examined the impact of childhood abuse and neglect on levels of emotional intelligence during adulthood.

Assuming emotional intelligence is a cumulative and developmental process, as well as a requisite to increased success in life, as suggested by previous research (Kelton, 2015; Libbrecht et al., 2015), the implications provided by the results from the current project are socially significant. Results from this research suggest that childhood abuse and neglect may be possible etiological factors in the impairment of adequate emotional development, potentially imposing limits on the future quality of life. If emotional intelligence is indeed accepted as a marker of success, society would benefit from an increased focus in research on the components of emotional functioning during development, as well as emotion-based interventions. This study serves as an extension of knowledge on emotional intelligence, as well as providing an avenue for additional research into factors that hinder adequate development of emotional intelligence.

The positive social change implications from results are potentially significant. This research indicates that childhood abuse and neglect impair the development of adequate emotional functioning skills. The integration of emotional skills training and assessments by organizations involved in the welfare of children in suspected child abuse or neglect cases could lead to a positive social change on a national level. Additionally, because childhood abuse and neglect are global issues (Mahram et al., 2013; Shi, 2013; Xiangming et al., 2015), the implications for positive social change are significant both nationally and globally, for families and individuals in which childhood abuse or neglect are, or have been, issues.

These results suggest a focus on emotional functioning could potentially improve the quality of life for those with a childhood history of abuse or neglect. As stated by

Keaten and Kelly (2008) and Ruiz et al. (2012), interpersonal communications and psychosocial functioning improve with emotional skills training. Results from this research suggest the quality of life may be improved through the application of emotional skills assessments and training for adults with a childhood history of abuse or neglect, children currently in a traumatic environment, and families who have come to the attention of child welfare agencies due to reports of abuse or neglect. This could gradually lead to improvement in the human condition for future generations.

Conclusion

The number of referrals of suspected childhood abuse and neglect to child protective services in 2013 was over 3,500,000 (DHHS, 2015a). With 670,000 cases of childhood abuse and neglect substantiated in 2013, the number of interventions translates into 9.1 victims per 1000 children in the United States (DHHS, 2015a). Even though the DHHS (2015a) reports that many referrals concerned the same child and many more cases were dismissed than substantiated, these numbers are astounding indicators of the level of childhood abuse and neglect that are potentially present in the United States. Of the substantiated cases of childhood abuse and neglect reported in 2013 by the DHHS (2015a), over 660,000 cases concerned childhood physical abuse and neglect, over 60,000 cases concerned childhood sexual abuse, and over 59.000 cases concerned childhood emotional abuse.

The goal of this research was to determine the impact of childhood abuse and neglect on emotional functioning ability during adulthood because previous research indicates adequate skills are necessary for a greater quality of life (Mikolajczak et al.,

2013). In the community sample of participants used in this research, over 84% reported at least one form of childhood trauma, as assessed by the CTQ (Bernstein & Fink, 1998), and over 79% reported multiple forms. As in previous research, and these results, childhood emotional abuse was the most frequently reported form of trauma and also the form of trauma most frequently reported in the moderate to severe range (Shi, 2013; Spinazzola et al., 2014). Previous research demonstrates that depression, anxiety, alexithymia, stress sensitivity, social anxiety disorder, interpersonal relationship difficulties, increased internalizing behavioral problems, emotional inhibition, increased abuse symptoms and symptom severity, dissociation, eating disorders, acute stress disorder, substance abuse disorders, self-harming behaviors, increased suicide risk, decreased quality of life, earlier onset of bipolar disorder and more severe symptomatology, decreased quality of life, and a lower GAF are associated with childhood emotional abuse (Bradbury & Shaffer, 2012; Bruce et al., 2012; Groleau et al., Iffland et al., 2012; Karagoz & Dag, 2015; Larsson et al., 2013; Marshall et al., 2013; Racine & Wildes, 2015; Shapero et al., 2014; Shi, 2013; Smith & Flannery-Schroeder, 2013; Spinazzola et al., 2014).

Results from this study, in relation to the impact of childhood emotional abuse, are inconclusive. In this project, multiple factors, such as small sample size, childhood and neglect multiplicity factors, inclusion of positive CTQ (Bernstein & Fink, 1998) minimization protocols during statistical analyses, and exclusion of clinical interviews during data collection make definitive conclusions concerning emotional abuse

impossible. This study should serve as a guide for additional research utilizing a much larger sample size, more representative of the larger population.

While emotional abuse did not achieve significance in the current project as a predictor variable, physical neglect in both genders, and sexual abuse in males achieved significance as predictors of lower measures of emotional ability. These results offer potential for positive social change. The results reported in this study are important for clinicians, child welfare agencies, individuals, and families, in which childhood abuse or neglect are present. Results from this research, indicating that childhood physical neglect and sexual abuse impair the development of adequate emotional functioning during later years, potentially provides new avenues of research, new clinical options for treatment, and suggestions for those involved in intervention and child welfare for children in an abusive or neglectful environment.

This dissertation provides a review of the detriment associated with childhood abuse and neglect and provides new information indicating significant emotional impairment in those with an environmentally traumatic childhood. In addition, potential interventions, that can serve as a guide for additional research, are included. This project supports previous research indicating that childhood abuse and neglect are topics of extreme importance in the United States and globally (Affifi et al., 2015; Chinawa et al., 2014; Mahram et al., 2013; Shi, 2013; Spinazzolaet al., 2014; Xiangming et al., 2015). This project appears to be the first research that examines factors that may hinder development of adequate emotional ability, which is theorized to be a requisite for an increased quality of life (Mikolajczak et al., 2013).

Finally, previous research on emotional intelligence suggests that increased emotional intelligence is associated with success (Kelton, 2015; Libbrecht et al., 2015). Results from this research support the Mayer and Salovey (1997) model of emotional intelligence as an accrued developmental process because measures of emotional functioning increased with the age of participants on all scales. In addition, gender differences in emotional functioning were found in this research, as reported by Mayer and Salovey (1999) in the development of their model. This research indicates the MSCEIT v2.0, functioning as a performance-based instrument of measure, is a valuable tool for examining factors that may impede healthy emotional development.

References

Afifi, T. O., Tailileau, T., Kristene, C., Katz, L. Y., Tonmyr, L., & Sareen, J. (2015). Substantiated reports of child maltreatment from the Canadian incidence study of reported child abuse and neglect 2008: Examining household characteristics and child functional impairment. *Canadian Journal of Psychiatry*, *60*(7), 315-323. Retrieved from http://web.b.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=0853ee74-658d-4288-9cf1-9a89c1508d61%40sessionmgr120&vid=23&hid=116

Alink, L. R. A., Euser, S., van IJzendoorm, M. H., & Bakermans-Kranenburg, M. J. (2013). Is elevated risk of child maltreatment in immigrant families associated with socioeconomic status? Evidence from three sources. *International Journal of Psychology, 48*(2), 117-127. doi:10.1080/00207594.2012.734622

Alloy, L. B., Abramson, L. Y., Hogan, M. E., Whitehouse, W. G., Rose, D. T., Robinson, M. S., & Kim, R. S. (2000). The Temple–Wisconsin Cognitive Vulnerability to Depression (CVD) Project: Lifetime history of Axis I psychopathology in individuals at high and low cognitive risk for depression. *Journal of Abnormal Psychology, 109*, 403–418. doi:10.1037/0021-843X.109.3.403

American Humane Association (nd). *Emotional abuse fact sheet*. Retrieved from http://www.americanhumane.org/children/stop-child-abuse/fact-sheets/emotional-abuse.html

Achenbach, T. M., & Rescorla, L. A. (2004). The Achenbach System of Empirically Based Assessment (ASEBA) for Ages 1.5 to 18 Years. In M. E. Maruish (Ed.),

The use of psychological testing for treatment planning and outcomes assessment: Vol. 2. Instruments for children and adolescents (pp. 179–213). Mahwah, NJ: Lawrence Erlbaum.

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Bagby, R. M.; Parker, J. D. A. & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale: Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research, 38*(1), 23-32. Retrieved from http://dx.doi.org.ezp.waldenulibrary.org/10.1016/0022-3999(94)90005-1

Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQI): Rationale, description and psychometric properties. In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy* (pp. 115-145). Hauppauge, NY: Nova Science.

Bar-On, R., & Parker, J. D. A. (2000). *Handbook of emotional intelligence: Theory, development, assessment and application at home, school and in the workplace*. San Francisco: Jossey-Bass.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York, NY: Guilford Press

Beck, A. T., Steer, R. A., & Ranieri, W. F. (1988). Scale for suicide ideation: Psychometric properties of a self-report version. *Journal of Clinical Psychology, 44*(4), 499-505. Retrieved from http://web.b.ebscohost.com.ezp.waldenulibrary .org/ehost /pdfviewer/pdfviewer?sid=0d288867-4e04-41dd-aaa5-797872f12e0e

%40sessionmgr114&vid=21&hid=116

Beck, A. T., & Steer, R. A. (1988). *Beck hopelessness scale manual*. San Antonio, TX: The Psychological Corporation.

Beck, A. T., & Steer, R. A. (1993). *Beck scale for suicidal ideation*. San Antonio, TX: The Psychological Corporation.

Beck, A. T., Steer, R. A., Beck, J. S., & Newman, C. F. (1993). Hopelessness, depression, suicidal ideation, and clinical diagnosis of depression. *Suicide and Life-Threatening Behavior*, *23*(2), 139-145. doi:10.1111/j.1943-278X.1993.tb00378.x

Bernstein, D. P., & Fink, L. (1998). *Childhood trauma questionnaire: A retrospective self-report manual.* San Antonio, TX: Psychological Corporation.

Bernstein, D. P., Fink, L., Handelsman, L., & Foote, J., Lovejoy, M., Wenzel, K.,…Ruggerio, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *American Journal of Psychiatry, 161*(8), 1132-1136. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.proquest.com.ezp.waldenulibrary.org/docview/220457288?accountid=14872

Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T….Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect, 27*(2), 169-190. doi:10.1016/SO145-2134(02)00541-0

Bradbury, L. L. & Shaffer, A. (2012). Emotion dysregulation mediates the link between childhood emotional maltreatment and young adult romantic relationship

satisfaction. *Journal of Aggression, Maltreatment, and Abuse, 21*(5), 497-515. doi:10.1080/10926771.2012.678466

Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social & Personality Psychology Compass, 5*(1), 88-103. doi:10.1111/j.1751-9004.2010.00334.x

Briere, J., Elliott, D. M., Harris, K., & Cotman, A. (1995). Abuse symptom inventory psychometrics and association with childhood and adult victimization in clinical samples. *Journal of Interpersonal Violence*, *10*(4), 387-401. doi:10.1177/088626095010004001

Bruce, L. C., Heimberg, R. G., Blanco, C., Schneire, F. R., & Liebowitz, M. R. (2012). Childhood maltreatment and social anxiety disorder: implications for symptom severity and response to pharmacotherapy. *Depression & Anxiety, 29*(2), 132-139. doi:10.1002/da.20909

Chinawa, J., Aronu. A., Chukwu, B., & Obu, H. (2014). Prevalence and pattern of child abuse and associated factors in four secondary institutions in Enugu, Southeast Nigeria. *European Journal of Pediatrics, 173*(4), 451-456. doi:10.1007/s00431-013-2191-4

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin, 112*(1), 155-159. Retrieved from http://classes.deonandan.com/hss4303/2010/cohen%201992%20sample%20size.pdf

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297-334. Retrieved from http://psych.colorado.edu/~carey

/courses/psyc5112/readings/alpha_cronbach.pdf

Derogatis, L. R., & Spencer, P. M. (1993). *Brief symptom inventory: BSI*. Upper Saddle River, NJ: Pearson.

DHHS (2015a). U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. *Child Maltreatment 2011*. Retrieved from http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2013

DHHS (2015b). U.S. Department of Health and Human Services, Administration for Children and Families, Child Welfare Information Gateway. *What is child abuse and neglect? Recognizing the signs and symptoms.* Retrieved from https://www.childwelfare.gov/pubPDFs/whatiscan.pdf#page=3&view=What%20Are%20the%20Major%20Types%20of%20Child%20Abuse%20and%20Neglect?

DHHS (2003). U.S. Department of Health and Human Services, Administration for Children and Families, Keeping Children and Families Safe Act. *The child abuse prevention and treatment act (CAPTA)*. Retrieved from http://www.acf.hhs.gov/programs/cb/laws_policies/cblaws/capta03/capta_manual.pdf

DHHS (2010). Mandatory reporters of child abuse and neglect: Summary of state laws. Retrieved from http://www.childwelfare.gov/systemwide/laws_policies/statutes/manda.cfm

Dimeff, L. A., Baer, J. S., Kivlahan, D. R., Marlatt, G. A. (1999). *Brief Alcohol Screening and Intervention for College Students (BASICS): a harm reduction approach*. New York, NY: Guilford Press.

Dvorak, R. D., Sargent, E. M., Kilwein, T. M., Stevenson, B. L., Kuvaas, N. J., & Williams, T. J. (2014). Alcohol use and alcohol-related consequences: associations with emotion regulation difficulties. *American Journal of Drug & Alcohol Abuse, 40*(2), 125-130. doi:10.3109/00952990.2013.877920

Engels, M., & Moisan, D. (1994). The Psychological Maltreatment Inventory: Development of a measure of psychological maltreatment in childhood for use in adult clinical settings. *Psychological Reports, 74*, 595–604. Retrieved from http://www .amsciepub.com/doi/abs/10.2466/pr0.1994.74.2.595

Fairburn, C. G., Cooper, Z., & O'Connor, M. E. (2008). *Eating disorders examination*. In C. G. Cooper (Ed.), Cognitive Behavior Therapy and Eating Disorders (pp. 265-308). New York: Guilford Press.

Fink, L., Bernstein, D., Foote, J., Lovejoy, M., Ruggiero, J., & Handelsman, L. (1993). *The Childhood Trauma Interview: Reliability, validity, and relationship to personality disorders.* In the Proceedings of the Third International Congress on the Disorders of Personality. Roskilds, Denmark: International Society for the Study of Personality Disorders.

First M. B., Spitzer R. L., Gibbon M., Williams, J. B.W. (1995). *Structured Clinical Interview for DSM-IV (SCID-I/P Version 2.0)*. New York: Biometrics Research Department, New York State Psychiatric Institute.

First M. B., Spitzer R. L., Gibbon M, & Williams J. (2007). *Structured Clinical Interview for DSM-IV Axis I Disorders-Patient Edition with Psychotic Screen [SCID-I/P*

(W/PSYCHOTIC SCREEN)]. New York: Biometrics Research Department, New York State Psychiatric Institute.

Frisch M. B. (1994). *Manual and Treatment Guide for the Quality of Life Inventory*. Minneapolis, MN: National Computer Systems, Inc.

Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The eating attitudes test: psychometric features and clinical correlates. *Psychological medicine*, *12*(04), 871-878. doi:10.1017/S0033291700049163

Garner, D. M. (1991). *Eating-Disorder Inventory-2: Professional Manual*. Odessa, Florida: Psychological Assessment Resources.

Goldsmith, E. R, & Freyd, J. J. (2005). Awareness for emotional abuse. *Journal of Emotional Abuse, 5*(1), 95-124. doi:10.1300/J135v5n01_0

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.

Gratz, K .L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 30*(4), 41–54. doi:10.1007/s10862-008-9102-4

Groleau, P., Steiger, H., Bruce, K., Israel, M., Sycz, L., Ouellette, A., & Badawi, G. (2012). Childhood emotional abuse and eating symptoms in bulimic disorders: An examination of possible mediating variables. *International Journal of Eating Disorders, 45*(3), 326-332. doi:10.1002/eat.20939

Grossman, I., Ellsworth, P. C., & Ying-Yi, H. (2012). Culture, attention, & emotion.

Journal of Experimental Psychology, 141(1), 31-36. doi:10.1037/a002381

Hassan, E. (2005). Recall bias can be a threat to retrospective and prospective research designs. *The Internet Journal of Epidemiology, 3*(2), 1-7. Retrieved from http://print.ispub.com/api/0/ispub-article/13060

Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and Family*, 20, 93–98. Retrieved from http://www.jstor.org /stable/352430?seq=1#page_scan_tab_contents

Heinrichs, N., Hahlweg, K., Fiegenbaum, W., Frank, M., Schroeder, B., von Witzleben, I. (2002). Validitat und Reliabilitat der Social Interaction Anxiety Scale (SIAS) und der Social Phobia Scale (SPS) (Validity and Reliability of the Social Interaction Anxiety Scale (SIAS) and the Social Phobia Scale (SPS). *Verhaltenstherapie*, *12*(1), 26–35. Retrieved from http://www.karger.com/Article/Abstract/56690#

Hertel, J., Schutz, A., & Lammers, C. (2009). Emotional intelligence and mental disorder. *Journal of Clinical Psychology, 65*(9), 942-954. doi:10.1002/jclp.20597

Iffland, B., Brahler, E., Neuner, F., Hauser, W., & Glaesmer, H. (2013). Frequency of child maltreatment in a representative sample of the German population. *BMC Public Health*, 13(1), 1-12. doi:10.1186/1471-2458-13-980

Iffland, B., Sasen, L., M., Catani, C., & Neuner, F. (2012). Emotional but not physical maltreatment is independently related to psychopathology in subjects with varying degrees of social anxiety: a web based internet survey. *BMC Psychiatry, 12*(1), 49-56. doi:10.1186/1471-244X-12-49

Iwaniec, D., Larkin, E., & Higgens, S. (2006). Research review: Risk and resilience in

cases of childhood emotional abuse. *Child & Family Social Work, 11*(1), 73-82. doi:10.1111/j.1365-2I206.2006.00398.x

Iwaniec, D., Larkin, E., & McSherry, D. (2007). Emotionally harmful parenting. *Child Care in Practice*, *13*(3), 203-220. doi:10.1080/13575270701353531

Karagoz, B., & Dag, I. (2015). The relationship between childhood maltreatment and emotional dysregulation in self-mutilation: An investigation among substance dependent patients. *Archives of Neuropsychiatry, 52*(1), 8-14. doi: 10.5152 /npa.2015.6769

Keaten, J., & Kelly, L. (2008). Emotional intelligence as a mediator of family communication patterns and reticence. *Communication Reports, 21*(2), 104-116. doi:10.1080/08934210802393008

Kelton, C. C. (2015). Clients want results, lawyers need emotional intelligence. *Cleveland State Law Review, 63*(2), 459-494. Retrieved from http://web.a .ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=003a5b34 -34a5-4ea9-8e63-f1fb63f11960%40sessionmgr4001&vid=25&hid=4101

Krinsley, K., Gallagher, J. G., Weathers, F.W., Kaloupek, D. G., & Vielhauer, M. (1997). *Reliability and validity of the Evaluation of Lifetime Stressors questionnaire*. Unpublished manuscript.

Larsson, S., Aas, M., Klungsoyr, O., Agartz, I., Mork, E., Steen, N. E……..Lorentzen, S. (2013). Patterns of adverse childhood events are associated with clinical characteristics of bipolar disorder. *BMC Psychiatry, 13*(1), 1-9. doi:10.1186 /1471-244X-13-97

Lawson, D., Davis, D., & Brandon, S. (2013). Treating complex abuse: Critical interventions with adults who experienced ongoing abuse in childhood. *Psychotherapy, 50*(3), 331-335. doi: http://dx.doi.org.ezp.waldenulibrary .org/10.1037/a0032677

Layne, C. M., Briggs-King, E., & Courtois, C. (2014). Introduction to the Special Section:Unpacking risk factor caravans across development: Findings from the NCTSN Core Data Set. *Psychological Abuse: Theory, Research, Practice & Policy, 6*(Suppl. 1), S1–S8. doi:10.1037/a0037768

Libbrecht, N., Lievens, F., Carette, B., & Cote, S. (2014). Emotional intelligence predicts success in medical school. *Emotion 14*(1), 64-73. doi:http://dx.doi.org.ezp .waldenulibrary.org/10.1037/a0034392

Liebowitz, M. R. (1987). *Social phobia*. In Klein, D. F. (Ed.), Modern trends in Pharmocopsychiatry (141-173, 22). doi:10.1159/000414022

Livesley, W. J., Jackson, D. N., & Schroeder, M. L. (1992). Factorial structure of traits delineating personality disorders in clinical and general population samples. *Journal of Abnormal Psychology, 101*(3), 432–440. doi:10.1037/0021-843X.101.3.432

MacDonald, K., Thomas, M. L., Sciolla, A. F., Schneider, B., Pappas, K., Bleijenberg, G….Kenny, D. T. (2016). Minimization of childhood maltreatment is common and consequential: Results from a large multinational sample, using the Childhood Trauma Questionnaire. *PLoS ONE, 11*(1), 1-16. doi: 0.1371/journal .pone.0146058

Mahram, M., Hosseinkhani, Z., Nedjet, S., & Aflatouni, A. (2013). Epidemiological evaluation of child abuse and neglect in school-aged children of Qazvin Province of Iran. *Iranian Journal of Pediatrics, 23*(2), 159-164. Retrieved from http://web.b.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=0853ee74-658d-4288-9cf1-9a89c1508d61%40sessionmgr120&vid=16&hid=116

Marshall, N. A. (2010). A clinician's guide to recognizing and reporting parental psychological maltreatment of children. *Professional Psychology: Research and Practice, 43*(2), 73-79. doi:10.1037/a0026677

Marshall, B. D. L., Galae, S., Wood, E., & Kerr, T. (2013). Longitudinal associations between types of childhood trauma and suicidal behavior among substance users: A cohort study. *American Journal of Public Health, 103(9)*, 69-75. doi:10.2105/AJPH.2013.301257

Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*(4), 267-298. doi:10.1016/S0160-2896(99)00016-1

Mayer, J. D., & Salovey, P. (1997). *What is emotional intelligence?* In P. Salovey & D. Sluyter (Eds.), Emotional Development and Emotional Intelligence: Implications for Educators (pp. 3-31). New York: Basic Books.

Mayer, J. D., Salovey, P., Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test. Self-report questionnaire*. North Tonawanda, NY: Multi-Health Systems, Inc.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT) item booklet*. Toronto, Ontario, Canada: MHS Publishers.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New abilities or eclectic traits? *American Psychologist, 63*(6), 503-517. doi:10.1037/0003-066X.63.6.503

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3*(1), 97-105. doi:10.1037/1528-3542.3.1.97

Mikolajczak, M., Avalosse, H., Vancorenland, S., Verniest, R., Callenas, M., van Broeck, N.,…Mierop, A. (2013). A nationally representative study of emotional competence and health. *Emotion, 15*(5), 653-667. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1037/emo0000034.supp

Morelen, D., & Schaffer, A. (2012). Understanding clinical, legal, and ethical issues in child emotional maltreatment. *Journal of Aggression, Maltreatment, & Abuse, 21*(2), 188-201. doi:10.1080/10926771.2012.639054

Motahari, A. A. & Rahgozar, S. (2011). Inhibitory role of emotional intelligence in committing suicide. *Indian Journal of Science & Technology, 4*(11), 1601-1606. Retrieved from http://web.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=fea109ce-1e9b-4af3-8f7a-acbbf749ba73%40sessionmgr4&vid=12&hid=12

Negele, A., Kaufhold, J., Kallenbach, L., & Leuzinger-Bohleber, M, (2015). Childhood

trauma and its relation to chronic depression in adulthood. *Depression Research & Treatment*, 1-11. doi:10.1155/2015/650804

Paulhus, D. L., & Robinson, J. P. (1991). *Measures of personality and social psychological attitudes*. In P. R. Shaver, L. S. Wrightsman, (Eds.), Measures of social psychological attitudes, 1, (pp. 17-59). San Diego, CA: Academic Press.

Powers, A., Ressler, K. J., Bradley, R. G. (2009). The protective role of friendship on the effects of childhood trauma and depression. *Depression & Anxiety, 26*(1), 46-53. doi:10.1002/da.20534

Racine, S. E., & Wildes J. E. (2015). Emotion dysregulation and anorexia nervosa: An exploration of the role of childhood trauma. *International Journal of Eating Disorders, 48*(1), 55-58. doi:10.1002/eat.22364

Rajappa, K., Gallagher, M., & Miranda, R. (2012). Emotion dysregulation and vulnerability to suicidal ideation and attempts. *Cognitive Therapy & Research, 36*(6), 833-839. doi:10.1007/s10608-011-9419-2

Read, J. P., Kahler, C. W., Strong, D. R., & Colder, C. R. (2006). Development and preliminary validation of the young adult alcohol consequences questionnaire. *Journal of Studies on Alcohol*, *67*(1), 169-177. Retrieved from http://www.jsad .com/doi/abs/10.15288/jsa.2006.67.169

Roberts, R. D., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards for an intelligence? Some new data and conclusions. *Emotion, 1*, 196-231. doi:0.1037//1528-3542.1.3.196

Rodebaugh, T. L., Heimberg, R. G., Woods, C. M., Liebowitz, M. R., Schneier, F. R.

(2006). The factor structure and screening utility of the Social Interaction Anxiety Scale. *Psychological Assessment, 18*(2), 231-237. doi: 0.1037/1040-3590.18.2.231

Rose, D. T., Abramson, L. Y., & Kaupie, C. A. (2000). *The Lifetime Experiences Questionnaire: A measure of history of emotional, physical, and sexual maltreatment.* Manuscript in Preparation, University of Wisconsin-Madison, Madison, Wisconsin.

Ruiz-Armanda, D., Salguero, J. M., Cabello, R., Palomera, R., & Fernandez-Berrocal, P. (2012). Can an emotional intelligence program improve adolescents' psychosocial adjustment? Results from the INTEMO project. *Social Behavior & Personality, 40*(8), 1373-1379. Retrieved from http://dx.doi.org/10.2224/sbp.2012.40.8.1373

Rus, M. & Galbeaza, A. B-T. (2013). Psychological aspects of child sexual abuse. *Contemporary Readings in Law & Social Justice, 5*(2), 499-510. Retrieved from http://web.b.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=0853ee74-658d-4288-9cf1-9a89c1508d61%40sessionmgr120&vid=11&hid=116

Safford, S. M., Alloy, L. B., Abramson, L. Y., & Crossfield, A. G. (2007). Negative cognitive style as a predictor of negative life events in depression-prone individuals: A test of the stress generation hypothesis. *Journal of Affective Disorders, 99*(1), 147–154. doi:10.1016/j.jad.2006.09.003

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, *9*, 185-211. Retrieved from http://web.b.ebscohost.com.ezp

.waldenulibrary.org/ehost/detail/detail?sid=6dcc2ae0-6214-4856-8f2c-a610301ec374%40sessionmgr110&vid=14&hid=105&bdata=JnNjb3BlPXNpdGU%3d#AN=93326140&db=a9hhttp://www.unh.edu/emotional_intelligence/EI%20Assets/Reprints...EI%20Proper/EI1990%20Emotional%20Intelligence.pdf

Salovey, P., Mayer, J. D., Caruso, D., Lopes, P. N. (2003). *Measuring emotional intelligence as a set of abilities with the Mayer-Salovey-Caruso Emotional Intelligence test*. In S. J. Lopez, & C. R. Snyder (Eds.), Positive psychological assessment: A handbook of models and measures (pp. 251-265). Washington, DC: American Psychiatric Association.

Saxena M. K., & Aggarwal, S. (2010). Developing emotional intelligence in children – Role of parents. *International Journal of Education & Allied Sciences, 2*(2), 45-52. Retrieved from http://ehis.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=e750472a-6292-4aea-b7df-290ab6350d67%40sessionmgr4&vid=7&hid=6

Schneier, F. R., Heckelman, L. R., Garfinkel, R., Campeas, R., Fallon, B. A., Gitow, A., ... & Liebowitz, M. R. (1994). Functional impairment in social phobia. *Journal of Clinical Psychiatry*, 55(8), 322-331. Retrieved from http://psycnet.apa.org/psycinfo/1995-04074-001.

Shapero, B. G.., Black, S. K., Liu, R. T., Klugman, J., Bender, R. E., Abramson, L. Y., & Alloy, L. B. (2014). Stressful life events and depressive symptoms: the effect of childhood emotional abuse on stress reactivity. *Journal of Clinical Psychology, 70*(3), 209-223. doi:10.1002/jclp.22011

Shulz, A., Schmidt, C. O., Appel, K., Mahler, J., Apitzer, C., Wingenfeld, K….Grabe, H. J. (2014). Psychometric functioning, sociodemographic variability of childhood maltreatment in the general population and its effects on depression. International *Journal of Methods in Psychiatric Research, 23*(3), 387-400. doi:10.1002/mpr.1447

Shi, L. (2013). Childhood trauma and neglect in an outpatient clinical sample: Prevalence and impact. *American Journal of Family Therapy, 41*(3), 198-211. doi:10.1080/01926187.2012.677662

Shpiegel, S., Simmel, S., & Huang, C. (2013). Emotional maltreatment reports in children: The influence of state statutes and co-occurring maltreatment. *Journal of Aggression, Maltreatment, & Abuse*, 22(6), 626-643. doi:10.1080/10926771 .2013.803507

Smith, A. M. & Flannery-Schroeder, E. C. (2013). Childhood emotional maltreatment and somatic complaints: The mediating role of alexithymia. *Journal of Child & Adolescent Abuse, 6(3),* 157-172. doi:10.1080/19361521.2013.811456

Soper, D. (2013). Sample size calculator. Retrieved from http://danielsoper.com/statcalc3 /calc.aspx?id=16

Spinazzola, J., Hodgdon, H., Liang, L-J., Ford, J. D., Layne, C. M., Peynoos, R.,….Kisiel, C. (2014). Unseen wounds: The contribution of psychological maltreatment to child and adolescent mental health and risk outcomes. *Psychological Abuse: Theory, Research, Practice, and Policy, 6(Suppl1).* doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1037/a0037766

Spitzer, R. L., Kroenke, K., Williams, J. B. W. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. *Journal of the American Medical Association, 282*(18), 1737–1744. doi:10.1001/jama .282.18.1737

Steinberg, A. M., Brymer, M. J., Kim, S., Ghosh, C., Ostrowski, S. A., Gulley, K.,... Pynoos, R. S. (2013). Psychometric properties of the UCLA PTSD Reaction Index: Pt. 1. *Journal of Traumatic Stress, 26*, 1–9. doi:10.1002/jts.21780

USDC (2014). United States Department of Commerce, U.S. Census Bureau. *Fact finder*. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages /productview.xhtml?src=CF

Yerkes, R. M. (1921). Psychological examining in the United States. *Memoirs of the National Academy of Science.* Retrieved from http://books.google.com/books ?hl=en&lr=&id=YIH7DBtwZOkC&oi=fnd&pg=PR7&dq=Yerkes,+1921&ots=Q xsRFIHNOl&sig=vP3Xa9-BkH-Xd8y6EXN2AX5Nfdw#v=onepage&q =Yerkes%2C%201921&f=false

Waller, G., Corstorphine, E., & Mountford, V. (2007). The role of emotional abuse in eating disorders: Implications for treatment. *Eating Disorders, 15*(4), 317-331. doi:10.1080/10640260701454337

Webb, C. A., DelDonno, S., & Killgore, W. D. (2014). The role of cognitive versus emotional intelligence in Iowa Gambling Task performance: What's emotion got to do with it? *Intelligence*, *44*, 112-119. doi:10.1016/j.intell.2014.03.008

Weisman, A., & Beck, A. T. (1978). *Development and validation of the Dysfunctional*

Attitudes Scale. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, Chicago, IL

Weissman, M. M., Sholomskas, D., Pottenger, M., Prusoff, B. A., & Locke, B. Z. (1977). Assessing depressive symptoms in five psychiatric populations: a validation study. *American journal of Epidemiology*, *106*(3), 203-214. Retrieved from http://aje.oxfordjournals.org/content/106/3/203.full.pdf+html

Xiangming, F., Fry, D. A., Kai, J., Finklehor, D., Chen, J., Lannen, P., & Dunn, M. P. (2015). The burden of child maltreatment in China: a systematic review. *Bulletin of the World Health Organization, 93*(3), 176-185. doi:10.2471/BLT.14.140970

Appendix A: American Humane Association Fact Sheet

Childhood Emotional Abuse Fact Sheet

- **Ignoring**. Either physically or psychologically, the parent or caregiver is not present to respond to the child. He or she may not look at the child and may not call the child by name.
- **Rejecting**. This is an active refusal to respond to a child's needs (e.g., refusing to touch a child, denying the needs of a child, ridiculing a child).
- **Isolating**. The parent or caregiver consistently prevents the child from having normal social interactions with peers, family members and adults. This also may include confining the child or limiting the child's freedom of movement.
- **Exploiting or corrupting**. In this kind of abuse, a child is taught, encouraged or forced to develop inappropriate or illegal behaviors. It may involve self-destructive or antisocial acts of the parent or caregiver, such as teaching a child how to steal or forcing a child into prostitution.
- **Verbally assaulting**. This involves constantly belittling, shaming, ridiculing or verbally threatening the child.
- **Terrorizing**. Here, the parent or caregiver threatens or bullies the child and creates a climate of fear for the child. Terrorizing can include placing the child or the child's loved one (such as a sibling, pet or toy) in a dangerous or chaotic situation, or placing rigid or unrealistic expectations on the child with threats of harm if they are not met.
- **Neglecting the child**. This abuse may include educational neglect, where a parent or caregiver fails or refuses to provide the child with necessary educational services; mental health neglect, where the parent or caregiver denies or ignores a child's need for treatment for psychological problems; or medical neglect, where a parent or caregiver denies or ignores a child's need for treatment for medical problems.

Appendix B: Participant Recruitment Flyer

Adult Research Participants Needed

My name is Deborah Isaacs and I am a doctoral student in clinical psychology at Walden University. I am looking for adult volunteers, 18 years and above, to help me complete my dissertation research. I am examining the relationship between childhood experiences and adult emotional functioning.

If you are interested in participating in the research, you will be paid $10.00 upon completing three anonymous questionnaires when you come in. The total time needed to complete the questionnaires is approximately 45 to 60 minutes. Participation is completely voluntary and anonymous.

If you are interested in helping me with my research, please contact me by phone at [redacted] to discuss the research, ask questions, or **schedule an appointment to participate**.

Appendix C: Informed Consent

Consent to Participate in Research Study

You are invited to take part in a doctoral research study on adult emotional functioning and childhood trauma. Adults are being invited to anonymously participate in a research study being conducted by a graduate student in clinical psychology. This form is part of a process called informed consent. The purpose of informed consent is to provide you with information that aids you in understanding this study, and the part you are invited to play in the research. This information will help you decide whether or not you would like to be a research participant. This dissertation study is being conducted by a researcher named Deborah Isaacs, a doctoral student in clinical psychology at Walden University.

Background

The purpose of this research is to examine the relationship between emotional functioning during the adult years, and the absence or presence of childhood trauma.

Procedures

If you agree to be in this study, on the date you contribute data, you will be provided with a random identification number to maintain anonymity. You will write this number on all documents and assessments you complete. Following the collection of the informed consent document acknowledging understanding and agreement to participate, you will be asked to:

• Complete a short anonymous demographic form. This form will ask for such items as age and gender, among other basic demographics. Completion time for the demographic form will be approximately 5 minutes.

• Complete an online objective, performance-based, standardized assessment on emotional functioning. The assessment, the MSCEIT V2.0 (Mayer et al., 2002), obtains measures of an individual's various emotional skills through their responses to the multiple choice assessment items. Activities include such things as choosing the emotions that are represented in the facial expressions of individuals depicted in pictures or pictures of artwork, and determining which emotion is most appropriate to different situations. The MSCEIT V2.0 takes approximately 30 - 45 minutes to complete.

• Complete a retrospective, self-report instrument on childhood trauma. The CTQ (Bernstein & Fink, 1998) is a 28-item screener for five types of childhood trauma, including emotional, physical, and sexual abuse, as well as physical and emotional neglect. Possible responses to items range from *never true* to *very often true* to questions, such as whether you felt secure as a child, were inappropriately touched in a sexual manner, were physically hurt, or felt loved during childhood. The CTQ takes approximately 5 minutes to complete.

• Debriefing. You will be debriefed on the reasons for the study following your completion of the CTQ. You will also be compensated ten dollars for your time.

If you should have any questions following your participation, you may contact the researcher at [redacted].

Voluntary Nature of the Study

Participation in the study is completely voluntary and anonymous. Everyone will respect your decision on whether or not to serve as a research participant. If you decide to participate now, you may still withdraw later if you change your mind. You may stop

participation at any time.

Risks and Benefits of Being in the Study

Childhood trauma may be a difficult subject. Research in this area is limited and consequently participation will benefit understanding. However, questions necessarily may touch on sensitive issues, and should you feel you are not ready to respond to sensitive questions regarding any adverse childhood experiences, it is recommended that you decline participation. The assessment being utilized is a 5-minute screener, rather than an in-depth assessment, however childhood trauma is a difficult topic and may result in some psychological or emotional discomfort. The location and number for community mental health providers are printed at the bottom of this form, and additional information is provided on a table outside the data collection room. Serving as a research participant in this study will not pose risks to your physical safety or well-being. In addition to monetary compensation in the amount of ten dollars, the benefit of the research includes a potentially valuable contribution to the understanding of childhood trauma on emotional functioning during the adult years. This information may potentially help to guide the development of more effective interventions and preventative measures concerned with the significant impact of childhood trauma, and the importance of the development of healthy emotional skills during childhood. The knowledge may also be incorporated into parental training methods and other preventative measures, possibly leading to a decrease in childhood abuse.

Payment

An incentive of ten dollars is being offered for participating in the research.

Privacy

All information you provide will be anonymous. The researcher will assign a random number to you at the beginning of participation and this random number will be used to identify all of the information you provide, including the informed consent document, the childhood trauma survey, the emotional functioning assessment, and the demographic questionnaire. As required by Walden University, the data obtained in this research will be kept secured for five years in a locked cabinet.

Contacts and Questions

***Researcher*:** Deborah Isaacs

If you have any questions about the research, please contact me at one of the following.

Email: [redacted].

Local Mental Health Providers:

Walden University

If you want to talk privately about your rights as a research participant, you may contact Dr. Leilani Endicott. She is the university representative who can discuss this with you. Her number is 612-312-1210. Walden University's approval number for this research is 10-14-14-0102727 and it expires on October 7, 2016.

If you decide to participate, please keep this informed consent document for your records.

Another copy will be provided to you on the day you participate for acknowledgement of

understanding and agreement to participate. This will involve checking the "I agree to participate" selection below, and providing the random, anonymous identification number you

will be provided at the beginning of participation.

Statement of Consent I have read the above information and feel I understand the study well enough to make a decision about my participation. By selecting the "I agree" option below I am demonstrating that I understand participant rights and expectations, and agree to serve in the research study.

_____ I agree to serve as a research participant

Randomly Assigned Study Identification Number - _____

Appendix D: Participant Demographics

Participant Demographics

1. ID Number: _____

2. Age: _____

3. Gender: Male _____ Female _____

4. Ethnicity:

African American _____ Caucasian _____ Native American _____

Hispanic origin _____ Asian _____ Other _____

5. Yearly income:

Less than $10,000 _____ $10,000 to $20,000 _____ $20,000 to $30,000 _____ $30,000 to $40,000 _____ Greater than $40,000 _____

6. Education:

A. Are you a high school graduate? Yes _____ No _____

If you answered **no**, how many years of high school did you attend? _____ Have you earned a GED? _____

B. Did you attend a college or university? Yes _____ No _____

If you answered **yes** to attending college or university, are you a current student? Yes _____ No _____

How many years have you, or did you, attend an institute of higher education? _____

Did you earn a degree? Yes _____ No _____

If you answered **yes** to earning a degree, what degree did you earn? _____

Appendix E: MSCEIT Copyright Clearance

MHS Multi-Health Systems Inc.
SENT VIA ELECTRONIC MAIL
March 6, 2013

Attention: Deborah lsaacs,

Re: Copyright Clearance Letter

Thank you for your interest in Multi-Health Systems lnc. ("MHS") and request for Mayer-
Salovey-Caruso Emotional lntelligence Test (MSCEIT). This letter provides Deborah lsaacs (the "Licensee") with permission to reproduce one copy of the MSCEIT at no cost for the
purpose of IRB approval.

The Licensee will not be permitted to make additional reproductions of the MSCEIT without first obtaining express written permission from MHS, which may be subject to additional costs. The Party agrees to return and/or destroy the test within thirty (30) days of receipt.

The Licensee shall not, directly or indirectly, disclose, divulge, reveal, report, publish, transfer or
otherwise communicate, or use for its or his own benefit or the benefit of any other person,
partnership, firm, corporation or other entity, or misuse in any way, any of the MSCEIT components.

Please sign and return a copy of this letter acknowledging your understanding of our relations.
lf you have any questions or concerns regarding the foregoing, please feel free to contact me.

We accept the arrangements outlined above.

LICENSEE:

DEBORAH ISAACS Date: March 6, 2013

Sincerely,
MULTI-HEALTH SYSTEMS INC.
Per: Betty Mangos

Appendix F: CTQ Permission

From: "Licensing, -" <pas.licensing@pearson.com>
To: disaacs@wyoming.com
Subject:Re: Permission Requests
Date: Mon 04/22/13 11:10 AM

Dear Ms. Isaacs,

Permission to use a Pearson assessment is inherent in the qualified purchase of the test materials in sufficient quantity to meet your research goals. In any event, Pearson has no objection to you using the Childhood trauma Questionnaire (CTQ™) and **you may take this email response as formal permission from Pearson to use the test in its as-published formats in your student research.** But you must purchase the required number, and not simply reproduce.

The CTQ is a sensitive clinical assessment that requires a high degree (B Level, Q1 or Q2) to purchase, administer, score and interpret. It also represents Pearson copyright and trade secret material. As such, Pearson **does not permit photocopying or other reproduction of our test materials by any means and for any purpose when they are readily available in our catalog. Consequently, you may not simply reproduce the CTQ test forms**.

To qualify for and purchase a CTQ Kit or other test materials, please visit the following link to the product page in our online catalog: http://www.pearsonassessments.com/HAIWEB/Cultures/en-us/Productdetail.htm?Pid=015-8102-339&Mode=summary

I recommend you take advantage of Pearson's Research Assistance Program (RAP) that will, if approved, allow a 50% discount on your test material purchases. If you do not yet meet the purchase qualifications, your professor or faculty supervisor may assist you by lending their qualifications.

The computer link to the Research Assistance Program is:
https://psychcorp.pearsonassessments.com/pai/ca/support/rap/ResearchAssistanceProgram.htm

Finally, because of test security concerns, permission is not granted for appending tests to theses, dissertations, or reports of any kind. You may not include any actual assessment test items, discussion of any actual test items or inclusion of the actual assessment product in the body or appendix of your dissertation or thesis. You are only permitted to describe the test, its function and how it is administered and discuss the fact that you used the Test(s), your analysis, summary statistics, and the results.

Regards,
Angela Kearns
Manager, Clinical Assessment IP Licensing & Contracts Assessments & Information San Antonio
19500 Bulverde Road San Antonio, TX 78259