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# Empathy in Detained Male Juvenile Offenders

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# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Cloyce Joe Barton III

has been found to be complete and satisfactory in all respects,  
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Walden University  
2016

Abstract

Empathy in Detained Male Juvenile Offenders

by

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MA, West Texas A&M University, 2006

BA, Texas Tech University, 2003

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

May 2016

## Abstract

In Texas and across the United States, minority male juvenile offenders are overrepresented in juvenile detention facilities. Researchers have demonstrated an inverse relationship between levels of empathy and antisocial beliefs and delinquent behaviors in juveniles. Understanding this relationship is an important step in designing and implementing rehabilitative interventions for juvenile detainees. Grounded in social learning theory and the social empathy model, the current study addressed whether significant differences in empathy existed between nonminority and minority male juvenile offenders with felony and nonfelony offenses within a juvenile detention facility in rural Texas. A de-identified data set of 357 Interpersonal Reactivity Index (IRI) questionnaires was analyzed. The data set contained only males ranging in age from 10 to 17 years. A two-way analysis of variance indicated no significant mean differences in measured empathy between nonminority and minority detainees, or between those with felony and nonfelony offenses. Results suggest that the site facility may focus its rehabilitative resources on broad empathy interventions regardless of minority status or offense. Results do not support targeting specific demographics for empathy interventions.

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## Dedication

To my wife, Kacy, whose unwavering belief in me has helped give me the courage—and permission—to believe in myself. Your support and sacrifice have made this possible. It is fact that without you I could not have accomplished this milestone. Truly, this is *our* Ph.D. ~You are my answer, my forever. In you, I am so clear.~

To my sweet children, Sydney and Stratton, who are ready to have their daddy back! Sydney, your help with Stratton has been tremendous and our daddy-daughter dates have been some of my most treasured moments through this journey. Remember that I love you because you are you, not because of what you do. Stratton, you are too young to remember most of this journey, but please know you helped me remember to laugh and play, which was just what I needed (even when I did not realize it).

And to my dearest friend and brother, Justin, who truly humbles me with his support and relentless faith in me. From the start you have honestly and earnestly believed in me and never allowed me to quit. Having you in my corner all these years is a gift I can never repay. More than you know, I am indebted to you.

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## Chapter 1: Introduction to the Study

The current study addressed differences in empathy among minority and nonminority male juvenile detainees with felony and nonfelony offenses within a secure facility in Texas. Empathy is associated with prosocial behaviors, while a lack of empathy is associated with antisocial and delinquent behaviors (Calley & Gerber, 2008; Carrera et al., 2013; Olthof, 2012; Ottoni Wilhelm & Bekkers, 2010; Texas Juvenile Justice Department [TJJJ], 2012; Wagaman, 2011). Through the identification of possible inherent underlying empathy differences among minority and nonminority juvenile felony and nonfelony offenders, this study could catalyze positive social change by targeting policies and programs to increase empathy in this population of juveniles and thereby decrease detainable offenses and reduce recidivism rates in this vulnerable population.

In Chapter 1 I provide background data and statistics to describe and clarify the demographics and scope of juvenile detainment in the United States and, more specifically, Texas. I present a clear problem statement followed by a concrete purpose statement. I also list each research question and the hypotheses to be tested. I briefly summarize the theories used to frame the study. Additionally, I introduce the nature of the study, including the design, statistical analysis, and variables tested. I define important terms and describe the scope and limitations of the study.

### **Background**

Higher juvenile recidivism rates are associated with more serious offenses, lack of social skills, and antisocial characteristics, including a lack of empathy (Brendtro &

Mitchell, 2011; Caldwell, 2011; Calley & Gerber, 2008; Cheng, Hung, & Decety, 2012; Frias-Armenta & Corral-Verdugo, 2013; Shaw, Hyde, & Brennan, 2012; TJJD, 2012). Residential programs and treatment regimens incorporating cognitive behavioral therapy (CBT) components, along with anger management and empathy-building interventions, have demonstrated the best outcomes (i.e., lowest recidivism rates) for the U.S. juvenile offender population (Abrams, Kyoungcho, & Anderson-Nathe, 2005; Calley & Gerber, 2008; TJJD, 2011). In general, current treatment programs for juvenile offenders attempt to help juveniles learn to rethink and control their automatic thought processes to increase self-acceptance, tolerance for others, and problem-solving skills, which catalyze prosocial behaviors and empathy—including social empathy—resulting in reduced recidivism rates (Abrams et al., 2005; Calley & Gerber, 2008; Redondo, Martínez-Catena, & Andrés-Pueyo, 2012).

Previous researchers defined empathy as the affective-cognitive ability to experience concern for others, possess a desire to help and comfort others, and experience emotional distress or discomfort when witnessing another in discomfort or distress (Barriga, Sullivan-Cosetti, & Gibbs, 2009; Bush, Mullis, & Mullis, 2000; Davis, 1980, 1983, 1996). Segal (2011) defined social empathy as the subjective desire to improve the larger social context in which an individual resides. In other words, researchers characterize social empathy as the ability to recognize distress in others while also possessing the desire to help, with the end goal of improving the larger social gestalt (Segal, 2011). However, the current study addressed the construct of empathy at the individual level because it is the foundation from which researchers derive the larger



construct of social empathy (Barriga et al., 2009; Bush et al., 2000; Segal, 2011; Wagaman, 2011). Segal (2011) and Wagaman (2011) posited that empathy, contextual understanding, and civic responsibility are the cornerstones of social empathy.

Contextual understanding, such as multiculturalism and trauma-informed care, as well as civic responsibility, is the current rehabilitative focuses of the Texas Juvenile Justice Department (TJJD, 2011). The goal of the current study was to investigate empathy in detained male juveniles in Texas to gain a better understanding of any significant differences that may exist in relation to minority status and severity of offense.

Wagaman (2011) suggested that increased social empathy empowers juvenile offenders to become more prosocial and civically responsible. According to Wagaman (2011), increased social empathy is derived from juvenile offenders understanding the larger social context from which they come and to which they are returning. In this way, juveniles come to understand themselves as part of a larger social whole in which they can create positive changes and increase justice and positivity (Wagaman, 2011).

Through increased empathy, contextual understanding, and civic responsibility—the primary components of social empathy—juveniles experience improved self-esteem and self-efficacy, which catalyze positive social interactions and help reduce future offenses (Segal, 2011; Wagaman, 2011). An important point to understand is that empathy is a necessary foundational building block of social empathy (Segal, 2011; Wagaman, 2011).

Caprara, Alessandri, and Eisenberg (2012) found that self-reported levels of empathic self-efficacy are predictive of engagement in prosocial behaviors. These findings are consistent with earlier research, which showed that self-efficacy was

associated with prosocial behaviors and attitudes (Caprara et al., 2010; Caprara & Steca, 2007). Prosocial predictors are arguably rooted in enduring personality traits that, according to social cognitive theory, are influenced by individuals' cognitive interpretations of social experiences (Bandura, 1986; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007).

Segal (2011) explained that oppressed and marginalized groups may tend to lack social empathy because they feel disempowered and defensive. Feagman and Eckberg (1980) conceptualized racial discrimination as a phenomenon in which the actions of those in a dominant societal position have negative impacts on those in subordinate positions. Current research has demonstrated how perceptions of racial discrimination victimization resulted in negative psycho-emotional outcomes and conduct problems in Hispanic and African-American individuals (Brody et al., 2006; Greene, Way, & Pahl, 2006; Seaton, 2009; Segal, 2011). In such circumstances, the individuals in these groups may become more concerned with their own personal outcomes—and those within their identified oppressed group—rather than with the larger societal good (Segal, 2011).

This may explain why minority males are disproportionately represented in the juvenile justice system (Segal, 2011; TJJD, 2013a). A lack of empathy is correlated with increased acts of violence, a lack of prosocial behaviors, and increased antisocial attitudes (Barriga et al., 2009; Bush et al., 2000). These findings suggest that individuals from oppressed and marginalized groups are less likely to possess high levels of social empathy and, therefore, are more likely to exhibit assaultive and antisocial behaviors. Barriga et al.'s (2009) and Bush et al.'s (2000) findings may help account for the high

detainment rates of ethnic minorities in the juvenile justice system. However, the preponderance of current data focuses on experiences (i.e., oppression, discrimination, racism, marginalization) rather than differences in minority status (Barriga et al., 2009; Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). The current study was conducted to determine whether empathy differences are present among minority and nonminority groups within a population of detained juvenile felony and nonfelony offenders.

### **Problem Statement**

In Texas and across the United States there exists the need to help minority juvenile offenders reenter society and avoid future detainment or incarceration due to serious offenses, including felony assaults. According to the latest census data from the U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP, 2011), approximately 70,000 juveniles were incarcerated on a given day in 2010. In fiscal year 2012, Texas had 860 new juvenile felony commitments (TJJD, 2013a). The majority of these felony offenses were related to assaults (TJJD, 2013a). By gender, the TJJD (2013a) reported the overwhelming majority of new felony commitments in Texas for fiscal year 2012 were males (92%). Hispanic (48%) and African-American (32%) offenders made up 80% of new juvenile felony commitments in Texas for fiscal year 2012 (TJJD, 2013a).

Higher recidivism rates for juvenile offenders are associated with more serious offenses, a lack of social skills, and antisocial characteristics, including a lack of empathy (Calley & Gerber, 2008; TJJD, 2012).

The current theories and research findings suggest that a lack of empathy is associated with increased conduct problems and negative social behaviors. Additionally, current data and statistics indicate the overwhelming majority of juvenile detainees are minorities (OJJDP, 2013; TJJD, 2013a). These data suggest that minority felony offenders likely possess less empathy than their nonminority or nonfelony counterparts and this difference is predictive of conduct problems and negative social behaviors. However, the possible underlying intrinsic variables (i.e., minority status and severity of offense) of this phenomenon have not been adequately studied.

Within the scientific literature, females consistently demonstrate higher levels of empathy than males (Belgrave, Nguyen, Johnson, & Hood, 2011; Davis, 1980; Kanrath, O'Brien, & Hsing, 2011; Mestre, Samper, Frias, & Tur, 2009). Specific to the Interpersonal Reactivity Index ([IRI] Davis, 1980), which is a self-report measure of empathy, study results consistently indicate that females tend to obtain higher scores than males on each of the four subscales that make up this measure (Fernandez, Dufey, & Kramp, 2011; Hawk et al., 2013; Kanrath et al., 2011). Because of this clearly established trend in the literature, I controlled for the influence of gender on empathy by only analyzing data on male juvenile detainees with felony and non-felony offenses. The scientific literature on juvenile offenders suggests that differences in empathy may exist between felony and nonfelony offenders, as well as between minority and nonminority juveniles (Calley & Gerber, 2008; Carrera et al., 2013; Olthof, 2012; Ottoni et al., 2010; TJJD, 2012; Wagaman, 2011). However, there is a lack of research within the scholarly literature that focuses specifically on these intrinsic differences in empathy in the

population of male juvenile detainees. Understanding such differences may help with the prediction and prevention of antisocial behaviors within this population and thereby reduce recidivism. The current study was conducted to measure empathy among minority and nonminority detained male juvenile offenders with felony and nonfelony offenses to determine whether statistically significant differences existed among these subgroups. Identifying whether differences exist among these subgroups within the population of male juvenile detainees may help with the design and implementation of effective rehabilitative programs.

### **Purpose of the Study**

The purpose of the quantitative study was to determine whether differences in empathy exist between minority and nonminority detained juveniles with felony and nonfelony offenses. Empathy was measured using the Empathic Concern (EC) subscale (see Appendix A) of the Interpersonal Reactivity Index (Davis, 1980, 1983, 1996), using archival data from a rural Texas juvenile detention facility. The IRI (Davis, 1980) is a psychometrically valid and reliable measure of empathy (Davis, 1980; 1983; Fernandez et al., 2011; Hawk et al., 2013; Varker & Devilly, 2007). The EC subscale of the IRI (Davis, 1980) is used to measure individuals' compassionate emotional responses to those in distress (Davis, 1980; Varker & Devilly, 2007).

Researchers have demonstrated a relationship between higher EC scores and increased prosocial behaviors (Fraser, Padilla-walker, Coyne, Nelson, & Stockdale, 2012; Hawk et al., 2013). Verschuere, Candel, Van Reenen, and Korebrits (2012) found that scores on the EC subscale of the IRI (Davis, 1980) were inversely correlated with

measures of antisocial behaviors and adolescent psychopathy. Oberle, Schonert-Reichl, and Thomson (2010) found that higher scores on the EC subscale of the IRI (Davis, 1980) were associated with increased peer acceptance and harmonious peer interactions in a sample of boys and girls between the ages of 9 and 14 years. The relationship between EC subscale scores and prosocial behaviors provides the rationale for using this single subscale in the current study.

The Centers for Disease Control and Prevention (CDC, 2014) identified the following ethnic groups as minorities in the United States: Asian American, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, and American Indian and Alaska Native. The CDC (2014) considers Whites /Caucasians of non-Hispanic origins to be nonminorities. I determined minority classifications using demographic information collected by employees within the data-collection facility used for this study.

### **Research Questions and Hypotheses**

Research Question (RQ) 1: Is there a difference in empathy between minority and nonminority male juvenile detainees?

Null Hypothesis ( $H_0$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), between minority and nonminority male juvenile detainees.

Alternate Hypothesis ( $H_1$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), between minority and nonminority male juvenile detainees.

RQ2: Is there a difference in empathy between felony offending and nonfelony offending male juvenile detainees?

Null Hypothesis ( $H_{02}$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), between felony offending and nonfelony offending male juvenile detainees.

Alternate Hypothesis ( $H_{12}$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), between felony offending and nonfelony offending male juvenile detainees.

RQ3: Is there an interaction between minority status and type of offense in male juvenile detainees?

Null Hypothesis ( $H_{03}$ ): There is no interaction between minority status and type of offense in male juvenile detainees.

Alternate Hypothesis ( $H_{13}$ ): There is an interaction between minority status and type of offense in male juvenile detainees.

### **Theoretical Framework**

The general theoretical framework of this study was social empathy theory, which is derived from the tenets of social cognitive theory (Bandura, 1977, 1986; Davis, 1980, 1983, 1996; Segal, 2011). Together, these theories suggest that individuals actively learn from their environments through interaction and observation (Bandura, 1986; Redondo et al., 2012). Each of these theories helps explain why gender and ethnic group identity may impact empathy levels in juvenile offenders.

### **Social Cognitive Theory**

According to social cognitive theory, individuals actively learn from their environments through interaction and observation (Bandura, 1986; Redondo et al., 2012). Through active social learning, individuals' social behaviors are shaped by a myriad of factors including individual and contextual influences (Bandura, 1986). For example, expectancy effects, self-efficacy, observational learning, and moral engagement/disengagement are all social cognitive determinants of social behaviors (Bandura 1977; 1986; 1998; 2002; Karoly, 1993). These findings are consistent with Bandura's (1977, 1986) original self-efficacy and social cognitive theories.

### **Social Empathy Theory**

Davis (1980, 1983, 1996) and Segal (2011) theorized that empathy and social empathy are the result of cognitive and affective responses including understanding another's feelings, possessing a desire to help those in need or distress, and a having a desire to engage in prosocial behaviors to improve the broader social context. When individuals feel disempowered and oppressed, they often engage in fewer prosocial behaviors and exhibit less empathy (Bandura, 1977, 1986; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007; Wagaman, 2011). Empathy theorists agree that empathy is a combination of cognitive and affective responses to social contexts and that a lack of empathy is correlated with antisocial beliefs and behaviors (Barriga et al., 2009; Bush et al., 2000; Robinson, Roberts, Strayer, & Koopman, 2007).

Both social cognitive theory and social empathy theory provide a basis for understanding how empathy may or may not develop in juveniles. However, it is



important to understand that the construct of social empathy differs from that of social cognitions in that social empathy is primarily focused on prosocial empathic responses in social contexts, while social cognitive theory focuses on a much broader range of social behaviors (Bandura, 1971; 1977; 1986; Segal, 2011). Social cognitive theory is presented in this study as a framework for understanding how empathy and social empathy may develop in individuals. Research indicates that empathy may be derived from basic personality traits, which social cognitive theories suggest are shaped by subjective interpretations of environmental interactions or life events (Bandura, 1986; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007). In other words, individuals' social beliefs and behaviors are shaped by numerous influencing factors, including individual and contextual influences, through active social learning, (Bandura, 1986). Within this social cognitive framework, when individuals feel disempowered and oppressed, they often engage in fewer prosocial behaviors and exhibit less empathy, partially due to negative beliefs about power, self-efficacy, and control (Bandura, 1977, 1986; Caprara et al., 2012; Caprara et al., 2010; Caprara & Steca, 2007; Wagaman, 2011). Additionally, due to cultural, ethnic, and societal norms related to sex, gender, ethnicity, race, and power, individuals experience dissimilar developmental events, which are also interpreted through their subjective sociodemographic point of view (Bandura, 1977, 1986; Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). Differences in life experiences—and resulting interpretations—begin in early childhood, as individuals are exposed to their subjective contextual influences based upon several sociodemographic and sociocultural influences (Bandura, 1977, 1986; Spencer, 2005).

While the current study did not address the specific subjective developmental experiences of each participant (i.e., instances of discrimination or oppression), the recognition and understanding of their existence and influence on specific populations and groups may be used to explain possible differences in empathy based solely on ethnic group identity. These theoretical and developmental constructs are described in more detail in Chapter 2.

### **Nature of the Study**

To test the hypotheses that there are differences in empathy between minority and nonminority male juvenile detainees, with felony and nonfelony offenses, I analyzed scores of empathy on the EC subscale of the IRI (Davis, 1980) using a two-way analysis of variance (ANOVA). The IRI (Davis, 1980) has been used to measure empathy in adolescents in several recent studies (Hawk et al., 2013; Mestre et al., 2009; Varker & Devilly, 2007). For this study, there were two dichotomous categorical independent variables (IVs): minority status and committing offense. Category 1 of minority status was minority juvenile detainees. Based upon preestablished CDC (2014) guidelines, the following ethnic groups were included in Category 1 of the proposed IV: Asian American, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, and American Indian and Alaska Native juvenile detainees. Category 2 was nonminority juvenile detainees, which consisted of Caucasian (i.e., White) juvenile detainees (CDC, 2014). All felony offenses were included in the felony category of committing offense. All other offenses, including misdemeanor offenses and technical violations of probation, were included in the nonfelony category of committing offense.

The dependent variable (DV), empathy, was measured using the EC subscale of the IRI (Davis, 1980).

The population of interest for the current study did not have open access to the Internet and was not permitted to receive mail from unauthorized sources. Additionally, detained juveniles had limited access to telephones and were only permitted to make or receive phone calls from specifically identified individuals. Therefore, the use of Internet-based surveys, mail surveys, or telephone surveys was not practical or appropriate for the population of interest. A secondary analysis of preexisting data from a rural Texas juvenile detention facility was conducted on paper-based versions of the IRI (Davis, 1980), which were completed by residents upon entry into and exit from the identified juvenile detention facility used for this study.

Kroth et al. (2009) reported higher response rates for a paper-based questionnaire than a Web-based (i.e., electronic) version of the same questionnaire. Additionally, Wyrick and Bond (2011) found that respondents were more likely to skip sensitive questions on Web-based versions of questionnaires than on the paper-based versions. The adolescents in Wyrick and Bond's study exhibited less response bias with paper-based versions of questionnaires. The archival data analysis design for this study was necessary due to the unique limitations of the sample and to ensure complete anonymity of the individuals whose data were analyzed (Kroth et al., 2009; Wyrick & Bond, 2011).

### **Definitions**

*Empathy*: The ability to experience concern for others, the desire to help and comfort others, as well as the extent to which an individual experiences emotional

discomfort when witnessing others experiencing discomfort or distress (Barriga et al., 2009; Bush et al., 2000; Davis, 1980, 1983, 1996).

*Juvenile offender*: An individual at least 10 years of age but not yet 17 who commits an illegal act requiring detainment in a juvenile facility (TJJJ, 2013b).

*Minorities*: Juvenile detainees who identify themselves as Asian American, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander, or American Indian or Alaska Native (CDC, 2014).

*Nonminorities*: Juvenile detainees who identify themselves as White, Caucasian/non-Hispanic (see CDC, 2014).

*Social empathy*: Understanding people within the context of their life circumstances, while recognizing the larger sociostructural inequalities individuals experience, and the desire to improve the larger social context in which an individual resides (Segal, 2011).

*Prosocial behaviors*: The voluntary actions taken by an individual or individuals, which are beneficial to others (Caprara et al., 2012).

*Recidivism*: An arrest, referral to juvenile law enforcement, incarceration in a juvenile detention facility, or referral to juvenile treatment facility as a result of an illegal act occurring after a juvenile receives sanctions or treatment for a previous offense—a relapse into illegal behaviors (National Institute of Justice [NIJ], 2010; TJJJ, 2012).

### **Assumptions**

I made several assumptions regarding the design and methodology of this study. I assumed the self-report instrument used within the identified juvenile detention facility,

from which data were analyzed for this study, accurately measured what it purported to measure with the proposed sample of participants. The IRI (Davis, 1980) has been demonstrated to have acceptable validity and reliability in previous studies (Davis, 1980, 1983; Fernandez et al., 2011; Hawk et al., 2013; Konrath et al., 2011; Varker & Devilly, 2007). The demographic information that was used for this study was collected from preexisting facility information and, therefore, had no validity or reliability statistics associated with it. I assumed residents answered questions honestly and accurately when completing both the IRI (Davis, 1980) and the demographic questionnaires upon entry into the data collection site.

Lastly, I assumed the sample of de-identified archival data was representative of the population of interest, which was detained juveniles within a rural Texas juvenile detention facility. However, as described in the next section, the results of this study do not generalize to the larger population of U.S. juvenile detainees outside of the population of juveniles within the juvenile detention facility from which data for this study were obtained.

### **Scope and Delimitations**

The purpose of this study was to test the hypothesized relationship between empathy and minority status within the population of rural Texas juvenile felony and nonfelony detainees within a specific juvenile detention facility. This study did not address juvenile offenders who were not detained and may, for example, have been under supervision by way of probation. Therefore, the results of this study are not generalizable to juvenile offenders who are not detained. Additionally, this study did not address

juveniles who may have been committing crimes but had not yet encountered the juvenile justice system, which means the results are not generalizable to juvenile delinquents in the community who are not yet within the juvenile justice system. Furthermore, this study focused solely on offense and minority-status differences related to empathy and did not include other possible theories or explanations, such as trauma or socioeconomic stressors.

## **Limitations**

### **Generalizability**

This study's population limits how the results can be generalized to the larger population of U.S. juvenile detainees. At best, the results may help provide increased understanding of empathy in the population of detained juveniles within the facility accessed for this study, which serves a large 300-mile radius of rural Texas counties. The results are not generalizable to detained juveniles outside of the facility accessed for this study.

### **Convenience Sample**

The results obtained from the convenience sample of this study may be markedly biased, especially because any preexisting confounding variables within the sample cannot be controlled for through traditional probability sampling procedures. For example, I had no control over the ethnic makeup of the sample. As a result, the convenience sample may have been biased, resulting in an unrepresentative sample. However, current researchers have used convenience samples for pilot studies, including doctoral dissertations (Stevenson, Najdowski, & Wiley, 2013; Taylor, 2011).

### **Significance of the Study**

I hoped the information obtained from the current study could be used in the design and implementation of future therapeutic interventions promoting empathy building in the identified juvenile facility's population of detained juvenile offenders. Results may be used to reduce recidivism rates for these juveniles and empower them to actively improve the social context of their multicultural environments. Le, Lai, and Wallen (2009) indicated that the perception of improved multicultural sensitivity and recognition in academic settings was associated with improved psychological and emotional outcomes in a sample of adolescents. More specifically, Le et al. (2009) found that when minority students perceived increased multiculturalism in their school environments, they also reported higher levels of happiness and subjective satisfaction. Individuals can extrapolate such results to argue for the importance of multiculturalism in nontraditional academic settings, such as juvenile detention centers. Lastly, I hoped the current study would add to the scientific literature regarding empathy in juvenile offenders.

### **Summary**

In Chapter 1 I introduced the concepts of empathy and social empathy and explained why these concepts provided a better understanding of offenses and high recidivism rates within the population of juvenile detainees. Data and statistics, as well as theoretical models, were provided to support the position that empathy is an important factor in juvenile delinquency and recidivism. Furthermore, by describing the overrepresentation of minorities within juvenile detainment facilities, I established the

need to understand juvenile delinquent behaviors in this minority population to decrease their current detainment and recidivism rates. I briefly introduced social cognitive theory and social empathy theory as a lens through which to view the phenomenon of empathy development in juveniles.

Chapter 2 provides a thorough review of the scientific literature and a more detailed description of social cognitive and social empathy theory, while also providing a better explanation of why there may be differences in empathy among juvenile felony and nonfelony offenders of different minority statuses. Additionally, a thorough review of the previous and current research highlights the variables involved in empathy development and prosocial behaviors that were not examined in this study but may affect outcomes in this study's sample and target population.



## Chapter 2: Literature Review

Juvenile delinquency, empathy, prosocialism, and recidivism are consistently linked in the scientific literature (Calley & Gerber, 2008; Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011; Verschuere et al., 2012). Generally, low levels of empathy are associated with antisocial behaviors and conduct problems in juveniles (Barriga et al., 2009; Bush et al., 2000). Additionally, when juveniles feel oppressed and disempowered, their empathy development is negatively impacted, leading to increased conduct and emotional problems later in life (Bandura, 1977, 1986; ; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007; Wagaman, 2011).

Chapter 2 includes a comprehensive review of the literature related to empathy development and juvenile delinquency. The discussion of development begins with a general overview of adolescent cognitive, emotional, and social development. An explanation of how each of these developmental areas relates to empathy is included, along with clarification of how empathy development influences juvenile delinquency and recidivism. A discussion of ethnic differences in adolescent development is included—providing support for the need to examine empathy differences between minority and nonminority juvenile detainees.

Chapter 2 begins with a description of the strategies used to find relevant research articles and transitions into a comprehensive discussion of this study's primary theoretical foundation. Next, the chapter includes a discussion of the existing literature related to key variables of the study. Chapter 2 concludes with a concise summary of important themes and gaps in the literature.

## **Literature Search Strategy**

The primary strategy used to find articles for this literature review was key-word searches performed within the Walden University online databases, including Academic Search Complete, ProQuest Central, ProQuest Criminal Justice, PsychARTICLES, and PsychINFO. The online database search strategy included the use of the following key terms: *delinquents, development, empathy, ethnicity, ethnic group, ethnic group identity, juveniles, juvenile offenders, pro-social behaviors, recidivism, social cognitive theory, and social empathy*. I entered the identified key terms into databases individually and in several combinations.

The scope of the searches included current peer-reviewed articles, as well as seminal articles, books, and book chapters spanning back to the 1950s. The secondary research strategy included existing governmental websites and online resources, including the National Institute of Justice ([www.nij.gov](http://www.nij.gov)), the Texas Juvenile Justice Department (<http://www.tjjd.texas.gov/>), and the World Health Organization (<http://www.who.int/en/>). Lastly, I reviewed Walden University's collection of online dissertations via the ProQuest database.

## **Theoretical Foundations**

### **Social Cognitive Theory**

Social cognitive theory (SCT) was developed by Bandura (1986) as a refinement and extension of his previous learning theory known as social learning theory ([SLT], Bandura, 1971; 1977). SLT suggested that individuals develop behaviors through an active interaction with their social environments, mediated by cognitions (Bandura, 1971;

1977). SLT was a pioneering early departure from strict behavioralism, which suggested that individuals learn new behaviors through rote stimulus-response interactions with no emphasis on subjective cognitive functions (Skinner, 1953). In contrast to behavioralism, SLT suggested that learning could take place via cognitions alone (e.g., observations) with no behavioral interactions necessary—a phenomenon termed observational learning (Bandura, 1971; 1977). Bandura's early studies focused on determining the influencing factors related to aggressive behaviors in children (Bandura, 1965; Bandura, Ross, & Ross, 1961; 1963). Bandura's famous Bobo-Doll experiments illustrated the power of observational learning by demonstrating that children could learn and exhibit aggressive behaviors simply by watching models perform the behaviors and observing the consequences the models received as a result (Bandura 1965; Bandura et al., 1961; 1963). Bandura later refined social learning theory to develop social cognitive theory (SCT), which focused more specifically on the subjective cognitive tactics used by individuals within their social contexts (Bandura, 1986; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

### **Major Concepts of Social Cognitive Theory**

A number of key SCT concepts help explain how individuals adopt and exhibit behaviors. The core tenets of SCT can be grouped into the following general categories: (a) intrapersonal influences, (b) environmental response-cost influences, and (c) interpersonal /social observational learning (Bandura, 1969; 1986; 1997; 1998; 1999; 2002). Together, these categories help to explain how individuals acquire and develop social behaviors within the model outlined by SCT.

**Intrapersonal influences.** According to SCT, individuals have unique interpretations and appraisals of their subjective experiences (Bandura, 1971; 1986). Therefore, subjective perceptions of the costs and benefits of engaging in specific behaviors are influenced by individuals' internalized values and belief systems (Bandura, 1971; 1986). In other words, individuals tend to internally evaluate the outcomes of behaviors as a way of determining whether they will engage in specific behaviors.

***Self-evaluation.*** One method of evaluating outcomes consists of individuals imagining how they would feel about themselves after engaging in a particular behavior (Bandura, 1977). In other words, individuals attempt to cognitively picture themselves in a future circumstance and imagine how they might feel about themselves after engaging in a given behavior. Such self-evaluations help influence the behaviors individuals will choose. Researchers have found that self-evaluative cognitions have influenced several types of behaviors in individuals, including personal health-promoting behaviors and social interaction behaviors, including interpersonal prosocial behaviors (Johannessen, Oettingen, & Mayer, 2012; Oettingen, Mayer, & Thorpe, 2010; Oettingen, Stephens, Mayer, & Brinkmann, 2010).

***Self-efficacy.*** Bandura also identified another psychological determinant of behavior, which he termed *self-efficacy*. Self-efficacy is the personal belief individuals possess regarding their abilities to successfully catalyze changes in their lives and qualitatively affect their personal outcomes and general functioning (Bandura, 1977; 1997). This belief results in increased motivation and persistence, which can increase the odds of improving mastery (Bandura, 1977; 1997). For example, research indicates

individuals with high levels of self-efficacy tend to be more persistent in the face of challenges, more optimistic about their future outcomes, and less prone to antisocial behaviors (Bandura, 1977, 1997; Caprara et al., 2012; Segal, 2011; Wagaman, 2011).

The results of previous studies indicated individuals lacking self-efficacy also exhibited fewer empathic prosocial behaviors (Bandura, 1977, 1986; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007; Wagaman, 2011). Outcome expectations are the perceived outcomes individuals expect will occur when they engage in a given behavior (Bandura, 1977, 1986, 1997, 2002), and self-efficacy may provide explanations for such outcomes. The difference between outcome expectations and self-efficacy is that outcome expectations are both the desirable and undesirable outcomes individuals assume will result from a given behavior, while self-efficacy is the internal belief individuals possess that they are capable of realistically achieving desirable outcomes (Bandura 1977, 1986, 1997, 2002). Individuals who consistently experience negative social consequences may come to expect negative outcomes and have a decreased sense of efficacy or ability to adequately engage in behaviors that create positive outcomes. Specifically, the results of some studies indicated a relationship between subjective perceptions of racial discrimination / victimization and conduct problems in ethnic minorities (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). The results of these studies suggest that when individuals feel oppressed and disempowered, they may exhibit less empathy and fewer prosocial behaviors. Such results support Bandura's contention that subjective beliefs and perceptions influence how individuals behave within society.

***Self-regulation.*** Within SCT, the term self-regulation refers to an individual's tendency to engage in unpleasant behaviors, or endure negative consequences, in the short-term in order to achieve perceived desirable long-term gains (Bandura, 1977; Karoly, 1993). The results of several studies suggest that juvenile delinquents may lack self-regulation when experiencing psychosocial stressors. The general consensus of many study results is that juveniles engage in fewer prosocial behaviors when faced with negative or challenging situations (Barriga et al., 2009; Brody et al., 2006; Bush et al., 2000; Seaton, 2009). Based on these study results, it appears individuals lack motivation to engage in prosocial behaviors and begin to view themselves and the world around them negatively. When considering the development of social behaviors through the concepts of SCT, it is not surprising that disempowered, oppressed, and nonefficacious individuals are more likely to exhibit antisocial beliefs and behaviors (Barriga et al., 2009).

***Moral disengagement.*** According to SCT, individuals use several cognitive tactics to allow themselves to engage in behaviors that violate their learned personal moral standards (Bandura, 1977). For example, individuals may use minimizing language and labels to help significant immoral behaviors sound less serious (Bandura, 1977). Additionally, individuals may attempt to label, blame, and dehumanize certain individuals to justify their negative behaviors toward them (Bandura, 1977).

Quantitative studies have indicated links between moral disengagement and adolescent peer violence (Bandura et al., 1996; Pelton, Gound, Forehand, & Brody, 2004). Bandura et al. (1996) discovered that Italian male adolescents were more prone to

moral disengagement than females, and that moral disengagement was positively correlated with increased acts of violence or aggression. Pelton et al. (2004) found similar results as Bandura et al.'s (1996) original study in a sample of U.S. adolescents.

**Environmental response-cost influences.** Within SCT, Bandura (1971; 1977; 1986) claimed that individuals have a reciprocal relationship with their environment, whereby rewards and punishments influence the perpetuation or extinction of behaviors. The effective influential impacts of rewards and punishments on human behavior have been commonly reported in behavioral modification research (Cavanagh, Frank, & Allen, 2011; Heerey, 2014; Meyers, Roozen, & Smith, 2011). Through environmental response-cost learning experiences, individuals can gain an understanding of the positive and negative impacts of behaviors and, therefore, determine which behaviors they will choose to adopt (Bandura, 1969; 1986; 2002).

**Facilitation.** Synonymous with the concept of empowerment, facilitation is a phenomenon that occurs when environmental supports make it easier for individuals to perpetuate specific behaviors (Bandura, 1998). Social behaviors such as education and public outreach programs utilize the concept of facilitation to help individuals adopt and continue to perform certain behaviors, such as prosocial health-promoting behaviors (Bandura, 1998; Sherman, German, Cheng, Marks, & Bailey-Kloche, 2006). Riina, Martin, Gardner, and Brooks-Gunn (2013) found that neighborhood cohesion and support offered a protective factor to African American adolescents in regards to externalizing behaviors. The results of this study help illustrate how social facilitation can have positive impacts on individuals and their behaviors.

**Interpersonal/social observational learning.** A key concept of SCT, observational learning, combines the influential effects of intrapersonal influences and environmental response-cost influences to help explain how individuals adopt and perpetuate social behaviors (Bandura, 1986, 2002). Put simply, observational learning occurs when an individual witnesses another person engaging in a given behavior and then receives either positive or negative consequences as a result (Bandura, 1986, 2002). The observer then internally processes this information and decides whether he or she will engage in the behavior observed (Bandura, 1986, 2002). Observational learning is a response-cost learning that occurs vicariously.

Different social, cultural, and societal factors affect which behaviors individuals are exposed to, while beliefs about the beneficial functions of each behavior influence which are given the most attention (Bandura, 1986, 2002). Additionally, subjective differences in abilities impact how well individuals retain observed behaviors and whether behaviors are expressed (Bandura, 1986; 2002). It is also important to note that the results of several studies (e.g., Brody & Stoneman, 1981; Schunk, 1987) illustrated that individuals are most likely to imitate the behaviors of models they perceive as similar to themselves. In other words, people are most likely to behave like those to whom they can relate.

Specific to juveniles, the results of Haggerty, Skinner, McGlynn-Wright, Catalano, and Crutchfield's (2013) study indicated a positive relationship between reports of violent acts and exposure to deviant behavior modeled by peers in a group of minority juveniles. Additionally, multiple studies have demonstrated a strong relationship



between exposure to delinquent peers and increased delinquent behaviors in juveniles (Fite et al., 2012; Kerr, Van Zalk, & Stattin, 2012; Meldrum, Miller, & Flexon, 2013; Miller, 2010; Pratt et al., 2010; Sampson, 1999; Warr, 1998). Such results illustrate the power and influence of observational learning. Individuals within a given sociocultural context observe their peers' behaviors, examine resulting consequences, and either imitate such behaviors or adopt new ones based upon their subjective interpretations and perceptions of personal costs and benefits.

***Vicarious punishment.*** While observational learning may lead to the adoption and exhibition of new behaviors due to observing the negative consequences perpetuated on models, individuals may also choose to not engage in a specific behavior. According to a recent meta-analysis, when individuals witnessed punitive actions taken against others, observers were less likely to engage in similar behaviors due to a phenomenon known as vicarious punishment (Malouff, Thorsteinsson, Schutte, & Rooke, 2009). Research on juvenile delinquent behaviors suggests that oppressed and marginalized groups observe and experience disempowering social interactions, which leave them with a deficit in empathy and lacking a desire to engage in prosocial behaviors. The results of a study by Seaton (2009) indicated that African American youth considered perceptions of institutional discrimination as especially distressing. According to the results, perceptions of large-scale collective/institutional racism were associated with low self-esteem and depressive symptoms (Seaton, 2009). In other words, when individuals viewed their social environments as globally unrewarding, they experienced decrease self-esteem and depressive symptoms (Seaton, 2009). The results of Seaton's (2009)

study support Bandura's position that personal or vicarious environmental experiences impact individuals' social development.

### **Social Cognitive Theory and Sex Differences**

Bussey and Bandura (1999) presented a SCT model of gender differentiation that encompassed biological sex differences paired with individuals' reciprocal relationships with their social environments. Bussey and Bandura (1999) argued that biology provides certain physiological potentials, but it does not dictate behaviors. As a result, the SCT model of gender differentiation and development describes how individuals interact with their environment and learn gender-specific behavioral and social norms through environmental reciprocal learning, utilizing the concepts of reinforcement and punishment (Bussey & Bandura, 1999). For example, parents, peers, and cultural media are significant influences of gender-typed behavioral norms for children (Bussey & Bandura, 1999). Parental reactions to their children's behaviors help reinforce or extinguish gender-typed behaviors (Bussey & Bandura, 1999). Also, according to SCT, children tend to learn appropriate gender-typed behaviors and emotional expressions by observing their parents (Bussey & Bandura, 1999). The concepts presented in SCT explain observed differences in moral disengagement, prosocial behaviors, and empathy in males and females (see Belgrave et al., 2011; Davis, 1980; Kanrath et al., 2011; Mestre et al., 2009).

### **Social Cognitive Theory and Ethnic Identity Development**

Bandura (2002) also presented an explanation for ethnic and cultural differences using SCT. According to Bandura (2002), individuals actively interact with their

environments to learn and adapt and these individuals have different social experiences based upon their unique cultural and ethnic contextual environments. Bandura (2002) argued that cultural and ethnic contexts are not static, but are, instead, influenced and altered by the impact of their respective agents. Reciprocally, cultural environments shape and influence the individuals (or “agents”) of which they consist. In order to function optimally Bandura (2002) argued that individuals must utilize social interdependence, rather than focusing solely on individualism. As such, individuals learn to adapt and influence their respective sociocultural milieus, while reciprocally being shaped and influenced by the milieus they are influencing. The reciprocal learning and influence described by Bandura (2002) helps explain the ethnic differences reported in research regarding delinquency and prosocial behaviors (see Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011).

### **Social Empathy Model**

Segal (2011) proposed a social empathy model (SEM). According to Segal (2011), social empathy is the ability to perceive the social inequities of others by observing and understanding their experiences and circumstances within the larger social context in which they exist. For example, Segal (2011) suggested that recognizing and understanding financial disparities can lead to prosocial changes that result in greater social economic justice. Segal’s (2002) model consists of three components, including individual empathy, contextual understanding, and social responsibility. Segal (2011) defined individual empathy as insight into different ethnic, cultural, and social contexts paired with a desire to engage in prosocial behaviors aimed at helping improve those

contexts. According to Segal (2011), contextual understanding occurs when accurate facts are provided about the cultural norms and daily experiences of those from different ethnic and sociocultural groups. Segal (2011) suggested that contextual understanding aids in increasing empathy and prosocial behaviors. As people become more knowledgeable and empathic toward a given group, they also experience an increase in their sense of having an obligation to help (Segal, 2011). Thus, increased contextual understanding and empathy foster the development of social empathy.

### **Rationale**

Approximately 70,000 juveniles are incarcerated on a given day in the U.S. (OJJDP, 2011). The most current data indicate that Texas commits juveniles to long term residential facilities at a rate of 115 per 100,000 juveniles (OJJDP, 2013). A recent report on detained juveniles in Texas indicated over 4,600 juveniles resided in secure facilities in 2011 (Kids Count Data Center, 2014; OJJDP, 2013). By race, the overwhelming majority (i.e., 80%) of juvenile felony detainees in Texas are Hispanic or African American (TJJD, 2013a). In Texas, the majority (92%) of detained juvenile felony offenders are males (TJJD, 2013a). Nationally, offenses committed against another person account for approximately 33 percent of offenses for juveniles in residential settings (OJJDP, 2013). Property and technical violations of court ordered probation requirements each account for about 22 percent of residential offenses (OJJDP, 2013). Similar to national statistics, Texas offenses of juveniles in residential settings mostly consist of person-offenses (33%), technical offenses (30%), and property offenses (19%) (OJJDP, 2013).

According to the Texas Legislative Budget Board ([TLBB], 2013) between 66 and 77 percent of detained juveniles are re-arrested within three years of being released. Additionally, between 27 and 46 percent of detained juveniles will be re-incarcerated within 3 years of being released (TLBB, 2013). Juvenile detention is correlated with increased recidivism and may have a negative impact on youths' overall mental health, behavioral functioning, and educational achievement (see Holman & Ziedenberg, 2006). The negative outcomes associated with juvenile detainment may be partly due to a lack of adequate mental health services within detention facilities (Ford & Blaustein, 2013). Many detained juveniles have experienced multiple traumatic experiences, which may tend to manifest symptoms of social withdrawal, conduct problems, and negative psychosocial and mental health functioning (Brody et al., 2006; Ford & Blaustein, 2013; Greene et al., 2006; Segal, 2011; Seaton, 2009).

Juvenile intervention programs focused on increasing empathy demonstrate the best recidivism rates in juvenile rehabilitation (Abrams et al., 2005; Calley & Gerber, 2008; Redondo et al., 2012). Such outcomes coincide with the scholarly literature, which indicates low levels of empathy in juveniles is predictive of antisocial behaviors and increased recidivism, while, conversely, increased empathy in juveniles is associated with increased prosocial behaviors and decreased recidivism (Brody et al., 2006; Calley & Gerber, 2008; Greene et al., 2006; Seaton, 2009; Segal, 2011; Verschuere et al., 2012; Wagaman, 2011). Juvenile detention statistics and recidivism trends illustrate the importance of implementing treatment interventions that have a high likelihood of increasing empathy and prosocialism in detained juveniles in order to decrease recidivism

rates in this vulnerable population (Holman & Ziedenberg, 2006; OJJDP, 2013; TLBB, 2013).

Bandura (1986; 2001) provided a basis for understanding how adolescents develop within, learn from, and interact with their social environments. The tenets of SCT provide structure and an explanatory lens through which hypotheses can be formed regarding how and why different ethnic groups develop empathy and prosocial behaviors. SCT suggests that juvenile delinquents are active participants within their given social environments. Their perceptions, interpretations, and observations within their given social environments help shape and influence their individual development of empathy and prosocial behaviors.

Segal (2011) provided a rationale for the importance of studying and understanding the experiences and development of different cultural groups. According to Segal (2011), increased knowledge and understanding fosters a sense of social responsibility to help those in need. The current study provides increased knowledge about juvenile detainees, which hopefully leads to an increased sense of social responsibility in policy makers, administrators, and others in positions to create positive social change.

### **Historical Background**

The concept of empathy is considered an important component of human cognition, emotions, behaviors, and interactions (Eisenberg, 2000a; Eisenberg & Strayer, 1987). The term empathy was originally coined by Edward Titchener in 1909 while he studied human perception (Titchener, 1909). Titchener's term was a translation of the

German concept “Einfühlung,” which attempted to describe and explain the perceptual experiences of individuals as they observed the aesthetic qualities of objects (Montag, Gallinat, & Heinz, 2008). Theodor Lipps is credited as the father of the original Einfühlung scientific theory (Montag et al., 2008). Lipps’ theory provided an explanation for individuals’ perceptions as well as the ability for people to understand others’ minds (Montag et al., 2008).

The concept of empathy became a popular research interest for psychologists during the 20<sup>th</sup> century. Currently, empathy is generally viewed within psychology as a phenomenon encompassing both cognitive constructs as well as emotional / affective constructs. Common themes associated with the study of empathy include moral reasoning and development (Eisenberg, 2000b; Eisenberg & Fabes, 1998; Eisenberg & Miller, 1987), motivation (Bandura, 1997; 1999), and pro-social behaviors (Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007).

A consistent link exists between empathy and prosocial behaviors (Farrant, Devine, Maybery, & Fletcher, 2012; Segal, 2011; Stocks, Lishner, & Decker, 2009; Stuermer, Snyder, Kropp, & Siem, 2006). Researchers have defined prosocial behaviors as behaviors that help or benefit others, often with some amount of cost experienced by the person exhibiting the helping behaviors (Caprara et al., 2012). Eisenberg and Mussen (1989) explained that individuals must make a decision to meet their individual needs or the needs of others when considering whether to engage in prosocial behaviors.

When deciding whether to engage in prosocial behaviors individuals must identify and consider others’ feelings, make judgments about what behaviors are appropriate or

inappropriate within a given context, and consider whether or not they feel they can adequately help the person in need (Bandura, 1986; 1997; Bandura et al., 1996; Batson et al., 1997). Such empathic cognitive considerations are influenced by social cognitive experiences beginning in childhood. For example, familial contexts and parenting styles have both been shown to influence the development of empathy and the expression of prosocial behaviors in children (Azar, 1997; Carpenter, 2001; Eisenberg, 2003; Koestner, Franz, & Weinberger, 1990; Michalik et al., 2007). Additionally, peer influences and experiences become especially formative during adolescence (Ellis & Zarbatany, 2007). Research by Twenge, Baumeister, DeWall, Ciarocco, and Bartels (2007) indicated that when people perceived they were ostracized and socially excluded they tended to be more self-focused, less empathic, and less likely to demonstrate pro-social behaviors. Additionally, children who have been victims of abuse or neglect are less likely to demonstrate empathic, prosocial behaviors (Luke & Banerjee, 2012).

Over the course of history, researchers and theorists focused on the cognitive and emotional components of empathy. Presently, these two components have been integrated to form a complete model of empathy, which recognizes the important influences of both empathic cognitions and emotional reactions. Partly catalyzed by the cognitively focused developmental theories of Piaget, Vygotsky, and Bandura, the contemporary view of empathy is that it is a cognitive-emotive-affective phenomenon occurring as a response to social interactions (Batson, et al., 2003; Hoffman, 1990).

For example, Hoffman's (1990) developmental theory of empathy includes emotional (early stages) as well as complex cognitive (later stages) components of



empathy. Segal (2011) emphasized the importance of cognitions in the development and expression of social empathy. According to Segal (2011) social empathy is exhibited by individuals when they are faced with social inequities or injustices—resulting in undesirable and unpleasant emotional states—and they engage in prosocial behaviors with the goal of improving the larger societal system, rather than simply rendering assistance to an identified individual. Segal (2011) suggested that individuals must consider the complexities of the larger social system and gestalt when considering how to improve the social system. Within both Hoffman's (1990) and Segal's (2011) explanations of empathy, the influences of emotions and cognitions are evident.

Davis' (1980; 1983; 1996) integrated model of empathy suggests that empathy is not a single construct, but rather a multidimensional construct primarily consisting of cognitive perspective-taking and emotional reactivity components. According to Davis (1980), the cognitive facets of empathy include individuals' abilities to consider how others feel in a given situation or how they might feel if in similar situations to those they are observing. The emotional components of empathy include (a) the extent to which individuals experience a congruent emotional reaction for the circumstances of others (e.g., feeling happy when a friend experiences something positive, or feeling sad when a peer experiences a loss); and (b) general emotional reactivity in stressful situations (Davis, 1980). While Davis' explanations help clarify the distinct components of empathy, SCT helps provide an explanation of how such facets may be developed. Through reciprocal interactions with their social environments, individuals observe others and actively engage in social behaviors, learning through the experiences of processing

costs and benefits—either directly or vicariously through social models—thereby, developing the cognitive-emotive components of empathy described by theorists such as Davis (1980).

### **Measuring Empathy**

Researchers have utilized subjective quantitative measures, including the IRI (Davis, 1980) to measure empathy in children (e.g., Eisenberg & Fabes, 1990; Eisenberg & Fabes, 1995; Fernandez et al., 2011; Hawk et al., 2013; Varker, & Devilly, 2007). Subjective self-report measures of empathy, such as the IRI (Davis, 1980), allow respondents to select from a set of predetermined responses to given stimuli. Informant rating scales, such as the Bryant Index of Empathy (Dadds et al., 2008) allow parents to provide a description of their children's behaviors by rating them according to their subjective perceptions. However, rating scales only measure the observations and perceptions of others and fail to measure the internal subjective emotional states of the children measured. Issues of response-bias are noted in the literature for both types of quantitative measures of empathy (Davis, 1980; Johnson et al., 2006; Kilpatrick, 2005). Issues of self-report response-bias have been revealed in studies examining myriad subjects (e.g., Burris & Mathis, 2011; Dodd-McCue & Tartaglia, 2010; Miller, 1999; O'Leary, Diller, & Recklitis, 2007). An inverse relationship has been reported in the literature regarding respondent perceptions of anonymity and socially acceptable responses (Burris & Mathis, 2011; Johnson & Delamater, 1976; Miller, 1999). Generally, with increased anonymity and privacy, respondents are more likely to provide socially aberrant or risqué responses on self-report survey measures, which also results in

increased response rates and a higher percentage of completed measures (Burriss & Mathis, 2011; Johnson & Delamater, 1976; Miller, 1999).

The data collection site for this study was a juvenile detention facility in a rural region of Texas. The facility required juveniles to complete the IRI (Davis, 1980) during the intake process. The facility was interested in empathy because of its relationship to prosocial behaviors and decreased recidivism rates in juveniles (Barriga et al., 2009; Bush et al., 2000; Calley & Gerber, 2008; Varker & Devilly, 2007; Verschuere et al., 2012). I analyzed a de-identified secondary data-set from the data collection site, which consisted of IRI (Davis, 1980) scores and demographic (i.e., gender, minority status, and type of offense) information on an anonymous set of juvenile detainees. Utilizing a de-identified data-set enabled me to ensure the complete anonymity of the residents' data utilized in this study.

### **Empathy and Juvenile Delinquency**

Research consistently links empathy and juvenile delinquency (Brody et al., 2006; Calley & Gerber, 2008; Greene et al., 2006; Seaton, 2009; Segal, 2011; Verschuere et al., 2012). Specifically, previous researchers have identified a link between low levels of empathy and increased antisocial behaviors and conduct problems in juveniles (Barriga et al., 2009; Bush et al., 2000). Furthermore, feelings of disempowerment and oppression impact the expression of pro-social behaviors and detrimentally impact the development of empathy (Bandura, 1977, 1986; Caprara et al., 2012; Caprara et al., 2010; Caprara & Steca, 2007; Wagaman, 2011). The general consensus in the current literature correlates low levels of empathy with high rates of antisocial beliefs and behaviors (Barriga et al.,

2009; Varker & Devilly, 2007; Verschuere et al., 2012). The findings presented here are increasingly salient when considering the majority of detained juveniles in the U.S. and Texas have felony offenses, and over 30 percent are charged with crimes against persons (OJJDP, 2013; TJJD, 2013a).

One approach to decreasing juvenile delinquency is to focus on increasing prosocial behaviors and attitudes via increased empathy. This approach is supported by recidivism research conducted by Andrews, Bonta, and Hogue (1990) and Bonta and Andrews (2007), which emphasized the importance of matching interventions to the identified needs of offenders. In their seminal research, Andrews et al. (1990) proposed an intervention model known as the Risk-Need-Responsivity model for Offender Assessment and Rehabilitation (RNR). The core principles of the RNR include the risk principle, the need principle, and the responsivity principle. The risk principle emphasizes the importance of matching the level of interventions to the specific needs of each offender (Andrews, Bonta, & Hogue, 1990; Bonta & Andrews, 2007). The needs principle argues the importance of matching specific and targeted interventions to the needs of individuals by considering characteristics of interventions such as intensity, length, and homogeneity of individuals within the treatment (Andrews et al., 1990; Bonta & Andrews, 2007). Lastly, the responsivity principle highlights the importance of matching interventions to an offender's unique cognitive abilities, learning style, and subjective motivational factors (Andrews et al., 1990; Bonta & Andrews, 2007). Grounded in SCT, the RNR consistently emphasizes the importance of teaching prosocial behavioral skills, the significant influences of social and peer interactions, and the

importance of cognition and attitudes in rehabilitation interventions (Andrews et al., 1990; Bonta & Andrews, 2007). Furthermore, the results of several recent research studies indicated that empathy and prosocial behaviors were effectively increased in juveniles through targeted therapeutic interventions, including cognitive-behavioral, educational, and social interventions (Calley & Gerber, 2008; Laursen, 2010; Maynard, Monk, & Booker, 2011; Michie & Lindsay, 2012; Salmivalli & Poskiparta, 2012).

Bonta and Andrews' (2007) provided evidence for the argument that multiculturalism is an important part of positive psychological and social outcomes in adolescent learning environments. After all, cultural experiences are powerful influences on internalized subjective needs, values, and perceptions of youths (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011; Wagaman, 2011). Additionally, current research findings demonstrated that when adolescents perceived environments as more culturally tolerant and accepting (i.e., multicultural), they reported higher levels of happiness and overall satisfaction (Le et al., 2009). Therefore, it is vital that juvenile treatment and rehabilitative programs are sensitive to the multicultural needs of detained juveniles.

### **Summary and Conclusions**

SCT suggests that learning is dependent upon a triadic cognitive-environmental-behavioral reciprocity between active individuals (i.e., “agents”) and their contextual social environments (Bandura, 2001). Bandura suggested that individuals possess certain subjective cognitive representations of themselves—including self-efficacy and outcome expectations—that influence how they think about and behaviorally interact with their

environments (Bandura, 1977; 1986; 2001). Reciprocally, the ways in which agents interact with their environments influence the experiences they will encounter. For example, the triadic reciprocity identified within SCT impacts where one lives, works, and vacations, which, in turn, influences the social experiences an individual encounters and from which they learn (Bandura, 2001).

SCT helps explain how juveniles develop empathy and pro-social behaviors. Through reciprocal social interactions, individuals develop empathic cognitions and emotional responses, which influence the exhibition of prosocial behaviors. Segal (2011) argued that with greater knowledge and understanding, empathy increases along with a greater sense of obligation to help improve the sociocultural contexts in which individuals reside. Research also indicates that a lack of empathy and social understanding is linked to low social empathy levels and increased antisocial behaviors and conduct problems (Barriga et al., 2009; Bush et al., 2000; Caprara et al., 2012; Segal, 2011).

The RNR model (Andrews et al., 1990) provides support for targeted interventions based upon the unique needs and cognitive styles of offenders. Together, SCT (Bandura, 1986), the SEM (Segal, 2011), and the RNR (Andrews et al., 1990) provide a theoretical and structural support system for the current study. This combination of theory and models provides a rationale for why differences in empathy may exist between ethnic minorities and non-minorities, while also providing an explanation for the importance of understanding such differences and how such

knowledge may aid in creating positive social change through decreased juvenile delinquency and recidivism.

The current research data provide clear and substantive evidence that empathy and prosocial behaviors are linked and can be improved in juveniles through targeted interventions (Calley & Gerber, 2008; Caprara et al., 2010; Caprara & Steca, 2007; Laursen, 2010; Maynard et al., 2011; Michie & Lindsay, 2012; Salmivalli & Poskiparta, 2012; Segal, 2011; Wagaman, 2011). Additionally, the results of current research studies provided explanations about the ways in which empathy development is helped or hindered. For example, Bandura (1986; 2001) and Segal (2011) suggested that social experiences, cognitive perceptual styles, and knowledge impact empathy development. Barriga et al. (2009) and Bush et al. (2000) conducted studies that indicated perceived experiences of oppression and discrimination detrimentally impacted empathy development and prosocial behaviors in adolescent minorities.

While the combination of current studies provides information about empathy development, prosocial behaviors, and recidivism trends in adolescents, none of the studies specifically examined minority status differences in empathy, or severity of offense differences in empathy, in detained juvenile offenders. In other words, while previous research study results indicated a relationship between empathy levels and type and severity of behaviors in adolescent populations (Calley & Gerber, 2008; Carrera, et al., 2013; Olthof, 2012; Ottoniet et al., 2010; TJJD, 2012; Wagaman, 2011), as well as a demographic trends in the population of United States juvenile detainees (Brendtro & Mitchell, 2011; Caldwell, 2011; Calley & Gerber, 2008; Cheng et al., 2012; Frias-

Armenta & Corral-Verdugo, 2013; Shaw et al., 2012; TJJD, 2012; TJJD, 2013a), the current body of research has a dearth of information specific to empathy and how it relates to minority status and level of offenses in the population of United States male juvenile detainees. The results of this study help fill the gap in the literature by specifically addressing empathy differences in minority and non-minority juvenile detainees with felony and non-felony offenses in a rural Texas juvenile detention facility. Gaining a better understanding of the role empathy plays in juvenile delinquency provides useful information to administrators and policy makers who design and implement rehabilitative interventions for this population .

Chapter 3 provides details about this study's design, which includes descriptions of the sample of participants, specific instruments, administration methods, and data collection and analysis activities. Clarification is provided for how each of these areas relates to the research questions and hypotheses identified in Chapter 1.



### Chapter 3: Research Method

The purpose of this study was to determine whether empathy differences existed between male minority and nonminority detained juveniles with felony and nonfelony offenses in a rural region of Texas. Low levels of empathy are correlated with increased conduct problems, antisocial behaviors, and higher rates of recidivism in juvenile delinquents (Barriga et al., 2009; Brody et al., 2006; Bush et al., 2000; Calley & Gerber, 2008; Greene et al., 2006; Seaton, 2009; Segal, 2011; Verschuere et al., 2012). Research results demonstrate that experiences of oppression and disempowerment negatively impact psychosocial development in juveniles (Bandura, 1977, 1986; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007; Wagaman, 2011). Findings suggest that individuals from social groups that are generally oppressed and marginalized, such as ethnic minorities, are likely to have low levels of empathy and are more likely exhibit conduct problems. Additionally, research findings indicate that minority male felony offenders make up the majority of juvenile detainees in the U.S. and, more specifically, the state of Texas (OJJDP, 2013; TJJD, 2013a). Chapter 3 provides detailed descriptions and rationales for the research design, methodology, threats to validity, and ethical procedures of this study. Archival data were used for this study. A description of how the data were collected, as well as how they were obtained and analyzed, is provided in this chapter. Chapter 3 ends with a summary and offers a brief preview of content presented in Chapter 4.

### **Research Design and Rationale**

For the current quantitative study, the dependent variable (DV), empathy, was measured using the Empathic Concern (EC) subscale of the Interpersonal Reactivity Index ([IRI] Davis, 1980). The independent variables (IVs), minority status and committing offense, were dichotomized into the categories of minority / nonminority and felony/nonfelony, respectively. Additionally, the interaction between these two IVs was analyzed to determine whether such interactions resulted in statistically significant differences in empathy scores, as measured by the EC subscale of the IRI (Davis, 1980). The minority category included individuals who identified themselves as Black/African American, Hispanic, American Indian, Asian American, and Other. The nonminority category included individuals who identified as White/Caucasian/non-Hispanic. These categories were based on precedents set by the Centers for Disease Control and Prevention (CDC) defining the populations of ethnic minorities and nonminorities in the United States (CDC, 2014). All felony offenses were included in the felony category of the committing offense IV, while all other offenses (e.g., misdemeanors and technical violations) were included in the nonfelony category of the committing offense IV.

Empathy has been shown to be an important factor in understanding juvenile prosocialism, antisocial behaviors, as well as juvenile delinquency and recidivism (Barriga et al., 2009; Brody et al., 2006; Bush et al., 2000; Calley & Gerber, 2008; Greene et al., 2006; Seaton, 2009; Segal, 2011; Verschuere et al., 2012). The concept of empathy has been studied and developed over decades within the realms of psychological, social, legal, and philosophical areas of study (Abrams et al., 2005;

Barriga et al., 2009; Bush et al., 2000; Calley & Gerber, 2008; Eisenberg, 2000a; Eisenberg & Strayer, 1987; Redondo et al., 2012; Segal, 2011; Wagaman, 2011).

However, while researchers have extensively studied empathy, prosocialism, and juvenile delinquency, there is a dearth of scholarly literature on empathy differences between minority and nonminority juvenile felony and nonfelony offenders.

Quantitative methods allow researchers to mathematically analyze specific constructs of interest and draw statistical conclusions about the constructs being analyzed (Creswell, 2014; Howell, 2013). For this study, I conducted a secondary data analysis on a set of de-identified archival data to determine whether there were statistically significant empathy differences between minority and nonminority male juvenile detainees with felony and nonfelony offenses. Quantitative studies are common in the scholarly literature focused on similar research questions for the current population of interest (Barriga et al., 2009; Brody et al., 2006; Bush et al., 2000; Caprara et al., 2010; Caprara et al., 2012; Caprara & Steca, 2007; Wagaman, 2011).

### **Time and Resource Constraints**

Some time and resource constraints are notable for this study design and methodology. Because I used a secondary data analysis of archival data, the data collection facility asked an employee to gather the data, de-identify it, and then provide it to me. Therefore, it took several months for me to receive the data after it was requested.

## **Methodology**

### **Target Population and Size**

The target population for this study was detained juveniles within a rural West Texas juvenile detention facility, which serves a 300-mile radius. On average, the facility has a census of approximately 60-80 detained juveniles on a given day. The facility houses approximately 1,100 juveniles in a given calendar year. The facility has been in existence for approximately 15 years. The estimated population size for this study was 16,500.

### **Sample and Sampling Procedures**

I drew the sample from an existing set of archival data. The data collection facility gathered the archival data as part of the normal admission process. Juvenile offenders are either court ordered into long-term residential treatment at the identified data-collection facility or they are temporarily detained in the facility's short-term pre-adjudication detention unit. Upon their entry into the facility, juveniles complete the IRI (Davis, 1980). The jurisdictional courts, law enforcement, and/or the juveniles' probation officers provide other demographic information, such as the juveniles' race, ethnic identity, gender, and type of offense at the time of referral/admission to the facility. I used no personally identifiable information, such as the juveniles' names, addresses, or other uniquely identifiable variables, in this study. The data collection facility took steps to de-identify the data prior to releasing it to me.

Anonymity was crucial in this study due to the population of interest being detained juvenile offenders. Using a de-identified data set ensured complete anonymity

of the individuals whose data was included in this study. Anonymity also aids in dissemination of this study's findings, as there are no ethical barriers or concerns that could prevent me from openly sharing the information. As such, disseminating the results of the current study will help advance knowledge in the area of juvenile delinquency and empathy.

The ages of the juveniles within the data set ranged from 13 to 17 years. Only males were included in the archival data set. The data set included juveniles identified as Caucasian, Hispanic, Black/African American, and Asian. As part of the intake process of the facility, juveniles completed several written forms, including the IRI (Davis, 1980). The facility gathers this data at admission as part of their normal day-to-day intake process. The data collection facility provided me with a set of archival data only for male juveniles who were actually detained in the facility. Those who were referred, but not actually detained, were not included in the archival data set. This criterion was easily controlled for because only those juveniles who were actually legally detained in the facility completed the IRI (Davis, 1980).

**Effect size, alpha level, and power level.** I used the online computer program G\*Power 3.1.9.2 (Faul, Erdfelder, Lang, & Buchner, 2007) to determine the appropriate sample size for the chosen statistical analysis (two-way ANOVA), using a-priori alpha (.05), statistical power (.80), and anticipated effect size (.25) as inputs. Based on these data, the suggested sample size was calculated at  $n = 269$ . An alpha level of .05 and power of .80 are acceptable standards in social science research (Howell, 2013). I made the decision to set the anticipated effect size at .25 based upon my review of previous

research studies (Davis, 1980; De Corte et al., 2007; Hawk et al., 2013; Mestre et al., 2009). An effect size of .25 is considered small (Howell, 2013) and is recommended when the researcher (a) expects the IV to produce a small effect on the DV, or (b) when the researcher is conducting an exploratory study and is unsure of the expected effect size of the IV on the DV (Howell, 2013). A small effect size is more difficult to detect and, therefore, requires a larger sample size in order for the study to possess acceptable power (Howell, 2013).

### **Procedures for Data Collection and Analysis**

I gained approval from Walden's Institutional Review Board (IRB) prior to collecting data for this study. Also, an agreement to use de-identified archival data was made between me and the data collection site. A copy of the signed data-use agreement is included in Appendix A. The data collection site agreed to provide me with a set of de-identified archival data on previous and current residents. An employee of the data collection facility noted each respondent's race/ethnic identity, type of offense, and gender on his respective IRI (Davis, 1980) form. Finally, an employee of the data collection facility provided me with a sample of archival data. After I reviewed the data for errors and omissions, I entered them into a password-protected computer. Hard copies of the data were stored in a lock filing drawer within a locked office.

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

As stated in Chapter 1, I measured the construct of empathy with the Empathic Concern (EC) subscale of the Interpersonal Reactivity Index (Davis, 1980). The IRI (Davis, 1980) is a free public domain instrument and, therefore, does not require

permission from the author to use it in research. Previous research findings demonstrate that the IRI (Davis, 1980) is a psychometrically valid and reliable measure of empathy (Davis, 1980; 1983; Fernandez et al., 2011; Hawk et al., 2013; Varker & Devilly, 2007). Additionally, researchers have used the EC subscale of the IRI (Davis, 1980) in scholarly studies with adolescent populations (Hawk et al., 2014; Oberle et al., 2010; Verschuere et al., 2012).

The EC subscale of the IRI (Davis, 1980) is used to measure individuals' compassionate emotional responses to those in distress (Davis, 1980; Varker & Devilly, 2007). The EC subscale consists of seven separate questions. Respondents answer the questions in a Likert-scale format by circling one of five answer choices ranging from "A—Does not describe me well" to "E—Describes me very well." An example of the questions on the EC subscale is "I often have tender, concerned feelings for people less fortunate than me" (Davis, 1980). Each item was scored based on the following criteria: A = 0, B = 1, C = 2, D = 3, and E = 4 except for two of the EC items marked with a "(-)" indicating they are to be reverse scored (A = 4, B = 3, C = 2, D = 1, and E = 0).

Researchers reported a positive relationship between EC scores and prosocial behaviors (Fraser et al.; Hawk et al., 2013). Conversely, Verschuere et al. (2012) found that scores on the EC subscale of the IRI (Davis, 1980) were inversely related to antisocial behaviors and adolescent psychopathy. Oberle et al. (2010) found that higher scores on the EC subscale of the IRI (Davis, 1980) were positively correlated with increased peer acceptance and harmonious peer interactions in a sample of boys and girls

between the ages of 9 and 14 years. The relationship between EC subscale scores and adolescent behaviors provides support for using this single subscale in this study.

As stated in Chapter 1, the independent variables (IVs), minority status and committing offense, were dichotomized into the categories minority/nonminority and felony/nonfelony, respectively. Criteria set forth by the Centers for Disease Control and Prevention ([CDC], 2014) dictated which ethnicities were included within each category of the minority status IV, including information from preexisting placement records kept by the data collection facility from which data for this study were collected.

Additionally, juvenile court documents kept by the facility pre-determined the classification of felony or nonfelony offenses within the sample of data. All felony offenses were included in the felony category of the committing offense IV, while all other charges (e.g., misdemeanors, violations of court orders) were included in the nonfelony category of the committing offense IV.

### **Data Analysis**

I analyzed the data for the this study using the most recent version of the computer software package known as the Statistical Software Package for the Social Sciences (SPSS).

**Data cleaning.** I visually reviewed the data for omissions or incomplete forms. I excluded those items with missing data (e.g., gender unidentified and/or minority status not indicated) from the sample. Additionally, because the facility representative provided me with both the raw scores and scale scores for each respondent's IRI (Davis, 1980) forms, I recalculated the scale scores to ensure they were correct.



**Frequencies, means, and standard deviations.** I reported descriptive statistics of the sample, including the frequencies of each minority/nonminority category, frequencies of felony/nonfelony offenses, mean age, as well as means and standard deviations of IRI (Davis, 1980) scores for each IV category.

**Cronbach's alpha.** Previous researchers reported that the EC subscale of the IRI (Davis, 1980) has been shown to have a Cronbach's alpha reliability coefficient of .72 to .75 (Hojat, Mangione, Kane, & Gonnella, 2005; Hwang, Plante, & Lackey, 2008). Additionally, in the results section of this study, I reported the results of Cronbach's alpha analyses on the EC subscale scores for this specific data set to determine the internal consistency of the measure with my sample of data.

**Assumption testing.** Prior to conducting the two-way ANOVA, I examined necessary assumptions to ensure they were met. These assumptions included having no significant outliers in the data set, normality of each variable's distribution, and homogeneity of variance of each subset of the IV within the sample. The results of these assumptions tests are presented in Chapter 4.

**Outliers.** Once I had the data in my possession, I examined them for outliers utilizing the Split File and Explore procedures within SPSS to create boxplots, which allowed me to identify any outliers present. I only considered extreme outliers (i.e., those more than three box-lengths from the edge of their box) to be cause for concern (Howell, 2013; Lund Research Ltd, 2013). I have provided the results of this analysis in Chapter 4.

*Normality.* I tested normality utilizing the Shapiro-Wilk test of normality within SPSS. Additionally, I visually analyzed normality by creating Q-Q plots, skewness and kurtosis analyses, as well as histograms with the normal distribution superimposed over the graph for each of the groups within the two-way ANOVA procedure. I have provided the results of these analyses in Chapter 4.

*Homogeneity of variance.* Lastly, I utilized Levine's test of Equality of Variances within SPSS to test the homogeneity of variance within my data-set. I have provided the results of this test in Chapter 4.

### **Two-Way Analysis of Variance**

I tested the null hypotheses utilizing a two-way analysis of variance procedure. This statistical analysis is appropriate to measure the influence of two independent variables on one dependent variable (Howell, 2013). I compared de-identified archival scores from ethnic minority and non-minority male juveniles with felony and non-felony offenses in order to determine if statistically significant differences existed between their EC scale score on the IRI (Davis, 1980). I also completed analyses to examine the main effects and any combined interaction effects between the IVs and the DV. I have provided the results of these analyses in Chapter 4.

### **Research Question and Hypotheses**

RQ1: Is there a difference in empathy between minority and non-minority male juvenile detainees?

Null Hypothesis ( $H_{0_1}$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in minority versus non-minority male juvenile detainees.

Alternate Hypothesis ( $H_{1_1}$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in minority versus non-minority male juvenile detainees.

Analysis: I completed a two-way ANOVA examining the main effects of Minority Status on EC subscale scores.

RQ2: Is there a difference in empathy between felony offending and non-felony offending male juvenile detainees?

Null Hypothesis ( $H_{0_2}$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in felony offending versus non-felony offending male juvenile detainees.

Alternate Hypothesis ( $H_{1_2}$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in felony offending and non-felony offending male juvenile detainees.

Analysis: I completed a two-way ANOVA examining the main effects of committing offense on EC subscale scores.

RQ3: Is there an interaction between minority status and type of offense in male juvenile detainees?

Null Hypothesis ( $H_{0_3}$ ): There is no interaction between minority status and type of offense in male juvenile detainees.

Alternate Hypothesis (H<sub>13</sub>): There is an interaction between minority status and type of offense in male juvenile detainees.

Analysis: I completed a two-way ANOVA examining the interaction effects of minority status and type of offense on EC subscale scores.

### **Threats to Validity**

#### **Threats to Internal Validity**

The data may have been confounded, due to self-report biases. Research indicates that some forms of self-report biases occur when individuals respond to subjective self-report assessments. For example, individuals may tend to provide socially acceptable answers (Burriss & Mathes, 2011; Kuentzel, Henderson, & Melville, 2008). In addition, individuals may be more likely to provide answers on self-report measures that they believe are the desired or “correct” answers (Burriss & Mathes, 2011; Kuentzel, et al., 2008).

Additionally, the archival data used for this study may contain calculation and reporting errors that I could not control. Therefore, if the data provided to me contained errors, my results may be inaccurate and possibly skewed. I reviewed the data provided to me and checked it for any calculation errors. For example, I compared the raw scores to scale scores and corrected any errors I discovered. However, it was not possible for me to check if the data collection site’s personnel accurately reported demographic information, such as the respondents’ gender, age, type of offense, and ethnic minority status. Such errors would have resulted in a skewed data set. This issue has been discussed with personnel at the data collection site and they assured me the data was

checked for accuracy and was considered accurate and correct when gathered, collected, and stored.

### **Threats to External Validity**

As stated in Chapter 1, this study's target population limits the generalizability of results to the larger population of United States juvenile detainees. The generalizability of the results is limited to the population of detained juveniles within the facility accessed for this study. The results do not generalize to detained juveniles outside of the data-collection facility.

### **Ethical Procedures**

Permission was gained from the Walden University Institutional Review Board ([IRB] approval number 12-03-15-0242396) before any data collection procedures were initiated. A written data-use agreement was provided to the Walden IRB from the identified data-collection site. The Chairperson of the board representing the data-collection facility for this study designated an individual to sign a data-use agreement with the Walden IRB prior to data-collection. Once the agreement was in place, data-collection procedures began. An employee of the data-collection facility collected and de-identified all data provided to me for analysis. As a result, the data provided to me was completely anonymous. I had no way of identifying the individuals' included in the data set.

I kept all information provided to me in a locked drawer, within a locked office. Also, I entered all data into a password protected computer within a locked office. Therefore, I upheld the security and integrity of the data provided to me.

### **Summary**

Chapter 3 provided a detailed description and discussion of the rationale for this study's design and methodology. Furthermore, I described the sample, along with any foreseen threats to validity related to utilizing this type of sample. Finally, I discussed ethical procedures in regards to anonymity and privacy of participants' archival data. Chapter 4 provides a detailed discussion of the actual data-collection procedures and study results.

## Chapter 4: Results

The purpose of the study was to determine whether significant differences in empathy existed between minority and nonminority male juvenile detainees with felony and nonfelony offenses within a rural juvenile detention facility in Texas. I examined three research questions, with corresponding hypotheses, to fulfill the purpose of this study. I present the research questions along with their respective hypotheses below.

### **Research Questions and Hypotheses**

RQ1: Is there a difference in empathy between minority and non-minority male juvenile detainees?

Null Hypothesis ( $H_{01}$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in minority versus non-minority male juvenile detainees.

Alternate Hypothesis ( $H_{11}$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in minority versus non-minority male juvenile detainees.

RQ2: Is there a difference in empathy between felony offending and non-felony offending male juvenile detainees?

Null Hypothesis ( $H_{02}$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in felony offending versus non-felony offending male juvenile detainees.

Alternate Hypothesis (H<sub>12</sub>): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in felony offending and non-felony offending male juvenile detainees.

RQ3: Is there an interaction between minority status and type of offense in male juvenile detainees?

Null Hypothesis (H<sub>03</sub>): There is no interaction effect between minority status and type of offense in male juvenile detainees.

Alternate Hypothesis (H<sub>13</sub>): There is an interaction effect between minority status and type of offense in male juvenile detainees.

The remainder of this chapter provides a detailed description of the data collection process, demographic and descriptive statistics of the sample, results of the statistical analyses, and a brief summary and transition into Chapter 5.

### **Data Collection**

I drew the sample for this study from an existing set of archival data. The data collection facility gathered these data as part of the normal admission process for all juveniles entering the facility during 2014 and 2015. The data provided consisted of completed IRI (Davis, 1980) forms that also included the respondent's age, ethnicity, and highest offense at admission. There were no discrepancies in the actual collection of the data from the plan outlined for data collection in Chapter 3.

A representative from the data collection agency provided me with 410 de-identified forms. Once I reviewed the forms for completeness and errors, 53 forms were discarded due to missing or incomplete data (i.e., no ethnicity was indicated, the gender



was identified, the offense was not listed, or the questionnaire was incomplete). The age range within the data set was 10-17 years. Black/African American, White, Hispanic, Asian American, and American Indian ethnicities were included in the data set. Felony and non-felony (i.e., misdemeanors and/or violations of probation) were represented in the data set. Only males were included in the data set, which is consistent with this study's design and purpose. The data set characteristics are representative of the population of male juvenile detainees within the facility from which these data were obtained. The percentages of ethnicities, ages, and type of offenses are representative of the larger population of male detainees within the facility. Based on recent population estimates provided to me by a representative of the data collection facility, the total ethnic population percentages were Hispanic 47%, White/Caucasian 40%, Black/African American 12%, American Indian or Alaskan Native 0.7%, and Asian or Pacific Islander 0.5% (J. L. Beukelman, personal communication, April 11, 2016). Additionally, felony offenses made up 27% of detainable offenses based on information provided to me by the data collection site (J. L. Beukelman, personal communication, April 13, 2016). The characteristics of this study's data set are provided in Table 1.

Table 1

*Demographic Frequencies and Percentages of Male Juvenile Detainees in Data-Set (N=357)*

Characteristic	Frequency	Percentage
<b>Ethnicity</b>		
White/Caucasian	146	40.9
Black/African American	49	13.7
Hispanic	154	43.1
Asian American	1	.3
American Indian	3	.8
Other	4	1.1
<b>Age</b>		
10 yrs.	1	0.3
11 yrs.	11	3.1
12 yrs.	22	6.2
13 yrs.	40	11.2
14 yrs.	66	18.5
15 yrs.	87	24.4
16 yrs.	112	31.4
17 yrs.	18	5.0
<b>Offense</b>		
Felony	108	30.3
Nonfelony	249	69.7

It is important to note that after I analyzed the reliability of the EC subscale of the IRI (Davis, 1980) for my specific data set, I discovered I had poor reliability when all seven original items of the subscale were included in the calculation (Cronbach's  $\alpha = .46$ ). Generally, a reliability of .70 or higher is recommended for measurements used in research studies (DeVellis, 2012; Howell, 2013). This is because lower reliability

coefficients indicate the variance found within a specific sample is due to unknown error rather than measured fluctuations in the variable being measured by the given instrument, which is also related to validity (DeVellis, 2012; Howell, 2013).

Theoretically, Cronbach's (1951) alpha is a measurement of internal consistency. Cronbach's (1951) alpha is used to measure how well a set of questions (i.e., a scale) measures a single underlying construct. For this study, the EC subscale of the IRI (Davis, 1980) was intended to measure the construct empathic concern, which Davis (1980) described as the subjective concern an individual experiences when observing another in distress. When a Cronbach's alpha analysis indicates low internal consistency (e.g.,  $\alpha < .60$ ), the items making up the scale being analyzed theoretically may not be measuring the same underlying construct (Cronbach, 1951). However, poor internal consistency in a given scale may also be due to other confounding factors, such as response bias (Creswell, 2009).

Response bias occurs when individuals answer questions in a specific, inaccurate manner due to several confounding influences (Creswell, 2009; Cronbach, 1941, 1942, 1950). Some common reasons for response bias include vagueness (Cronbach, 1946, 1950), lack of knowledge (Cronbach 1941, 1942), and social pressures (Burriss & Mathes, 2011). Response bias due to vagueness occurs when questions are not specific enough to reliably measure the specific construct they are intended to measure (Cronbach, 1946, 1950). Vague questions result in higher variance in responses, which results in lower internal consistency (Cronbach, 1946, 1950). Next, when respondents have a lack of knowledge about the construct measured by a set of questions, they are more likely to

respond randomly, or by guessing, which results in poor internal consistency (Cronbach, 1941, 1942). Lastly, social expectations influence how respondents answer questions on surveys and scales (Burriss & Mathes, 2011). For example, when respondents are not anonymous, they are more likely to provide socially acceptable or “correct” answers to questions, while, conversely, anonymous respondents are more likely to provide socially risqué answers on questionnaires (Burriss & Mathes, 2011).

I do not know what the specific explanation is for the low internal consistency in my data set. It is theoretically possible that the low alpha in my data set was due to the confounding influences of response bias, or that the questions making up the scale did not adequately measure the same underlying construct. However, previous research studies contain results indicating the EC subscale demonstrated acceptable reliability (Davis, 1980, 1983; Fernandez et al., 2011; Hawk et al., 2013; Konrath et al., 2011; Varker & Devilly, 2007). The measured reliability I found in my data set, when including all seven questions of the original EC subscale ( $\alpha = .46$ ), indicates that over 50% of the measured variance in my data was due to unknown error, and any results gleaned would be considered questionable for drawing scientific conclusions (DeVellis, 2012; Howell, 2013).

Using the SPSS output tables of the Cronbach’s alpha procedure for my specific data set, I was able to determine which questions of the IRI (Davis, 1980) were contributing least to the internal consistency of the EC subscale for my particular data. I examined the *r*-scores within the SPSS output labeled “Cronbach’s alpha if Item Deleted” to determine which items within the EC subscale of the IRI (Davis 1980) demonstrated

the least internal consistency (i.e., resulted in the highest  $\alpha$ -coefficient when deleted). As a result of this analysis, I removed three items (questions 4, 14, and 18 of the IRI) from the EC subscale to eliminate as much error as possible and thereby maximize the internal consistency of the EC subscale with my particular data set, resulting in a Cronbach's alpha of  $\alpha = .61$ . Question 4 stated, "Sometimes I don't feel very sorry for other people when they are having problems." This question had an overall inter-item correlation of .087 within the EC subscale. Question 14 stated, "Other people's misfortunes do not usually disturb me a great deal." This question had an overall inter-item correlation of .111 within the EC subscale. Question 18 stated, "When I see someone being treated unfairly, I sometimes don't feel very much pity for them." This question had an overall inter-item correlation of .189 within the EC subscale. Table 2 summarizes the items deleted and the resulting Cronbach's alpha coefficients.

I calculated all statistical analyses for this study using this altered, and more reliable, version of the EC subscale of the IRI (Davis, 1980). The decision to remove these items was consistent with the underlying theory of internal consistency, which Cronbach's alpha is based upon, as well as response bias theory I described previously in this section (Creswell, 2009; Cronbach, 1950). By removing those items that demonstrated the lowest internal consistency, I was removing unknown error and thereby increasing the reliability of the measure used in this study to answer my research questions (Creswell, 2009; Cronbach, 1951).

## Results

The mean age of the sample was 14.68 ( $SD = 1.47$ ). Additionally, the mean EC subscale score of the IRI for the total data set was 15.06 ( $SD = 4.93$ ; range: 0-28). The mean EC score represents the average level of empathic concern individuals within the data set reported on the IRI (Davis, 1980). Empathic concern is defined as the compassionate emotional response individuals experience when witnessing others in distress (Davis, 1980; Varker & Devilly, 2007). Theoretically, higher scores on this subscale indicate higher levels of self-reported empathic concern, while lower scores represent lower levels of self-reported empathy (Davis, 1980). It is important to note that the IRI (Davis, 1980) is not intended to be a normative measure of empathy. Therefore, there is no specific normal level of empathy on the IRI (Davis, 1980) to which to compare scores. Instead, the IRI (Davis, 1980) provides a subjective measure of empathy for a given individual based upon his or her current responses. There are no normative sample data to which to compare scores to determine whether a given individual's scores are within or outside normal limits (e.g., above or below average). Table 2 provides descriptive statistics for the continuous variables in the data set.

## Assumptions Testing

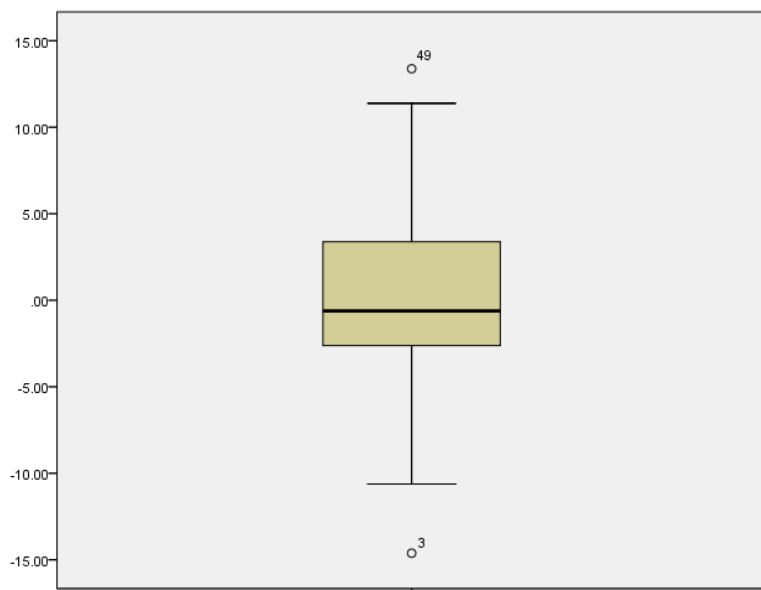
**Outliers.** I utilized boxplots to determine whether any cells of the current design contained extreme (i.e., 3 or more box-lengths from the edge of the box) outliers (Howell, 2013; Lund Research Ltd, 2013). I computed this analysis using the Split-File and Explore functions of SPSS. Results of this analysis revealed that there were no extreme

outliers in the data set. Figures 1 through 4 illustrate the boxplots that resulted from this analysis.

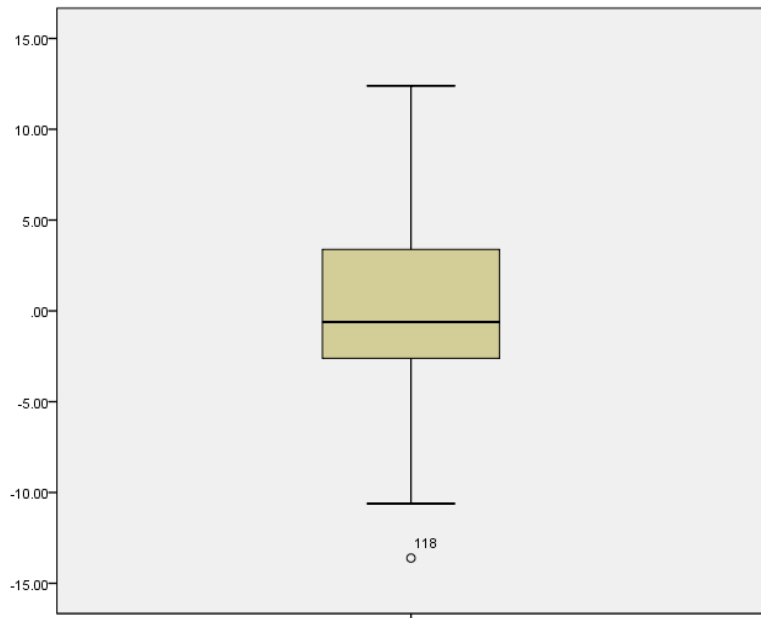
Table 2

*Descriptive Statistics for Continuous Variables within the Data Set*

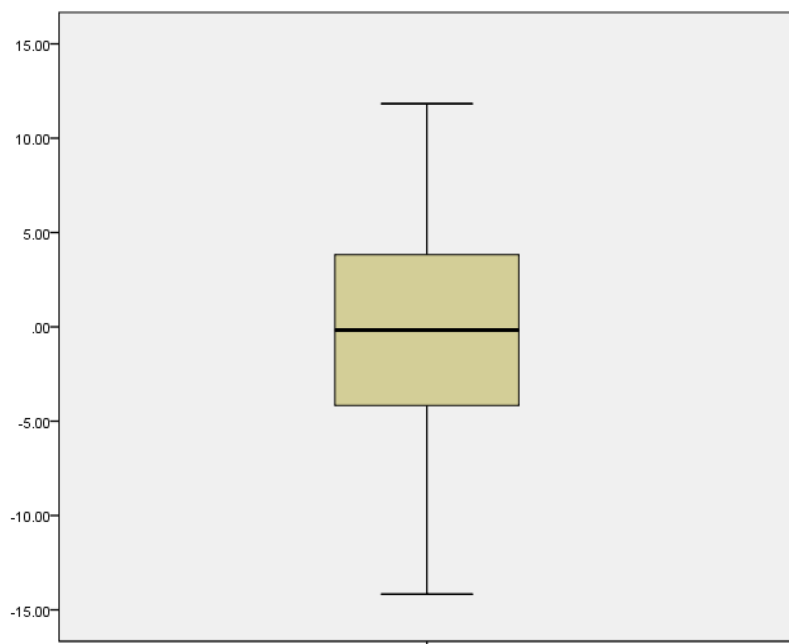
Variable	Range	<i>N</i>	<i>M</i>	<i>SD</i>
Age	10-17	357	14.68	1.47
IRI EC Scores	0-28	357	15.06	4.93



*Figure 1.* Boxplot of EC subscale mean scores for minority male juvenile detainees with felony offenses.

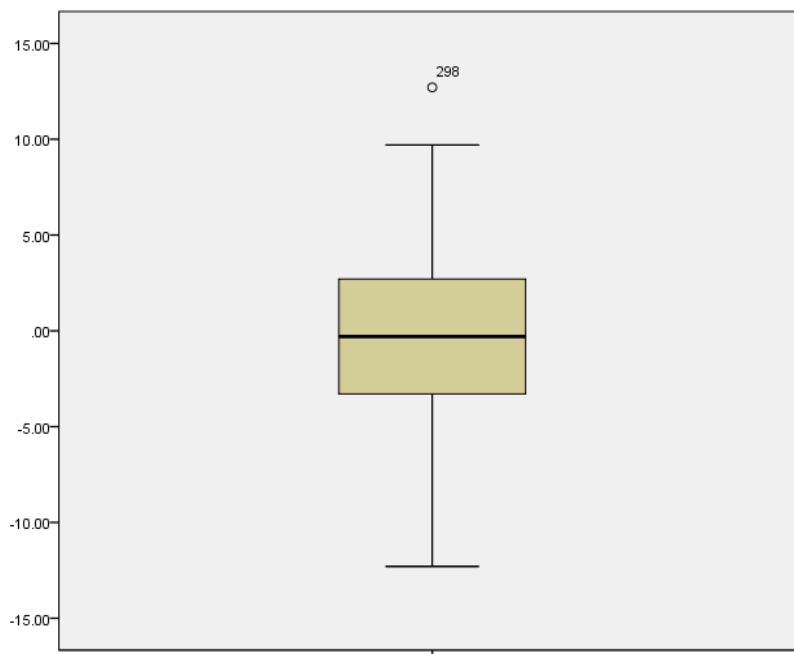


*Figure 2.* Boxplot of EC subscale mean scores for minority male juvenile detainees with non-felony offenses.



*Figure 3.* Boxplot of EC subscale mean scores for non-minority male juvenile detainees with felony offenses.



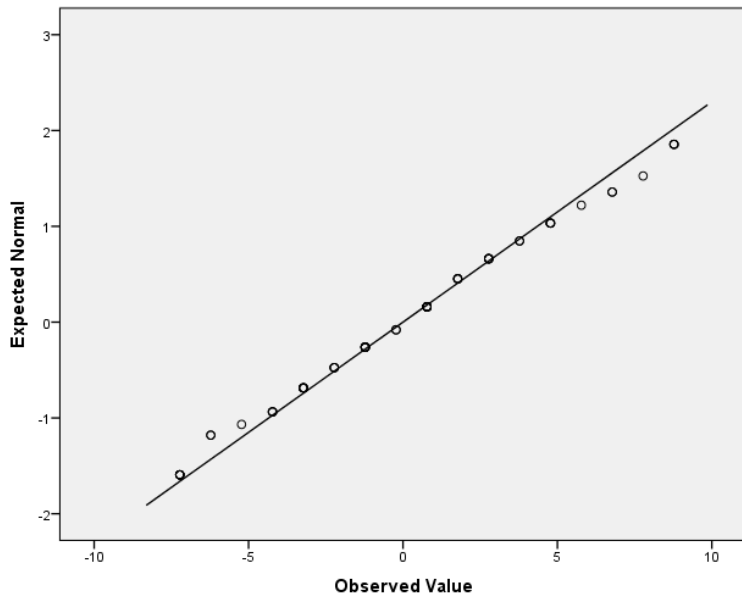


*Figure 4.* Boxplot of EC subscale mean scores for non-minority male juvenile detainees with non-felony offenses.

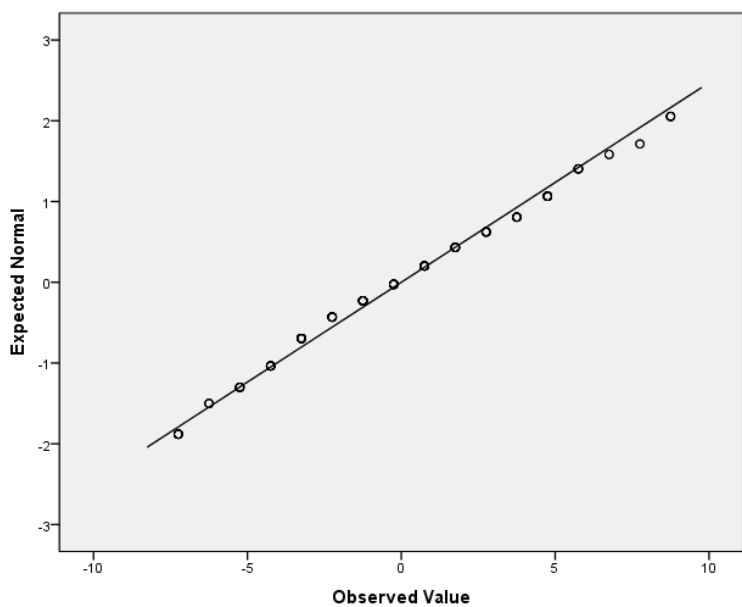
**Normality.** I analyzed each of the cells of the study design to determine if they were each normally distributed. The results of Shapiro-Wilk test of normality indicated that two of the cells (i.e., “Minority X Non-Felony”; and “Non-Minority X Non-Felony”) violated the assumption of normal distribution ( $p = .004$ ; and  $p < .001$ , respectively). However, it is important to note the Shapiro-Wilk test of normality becomes more sensitive to any deviations from normality as sample sizes increase (Osborne, 2008). Additionally, Osborne (2008) asserts the Shapiro-Wilk test is often too sensitive in regards to minor deviations from normality to be useful. Osborne (2008) argues that the Shapiro-Wilk test is not an appropriate substitute for visual inspection of the data. With Osborne’s (2008) assertions in mind, it is informative to understand the two cells in my

data-set identified as being non-normally distributed by the Shapiro-Wilk test are the two largest cells in my study design ( $n = 149$ ; and  $100$ , respectively). Therefore, it is possible that the reported violations are more a statistical artifact than meaningful deviations from normality.

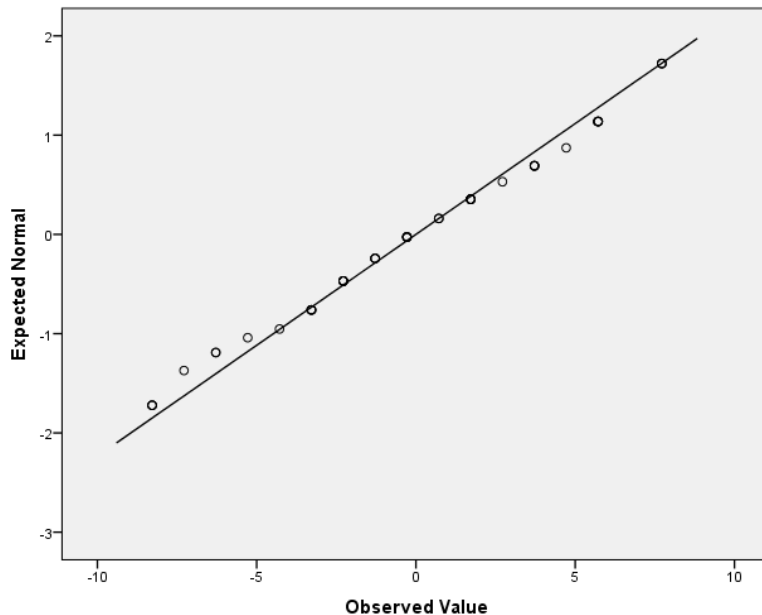
Thus, in an attempt to further determine the normality of distributions of the cells within my study design, I also analyzed skewness and kurtosis values ( $p = .01$ ), which indicated all cells were normally distributed. Additionally, visual inspections of Q-Q plots (see Figures 5 through 8), as well as histograms (see Figures 9 through 12), indicated all cells were approximately normally distributed, with no obvious violations observed. Based on all of these analyses, I decided to compute the two-way ANOVA, due to, (a) with the exception of the Shapiro-Wilk test, all other measures of normality indicated the cells within the design were normally distributed; (b) it is possible the significant findings in the Shapiro-Wilk test are due to statistical artifact, rather than meaningful violations of normality (Osborne, 2008); and (c) the ANOVA procedure has been reported by previous researchers to be a robust analysis that generally compensates for such violations (Howell, 2013; Maxwell & Delaney, 2004; Wilcox, 2012).



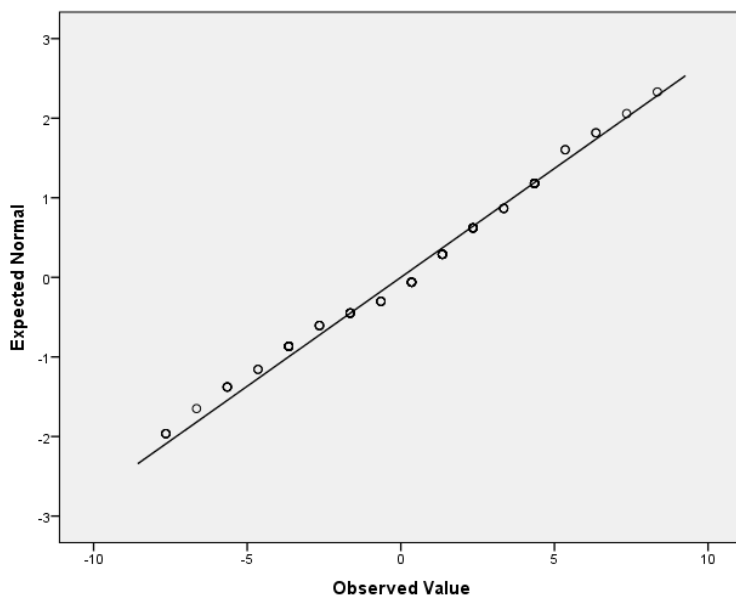
*Figure 5.* Normal Q-Q plot of EC subscale mean scores for minority male juvenile detainees with felony offenses.



*Figure 6.* Normal Q-Q plot of EC subscale mean scores for minority male juvenile detainees with non-felony offenses.



*Figure 7.* Normal Q-Q plot of EC subscale mean scores for non-minority male juvenile detainees with felony offenses.



*Figure 8.* Normal Q-Q plot of EC subscale mean scores for non-minority male juvenile detainees with non-felony offenses.

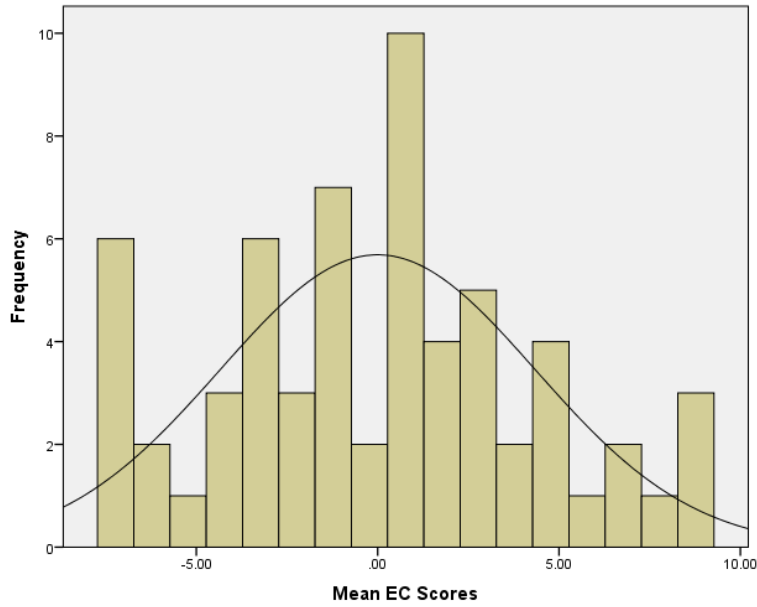


Figure 9. Distribution of EC subscale mean scores for minority male juvenile detainees with felony offenses.

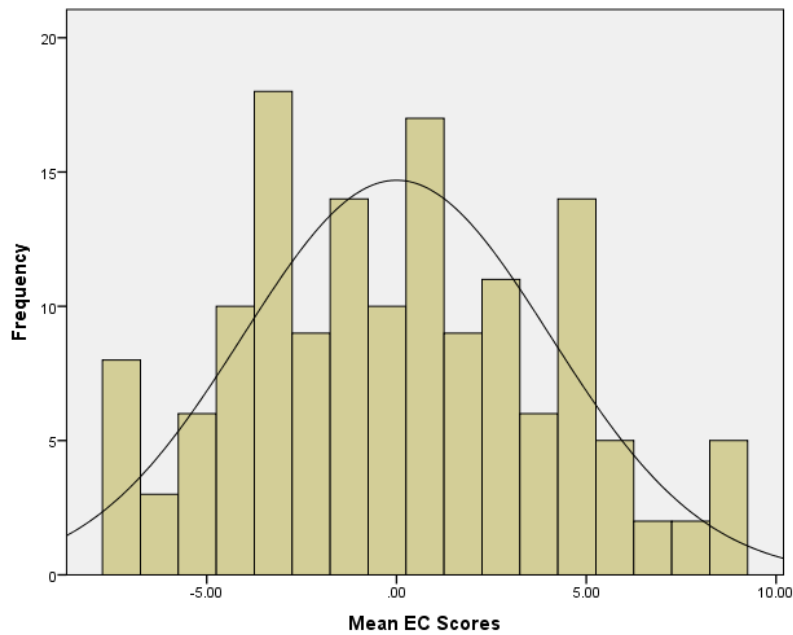
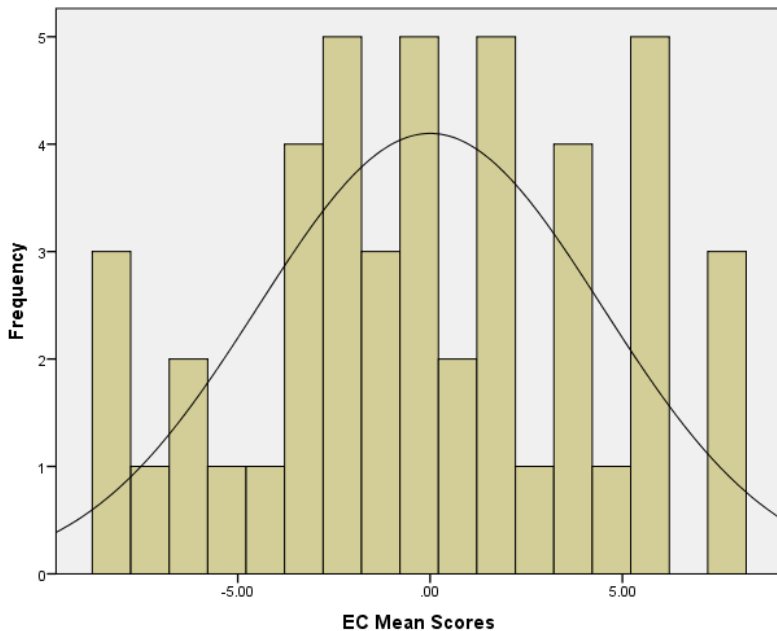
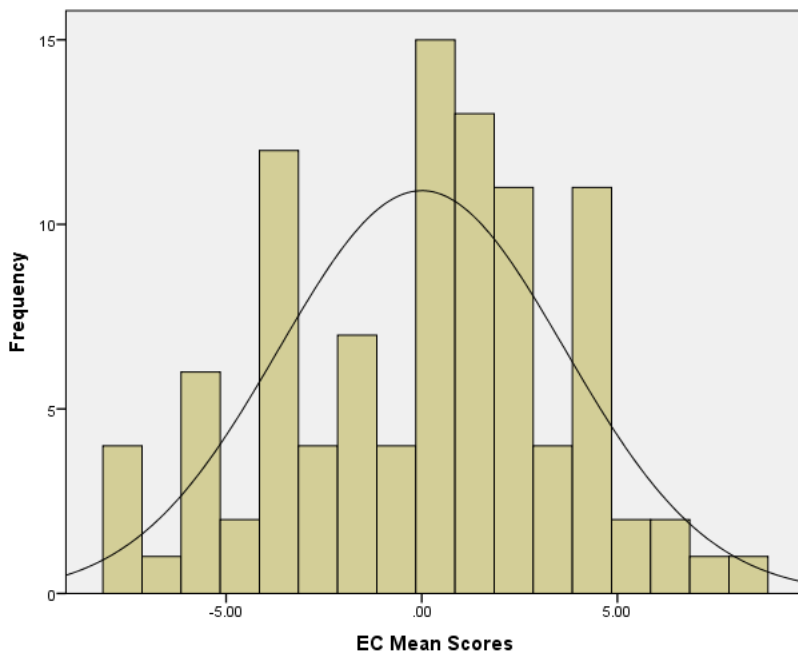


Figure 10. Distribution of EC subscale mean scores for minority male juvenile detainees with non-felony offenses.



*Figure 11.* Distribution of EC subscale mean scores for non-minority male juvenile detainees with felony offenses.



*Figure 12.* Distribution of EC subscale mean scores for non-minority male juvenile detainees with non-felony offenses.

**Equality of variances.** Equality (i.e., homogeneity) of variances for each of the cells of this design was analyzed using Levene's test for equality variances. According to the results of Levene's test, there was equality of variances ( $p = .309$ ).

### **Statistical Analyses Findings**

I conducted a two-way ANOVA procedure to examine if scores on the IRI EC subscale (Davis, 1980) were statistically different for minority and non-minority detained male juveniles with felony and non-felony offenses. I tested each of the study's hypotheses and provided the results of the statistical analyses.

#### **Analysis for Research Question 1**

Quantitative: Is there a difference in empathy between minority and non-minority male juvenile detainees?

Null Hypothesis ( $H_{01}$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in minority versus non-minority male juvenile detainees.

Alternate Hypothesis ( $H_{11}$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in minority versus non-minority male juvenile detainees.

**Results.** An analysis of the main effect for minority status was performed, which indicated that the main effect was not statistically significant,  $F(1, 353) = 2.373$ ,  $p = .124$ , partial  $\eta^2 = .007$ . All pairwise comparisons are reported with 95% confidence intervals and  $p$ -values that are Bonferroni-adjusted. Unweighted marginal means were utilized in

the analysis, due to the cells within the ANOVA design being unequal in size (Howell, 2013).

The unweighted marginal means of “Empathy” scores for minority and non-minority male detainees are 7.237 ( $\pm .602$ ) and 7.966 ( $\pm .710$ ), respectively. Minority male juvenile detainees did not have significantly different empathy scores than non-minority male juvenile detainees, (mean difference =  $.729 \pm .931$ ,  $p = .124$ ). Based on the results of this study, I did not reject the null hypothesis that no statistically significant mean differences in empathy exist between minority and non-minority male juvenile detainees within my sample.

### **Analysis for Research Question 2**

Quantitative: Is there a difference in empathy between felony offending and non-felony offending male juvenile detainees?

Null Hypothesis ( $H_0$ ): There is no statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in felony offending versus non-felony offending male juvenile detainees.

Alternate Hypothesis ( $H_1$ ): There is a statistically significant difference in mean empathy scores, as measured by the EC subscale of the IRI (Davis, 1980), in felony offending and non-felony offending male juvenile detainees.

**Results.** An analysis of the main effect for offense level was performed, which indicated that the main effect was not statistically significant,  $F(1, 353) = .415$ ,  $p = .520$ , partial  $\eta^2 = .001$ . The unweighted marginal means of empathy scores for male juvenile detainees with felony and non-felony offenses are 7.754 ( $\pm .776$ ) and 7.449 ( $\pm .515$ ),



respectively. Male juvenile detainees with felony offenses did not have significantly different empathy scores than male juvenile detainees with non-felony offenses, (mean difference =  $.305 \pm .931$ ,  $p = .520$ ). Based on the results of this study, I did not reject the null hypothesis that no statistically significant mean differences in empathy exist between male juvenile detainees with felony versus non-felony offenses within my sample.

### **Analysis for Research Question 3**

Quantitative: Is there an interaction between minority status and type of offense in male juvenile detainees?

Null Hypothesis ( $H_0$ ): There is no interaction between minority status and type of offense in male juvenile detainees.

Alternate Hypothesis ( $H_1$ ): There is an interaction between minority status and type of offense in male juvenile detainees.

**Results.** There was no statistically significant interaction between minority status and level of offense for empathy score,  $F(1, 353) = .479$ ,  $p = .489$ , partial  $\eta^2 = .001$ . Based on the results of this study, I did not reject the null hypothesis that no statistically significant interaction exists between minority status and type of offense in male juvenile detainees within my sample.

Tables 3 and 4 provide detailed summaries of the statistical analyses completed for this study.

Table 3

*Two-Way ANOVA Results and Descriptive Statistics for IRI EC Subscale Scores by Minority-Status and Offense Level*

Variable	Mean	SD	n
Minority			
Felony	7.23	4.35	62
Non-Felony	7.25	4.05	149
Non-Minority			
Felony	8.28	4.48	46
Non-Felony	7.65	3.66	100

Source	SS	df	MS	F	p
Minority-Status	38.97	1	38.97	2.37	0.12
Offense Level	6.82	1	6.82	0.42	0.52
Minority by Offense	7.86	1	7.86	0.48	0.49
Error	5798.73	353	16.43		
Total	25872.000	357			

*Note.* SS = Type-III sum of squares. MS = Mean square.

Table 4

*Summary of Main Effects for Minority-Status and Offense Severity*

Variable	MM (95% CI)	p <sup>a</sup>
<b>Minority Status</b>		
Minority	7.234 ( $\pm$ .602)	
Non-Minority	7.966 ( $\pm$ .710)	
Difference (95% CI)	.729 ( $\pm$ .931)	.124
<b>Offense Severity</b>		
Felony	7.754 ( $\pm$ .776)	
Non-Felony	7.449 ( $\pm$ .515)	
Difference (95% CI)	.305 ( $\pm$ .931)	.520

*Note.* MM = Marginal Means (Unweighted marginal means utilized, due to cells sizes being unequal (Howell, 2013). CI = Confidence Interval.

<sup>a</sup>Bonferroni-corrected.

### Summary

The purpose of this study was to determine if mean differences in empathy existed in a sample of minority and non-minority male juvenile detainees, with felony and non-felony offenses, in a rural Texas juvenile detention facility. Prior research has indicated that empathy and antisocial beliefs and behaviors are inversely correlated (Barriga et al., 2009; Bush et al., 2000). Additionally, research findings suggest that oppressed and marginalized groups may tend to possess less prosocial attitudes and be

more emotionally and psychologically maladjusted (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011).

The current research results do not support previous research findings. The results of this study found no statistically significant mean differences in empathy between minority and non-minority male juvenile detainees, or between those with felony and non-felony offenses. Also, the results of this study did not find a statistically significant interaction effect of minority status and level of offense on empathy levels. However, it is important to note that I removed three questions from the subscale utilized to measure the construct of empathy in this study in order to increase reliability within my specific data-set (Cronbach's  $\alpha = .61$ ). Additionally, the results of this study should be considered with caution due to evidence the assumption of normality may have been violated in two of the cells of the ANOVA design.

Chapter 5 provides a detailed discussion and interpretation of the current findings. Additionally, the limitations of this study are discussed in detail, along with recommendations for future research. Chapter 5 concludes with a discussion of the implications of this study for positive social change.

## Chapter 5: Summary, Conclusions, and Recommendations

In Texas and across the United States, there is a need to reduce recidivism rates in the juvenile population (OJJDP, 2011; TJJD, 2013a). Statistics indicate that juvenile detention facilities are overwhelmingly populated by male ethnic minorities and that this demographic of detainees commits the majority of felony offenses (TJJD, 2013a). Research findings consistently indicate a relationship between empathy, prosocial behaviors, and delinquency in juveniles (Calley & Gerber, 2008; TJJD, 2012). Furthermore, researchers have suggested that experiences of marginalization and discrimination can lead to more emotional and psychological maladjustment, which are also linked to antisocial beliefs and behaviors (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). Previous researchers suggested that individuals with low empathy levels are most likely to possess antisocial beliefs and attitudes, which makes them most likely to commit felony offenses (Brendtro & Mitchell, 2011; Caldwell, 2011; Calley & Gerber, 2008; Cheng et al., 2012; Frias-Armenta & Corral-Verdugo, 2013; Shaw et al., 2012; TJJD, 2012).

The purpose of this study was to determine whether significant differences in empathy existed between minority and nonminority male juvenile offenders with felony and nonfelony offenses within a rural Texas juvenile detention facility. I conducted a two-way ANOVA to examine the interaction between minority status and offense level on empathy, as well as the main effects of minority status and offense level on empathy. The results revealed no statistically significant findings in relation to the interaction effect or either of the main effects on empathy.

In this chapter, I provide a detailed discussion of the findings. The chapter includes the limitations of the study along with recommendations for further research. This chapter concludes with a discussion of the implications for positive social change and an overall conclusion based on the outcomes and characteristics of this study.

### **Interpretation of Findings**

#### **Minority Status and Empathy**

Based upon the results of prior research, I hypothesized that there would be a statistically significant mean difference in empathy between minority and nonminority male juvenile offenders. The results of prior research suggest that individuals who experience discrimination and marginalization are more likely to possess lower levels of empathy compared to their nondiscriminated or nonmarginalized counterparts (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). However, the results of my study did not indicate a statistically significant mean difference in empathy between minority and nonminority male juvenile offenders.

My findings may indicate that the population from which the sample of data was drawn does not possess the same differences in empathy between minority and nonminority juvenile offenders, as suggested by previous research. Furthermore, my findings suggest there may be no implicit meaningful difference in empathy between minority male juvenile offenders and nonminority juvenile offenders detained within the juvenile detention facility from which this sample of data was drawn. The results of this study led me to not reject the null hypothesis that no statistically significant differences in empathy exist between minority and nonminority male juvenile detainees within my

sample. These findings are inconsistent with prior research findings, which suggest that minority juvenile offenders tend to possess less empathy than their nonminority counterparts (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011).

### **Offense Level and Empathy**

I hypothesized that there would be a statistically significant mean difference between male juvenile offenders with felony and nonfelony offenses. Demographic statistics show that minorities account for the majority of felony juvenile offense (TJJD, 2013a), which research findings suggest may be indicative of low empathy levels (Calley & Gerber, 2008; TJJD, 2012). The results of my study did not indicate a statistically significant mean difference in empathy between male juvenile detainees with felony versus nonfelony offenses.

This finding may indicate that the population from which the sample of data was drawn does not possess the same differences in empathy between felony and nonfelony juvenile offenders, as suggested by previous research. This finding suggests there is no implicit meaningful difference in empathy between felony offending male juvenile offenders and nonfelony offending juvenile offenders detained within the juvenile detention facility from which this sample of data was drawn. The results of this study led me to not reject the null hypothesis that no statistically significant differences in empathy exist between male juvenile detainees with felony versus nonfelony offenses within my sample. These findings are inconsistent with prior research and data, which suggest that juvenile offenders with more serious (i.e., felony) offenses tend to possess less empathy

than juveniles with less severe (i.e., nonfelony) offenses (Calley & Gerber, 2008; TJJD, 2012; TJJD, 2013a).

### **Interaction Effect and Empathy**

Finally, I hypothesized that there would be a statistically significant interaction effect between minority status and level of offense on empathy levels. I considered the research regarding the relationship between empathy levels and delinquency (Calley & Gerber, 2008), as well as the research suggesting that experiences of discrimination and marginalization are associated with poorer psycho-emotional outcomes, especially in minorities (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). I concluded that these relationships may help explain why minority males are overrepresented in juvenile detention facilities and why they make up the majority of juveniles with felony offenses. This conclusion led me to hypothesize that a statistically significant interaction effect would exist between the two independent variables (minority status and offense level) on levels of empathy. The results of this study did not indicate a statistically significant interaction effect between minority status and offense level on empathy.

This finding suggests that there is not a significant difference in empathy based upon the combined effects of minority status or offense level in the sample of data used for this study. Therefore, I failed to reject the null hypothesis that there is no significant interaction between minority status and offense level on levels of empathy for my sample of data.



## **Social Cognitive Theory and Social Empathy**

Examining the lack of significant findings in this study within the context of Bandura's (1977, 1986) social cognitive theory and Segal's (2011) description of social empathy offers some possible explanations. For instance, Bandura's (1977, 1986) theory suggests that only those ethnic minorities who had learned from their social environment to be antisocial would demonstrate antisocial beliefs or behaviors. Segal (2011) supported this assertion by arguing that individuals who have had negative societal experiences are most likely to possess less empathy and be less interested in engaging in prosocial behaviors. Additionally, other researchers suggested that individuals who experience negative psychosocial experiences, such as discrimination and marginalization, tend to become more socially maladjusted, especially as their age increases (Barriga et al., 2009; Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011; TJJD, 2013a).

Therefore, it is possible that the individual data within my data set was made up of minority and nonminority individuals who did not subjectively experience significantly different discriminatory or marginalizing social interactions. As a result, there were no significant differences in empathy when categorized by minority status or offense level for the sample of data used for this study.

### **Limitations of the Study**

#### **Low Reliability with Specific Sample of Data**

The data set for this study was a convenience sample of archival data. I had no control over the demographics or size of the data set. Once I had my total set of data, I

calculated Cronbach's alpha to determine the reliability of the EC subscale of the IRI (Davis, 1986), resulting in a low reliability coefficient ( $\alpha = .46$ ). After examining the scores that made up the EC subscale, I discarded three items to increase the reliability of the measure with my specific data set ( $\alpha = .61$ ). I removed these items because they did not demonstrate adequate internal consistency and, therefore, did not meaningfully differentiate between the IV categories within my particular set of data. Although still not considered a good reliability coefficient, this was the maximum reliability I could achieve with my data set, as removing additional items decreased Cronbach's alpha. As a result, I used an altered version of the EC subscale of the IRI (Davis, 1986), with a total of four items. This altered version of the scale increased the internal consistency (i.e., reliability) of the measure for my specific data set, yet also resulted in the scale being meaningfully altered from its original version, which calls into question how valid the scale was for my particular population. Other researchers used the IRI (Davis, 1980) with adolescent populations (Fernandez et al., 2011; Hawk et al., 2013). However, I could find no other studies in which researchers altered the measure as I did in this study. Therefore, readers cannot technically compare the results of my study to other studies in which researchers used an unaltered version of the scale. Furthermore, even by altering the scale, I was still left with what is considered a low reliability score by conventional research standards.

The low reliability score with my data set indicates 40% of the variability observed within my sample is due to unknown error. Such variability may indicate that the measure possessed poor validity in regards to measuring the construct of empathy in

the sample of individuals within my data set. The EC subscale of the IRI (Davis, 1986) has been used in similar research studies. However, it has not been validated specifically with male juvenile offenders in rural Texas. Therefore, it is possible that this was not a valid measure with this specific population. Because of this possibility, the results of this study should be considered with caution.

### **Dichotomous Independent Variable Categories**

It is possible that the manner in which I chose to dichotomize the independent variable minority status may have failed to reveal significant differences. For example, because this was an exploratory dissertation study, I chose to create the discreet dichotomous categories of minority and nonminority, which was supported by prior research. It is possible these broad dichotomies did not capture significant differences among the subcategories of ethnic minorities (i.e., Black/African American, Hispanic, Asian American, American Indian, and Other) that may exist within my data set.

I also dichotomized the independent variable offense level into the categories felony and nonfelony. I made this decision because this dissertation study was an exploratory study to determine whether differences in empathy existed between these broad categories of offenses, for which prior research findings provided evidence. However, my analysis did not indicate any possible significant differences among the subcategories. For example, the category felony includes several types of offenses. Person versus nonperson offenses are those that involve direct victimization (i.e., violence, sexual), and indirect victimization (i.e., theft), respectively. Prior researchers

suggested that a relationship may exist between empathy and violent offenses, which I did not examine within the scope of this study (Barriga et al., 2009; Bush et al., 2000).

The results of this study did not indicate a statistically significant interaction effect between minority status and offense level on empathy. This lack of a significant finding may be due to the manner in which I defined the levels of my dichotomous independent variables, which I described previously. Because the manner in which the independent variables were categorized may have resulted in nonsignificant findings, the combined effects between these two independent variables may have resulted in a nonsignificant interaction effect.

### **Recommendations for Future Research**

Because this study contained certain limitations, it is important to offer some suggestions regarding how future researchers may replicate this study, correcting for its limitations, to determine whether different meaningful results may be achieved. I discuss recommendations focused on this study's two main limitations: (a) sample characteristics and (b) independent variable operationalization.

#### **Sample Characteristics**

**Sufficient reliability using complete subscale.** Future researchers could replicate this study to determine whether the same low reliability results are obtained with the EC subscale of the IRI (Davis, 1986). If this occurs, it will lend support to the hypothesis that this measure is not valid with this specific population and further supports the need to use caution when considering the results of this study. If the same low reliability results are not obtained, it provides some support for the conclusion that my

specific sample of data was anomalous and that the EC subscale of the IRI (Davis, 1986) is a valid measure of empathy in rural Texas male juvenile detainees.

**Normal distributions.** Replicating this study with a new sample of data may also result in nonsignificant Shapiro-Wilk test  $p$  values for all cells of the design. Although the significant findings in this study may have been due to statistical artifact rather than meaningful violations of the assumption of normal distribution of cell means, obtaining nonsignificant Shapiro-Wilk results would help decrease concerns about the accuracy of the outcomes obtained.

The low reliability observed with my sample of data, along with the indication that the assumption of normality was violated in two of the cell means, causes the results of the current study to lack credibility. Those reading these results are left to wonder if the results truly indicate there were no meaningful differences in empathy between my independent variables, or if there were differences but the study failed to identify them. By replicating this study with a new set of data, researchers could answer these questions.

### **Increased Specificity of Independent Variable Categories**

The method in which I categorized each of my independent variables into broad dichotomies may have reduced the specificity of this study. As a result, there may have been significant differences between specific ethnic minorities, as well as between specific types of felony and non-felony offenses, which the current study design did not explore nor analyze. Future research could redefine the categories of the independent variables and explore whether or not significant differences in empathy exist between non-person and pPerson felony offenses, for example, or between specific ethnic

minorities (e.g., Black / African American and Hispanics). Prior researchers have suggested that Black / African American youth, who experience subjective social discrimination and marginalization, are particularly vulnerable to later psychoemotional maladjustment (Brody et al., 2006; Greene et al., 2006; Seaton, 2009). Therefore, it may be meaningful in future research studies to parse out this particular racial/ethnic subgroup to determine if they possess significantly different empathy levels than other minority groups.

### **Implications for Positive Social Change**

While the current results are somewhat called into question, they do highlight an important implication for positive social change. The current study reminds individuals that presumptions—even educated presumptions—may not be as clearly defined as they seem. After all, this study produced results that suggest there are no significant differences in empathy across minority-statuses or severity of offenses in male juvenile offenders. Therefore, this study serves as a reminder to be cautious when making broad generalities about juvenile offenders. For example, I could utilize the results of this study to help educate juvenile justice professionals that they should not jump to conclusions about felony offenders or minority offenders being more antisocial and less empathic than those with less significant offenses, or non-minorities. Therefore, the current results suggest that the facility utilized for this study should focus its financial and time resources on empathy building interventions across its broad population of juvenile detainees. Considering that prior researchers have reported correlations between juvenile delinquency and empathy, it is important to utilize empathy-building interventions in

order to promote positive social change through decreased recidivism in the population of juvenile detainees utilized for this study (e.g., Calley & Gerber, 2008; Carrera, et al., 2013; Olthof, 2012; Ottoni et al., 2010; TJJD, 2012; Wagaman, 2011). However, because the current results did not reveal a demonstrated significant difference in mean empathy scores between minority and non-minority detainees, nor between detainees with felony and non-felony offenses, it would be inefficient for the facility to invest its resources in targeted empathy interventions specific to these demographic groups. Instead, in order to create positive social change, my recommendation is that the facility continues to implement general empathy interventions to the overall population of juvenile detainees, regardless of minority-status or severity of offense.

### **Conclusion**

Prior research results suggest that empathy and delinquency are related in juveniles (e.g., Calley & Gerber, 2008; Carrera, et al., 2013; Olthof, 2012; Ottoni et al., 2010; TJJD, 2012; Wagaman, 2011). National and state-level statistics on incarcerated juvenile offenders in the United States indicate that minority males (i.e., African American and Hispanic) are overrepresented in juvenile detention facilities. The most serious juvenile felony offenders tend to be minority males with low levels of empathy. Finding a way to identify juveniles with low levels of empathy and high levels of antisocial beliefs may help professionals in the juvenile justice and mental health professions design targeted interventions to help increase empathy and prosocialism in this vulnerable population and, thereby, decrease their involvement in the juvenile justice and criminal justice systems.

The results of the current study did not demonstrate a statistically significant mean difference in empathy scores among detained male juveniles with felony and non-felony offenses. These results do not necessarily indicate that such differences do not exist. However, that is one possible conclusion I am considering. It is also possible that due to the multi-faceted nature of the construct of empathy, the current study's design failed to adequately detect any meaningful differences that may have been present in the current data-set.

Alternatively, it is also possible that empathy, as a single construct, is not an adequate distinguishing variable in regards to level of offense with the current data-set. Prior researchers have suggested that antisocial attitudes, experiences of marginalization and discrimination, and poor psychoemotional adjustment may also be indicators of juvenile delinquency, especially in minorities (Brody et al., 2006; Greene et al., 2006; Seaton, 2009; Segal, 2011). Therefore, it is necessary to consider multiple social experiences when considering risk factors for delinquency in male juvenile offenders. Regarding positive social change, the results of the current study leave me with the conclusion that targeting only empathy may be an inadequate rehabilitative intervention for the delinquent male juveniles in the facility from which data were collected for this study.



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Appendix A: Interpersonal Reactivity Index

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Instructions: Circle the number that best describes you.

Age: \_\_\_\_\_  
 Highest Grade in School: \_\_\_\_\_

Brief Interpersonal Reactivity Index (IRI)  
 The following statements relate to your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by circling the number that best fits in the space provided. A=1, B=2, C=3, D=4, E=5.

ANSWER SCALE: CIRCLE THE NUMBER THAT BEST DESCRIBES YOU: 1=1 2=2 3=3 4=4 5=5

Circle the Letter	Description
A B C D E	I get upset and bothered, with some regularity, about things that happen to me. (25)
A B C D E	I often have trouble understanding the feelings of other people. (26)
A B C D E	I sometimes feel I understand other people's feelings better than I do my own. (27)
A B C D E	I sometimes feel that I have a better understanding of other people's feelings than I do my own. (28)
A B C D E	I am usually able to understand other people's feelings. (29)
A B C D E	I am usually able to understand other people's feelings. (30)
A B C D E	I am usually able to understand other people's feelings. (31)
A B C D E	I am usually able to understand other people's feelings. (32)
A B C D E	I am usually able to understand other people's feelings. (33)
A B C D E	I am usually able to understand other people's feelings. (34)
A B C D E	I am usually able to understand other people's feelings. (35)
A B C D E	I am usually able to understand other people's feelings. (36)
A B C D E	I am usually able to understand other people's feelings. (37)
A B C D E	I am usually able to understand other people's feelings. (38)
A B C D E	I am usually able to understand other people's feelings. (39)
A B C D E	I am usually able to understand other people's feelings. (40)

Child's name: \_\_\_\_\_ Date: \_\_\_\_\_

ANSWER SCALE: CIRCLE THE NUMBER THAT BEST DESCRIBES YOU: 1=1 2=2 3=3 4=4 5=5

Circle the Letter	Description
A B C D E	I often get upset and bothered about things that happen to me. (41)
A B C D E	I often have trouble understanding the feelings of other people. (42)
A B C D E	I sometimes feel I understand other people's feelings better than I do my own. (43)
A B C D E	I sometimes feel that I have a better understanding of other people's feelings than I do my own. (44)
A B C D E	I am usually able to understand other people's feelings. (45)
A B C D E	I am usually able to understand other people's feelings. (46)
A B C D E	I am usually able to understand other people's feelings. (47)
A B C D E	I am usually able to understand other people's feelings. (48)
A B C D E	I am usually able to understand other people's feelings. (49)
A B C D E	I am usually able to understand other people's feelings. (50)
A B C D E	I am usually able to understand other people's feelings. (51)
A B C D E	I am usually able to understand other people's feelings. (52)
A B C D E	I am usually able to understand other people's feelings. (53)
A B C D E	I am usually able to understand other people's feelings. (54)
A B C D E	I am usually able to understand other people's feelings. (55)
A B C D E	I am usually able to understand other people's feelings. (56)
A B C D E	I am usually able to understand other people's feelings. (57)
A B C D E	I am usually able to understand other people's feelings. (58)
A B C D E	I am usually able to understand other people's feelings. (59)
A B C D E	I am usually able to understand other people's feelings. (60)

Please photocopy a copy of the form labeled "IRI" at Main Campus.