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Are There Personality Factors That Can Undermine Moral Judgment Development?

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ARE THERE PERSONALITY FACTORS THAT CAN UNDERMINE MORAL
JUDGMENT DEVELOPMENT?

A Thesis
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In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts

By
Nathan A. Kerr

August 2007

ARE THERE PERSONALITY FACTORS THAT CAN UNDERMINE MORAL
JUDGMENT DEVELOPMENT?

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ii

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Table of Contents

List of Tables

ARE THERE PERSONALITY FACTORS THAT CAN UNDERMINE MORAL
JUDGMENT DEVELOPMENT?

Nathan A. Kerr   August 2007   Pages 40

Directed By: W. Pitt Derryberry, Frederick Grieve, Phil Pegg

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Research in moral psychology has focused on understanding what factors assist in the development of moral action and decision making. Examples of these research factors include educational experiences (Rest et al, 1986), intelligence (Rest, 1979), and social networking (Derryberry & Thoma, 2000). Personality factors facilitating moral judgment have also receive attention in recent years with Damon and Hart (1988) exploring self-understanding as a possible factor in moral judgment and Baumeister and Exline (1999) proposing that exercising self-control is often characteristic of those who often employ prosocial behavior. Pizarro (2000) suggested that those who fail to utilize empathy may think about moral issues just as those who do employ empathy but find them easier to ignore. This study attempted to explore this research from a different angle by examining the relationships between antisocial personality traits as opposed to prosocial personality traits. To measure these traits, data were collected from two samples comprised of 120 college students and 24 prisoners from a state-inmate facility. The Defining Issues Test (DIT) was used to measure moral judgment and the Personality Assessment Inventory (PAI) was used to measure the desired personality factors. The results indicated that antisocial personality characteristics do not inhibit moral judgment development. However, the results showed that individuals with antisocial personality

characteristics were more likely to endorse self-serving decisions in situations that call

for moral decision-making.

Introduction

Moral Judgment Development: An Overview

"The function of morality is to provide a basic guideline for determining how conflicts in human interests are to be settled and for optimizing mutual benefit of people living together in groups" (Rest, Deemer, Barnett, Spickemier, & Volker, 1986, p.1). Lawrence Kohlberg's theory on moral development is considered a key paradigm for research in moral psychology. His original view stated that an individual's moral functioning operates under one of three primary levels divided into two stages per level (Colby & Kohlberg, 1987; Kohlberg, 1958). His first level, defined as the preconventional level, represents the stage where one's moral reasoning centers on how he/she will be directly affected by the consequences of decisions. Individuals functioning at this level will operate with a reasoning level oriented towards a reward-punishment mentality (stage 1) or "you scratch my back, I'll scratch yours" mentality (stage 2) (Colby & Kohlberg, 1987; Kohlberg, 1958).

The next level Kohlberg proposed under which individuals operate is the conventional level. Stage 3 of this level is defined by a mutual interpersonal expectation of relationships and interpersonal conformity. Individuals operating under this stage attempt to perform the right actions because they feel that the majority of society expects them to and that so doing earns the approval of important others. In stage 4, individuals begin placing emphasis on the social system and their conscience. In other words, they begin conforming to the laws of society because they believe those are the infallible standards.

Kohlberg's last proposed level is known as the postconventional level. When individuals achieve stage 5 of this level, their moral thinking becomes focused more on individual rights as specified in social contracts. They become aware of the relativity of group values, but respect non-relative values regardless of majority opinion. Finally, in stage 6, individuals develop a perspective that revolves around universal ethical principles. Ultimately, they integrate a sense of willingness to follow self-chosen principles even if so doing results in violations of the law.

There has always been controversy on whether or not Kohlberg contributed to a strong foundation for the views on moral judgment. His theory has been criticized for being too narrow (not representing the whole domain), too similar to Piaget's theory of cognitive development, and more a measure of verbal ability (Rest, Narvaez, Bebeau, & Thoma, 1999b). According to Rest et al. (1999b), some have even suggested restarting the field from scratch rather than building on Kohlberg's theories. However, believing that his theories still lend credibility but require modification, Rest et al. (1999b) proposed a neo-Kohlbergian approach to moral thinking to offer answers to criticisms of Kohlberg's theory. The approach redefines Kohlberg's moral stages, but maintains his core concepts. Core concepts that the neo-Kohlbergian approach endorses include the emphasis on rationality, the idea that individuals self-construct their categories of morality, that moral thinking develops, and that individuals shift from conventional moral thinking to postconventional thinking.

In advancing neo-Kohlbergian theory, Rest (see Rest, Narvaez, Bebeau, & Thoma, 1999a) developed the Defining Issues Test (DIT; discussed in more detail below), which is an objective measurement of moral judgment with validated response items designed to

activate particular moral judgment developmental schema. These include the personal interest, maintaining norms, and postconventional schema. For Rest, moral judgment development is the product of the advancement along these three schemata such that reasoning from a specific schema is typically modal, though any schema can be activated. As such, Rest's conception of moral judgment development is more of a soft-stage approach paralleling contemporary views on human development that allows for more flexibility in moral reasoning throughout the life course as opposed to the hard-stage notion (e.g., moral judgment is fixed at a specific stage) that Kohlberg advocated.

Rest et al. (1999a) cited the DIT as measuring and confirming Rest's schema theory as a result of its ability to reliably distinguish between conventional and postconventional thinking along with earlier forms of moral thinking (1999a). In comparison to Kohlberg's stage theory, the personal interest schema pulls elements from stage 2 and 3 of moral development, commonly viewed as the beginning stages for children (Rest et al., 1999a). In other words, individuals who operate under the personal interest schema are those who endorse a system that follows punishment, obedience, and the actions that will serve one's personal interest. Because DIT research is done with participants 12 years or older, there is little to say about the personal interest schema relative to the other two schemas.

Kohlberg viewed individuals who operated under stages 3 and 4 of his theory as ones who place law and order as the greatest priority. Rest designed the maintaining norms schema as an alternative to Kohlberg's stage 4. This schema is made up of many components. Individuals operating under this schema present a "need for norms." As Rest et al. (1999a) maintain, society must have a set of norms and standards for

cooperation among individuals. Individuals do not need to just cooperate with individuals they know and are familiar with; there also needs to be a mutual understanding between strangers who come face-to-face. Implementing official laws to regulate these encounters establishes this society-wide scope of cooperation. These laws make up a uniform, categorical application known to everyone. The law is set up so that no matter how individuals understand it, they are both protected by it as well as obligated to follow it. The law also sets up partial reciprocity where people obey the law and expect that others are doing the same. Through this system, the society in general will benefit from everyone's mutual labor of doing their duty. Rest et al. (1999a) called this a partial reciprocity as opposed to a "full" reciprocity because obeying the law under the maintaining norms schema may not serve every individual equally.

The last component of the maintaining norms schema relates to the duty orientation that individuals feel for a social system. Those who operate under the maintaining norms schema follow the laws of society rigidly because that is what defines morality for them. Rest et al. (1999a) stated that "one must obey authorities, not necessarily out of respect for the personal qualities of the authority, but out of respect for the social system" (p. 306). In essence, individuals define their morality through the order and law of society. It is through this belief system that these individuals will oppose anyone who threatens the social order and, ultimately, their perceived morality.

At the peak of moral judgment is the postconventional schema. Rest et al. (1999a) defined postconventional thinking as a group of ideals that individuals share for the cooperation of society and that those ideals are modifiable through debate, tests of logical consistency, mutual acceptance, and the personal experience of those involved in the

community. As with the maintaining norms schema, the postconventional schema is made up of four elements of reference. The first element is related to the primacy of moral criteria in which an individual realizes that the standards of society are arranged in a fashion that stipulates the way those under those standards are to behave. However, the postconventional thinker also realizes that there are exceptions to the proposed norms and that just because it requires that people behave a certain way does not mean that it is moral for a person to behave that way. At the postconventional level, individuals see the laws and standards as modifiable and negotiable when they are not serving the best interest of the community (Rest et al., 1999a).

The second element is that these thinkers are appealing to an ideal. In other words, postconventional thinking aspires to achieve goals that create the greatest good for all. Rest et al. (1999a) use examples such as guaranteeing minimal rights and protection for everyone, engendering caring and intimacy among people, fair treatment, providing for the needy, furthering the common good, and actualizing personhood to demonstrate that a postconventional thinker is not merely an individual who is opposing the current system's establishment. The third element of postconventional thinkers is the shareable ideals that they hold. Instead of a personal intuition or ethnocentric preference, these individuals justify their acts by arguing that their behavior furthers the cooperation, the common good, and that their acts respect others. Postconventional thinkers behave in such a way that is selfless because they view their behavior as promoting the overall well-being of everyone.

The last element is known as full reciprocity. Partial reciprocity of the maintaining norms schema proposed that society will work if everyone abides by the law.

However, the postconventional thinker realizes the possibility of a subjective law that favors certain individuals over others. Hence, the individual under this schema argues that certain laws should be modified to provide equality among all individuals (Rest et al., 1999).

The DIT

The Moral Judgment Interview (MJI; Colby & Kohlberg, 1987) was Kohlberg's primary means for assessing moral judgment development. With the MJI, participants are presented with several moral dilemmas, asked to solve them, and then asked to provide an explanation for the reasoning behind their choices. These interviews were transcribed then scored for a stage using a scoring guide of over 800 pages (Rest et al., 1999a). As this description implies, scoring the interview material of the MJI is arduous. Hence, the DIT's multiple choice method of assessment was developed as a viable alternative, despite reservations from Kohlberg that rankings and ratings from participants were a "quick and dirty" technique that was too good to be true (Rest et al., 1999a, p. 295). For researchers like Kohlberg, the interview method was considered the primary assessment tool for understanding an individual's moral mind. Kohlberg assumed that individuals were perfectly aware of their own inner processes and would therefore be able to verbally explain them. However, this method of moral assessment became questioned more and more over time (Rest et al., 1999a). For example, researchers began to note the fallibility of self-report explanations pertaining to one's own cognitive processes. Although it was noted that Kohlberg referred to the scoring procedure of his interviews as error-free, reports on participants' responses indicated their responses could mirror the background of the scorer. For example, based on the

individual responsible for scoring interviews, some participants tended to sound like the philosopher John Rawls under Kohlberg, while others sounded like gender feminists under Carol Gilligan.

In citing the need for a different means for assessing moral reasoning, Rest (see Rest et al., 1999a) argued that individuals are able to adequately report on the products of their cognition but less so on the mental operations they utilized to arrive at their conclusion. The logic behind the development of the DIT, therefore, presumes a recognition task is much simpler in that individuals only discriminate between lines of reasoning versus producing a unique line of reasoning (Rest et al., 1999a). One problem with Kohlberg's research is postconventional thinking has rarely been scored. Little evidence exists to support his stage 5 scoring, and Kohlberg himself even eliminated stage 6 from scoring due to lack of empirical evidence. This was considered by many to be a serious problem for his theory (Rest et al., 1999a). However, the DIT recognition tasks appear to have eliminated this problem, showing more instances scored at the postconventional level.

The procedure to follow for individuals taking the DIT is straightforward. Participants read six scenarios, each containing an individual faced with a moral dilemma. The individuals are then asked to respond, or make an action choice, which measures their level of moral judgment. Participants' choices are limited to whether they feel the individual in the scenario should act on the situation, not act on the situation, or whether they are unable to decide. The next step for participants is to read a list of 12 issues related to the dilemma and indicate on a scale of 1 to 5 (1 = *great importance*, 5 = *no importance*) how relevant each statement is to the choice the character makes in each

hypothetical scenario. Finally, participants are asked to rank the four items in each dilemma that they consider most important in making their action choice. These ratings and rankings provide insight into which schema (personal interest, maintaining norms, or postconventional) participants are primarily operating under.

To quantify each domain the DIT measures, many indices have been researched over time. For over 20 years, individuals relied on the P score to measure an individual's moral development. The P score references the number of times an individual ranks postconventional items as most important and, therefore, measures the extent to which an individual demonstrates postconventional reasoning in their responses. However, research indicated two significant flaws with this index (Rest, Thoma, Narvaez, & Bebeau, 1997). The first suggested that assigning numbers to Kohlbergian views created a quantitative vs. qualitative issue while the second indicated that because information from lower stage items was not used, the P score would ultimately throw away data. Rest et al. (1997) compared the P index to the newer N2 index and found that N2 outperformed P on multiple domains. The N2 index is similar to the P score in that it measures the degree to which P items are prioritized. However, in accounting for an individual's rating of all items, it also contains another component that measures the degree to which the lower stages are rated lower than the ratings of the higher stages (Rest et al., 1997). As with the P score, the N2 score will be higher for individuals who respond to DIT items related to postconventional thinking. Unlike the P score, however, the N2 score accounts for the participant's rating of other items. Thus, those who rate items related to the postconventional schema highly and minimize their ratings of items pertaining to the other two schemata have the highest N2 scores.

The Type index, which has been developed to compensate for N2's lack of information about the extent of schema mixture, scores group participants on two common characteristics: a) modal moral judgment schema and b) the extent of schema mix (Rest et al., 1999a). Seven developmental types are noted and split into two categories: consolidated and transitional. Individuals of consolidated types will utilize a point of view that is consistent with the predominant schema, whereas those of transitional types will utilize contending views from more than one schema. Types 1, 4, and 7 are defined as consolidated types. Hence, the personal interest schema is not only modal at type 1 but is also clearly preferred over the other two schemata; the maintaining norms schema is not only modal at type 4 but is also clearly preferred over the other two schemata; and the postconventional schema is not only modal at type 7 but is also clearly preferred over the other two schemata. Types 2, 3, 5, and 6 are defined as the transitional types. Although a moral judgment schema is modal for these types, the preference of a specific schema is not as strong among these types as is the case for consolidated types. At type 2, the individual is transitioning away from the personal interest moral judgment schema. At type 3, the maintaining norms schema has become modal though the influence of the personal interest schema is still apparent. The maintaining norms schema is still modal at type 5, but it is evident that the individual is starting to transition away from this schema as reference of items pertaining to the postconventional schema is increasing. At type 6, the modal schema is the postconventional schema but the influence of items pertaining to the maintaining norms schema remains.

Rest et al. (1999a) also describe other indices of importance used in the quantification of DIT information. These are noted as the Number of Can't Decides

(NUMCD), the Utilizer score (U), the Humanitarian/Liberal Perspective (HUMLIB), Religious Orthodoxy (ORTHO), and Antiestablishment (A). The NUMCD is essentially a count of the number of times a participant reports he/she can't decide on which action to take. The U score is a measure of the degree of fit between the importance ratings of items and advocacy of action. The HUMLIB variable is in place to indicate how many times a participant's response is consistent with those in the highest scoring groups (professionals in political science and philosophy) (Thoma, 2006). ORTHO is an index designed to measure the amount a participant utilizes reasoning according to religious orthodoxy. The ORTHO index is in place to represent the sum of both the rates and ranks for Item 9 in the Doctor's Dilemma (note: Item 9 relates to the idea that only God can determine who should live and die). The A score is the sum of the rating of items reflecting an antiestablishment attitude. As Rest (1993) notes, "These considerations presuppose an understanding of Stage 4, but fault existing authorities and 'the establishment' for being hypocritical and inconsistent with its own rationale. The 'A' point of view is critical but offers nothing positive in its place" (p. 12).

Factors Facilitating Moral Judgment

Over the years, research has identified a variety of factors that influence and contribute to the development of moral judgment such as educational experiences (Rest et al, 1986), intelligence (Rest, 1979), and social networking (Derryberry & Thoma, 2000). One area that has received increased attention in recent years is personality and aspects of self that pertain to or contribute to personality. A variety of research has emerged which focuses on aspects of personality that appear to be positively correlated with moral judgment development. For example, results from a longitudinal design on the existence

of a prosocial personality by Eisenberg, Guthrie, and Cumberland (2002) indicated that self-reported prosocial dispositions and prosocial moral reasoning on an objective measure of moral judgment were positively related to prosocial behavior when the participants were observed as preschoolers. In another study, Wilson (1983) found that those who were rated at the highest stages of Kohlberg's moral judgment rated highest on values such as Self-Respect, Mature Love, Logical, Independent, and Inner Harmony of the Rokeach Value Survey and those at the pre-conventional stages were associated with the hedonistic values. In a study on the perceived personality of moral exemplars, Walker (1999) utilized the template for the Factor Five model (Costa & McCrae, 1992; Goldberg, 1993) to describe the perceived personality characteristics of moral exemplars (e.g., those advanced in components pertaining to advanced moral development including moral judgment). The results indicated that personality traits related to Conscientiousness and Agreeableness were salient for moral exemplars. In exploring older men and women, Lifton (1985) found that their moral judgment development was related to personality characteristics associated with the development of mature, balanced, and symbiotic senses of self and social identity.

Aspects of self that pertain to or contribute to personality that have been explored in trying to account for moral judgment development include self-control, self-understanding, and emotionality. Baumeister and Exline (1999) examined research on morality and suggested that self-control operates as a "moral muscle" and is vulnerable to fatigue over time (p.1177). According to Baumeister and Exline, poor self-control is associated with individuals who make judgments that lead to socially unacceptable behavior, whereas those who make judgments pertaining to prosocial behavior may

possess higher self control. Damon and Hart (1988) indicated that individuals develop self-understanding over time, causing the individual to choose important philosophical or moral belief systems, ideological choices, and personal goals. Ultimately, this contributes to the ability to form moral ideals and beliefs. Lastly, Pizarro (2000) suggested that an empathic emotional response works as a "moral signal" in making everyday moral judgments. In other words, although individuals without empathy are not precluded from moral reasoning and judgments, they can be inhibited in recognizing moral situations or may find it easy to ignore recognized situations calling for moral action (Pizarro).

Statement of the Problem and Purpose of the Study

Research demonstrates the relationship that certain personality factors have with advanced moral judgment development. However, there are some aspects of personality that could negatively relate or work contrary to moral judgment development. For example, it is plausible to hypothesize that certain personality characteristics pertaining to anti-social behavior (specifically anti-social personality traits as defined by the *Diagnostic and Statistical Manual of Mental Disorders-4*th Edition *-Text Revised*, 2000, discussed later) could relate to an individual's failure to either advance in or utilize his or her moral judgment development. To date, moral judgment research has yet to examine this possibility. Thus, the following research question is presented: *How do antisocial personality characteristics relate to moral judgment development?* In asking this question, the goal of the study is to determine if there is inferential evidence supporting that certain aspects pertaining to personality could undermine moral judgment development.

As noted previously, there are a variety of personality characteristics and factors related to personality that have positive relationships with moral judgment development. At the same time, just as aspects of personality may serve to facilitate moral judgment development, other aspects of personality could be a detriment to moral judgment development. If one observes the DSM-IV-TR criteria for Antisocial Personality Disorder, there appear to be personality traits and behaviors that are quite the opposite of what is considered moral aptitude and behavior. Currently, the diagnostic criteria for Antisocial Personality Disorder include "a pervasive pattern of disregard for the rights of others that begins in childhood and early adolescence and continues into adulthood" (DSM-IV-TR, 2000, p. 701). Antisocial Personality Disorder falls under Cluster B (also known as the emotional, dramatic, and erratic disorders) of the Personality Disorders. At the center of this personality is a pattern of deceit and manipulation for self-serving reasons. Though the diagnosis of this personality disorder is only given to individuals 18 and above, children who display the same behaviors are diagnosed with Conduct Disorder (DSM-IV-TR, 2000).

From a Neo-Kohlbergian point of view, individuals manifesting behaviors leading to the diagnosis of Antisocial Personality or Conduct Disorder would be expected to be operating according to the personal interest schema. Those who are diagnosed with Antisocial Personality Disorder usually fail to conform to the norms and laws of society and have no problem breaking laws, such as destroying property the property of others, stealing, and becoming involved with illegal operations. For unexplained reasons, it appears that these individuals fail either to a) advance in their moral judgment development or b) utilize their moral judgment ability. In their interactions with other

individuals, those with this disorder fail to show any regard for the feelings, rights, and wishes of the other. Instead, they manipulate and deceive these individuals for the sole purpose of obtaining some personal gain such as money or sex (DSM-IV-TR, 2000). They are also likely to engage in physical fights and perform acts of assault on other individuals. It is also likely that individuals with this disorder are involved in spouse and child beatings (DSM-IV-TR, 2000). Individuals with Antisocial Personality Disorder act very impulsively and make decisions without considering how it might affect those around them (such as changing jobs or relationships quickly, DSM-IV-TR, 2000). Financially, they are irresponsible and they often engage in reckless behavior that will likely bring harmful consequences. Upon creating harm in the lives of other individuals, they will often respond with an indifferent attitude and make apathetic statements such as "life's unfair" and "they had it coming." They will usually attempt to justify their actions by blaming the victim for being helpless and deserving of what was coming. Individuals with Antisocial Personality Disorder have a very self-centered perspective and explain that the only person they will help is "number one" (DSM-IV-TR, 2000)

Individuals with Antisocial Personality Disorder are generally described as "psychopaths" and "sociopaths." Many of them have a very arrogant and inflated sense of the self and feel that the things most people do are "below them." The infamous Ted Bundy is a classic example of this description. His noted lack of empathy towards his victims and inflated ego as he defended himself during his murder trial were key components in his criminality. Generally, those who are diagnosed with Antisocial Personality Disorder are described as having a lack of empathy, inflated self-appraisal, superficial charm, and a complete disregard for social norms. They are typically very

poor parents and caretakers and generally leave those they are responsible for helpless.

For example, a child may become malnourished or an elder's needs may become

neglected (DSM-IV-TR, 2000).

Given what we understand about moral judgment development, it is possible to

predict that there are personality factors associated with Antisocial Personality Disorder

that could relate to an individual's failure to either advance in or utilize his or her moral

judgment development. Therefore, the purpose of the present study is to examine how

characteristics similar to the traits described in Antisocial Personality Disorder may relate

to the a) result in a failure to advance in moral judgment development and b) failure to

utilize one's moral judgment ability. In exploring the first possibility, antisocial

personality characteristics are compared to DIT N2 and Type scores. Significant

negative relationships will be required in order to infer that antisocial personality

characteristics are linked to detriments in moral judgment development. In exploring the

second scenario, antisocial personality characteristics will be compared to DIT U,

ORTHO, HUMLIB, NUMCD, and A scores. Affirmation of this second possibility will

require significant negative relationships among antisocial personality characteristics and

U, ORTHO, and HUMLIB; a negligible relationship with NUMCD scores; and a positive

significant relationship with A scores.

Method

Participants

 College Students. Participants included 120 college students who volunteered through the Department of Psychology's Study Board at a large Southeastern regional public comprehensive university. College students were offered extra-credit as incentive for completing the research. The sample of college students excluded 13 participants due to failure to pass reliability checks or failure to complete the measures fully. Of the sample, 32 identified their gender as male and 75 identified their gender as female. Of those who identified their class year, 78 indicated freshman, 15 indicated sophomore, nine reported junior, four reported senior, and one reported other. In terms of ethnicity, 89 classified themselves as white, 10 as black, three as Hispanic, three as other, and two as Indian. The average age of the sample was 19.36 years ($SD = 2.86$).

 Prisoners. Participants also included 24 prisoners, part of a state-inmate program, who volunteered to contribute to the research. However, 17 failed to pass reliability checks or did not complete the measures in full. Hence, only data from seven participants were included in the final sample. Of these seven participants, two reported that their gender was male, and five reported that their gender was female. In regards to ethnicity, six reported themselves to be white and one indicated black. The average age of the sample was 35.14 years ($SD = 8.15$).

Measures

 Demographics questionnaire. Participants were asked to indicate their age, gender, grade point average (GPA), ACT score, education level, and ethnicity.

Personality Measure. Individuals completed a personality measure known as the Personality Assessment Inventory (PAI; Morey, 1991). On the PAI, participants read statements and respond to how accurately each statement describes their personality. In responding to each item, participants have five response choices: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The PAI is designed to measure a variety of clinical variables. Such clinical variables include Depression (DEP), Anxiety (ANX), Mania (MAN), Paranoia (PAR), Schizophrenia (SCZ), and features of Axis II disorders such as Borderline Personality Disorder (BOR), and Antisocial Personality Disorder (ANT). Given that the focus of the current study is on the correlation between moral judgment development and antisocial personality factors, scores on the PAI's Antisocial Features scale (ANT) and its designated subscales are the focus of the study.

Once an individual's raw score has been calculated for each PAI subscale, it is then translated into a T-score. T-scores of 50 to 69 are considered within normal range and represent the population who displays specific traits of the feature, but not enough to warrant clinical significance. T-scores below 50 represent populations who display little or no characteristics. Finally, T-scores 70 and above are considered clinically significant and suggest that individuals in this range display multiple symptoms characteristic of the specific clinical variable.

The ANT scale of the PAI is comprised of three subscales of 8 items each which tap into different facets of antisocial personality. The first subscale, known as Antisocial Behaviors (ANTA), will be elevated for individuals who have a history of antisocial acts and have been involved in illegal activities such as theft, destruction of property, and physical aggression. These individuals have often manifested Conduct Disorder during

adolescence. The PAI measures traits on this scale from responses to statements such as "I like to see how much I can get away with" and "I've never taken money or property that wasn't mine."

The second subscale, Ego-centric (ANTE), is elevated for individuals who display little regard for others. They can be described as individuals who take advantage of others and feel little responsibility for the property of others. They are also unlikely to feel any remorse for past transgressions and place little importance on their role as spouse, parent, or employee. Responses to statements such as "I've borrowed money without paying it back" and "I'll take advantage of others if they leave themselves open to it" indicate an individual's level of ego-centricity.

Finally, Stimulus-Seeking (ANTS) represents individuals who manifest behavior in a manner that is dangerous to both themselves and/or those around them. These individuals also crave excitement and are easily bored by routine and convention. This scale is measured by the responses to statements such as "I get a kick out of doing dangerous things" and "I do a lot of wild things just for the thrill of it." It should be noted that individuals must be elevated (T score >70) on at least two of the three stated subscales for a diagnosis of Antisocial Personality Disorder to be considered.

Development of the PAI generated descriptive statistics from three different samples: Census-matched standardization, College, and Clinical. The Census-matched standardization sample ($N = 1,000$) acquired a $M = 4.99$ (T score = 50) and a $SD = 4.42$ (T score = 48) for the ANT-A subscale, a $M = 3.43$ (T score = 49) and a $SD = 3.01$ (T score = 49) for the ANT-E subscale, and a $M = 4.74$ (T score = 51) and $SD = 3.66$ (T score = 48) for the ANT-S subscale. The college sample ($N = 1,051$) acquired a $M = 6.34$

(T score = 49) and *SD* = 4.71 (T score = 47) for the ANT-A subscale, a *M* = 4.97 (T score = 50) and *SD* = 3.16 (T score = 44) for the ANT-E scale, and a *M* = 7.61 (T score = 51) and *SD* = 4.35 (T score = 42) for the ANT-S scale. Finally, the clinical sample (*N* = 1,265) patients acquired a *M* = 8.31 (T score = 49) and *SD* = 5.80 (T score = 44) on the ANT-A subscale, a *M* = 4.46 (T score = 49) and *SD* = 3.45 (T score = 46) on the ANT-E subscale, and a *M* = 6.10 (T score = 50) and *SD* = 4.52 (T score = 48) on the ANT-S subscale (Morey, 1991). Though the data for the sample were standardized using T-scores, the current study will run analyses using raw scores because it is a non-clinical sample.

According to Morey (1991), the internal consistency for the ANT-A subscale generated an α = .73 for the census sample, α = .76 for the college sample, and α = .80 for clinical sample. For the ANT-E, the results indicated an α = .63 for all three samples. Finally, the ANT-S resulted in an α = .69 for the census sample, α = .77 for the college sample, and α = .75 for the clinical sample. Test-retest reliability coefficients for the combined samples of community and college yielded *r* = .83 for the ANT-A subscale, *r* = .75 for the ANT-E subscale, and *r* = .85 for the ANT-S subscale (Morey). For the present study, the college sample yielded an α = .74 for the ANTA, α = .60 for ANTE, and an α = .70 for ANTS.

Moral Judgment: The Defining Issues Test (DIT; Rest, Narvaez, Bebeau, & Thoma, 1999) was used to assess participants' moral judgment. The DIT is a measure administered in multiple-choice format that presents six moral dilemmas for a main character. The participants are asked to indicate the action choice they feel is most appropriate for the main character. The response choices indicate whether or not the

character should act on the situation or if the participant is unable to decide on the proper choice. The participant is then faced with 12 issues related to each dilemma and asked to rate each issue or statement on a scale of 1 to 5 (1 = *great importance*, 5 = *no importance*) in terms of its importance to the decision made about the main character. The projected indices to measure will be those previously discussed, which are N2, Type, U, HUMLIB, ORTHO, and A. Scores for the N2 index range from 0 to 95, with scores towards the higher end indicating a tendency to make decisions under the postconventional schema. The Type index ranges from 1 to 7.

Types 1 and 2 are modal at the personal interest schema; Types 3, 4, and 5 are modal at the maintaining norms schema; and Types 6 and 7 are modal at the postconventional schema. Types 1, 4, and 7 represent consolidated phases of moral judgment development while Types 2, 3, 5, and 6 represent transitional phases of moral judgment development (see the earlier discussion of Type index). The scores for the U index range from -1 to 1. Scores closer to 1 indicate a greater likelihood of the utilization of the modal moral judgment schema. Scores for HUMLIB range from 0 (no matches) to 6 (all matches). ORTHO scores include a range from 1 (lowest) to 9 (highest). Finally, A scores range from 5 to 25, with higher scores indicative of antiestablishment attitudes.

Rest et al. (1999a) indicated that the test-retest reliability for the DIT has been reported to range from $r = .70$ to $r = .80$. Depending on the index, Cronbach's alpha for the DIT has ranged from the high .70's to the low .80's for the past 20 years, which is considered adequate (Rest et al., 1999). In evaluating the internal consistency of the DIT in the current study, Cronbach's α's were computed at the item-level for each schema (e.g., consideration of the consistency across DIT rating items specific to particular moral

judgment schema), as Crowson, DeBacker, Derryberry, and Thoma (2006) recently recommended. For the present study, internal consistency is low to acceptable at each schema, with $\alpha = .81$ for the postconventional schema, $\alpha = .52$ for the maintaining norms schema, and $\alpha = .76$ for the personal interest schema.

Procedure

Participants from the college sample volunteered to be a part of the study via the department's online study board. Participants from the prisoner sample volunteered after the researcher contacted the inmate facility's state-inmate program coordinator. College students were administered the measurements in a college classroom at different times of the day.

Before attempting to gather data from a prisoner population, the state-inmate facility with the desired population was contacted. The chief jailor's assistant indicated that the prisoners would be asked if they would be willing to volunteer their free time to participate in a psychological study. The prisoners were offered no incentive to participate and were told that they would be allowed to quit anytime they wished. Prisoners were gathered as a group into a conference room in the county jail to be administered their portion of the assessment. At the beginning of each session the researcher thoroughly explained the procedure. Participants then read and signed an informed consent document explaining the procedure prior to the administration of the preceding measurements. Participants first completed a copy of the DIT to assess for their level of moral judgment. Participants then completed the PAI to assess their clinical personality characteristics. When completed, the participants turned in their responses to the researcher. Data from each participant were placed in a folder and designated a

number. Informed consent documents were separated from their data to ensure

anonymity.

Results

Descriptive information for the college students, prisoners, and those with clinically elevated PAI scores can be found in Table 1. In terms of DIT scores, no major anomalies or unexpected occurrences were present in the college student sample. It is interesting to note that those scoring in the "clinically elevated" range of the antisocial scale had similar means and standard deviations, relative to both the college and prisoner sample, on both the developmental and non-developmental DIT indices. DIT Type and N2 scores indicate that both the college students and the prisoners were modal at the maintaining norms schema. Though both were similar in terms of their modal moral judgment schema, it is interesting to note that DIT Type scores support that the college students were consolidated upon the maintaining norms schema, whereas the prisoners were transitioning towards the maintaining norms schema (Rest, 1993, Rest et al.,1999a Thoma, 2006). DIT NUMCD score means suggest that participants were decisive in their action choices and had minimal difficulty in deciding upon an action choice. The low DIT HUMLIB means denote that the action choice responses of most participants in the sample were not reflective of the humanitarian/liberal perspective on moral issues and are typical of those with conventional Type scores (i.e., 3 to 5; Thoma, 2006). DIT ORTHO means reflect a moderate influence of religious orthodoxy in moral decision making among most participants. DIT U score means support that the action choices and ratings of the majority of the sample were neither predominantly consistent nor inconsistent. DIT A score means indicate that antiestablishment attitudes for most in the sample were low, though it is interesting to note that the A scores of the prisoners were advanced relative to the college students.

Table 1

Descriptive Statistics of the Participants

Index	College Students (N =107)		Prisoners (N =7)		Clinically Elevated (N = 8)	
	M	*SD*	*M*	*SD*	M	SD
Type	4.19	1.80	3.14	1.68	4.75	1.91
NUMCD	1.03	.94	1.00	.00	1.13	.99
HUMLIB	2.67	1.25	2.43	.79	3.13	1.36
ORTHO	5.76	2.88	5.29	2.21	6.13	3.60
U	.16	.14	.03	.09	.16	.14
N2	32.71	13.27	21.30	8.75	31.36	15.62
A	1.73	2.36	3.00	2.31	3.88	3.76
ANTA	5.31	4.49	11.29	3.59	15.13	3.94
ANTE	4.31	3.10	3.86	3.39	9.86	2.90
ANTS	6.43	3.92	10.57	6.16	14.75	3.92

Note: Type = Defining Issues Test (DIT) index of schema and developmental phase, NUMCD = DIT

Number of Can't Decides scores, ORTHO = DIT Religious/Orthodoxy scores, U = DIT Utilitarianism

scores, N2 = DIT Developmental scores, A = DIT Antisocial scores, ANTA = PAI Antisocial: Antisocial

Behavior subscale score, ANTE = PAI Antisocial: Egocentricity subscale score, ANTS = PAI Antisocial:

Stimulation seeking subscale score.

For PAI ANT indices, the clinically elevated sample falls within the normal range

of the ANT subscale scores. The ANT subscale data also appears within the normal

expected range for college students taking the PAI. Mean scores for the prisoner

participants appear within the normal range for the ANTE subscale, but appear slightly

elevated for both the ANTA and ANTS subscales (Morey, 1991).

Table 2

Correlations among DIT and PAI scores

	Type	NUMCD	HUMLIB	ORTHO	U
Type	1.00				
NUMCD	.031	1.00			
HUMLIB	.099	-.323**	1.00		
ORTHO	-.268**	-.008	-.334**	1.00	
U	.039	-.088	.054	.105	1.00
N2	.756**	-.097	.176	-.189	.267**
A	.166	-.116	.210*	-.394**	-.052
ANTA	.075	-.013	.181	-.095	.066
ANTE	.061	-.009	.228**	-.222*	.225**
ANTS	.077	.130	.196	-.131	-.064

Table 2 (continued)

	N2	A	ANTa	ANTe	ANTs
N2	1.00				
A	.100	1.00			
ANTA	.114	.329**	1.00		
ANTE	-.011	.217*	.410**	1.00	
ANTS	-.049	.223**	.434**	.498**	1.00

*Note: ** Correlation is significant at the .001 level. * Correlation is significant at the .05 level.*

Note: Type = Defining Issues Test (DIT) index of schema and developmental phase, NUMCD = DIT

Number of Can't Decides scores, ORTHO = DIT Religious/Orthodoxy scores, U = DIT Utilitarianism

scores, N2 = DIT Developmental scores, A = DIT Antisocial scores, ANTA = PAI Antisocial: Antisocial

Behavior subscale score, ANTE = PAI Antisocial: Egocentricity subscale score, ANTS = PAI Antisocial:

Stimulation seeking subscale score.

Table 2 addresses correlations among the considered indices among the college
participants. As indicated below, various significant correlations existed. Most
significant correlations were among the DIT indices and among the PAI indices.
However, significant correlations also appear between certain DIT indices and ANT
subscales including, ANTE and HUMLIB, ANTE and ORTHO, ANTA and A, ANTE
and A, ANTS and A, and ANTE and U.

As a result of the various relationships observed in Table 2, regression analyses
were conducted in order to determine the degree to which PAI scores accounted for
variance in each of the considered DIT indices (see Table 3).   As Table 3 illustrates,

there were some instances in which ANT scores accounted for a significant amount of variance in DIT scores. This was the case for U scores, where both the ANTE and ANTS subscales provided significant contributions, and A scores, where ANTA subscale was a significant contributor.

Given the trends observed between U and ANTE scores (see Tables 2 and 3) variance, additional analyses were conducted among the college students. As noted earlier, U scores refer to the consistency of action choices in concert with item ratings. Consequently, this index provides a useful inference for predicting moral behavior (see Rest, 1993). As also noted earlier, those with high ANTE scores display little regard for others or the property of others, do not feel remorse for past transgressions, and place little importance on their role as spouse, parent, or employee. Hence, both of these indices provide valuable information about participants' action choices. Therefore, one-way Analyses of Variance (ANOVA) were performed among most of the DIT dilemma action choices in order to determine if there were statistically significant differences in ANTE scores. Such analyses were necessary in order to determine if particular action choices were associated with advanced ANTE scores. Table 4 reveals the findings of these analyses.

Table 3

Summary of Regression Analyses

		B	*SE B*	*β*	*t*	Sig.*
Type	ANTA	.019	.045	.047	.414	.680
	ANTE	.010	.068	.018	.152	.880
	ANTS	-.022	.054	-.048	-.404	.687

Table 3 (Continued)

NUMCD	ANTA	-.014	.023	-.067	-.598	.551
	ANTE	-.025	.035	-.082	-.708	.481
	ANTS	.048	.028	.200	1.707	.091
HUMLIB	ANTA	.023	.030	.082	.749	.455
	ANTE	.061	.046	.152	1.343	.182
	ANTS	.027	.037	.085	.741	.460
ORTHO	ANTA	-.002	.571	-.003	.023	.982
	ANTE	-.195	.106	-.210	-1.835	.069
	ANTS	-.020	.085	-.027	-.236	.814
U	ANTA	.001	.003	.033	-.303	.762
	ANTE	.015	.005	.332	2.941	.004
	ANTS	-.009	.004	-.243	-2.141	.035
N2	ANTA	.411	.338	.138	1.215	.227
	ANTE	-.379	.507	-.088	-.747	.457
	ANTS	-.114	.399	-.034	-.286	.775
A	ANTA	.142	.056	.270	2.547	.014
	ANTE	.054	.084	.071	.644	.521
	ANTS	.042	.067	.071	.633	.528

*Note: Type = Defining Issues Test (DIT) index of schema and developmental phase, NUMCD = DIT Number of Can't Decides scores, ORTHO = DIT Religious/Orthodoxy scores, U = DIT Utilitarianism scores, N2 = DIT Developmental scores, A = DIT Antisocial scores, ANTA = PAI Antisocial: Antisocial Behavior subscale score, ANTE = PAI Antisocial: Egocentricity subscale score, ANTS = PAI Antisocial: Stimulation seeking subscale score. * Bonferroni's adjustment – p < .007.*

In consideration of the ANTE score choices on *Heinz and the Drug* action choices, significant differences were found (F [2, 104] =3.47 p = .035, η^2 = .062). A Least Significant Difference (LSD) post hoc test revealed a difference between those who chose "Should steal" versus "Should not steal" (p = .016). A Bonferonni post hoc test also revealed the same thing (p = .048) No significant differences were found for ANTE scores among the *Escaped Prisoner* action choices (F [2, 103] = .557, p = .575, η^2 = .011). For ANTE scores and the *Newspaper* action choices, no significant differences were present (F [2, 104] = 2.33, p = .102, η^2 = .043). No significant differences were seen for ANTE scores among the *Doctor's Dilemma* action choices (F [2, 103] = 2.46, p = .090, η^2 = .046). The large majority of participants selected "should hire Mr. Lee" on the *Webster* dilemma (See Table 4). Thus, it was not prudent to statistically consider the differences in ANTE scores among the differing answering choices. It is interesting to note that ANTE scores were elevated among those that were undecided and those that selected "should not hire Mr. Lee." Finally, significant differences were found on ANTE scores among the *Student Take-Over* action choices (F [2, 102] = 4.26, p = .017, η^2 = .077). A LSD post hoc test revealed significance between the "Should Take Over" and the "Should Not Take Over" responses (p = .015). A Bonferroni post hoc test also revealed a significant difference between the two (.044).

Table 4

ANTE Scores per Dilemma Action Choice

	Should …			Can't Decide			Should Not …		
	Mean	*SD*	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*N*
Heinz and the Drug[1]	5.00	3.35	41	4.86	3.14	22	3.39	3.10	44
Escaped Prisoner[2]	4.61	3.36	46	3.83	2.79	29	4.35	3.06	31
Newspaper3	3.67	2.43	31	2.71	1.89	7	4.75	3.38	69
Doctor's Dilemma4	5.29	3.36	31	3.59	2.60	29	4.13	3.15	46
Webster 5	4.11	2.91	98	6.67	3.61	6	9.00	5.66	2
Student Take-Over6	5.69	3.42	16	5.42	3.15	12	3.71	2.74	77

Note: [1]Should/should not steal the drug; [2] Should/should not report him; : [3] Should/should not allow the students to publish the articles; [4] Should/should not administer the drug; [5] Should/should not have hired Mr. Lee; : [6] Should/should not take over the building.

Discussion

In researching the relationship between antisocial personality factors and moral judgment, it is important to note that no previous research on this topic was found prior to this study. Thus, this study attempts to set the foundation for future research on similar topics. The research question this study pursues is: *How do antisocial personality characteristics relate to moral judgment development?* The research question at hand addresses the possibility that just as prosocial personality factors positively relate to reasoning and judgments on moral dilemmas (Goldberg, 1993; Lifton, 1985, Walker, 1999), the inverse could occur where antisocial personality factors are concerned.

This study relied on bivariate correlations (see Table 2) and regression (see Table 3) in order to consider how PAI subscales of antisocial personality (i.e., ANTE, ANTS, and ANTA) related to DIT developmental indices (i.e., Type and N2) and DIT non-developmental indices (i.e., NUMCD, ORTHO, U, A, and HUMLIB). As Tables 2 and 3 support, no significant relationships emerged between any of the PAI ANT scores and the DIT developmental indices. In regards to the first hypothesis, this indicates a possibility that antisocial personality characteristics assessed by the PAI do not inhibit moral judgment development. In essence, this provides us with a clue as to how these personality factors pertain to moral judgment. This finding is particularly important given that the previous research by Goldberg (1993), Lifton (1985), and Walker (1999) have indicated that prosocial personalities characteristics contribute to moral judgment development. Therefore, future research may want to further delve into what it is about prosocial characteristics that advance moral judgment development and account for why it is that the inverse does not occur with antisocial characteristics.

31

Correlations between the non-developmental DIT indices and ANT scores revealed some significant relationships (See Table 2). Specifically, statistically significant correlations were found between ANTE scores and the ORTHO, HUMLIB, A, and U indices. Significant correlations also existed for the ANTS and ANTA subscales with DIT A scores. In order to determine if ANT scores accounted for a significant portion of variance for these indices, regression analyses were conducted. Where the ORTHO index was concerned, ANT subscales did not provide a significant contribution to variance. Hence, though a significant negative correlation between ANTE and ORTHO existed, its magnitude was not large enough to result in a significant amount of shared variance. Therefore, the presence of antisocial personality characteristics are not enough to statistically predict a decrease in a person utilizing reasoning based on religious or other culturally influenced ideologies (and vice versa). This finding raises an interesting possibility. Though the lack of clinically elevated antisocial personalities make it difficult to predict how this index is influenced by antisocial personality disorder, it may still be possible that religious cultural ideologies affect the manifestation of antisocial characteristics in situations where they would otherwise be prevalent. In other words, participants raised in a highly religious environment may have antisocial tendencies suppressed in specific situations. Indeed, this possibility is supported by the biopsychosocial approach, which is an important theoretical explanation of behavioral problems and abnormal psychology. According to the biopsychosocial approach, behavioral problems are the product of the interaction of biological, psychological, and social factors. Hence, it may be that the social influence of religious or other cultural

ideologies might be enough to prevent biological predispositions towards antisocial personality from manifesting into individual behavior.

In regards to the HUMLIB index, ANT subscales provided no significant contribution to variance. It should be noted that the significant correlation between ANTE and HUMLIB scores was positive, which was counter to what was expected. Though chance is always a possibility in an unexpected correlation such as this, it is also possible that those manifesting antisocial personality characteristics may have endorsed items that those with a humanitarian liberal perspective also endorse but for differing reasons. One possibility may be that those with elevated characteristics may see some self-serving interest within items that characterize the humanitarian liberal perspective. For example, choosing to have Heinz steal the drug can be a result of both a humanitarian liberal ideology (the preservation of human life) and an tendency towards antisocial behavior (the druggist deserves to be robbed, my wife has duties she must do for me, etc). Another possibility may be that, when those with antisocial characteristics see no opportunity for personal gain, they may rate items that pertain to the humanitarian liberal perspective as important either by default or due to an exaggerated since of self-importance. Regardless of these possibilities, the regression analysis is important to note because it acknowledges that antisocial personality traits do not statistically predict the likelihood that participants will endorse the humanitarian liberal perspective, which supports that those with high ANTE scores are not receptive to all of the items comprising the humanitarian liberal perspective.

Regression analyses revealed stronger relationships among ANT scores and the DIT A and U indices. Where DIT A scores were concerned, the ANTA scores

contributed a significant amount of shared variance. Specifically, the relationship

between the ANTA subscale and the A index indicates that those reporting higher levels

of antisocial behavior were statistically more likely to rate antiestablishment attitudes

regarding social issues as important on the DIT. This finding does not reveal any

surprises as the antiestablishment items are inherently antisocial. Thus, it makes sense

that those reporting higher levels of antisocial behavior would endorse an

antiestablishment attitude.

For DIT U scores, both ANTE and ANTS scores provided significant

contributions to variance. These contributions suggest that antisocial characteristics can

statistically increase the chances that certain action choices will correspond with certain

issues that are advocated or rated as important on the DIT. This also makes sense as

those with Antisocial Personality Disorder are described as those who are more self-

serving and have no issue with stealing or vandalizing. For example, in both the *Student

Take-Over* and *Heinz and the Drug* dilemmas, there are opportunities to break the law for

various reasons related to both the ANTE (He deserves what he's getting) and ANTS

(It'll give me a rush).

The significant positive correlations and betas observed between U and ANTE

scores are recognized as an important finding. As previously stated, the U score is in

place to measure the degree of fit between the importance rating items and the advocacy

of action choices (Rest et al, 1999b). Recall that ANTE scores represent the level of

egocentricity an individual's personality manifests. In other words, individuals with high

scores on this subscale have often acted without regarding the impact it may have on

others. Since both variables have implications pertaining to moral action, investigation of

whether specific action choices are associated with increases or decreases in ANTE scores was warranted. Thus, further analyses involving five one-way ANOVAs were conducted in order to account for differences in ANTE scores among the differing action choices for each dilemma (Table 4).

Significant differences in ANTE scores were seen among action choices for the *Heinz and the Drug* and *Student Take-Over* dilemmas. On the *Heinz and the Drug* dilemma, LSD post hoc tests revealed that those who responded with "Should Steal the Drug" had significantly higher ANTE scores than those that responded with "Should Not Steal the Drug." On the *Student Take-Over* dilemma, those who supported "Should Take Over" had significantly higher ANTE scores than did those who supported "Should Not Take Over." The ANTE scores on the action choices for the *Webster* dilemma should also be noted. Though it was not possible to address these differences statistically due to the disparate number of participants that selected "Should hire Mr. Lee," the results are consistent with the trends noted on the two previous dilemmas.

It is important to distinguish the nature of the decisions made in these scenarios as opposed to other scenarios. The action choices in these dilemmas possess the essence of self-serving opportunities in some form or fashion, whereas the other scenarios are situations in which no apparent self-serving goal would be served, regardless of the decision made. For example, in the *Heinz and the Drug* dilemma, participants may choose the option "Should Steal the Drug" because they feel that the pharmacist is so greedy he deserves to be robbed. When describing the personal interest schema, Rest et al (1999a) stated that individuals operating from this schema may choose "Should Steal the Drug" because Heinz needs his wife to get better so she can continue to provide her

necessary duties as a wife for him. In a similar vein, this action choice may be appealing to those possessing the characteristics that the ANTE score assesses.

In the "Student Take-Over" scenario, self-serving reasons for taking over the administration building may include thoughts such as, "The president deserves this for disagreeing with what everyone else thinks," or even, "This could gain me public exposure." Thus, it is plausible to suggest that those with elevated ANTE scores responded with "Should Steal the Drug" and "Should Take-Over" because making these decisions would fulfill a specific self-serving purpose. These data, therefore, provide initial confirmation that those scoring high on ANTE scale will have a tendency to make self-serving decisions in a situation that calls for moral judgment. In short, this information provides important clues concerning this study's research question in that it offers insight regarding the types of moral decisions that those with elevated antisocial personality characteristics are likely to make.

Limitations

As with any study, the research involved in this current investigation is not without its shortcomings. Given the fact that this study explores new domains, drawing absolute conclusions with the limited data should be cautioned. The primary limitation to this study is the lack of clinically elevated antisocial personality disorders in the data pool. The prisoner sample proved to be similar to the college sample in many different categories and, thus, provided the research with little variance. This is a limitation mainly because the lack of variance makes it difficult to predict just how those with antisocial personality disorder will think about moral dilemmas.

Though the sample included prisoners, the number of prisoners relative to the number of college students was quite small. The initial sample was taken from a state-inmate facility, which only houses an average of 30 to 40 inmates. In addition, many of the prisoners appeared to begin randomly responding to the measurements after a short period of time. Collecting data from a larger source of incarcerated individuals may create more opportunity for variance in future studies.

Another factor to consider in future studies is the administration time of the two measurements. Although a relatively large amount of data was excluded from the final pool due to a failure to pass reliability checks, a great deal of the prisoner data was excluded simply due to a failure to complete the measurements. Hence, future efforts in this direction may wish to reduce the administration time by using less time-consuming measurements such as the short-format DIT, which requires participants to read and respond to three rather than six dilemmas.

Another limitation may be related to the influence of DIT responding to the PAI. After individuals spent a significant time reading and responding to a number of moral scenarios, they may have been less likely to endorse PAI items related to Antisocial behavior. In future studies, reversing the administration order or incorporating some form of counterbalancing; (i.e., an unrelated survey to reset their style of thinking from the DIT) may help to prevent this limitation.

Finally, the Cronbach's alpha for the maintaining norms schema emerged lower than expected. In consideration of the other two schema, which emerged as acceptable figures, the lower maintaining norms Cronbach's alpha likely represents the response pattern from a number of participants who are transitioning towards or away from the

maintaining schema and, thus, were responding inconsistently on items related to the maintaining norms schema.

This study presents opportunities for pursuing research into a completely new domain of how moral judgment develops. Future research should continue to develop this topic with a variety of approaches. As with any study, it is important to create the opportunity for as much variance in the data as possible. Thus, future research should collect data from as many relevant populations as possible. Any prison, jail, or state-inmate facility is appropriate. It is also recommended that no age restrictions be placed on future research. Gathering data from in-patient facilities that specialize in the treatment of adolescents with behavioral disorders is likely to contribute to variance as well.

The DIT should also continue to be the primary tool when measuring moral judgment development in the future. Given the numerous research and validation studies completed with the DIT, as well as the conclusions drawn in regard to its ability to measure an individual's level of moral thinking, the DIT continues to be a viable option when measuring moral judgment. However, as a result of a significant level of attrition, the short-form DIT should be considered in future studies with a similar administration structure. This study addresses moral judgment; however, Rest et al. (1999a) indicate that moral judgment is but one component of moral development. Future studies should explore the possible relationship that antisocial personality factors may have with other components including moral sensitivity, moral motivation, and moral character/implementation. More flexibility can be exercised, however, when dealing with personality characteristics.

Although the PAI is a viable tool when measuring personality, there are a great number of tools available when measuring personality characteristics and the possibility of using others should not be ruled out. Should measurements such as the PAI be used again, it may be practical to consider other Axis-II personality factors and their relationship with moral judgment as well. Proper measures should also be put in place to lower the number of excluded data as a result of a failure to pass reliability checks. Such measures could include a short-form reliability check before the initial administration to assess for any random responders or a contract in which participants agree to answer each item honestly.

Finally, it is recommended that those investigating this topic in the future should adjust the administration of the testing items accordingly when dealing with a population such as state-inmates. Although the college participants were able to complete the measurements in approximately an hour, the prisoner participants took between two to three hours before completing or giving up on the study all together. As mentioned above, the short-form DIT is an appropriate alternative. Also, administering items from the PAI that only relate to antisocial personality factors may be a viable alternative to administering the entire 344-item measurement.

Conclusion

Just as studies have linked prosocial characteristics to the development of moral judgment (Damon & Hart, 1988; Lifton, 1985), this study supports that important relationships exist between antisocial personality characteristics and aspects of moral judgment. The purpose of this study was two-fold: to explore the possibility that antisocial personality characteristics may a) result in a failure to advance in moral

judgment development, and b) result in a failure to utilize one's moral judgment ability. This study's findings did not support that antisocial personality characteristics can inhibit moral judgment development. However, its findings indicate that antisocial personality characteristics can pertain to one's thinking when it comes to making moral decisions. This is evidenced by the relationships seen with ANT subscales and DIT A and U scores as well as the findings that those with elevated ANTE scores had a tendency to respond on two scenarios (and potentially a third) in a way that could suggest self-serving motives. Overall, this study does the duty of setting the foundation for new research and creating the possibility for new hypotheses related to the study of moral judgment and its development. This study therefore supports that the investigation of similar topics in the future is warranted and a worthy pursuit.

References

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental*

disorders (4th ed., text revision). Washington, DC: Author.

Baumeister, R. F., & Exline, J. J. (1999). Virtue, personality, and social relations:

self-control as the moral muscle. *Journal of Personality*, *67*, 1165-1194.

Colby A., & Kohlberg, K. (1987). *The measurement of moral judgment* (Vol. 1). New

York: Cambridge University Press.

Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-*

R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL:

Psychological Assessment Resources, Inc.

Crowson, H. M., DeBacker, T. K., Derryberry, W. P., & Thoma, S. J. (2005, November).

Reliability and the DIT-2: Revisited. Paper presented at the annual meeting of the

Association for Moral Education, Cambridge, MA.

Damon W., & Hart, D. (1988) *Self-understanding in childhood and adolescence.*

Cambridge: Cambridge University Press.

Derryberry, W. P., & Thoma, S. J. (2000). The friendship effect: Its role in the

development of moral thinking in students. *About Campus, 5* (2), 13-18.

Eisenberg, N., Guthrie, I. K., & Cumberland, A. (2002). Prosocial development in early

adulthood: A longitudinal study. *Journal of Personality & Social Psychology*, *82*,

993-1006.

Goldberg, L. R. (1993). The structure of phenotypic personality traits, *American*

Psychologists, 48, 26-34

Kohlberg, L. (1958). The development of modes of moral thinking and choice in the

years 10-16. *Unpublished doctoral dissertation*, University of Chicago, Chicago,
IL.

Lifton, P. D. (1985). Individual differences in moral development: The relation of sex,
gender, and personality to morality. *Journal of Personality*, *53*, 306-331

Morey, L. C. (1991) *Personality Assessment Inventory professional manual.*
Odessa, Fl: Psychological Assessment Resources Inc.

Pizarro, D. (2000). Nothing more than feelings? The role of emotion in moral judgment.
Journal for the Theory of Social Behavior, 30, 355-375.

Rest, J. R. (1979). *Development in judging moral issues.* Minneapolis, MN: University of
Minnesota Press.

Rest, J. (1993). *Guide for the Defining Issues Test*. University of Minnesota.

Rest, J., Deemer, D., Barnett, R., Spickemier, J., & Volker, J. (1986). Moral development:
Advances in research and theory (pp. 28-58). New York: Praeger. *Life*
experiences and developmental pathways.

Rest, J. R., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999a). *Postconventional moral*
thinking: A neo-Kohlbergian approach. Hillsdale, New Jersey: Lawrence
Erlbaum Associates.

Rest, J., Narvaez, D., Bebeau, M., & Thoma, S.J. (1999b). A neo-Kohlbergian approach:
The DIT and schema theory. *Educational Psychology Review*, *11*, 291-324.

Rest, J. R., Thoma, S. J., Narvaez, D., & Bebeau, M. J. (1997). Alchemy and beyond:
Indexing the Defining Issues Test. *Journal of Educational Psychology*, *89*, 498-
507

Thoma, S (2006), *The Handbook of Moral Development*; Mahway, New Jersey:

   Lawrence Erlbaum Associates.

Walker, L. J. (1999). The perceived personality of moral exemplars. *Journal of Moral*

   Education, 28, 145-163.

Wilson, J. P. (1983). Motives, values, and moral judgments. *Journal of Personality*

   Assessment, 47, 414-426

Appendix A

Demographic Questionnaire

Demographics

1. Age: _____ years.

2. Gender (circle one):   Male   Female

3. Cumulative GPA: _____ 3.6 - 4.0
                     _____ 3.1 - 3.5
                     _____ 2.6 - 3.0
                     _____ 2.1 - 2.5
                     _____ below 2.1

4. ACT score: _____   or SAT Score : Total: _____   Verbal: _____

5. Number of semesters in college (including junior college): _____

6. Education level: _____ Freshman
                      _____ Sophomore
                      _____ Junior
                      _____ Senior
                      _____ Other: _____

7. Ethnicity (*optional*):   _____ African American/Black
                                    _____ American Indian or Alaska Native
                                    _____ Asian
                                    _____ Hispanic/Latino
                                    _____ Native Hawaiian or Pacific Islander
                                    _____ White
                                    _____ Other: _____

Appendix D

Informed Consent Document (College Students)

INFORMED CONSENT DOCUMENT (College Students)

Project Title: The relationship between personality and social decision making
Investigator: Nathan A. Kerr.

Psychology Department   270-535-2080

nathan.kerr@wku.edu

You are being asked to participate in a research project conducted through Western Kentucky University. The University requires that you give your signed agreement to participate.

The investigator will explain to you in detail the purpose of the research project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in this research, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep. The information that follows details the parameters of this research project:

1. **Nature and Purpose of the Project:** The purpose of this research project is to address how specific personality factors may relate to social decision making.
2. **Explanation of Procedures:** Your participation in this study involves your completion of three different questionnaires. The questionnaires to be completed ask participants to report demographic information, information about their thoughts about various social dilemmas and situations, and information about personality. Completing these questionnaires will take about 95 minutes.
3. **Discomfort and Risks:** There is minimal or no risk to you in participating in this study. This study involves some self-disclosure, and a commitment of your time is also involved.
4. **Benefits:** Your participation in this research will contribute to psychological research by helping to better understand how specific personality factors can relate to social decision making.
5. **Confidentiality:** Answers and information obtained in this study will remain anonymous and confidential and will be used solely for the purposes of this study. Additionally, answers and information obtained will not be identifiable as your specific answers. If you should become uncomfortable at any time, you have the right to discontinue your participation, and your answers will be removed from the study. You also have the option to refuse to answer any question and remain in the study. Only group data will appear in any reports of this study.

6. **Refusal/Withdrawal:** Refusal to participate in this study in full or in part will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate is free to withdraw from the study at any time.

If you have read and understand the parameters of this study and wish to participate, please sign below after reading the following statement:

I understand the conditions set forth above, and I agree to participate in this study. I also understand that it is not possible to identify all potential risks in an experimental procedure and believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

_____   _____
Signature of Participant   Date
_____   _____
Witness   Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD
Dr. Phillip E. Myers, Human Protections Administrator
TELEPHONE: (270) 745-4652

Appendix E

Informed Consent Document (Prisoners)

<u>INFORMED CONSENT DOCUMENT (Prisoners)</u>

Project Title: <u>The relationship between personality and social decision making</u>
Investigator: *Nathan A. Kerr.*

Psychology Department   270-535-2080

nathan.kerr@wku.edu

   You are being asked to join in a research project made by Western Kentucky University. Before taking part of this study, the University will ask you to sign your name in agreement.
   The investigator will tell you what this project is for, what you will be doing, how this project helps, and if there is any risk for you. You are welcome to ask him/her any questions you have to help you understand the project. A simple explanation of the project is written below. Please read this explanation and talk with the researcher about any questions you may have.
   If you then choose that you want to be in this project, please sign on the last page of this form in front of the person who explained the project to you. You should be given a copy of this form to keep. The information below talks about this research project:

1. **Nature and Purpose of the Project:** The idea of this project is to look at how someone's personality may relate to their decisions in a social setting.
2. **Explanation of Procedures:** To be a part of this study, you will need to complete three different surveys. The questionnaires to be completed ask participants to report background information, information about their thoughts about various social situations, and information about personality. Completing these questionnaires will take about 95 minutes.
3. **Discomfort and Risks:** There is little to no risk to you being a part of this study. This study will ask you to reveal some of your personal information, and a commitment of your time is also involved.
4. **Benefits:** Your presence in this research will help lead to a better understanding of how people's personality can relate to their decisions in social settings.
5. **Confidentiality:** Answers and information that we get in this study will be kept secret and will be used only for the purposes of this study. Also, answers and information obtained will not be seen as your specific answers. If you should feel uncomfortable at any time, you have the right to stop your participation, and your answers will be removed from the study. You also have the option to refuse to answer any question and remain in the study. Only group data will appear in any reports of this study.
6. **Refusal/Withdrawal:** Deciding to not participate in this study in full or in part will not keep you from any future services offered from the University. Anyone who agrees to be a part of this study is free to withdraw from the study at any time.

If you have read and understand the risks and benefits of this study and wish to participate, please sign below after reading the following statement:

I understand the purpose of this study, and I agree to participate. I also understand that it is not possible to identify all of the possible risks and believe that efforts have been taken to lower the chances of any risks.

_____   _____
Signature of Participant   Date
_____   _____
Witness   Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD
Dr. Phillip E. Myers, Human Protections Administrator
TELEPHONE: (270) 745-4652

Appendix F

Human Subjects Review Board Approval