

# The Correlation Between Complex Childhood Trauma and Adult Empathy Outcomes

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## Abstract

Researchers Decety and Jackson define three key components of empathy: a correct response to emotions and a sharing of one's emotional state; an ability to cognitively understand the other person's point of view; and an ability to self-regulate and avoid mixing up one's own feelings with another's. Furthermore, they define Complex Childhood Trauma (CCT) as ranging from ongoing severe abuse, to moderate episodes of abuse in childhood (2013). According to the U.S. Department of Health and Human Services (Child Welfare Information Gateway, 2015), close to 686,000 children were victims of CCT in the year 2012. Psychologists have started to analyze the outcome patterns of adults who suffered from CCT in crucial developmental years. Studies have been conducted on a possible correlation between empathy and Complex Childhood Trauma. However, these studies are few and far between and offer conflicting results. Obtaining 248 California State University, Stanislaus student participants, the present study utilized two surveys to understand if a correlation between CCT and adult empathy outcomes exists. The researcher hypothesized that individuals who endured greater levels of abuse in prime developmental years would report lower levels of empathy in adulthood. However, evidence suggested that adults who scored lower in different subsets of CCT generally reported higher levels of empathy. Based on this conclusion, a discussion on the implications on why the hypothesis was not supported follows.

*Keywords:* complex childhood trauma, empathy, correlation

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## Introduction

Empathy is a shared experience; it is the extending of emotions from one person to another. But what exactly is empathy? Is it biological, environmental, or maybe it is all subjective? According to Decety and Jackson, empathy can be defined as the capacity to understand and respond to the affective experiences of another individual (Decety & Jackson, 2013). Research into empathy is becoming more and more focused and extensive in disciplines such as social and forensic psychology as we attempt to understand the minds of those who have low levels of empathy.

Decety and Jackson (2013) outline three important components of empathy: a correct response to emotions and a sharing of one's emotional state; an ability to cognitively understand the other person's point of view; and an ability to self-regulate and avoid mixing up one's own feelings with another's. Studies on empathy have contributed greatly to the field of forensic psychology and work with incarcerated individuals. Forensic psychology is a field that stands at the intersection between science and the Law, and forensic psychologists contribute to the justice system by being

expert witnesses in court and studying behavior and brain anatomy of offenders.

In one study, thirty-three participants with varying levels of psychopathic traits were analyzed under fMRI while they viewed photographs that should cause them to have an empathetic reaction. However, results indicated that psychopathy was correlated with reduced activity in the right amygdala during some of these photographs. This means that, along with environmental factors, brain anatomy may be associated with a lack of empathy (Marsh & Cardinale, 2014).

There exists a gray area between empathy and something called Complex Childhood Trauma (CCT). CCT is defined as, "the dual problem of children's exposure to traumatic events and the impact of such exposure on their development and long-term outcomes," (Cook et al., 2005, p. 4). In 2012, the U.S. Department of Health and Human Services identified that a staggering number of children, an estimated 686,000, were proven to be victims of Complex Childhood Trauma in the U.S. (Child Welfare Information Gateway, 2015). CCT is not only about chronic exposure to abuse; CCT can also mean mild exposure,

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moderate exposure, or extreme exposure. The subsets of CCT are emotional abuse, physical abuse, emotional neglect, physical neglect, sexual abuse, and minimization/denial (Barenblatt et al., 2014).

What becomes of children who suffer from CCT? One theory is that individuals who lack empathy, in addition to many incarcerated individuals, were victims of CCT growing up (Wolff & Shi, 2012). Little research has been conducted in this area, though, therefore more research is needed. Only when we can determine the cause of a lack of empathy and the outcomes of CCT can we help those who have witnessed trauma. With the discipline of social and forensic psychology becoming more popular, though, there is hope that continued research in this area will follow.

As is common with new research topics, many studies present opposing outcomes and therefore must be analyzed and perhaps repeated in order to validate the results. Using a sample of forty-seven young boys and their biological fathers, Bernadett-Shapiro, Ehrensaft, and Shapiro (1996) measured father participation via a self-report on the Parental Involvement in Child Care Index (Bernadett et al., 1996), and the boys' empathy levels through Bryant's (1982) Index of Empathy for Children and Adolescents. Results indicated that, "parents' reports of father participation in childcare were significantly related to boys' empathy regardless of the level of father empathy," (p.76). In short, this means that a lack of father participation in childcare is related to a lack of empathy in children. Though this study focused on children's empathy levels instead of adults, it still shows evidence that childhood environment may be important for empathy levels at all walks of life.

On the contrary, conflicting results were found by Barenblatt et al. (2014). The researchers examined the empathy levels of forty-nine individuals sorted into three groups based on their answers to the Childhood Trauma Questionnaire (Bernstein et al., 1994): a control group, a moderate maltreatment group, and a severe maltreatment group. After watching a film of victims of gross human rights violations, empathy levels were measured both quantitatively and qualitatively. Researchers state: "Quantitative results indicated that self-reported empathy was lower in the moderate maltreatment group compared to the control group. However, qualitative thematic analysis indicated that both maltreatment groups displayed themes of impaired empathy," (Barenblatt et al., 2014, p. 97). The findings indicate that empathy was lower in moderate maltreatment groups than the control, but similar to that of the severe maltreatment group. Essentially, people who suffered moderate trauma had low empathy levels, but people who suffered an abundance of trauma had normal empathy levels similar to that of the control

group. The results, overall, show that yes, childhood trauma is associated with lower reports of self-reported empathy; however, the level of empathy often depends on the severity of the trauma. Thus, it is important to further study this topic and possibly replicate this study in an effort to clarify answers.

The purpose of the present study was to examine factors pertaining to reported childhood trauma and empathy. Participants were asked to complete a childhood trauma scale in order to determine the levels of trauma they have experienced in the past, and an empathy scale. Based on previous research, it was hypothesized that participants who experienced higher levels of childhood trauma would score lower in empathy as compared to those who experienced less severe or no childhood trauma.

## **Method**

### *Participants.*

243 students were recruited for the Qualtrics study via SONA, an online participant pool for Stanislaus State students. Of 243 participants, 31 were male and 208 were female, 1 identified as other, and 3 preferred not to state. The age range was 18-56 ( $M = 23.93$ ). Depending on their professor, some students were able to obtain extra credit for taking the study.

### *Design.*

The present study was a correlational study. The two naturally occurring variables were the level of Complex Childhood Trauma endured and the level of empathy in adulthood. The researcher hypothesized that participants who experienced high levels of childhood trauma would score lower in empathy as compared to those who experienced less severe levels of childhood trauma.

### *Measures.*

A short demographic questionnaire was used to gather information about the participants' gender, age, ethnicity, and year in college. The Childhood Trauma Questionnaire (CTQ, Bernstein, 1994) was utilized as a measure of Complex Childhood Trauma in participants. Finally, the researcher included the Toronto Empathy Questionnaire (TEQ, Spreng et al., 2009). The CTQ consisted of Likert-style questions designed to assess the participant's level of childhood trauma using a 5-point scale. The TEQ consisted of Likert-style questions designed to assess the participant's empathy levels now.

### *Procedure.*

Participants logged onto the SONA system and selected the study. From there, they were shown an informed consent form. After agreeing and electronically signing the informed consent, they began the study. First, participants confirmed that they were

eighteen years old or older by selecting “yes” or “no.” If they were not, they were thanked for their time and signed out of the study. Participants who continued then completed the short demographic questionnaire. From there, participants were taken to the Childhood Trauma Questionnaire, answering twenty-eight questions in total. After completing the questionnaire, participants began the Toronto Empathy Questionnaire. This questionnaire contained sixteen measures that have answers ranging from “never” to “always.” After completing both surveys, participants were taken to the debriefing form. Then, they were thanked for their time and logged out of the study.

## Results

To determine if there was a relationship between childhood trauma scores and empathy scores, data was analyzed using a correlational analysis.

The research hypothesis was not supported, although significant results were found, indicating that there was a significant negative relationship between scores on the Emotional Abuse Scale, Physical Abuse scale, Emotional Neglect scale, and Physical Neglect scale and scores on the TEQ, ( $r(219) = -.15, p = .023$ ;  $r(217) = -.13, p = .049$ ;  $r(217) = -.26, p = .000$ ;  $r(217) = -.271, p = .000$ , respectively).

Contrary to what was expected, participants who scored low in Emotional Abuse ( $n = 231, M = 2.1, SD = 0.95$ ), Physical Abuse ( $n = 231, M = 1.57, SD = .73$ ), Emotional Neglect ( $n = 231, M = .935, SD = 2.13$ ), and Physical Neglect ( $n = 231, M = 1.60, SD = .69$ ), reported high levels of empathy ( $n = 219, M = 67.0, SD = 8.72$ ;  $n = 219, M = 66.6, SD = 8.719$ ;  $n = 219, M = 66.6, SD = 8.719$ ;  $n = 219, M = 66.6, SD = 8.719$ , respectively). No significant relationship was found between Sexual Abuse Scores and scores on the TEQ,  $r(217) = -.09, p = .895$ .

Significant results were also found, indicating that there was a significant positive relationship between the scores on the Minimization/Denial Scale and scores on the TEQ,  $r(217) = .25, p = .000$ . Contrary to what was expected, participants who scored high in minimization/denial ( $n = 231, M = 66.61, SD = 8.72$ ) reported high levels of empathy ( $n = 219, M = 66.6, SD = 8.719$ ) (see Table 1).

## Implications

Though the research hypothesis was not supported, significant results were revealed. Furthermore, the purpose of the study was not to survey a homogeneous sample, yet the general demographic of the SONA research system gave the researchers the unique ability to dive deeper into the experiences and outcomes of women who have lived through at least one form of abuse. The sample indicated relatively high levels of empathy regardless of abuse experienced. This could be

theorized to be due to gender, age, or the fact that all participants gathered were college students at California State University, Stanislaus.

## Future work

There are many potential ways that researchers could improve this study. For example, gathering a larger, randomized sample would be key to validating the results of this study. In future research, it will be vital to study men to see if that alters the mean empathy score of participants. It also would be beneficial for researchers to utilize another way to test for empathy that is not a self-report style survey. Participants may have scored high in empathy because the Toronto Empathy Questionnaire is self-reported. Each of these ideas would expand the capabilities and, thus, minimize the current limitations of the present study.

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## Appendix A

Table 1

*Intercorrelation of Scores on the Childhood Trauma Questionnaire (CTQ) and the Toronto Empathy Questionnaire (TEQ)*

	Emotional Abuse	Physical Abuse	Sexual Abuse	Emotional Neglect	Physical Neglect	Minimization/Denial	Empathy Scale
Emotional Abuse	----						
Physical Abuse	.584**	----					
Sexual Abuse	.444**	.318**	----				
Emotional Neglect	.681**	.372**	.400**	----			
Physical Neglect	.532**	.448**	.496**	.673**	----		
Minimization/Denial	-.676**	-.391**	-.384**	-.727**	-.599**	----	
Empathy Scale	-.154*	-.133*	-0.009	-.257**	-.271**	.252**	----

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).