THE AFFECTIVE EXPERIENCE OF MORAL DECISION MAKING

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THE AFFECTIVE EXPERIENCE OF MORAL DECISION MAKING

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THE AFFECTIVE EXPERIENCE OF MORAL DECISION MAKING

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Laura Haley Creel, daughter of William Thomas Haley (deceased) and Nancy (Bowman) Haley Ventulett, was born on September 20, 1968, in Athens, Georgia. She graduated from Deerfield-Windsor School in Albany, Georgia as Salutatorian in 1986. She attended Furman University in Greenville, South Carolina, and graduated *cum laude* in 1990 with a Bachelor of Science degree in Biology, with a minor emphasis in Fine Art. She then worked as a free-lance artist for five years, and simultaneously attended Georgia State University in Atlanta, Georgia as a postbaccalaureate student in Fine Art and Psychology. She married Clyde Howard Creel, son of John Howard and Sheila (Owens) Creel, on May 21, 1994. She entered Graduate School at Georgia State University in 1996. Subsequently, she graduated with a Master of Science degree in Professional Counseling in March, 1998, and then continued her studies to graduate with a Specialist in Education degree in Professional Counseling in August, 2000. After graduation from Georgia State University, she immediately entered Graduate School at Auburn University in August, 2000.

DISSERTATION ABSTRACT

THE AFFECTIVE EXPERIENCE OF MORAL DECISION MAKING

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This research represents an attempt to use Lawrence Kohlberg's theory of moral development, the work of Neo-Kohlbergian theorist James Rest, and the theory of affect proposed by David Watson, as a framework for exploring the affective experiences that adults of different moral developmental levels face as they make moral decisions. Because Kohlberg and Rest focused primarily upon the cognitive processes in moral development, there is a paucity of theoretical literature and research on this phenomenon. Taking into account the available research and theory-based literature on moral development as defined by Kohlberg and Rest, and affective experience as defined by Watson, one research question was posed in this project. Do people at different levels of moral development have different positive and negative affective experiences as they engage in the process of moral decision-making? Using a survey research design, 87

randomly selected adult graduate students from Auburn University completed three questionnaires, beginning with a demographic questionnaire. The Defining Issues Test-Version 2 (DIT-2) measured the independent variable, Level of Moral Development. The Positive and Negative Affect Schedule – Expanded Form (PANAS-X) measured the two dependent variables, Positive Affect and Negative Affect. Participants were asked to complete the PANAS-X to report their affective experiences while completing the DIT-2, which served as the moral decision-making stimulus. Analyses of variance (ANOVA) revealed no statistically significant differences in the positive and negative affective experiences of participants at three different levels of moral development. Other statistical analyses revealed that the mean Positive Affect score was significantly higher than the mean Negative Affect score for the entire sample. Additional analyses of scores on the other eleven affect scales within the PANAS-X revealed no significant differences in the affective experiences of participants in the three different moral developmental groups. Although the two null hypotheses failed to be rejected in this study, investigating concomitant developmental changes in the emotional and cognitive experiences of moral reasoning in adults addresses deficits in adult moral developmental research, provides a more comprehensive view of moral decision making for clinical purposes, and potentially broadens the scope and applicability of Kohlbergian and Neo-Kohlbergian theory.

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CHAPTER ONE: INTRODUCTION

Statement of the Problem

The theory of moral development proposed by Lawrence Kohlberg provides a comprehensive conceptualization of the cognitive processes and structures that accompany moral development. His model of the six stages of moral development centers on the idea that the cognitive structures governing moral reasoning change over time, and these cognitive structures greatly impact other aspects of moral functioning, like emotional reactions and moral behavior. Though his philosophical position supports a holistic view of human functioning and experience, his theory and research efforts do not support holism. Kohlberg rarely addressed the impact that emotions have in moral reasoning, or how emotional functioning may change over the course of moral development. He believed that moral reasoning was carried out through using cognitive structures, and emotional reactions, though sometimes intense, were ancillary to the cognitive operations involved in moral decision-making. His decision not to account for the role of emotions in moral functioning undercut his efforts to provide a comprehensive view of moral development.

Kohlberg's work was carried on and modified by James Rest, one of his students. Rest developed an instrument, the Defining Issues Test, which was initially designed to

measure stages of moral development according to Kohlberg's theory. Today the DIT is recognized as one of only a handful of instruments that assess moral development. Several hundred studies using the DIT have lent support to many of Kohlberg's ideas. As the body of DIT research grew along with criticisms of Kohlberg's work, Rest and some of his colleagues started to question inconsistencies in Kohlberg's philosophical influences, his structural model emphasizing six hierarchical, discrete stages, and his focus on cognitive operations in defining those stages. He and his colleagues altered Kohlberg's model to create the Neo-Kohlbergian approach, which emphasizes the cognitive development of justice reasoning as a progressive shift in the frequencies in which people use three moral schemas to make moral decisions.

The Neo-Kohlbergians also developed a four component model of the psychology of morality to clarify the scope of their work and give credence to other aspects of moral functioning, such as affective experiences. Like Kohlberg, the Neo-Kohlbergians focused on cognition, but they more readily acknowledged the limitations of this narrow focus. They wrote about how cognition and affect exert a reciprocal influence on each other during moral decision making, in developing moral motivation and character, and in sensitivity to moral issues. Even though the Neo-Kohlbergians realized the potentially tremendous influence of emotions on all aspect of moral functioning, they did not research the link between cognition and affect in moral development.

Watson (2000) studied affective experience by focusing on mood, which is an episode of varying length during which a person experiences multiple emotions that seem to follow certain cyclical patterns. He and his colleagues developed a hierarchical, two-dimensional model of affect based on their research results (Tellegen, Watson, & Clark,

1999; Watson, 2000; Watson & Tellegen, 1985). Watson and Clark (1994c) also developed a model for understanding the complexity of affective experiences. In addition to his interest in short-term mood states, Watson also found that people tend to experience mood states that are stable over time; he called this phenomenon trait affect, and he has investigated this construct extensively. Watson distinguishes trait affect from another of his constructs, temperament, which is a long-term affective pattern that is related to various enduring aspects of personality. In general, Watson's approach provides a theoretically based, yet empirically supported view of how short-term, trait-based, and temperament-based affective experiences seem to center around two basic dimensions, Positive Affect and Negative Affect.

Currently, there is a lack of information that integrates emotional experience with Kohlberg's theory or Rest's Neo-Kohlbergian approach. This study applied the above theories of moral development to David Watson's approach to understanding the role of affect in daily mood and temperament by investigating the types of affective experiences reported by adults at different levels of moral development, as they engage in a moral decision-making task. This first step in integrating these three theories involved assessment of level of moral development using an instrument that exemplifies Kohlbergian and Neo-Kohlbergian theories, along with simultaneous assessment for certain types of affect using an instrument that is based on Watson's model of affective experience. By using this research method, one could attempt to identify any quantifiable relationship between these sets of ideas. The application of Watson's theory to Kohlbergian and Neo-Kohlbergian ideas about the affective experience of moral development may strengthen these moral development theories by making them clearer,

more internally consistent, and more comprehensive in their explanation of human moral functioning.

Background

Kohlberg developed his stage theory of moral development based on the three philosophical assumptions of phenomenalism, structuralism, and constructivism (Colby & Kohlberg, 1987), and on theories of justice posited by Kant, Rawls, and Piaget. He modified and narrowed the scope of this theory over time, eventually referring to his work as exploring "the rational reconstruction of the ontogenesis of justice thinking" (Kohlberg, 1984, p. 217). By centering his theory around the idea that people mature in their ability to conceptualize the universal principle of justice, Kohlberg created a hard stage model with three levels of moral development, and two stages within each level. Each stage has qualitatively different cognitive structures for justice reasoning, and there is no overlapping, skipping, or reversal in the developmental sequence. As people progress in their moral development, the cognitive structures of their sociomoral perspectives change to reflect a more accurate understanding of justice, equality, equity, universality, and the felt experiences of others.

Kohlberg conceptualized a developmental shift from externalized, self-interested moral heteronomy at the Preconventional level of his model (Stages 1 and 2), to awareness of the need to obey authorities, follow social norms, and maintain social rules for the benefit of all people at the Conventional level of his model (Stages 3 and 4). This second level shifts to a Principled, Postconventional level (Stages 5 and 6) where a person recognizes his or her individualized moral principles, his or her responsibility in

upholding broader moral principles and respecting the inherent worth of all people, and his or her commitment to creating society, all of which characterize moral autonomy.

Assessment instruments designed to test Kohlberg's theory include the Moral Judgment Interview (Colby & Kohlberg, 1987), the Defining Issues Test (Rest, 1974), the Defining Issues Test-Version 2 (Rest & Narvaez, 1998), and the Sociomoral Reflection Measure-Short Form (Gibbs, Basinger, & Fuller, 1992). Using these instruments in longitudinal, cross-cultural, and factor analytic research, Kohlberg and other researchers have found support for a culturally universal, transformational, invariant developmental sequencing of stages that appear to be qualitatively different with regard to logical operations. More support has been generated for Stages 1 through 4, and less support has surfaced for Stages 5 and 6, partially due to a focus on childhood moral development over adult moral development, and partially due to difficulties in finding people who score at these higher stages. Also, the concepts of heteronomy and autonomy seem to be supported in research. As always, research exists that does contradict these findings, but many psychologists acknowledge the rather large amount of research support for Kohlberg's ideas.

James Rest emerged as one of Kohlberg's most prolific students, writing his dissertation on Kohlberg's stages and developing an instrument (the DIT / DIT-2) that assesses Kohlberg's stages of moral development in a faster, more quantitative way than did Kohlberg's MJI. He ardently supported the hard stage model of moral development. Over the years, as criticism over Kohlberg's theory mounted and DIT research results came pouring in, Rest started to question several aspects of Kohlberg's theory. Rest was concerned about the philosophical pitfalls of suggesting foundational principlism, using

modern and postmodern philosophical concepts simultaneously, identifying too closely with the political philosophy of John Rawls, and inadvertently proposing a theory of normative ethics (Rest, Narvaez, Bebeau, & Thoma, 1999a; Rest Narvaez, Bebeau, & Thoma, 1999b). He also was troubled by the level of abstraction in Kohlberg's writings, and by his wholesale acceptance of Piagetian theory as a basis for the six-stage model. Like Kohlberg, as time went on Rest increasingly acknowledged the limited scope of Kohlberg's theory, but unapologetically continued to limit his research to testing the development of justice reasoning. DIT research started to contradict the hard stage model in some ways, and Rest, Narvaez, Bebeau, and Thoma (1999a, 1999b), struggled to make sense out of the results.

They settled on adopting a version of cognitive schema theory to explain the trends they saw in their DIT research, and called their modifications the Neo-Kohlbergian approach (Rest, Narvaez, Bebeau, et al., 1999a, 1999b). The group modified and modernized the DIT into a new version, the DIT-2 (Rest & Narvaez, 1998). They remained focused on studying the ontogenesis of justice reasoning, they denied any affiliation with a philosophical school of thought, and they adopted cognitive schema theory, which is a more contemporary view of cognitive development than Piaget's approach. Basically, they proposed that justice reasoning occurs within three levels of moral schemas: preconventional/personal interest, conventional/maintaining norms, and postconventional. These schemas are conceptually similar to Kohlberg's three levels. Over the course of moral development, justice reasoning becomes increasingly complex as people use postconventional schemas to solve moral dilemmas with greater frequency, and use conventional and preconventional schemas with less frequency. Development

does not appear to progress in discrete stages where only cognitive structures are used to solve moral problems, but rather in a series of overlapping schema preferences.

In addition to revising Kohlberg's model of moral development, the Neo-Kohlbergians thought it was necessary to frame their work, and that of Kohlberg's, into a comprehensive model of the psychology of morality that went beyond the traditional considerations of thought, affect, and behavior (Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999a, 1999b). They created a four component model of morality, where the four components of moral sensitivity, moral judgment, moral motivation, and moral character interacted with each other to determine moral behavior. Within this model, the Neo-Kohlbergians specified that their literary and research efforts were rather limited to the moral judgment component. Be that as it may, they also attested to the inherent complexity of the moral domain, and to the significant influence of affect on all four components, including moral judgment. However, they have not researched that connection, to date.

The idea that the subjective experience of affect exerts a tremendous influence on cognitive functioning is one of the critical theoretical assumptions David Watson (2000) uses in his theory of affect. Thus Watson suggests that affect may not just be an effect of cognitive processing, as Kohlberg suggested, but that it can also be a causal factor in cognitive processing and change. Affective experiences have important adaptive value, and they are an integral component of broader biobehavioral systems that explain human functioning. According to Watson, cognitive processing, biological influences, behavioral influences, and affective experiences are the four components that work in continuous feedback loops to enable humans to adapt to their respective environments.

Using these concepts as theoretical cornerstones of his work, Watson attempted the difficult task of measuring subjective affective experience. Along with his colleagues, he used factor analytic techniques to develop an instrument that assesses affect, the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988), and later he presented it in an expanded version, known as the PANAS-X (Watson & Clark, 1994b). The original PANAS (and later the PANAS-X) was used to assess subjective mood, which Watson believed was a much more useful concept than emotion in understanding everyday affective experiences. Over time, his research, as well as the research of other colleagues and scholars, revealed that affective experience seems to be arranged in a hierarchical model where two broad, independent constructs, Positive Affect (PA) and Negative Affect (NA), seem to account for much of the everyday emotional lives of people. More specific emotions are on the second level of this model. The specific emotions are intercorrelated because they can be subsumed under these two broad categories, yet they seem to be distinct constructs as well.

These findings were replicated when Watson and his colleagues studied transient, short-term moods, but they also appear to occur as long-standing mood patterns, which he called trait affect. Furthermore, PA and NA seem to be closely related to enduring personality characteristics as identified in McCrae and Costa's (1987) Big Five model of personality. Watson (2000) referred to personality-linked affective factors as temperaments. These results influenced Watson, as well as Watson and Clark (1994c) to develop a broader model that frames everyday affective experience as the product of four different forces: affective traits and temperaments, exogenous factors, endogenous and sociocultural rhythms, and characteristic variability. Watson's theory, research, and

instrumentation seem to provide a solid foundation from which affective experiences can be studied, particularly as they relate to the domain of moral functioning.

Kohlberg's ideas on moral development, along with Neo-Kohlbergian modifications of Kohlberg's work, can be used to explore affective aspects of moral functioning, thereby creating a more holistic approach to understanding moral development. Kohlberg acknowledged that emotions accompanying moral conflict can be quite intense, but emotions still play a miniscule role in comparison to the primacy of cognitive processes (Kohlberg, 1984). Many critics have noted the fact that Kohlberg focused on cognition at the expense of other aspects of moral development, especially emotions (Conn, 1981; Gilligan, 1982/1993; Kurtines & Greif, 1974). It is noteworthy to mention that while Kohlberg limited his research, he maintained that there was more to the moral domain than his theory permits. Rest and colleagues (1999a, 1999b) corroborated this position by stating that the complexity of the moral domain is so vast that it was necessary for them to focus their research on a small subset of moral phenomena, mainly cognitive developmental processes. Rest and colleagues also attested to the multiple facets of moral functioning by proposing their four component model. Even though affect was not a specific component, Rest (1986) and his colleagues (Rest et al., 1999b) believed that affective experiences probably have a notable impact on each component, and Rest (1986) cited research evidence to support this position.

Watson (2000) wrote about the importance of considering cognitive processes, stating that it works in synchrony with affective, biological, and behavioral processes to produce comprehensive human biobehavioral systems. He suggested that cognition and affect are so intertwined that it is difficult to discern whether cognition causes affect, or

vice versa. Since he attested to the motivational and adaptive value of affect, he believed that affective experience definitely could cause cognitive activity, or even cognitive changes. Even though he had this view, Watson chose to focus his studies only on the subjective experience of affect. Since his approach values the contribution of cognition processes to human functioning and concentrates on affective experience, it seems to coordinate well with the overall purpose of this current study, which was an attempt to explore the interface between moral developmental level and affective functioning.

Rationale for the Study

First and foremost, this research study was an attempt to address the lack of information integrating Kohlbergain and neo-Kohlbergian moral developmental theory with the emotional experience of moral decision making. The primary reason for such an integration evolved out of one of the most valid criticisms of Kohlberg's theory of moral development: the charge that he did not devote enough time and attention to other aspects of moral functioning, especially the affective experience of moral development. This criticism is in direct confrontation with Kohlberg's insistence that his theoretical and philosophical foundations honored the entirety of human moral experience. Furthermore, this criticism can be applied to the limited program of research by Rest and his colleagues, who openly recognized the need for more comprehensive research on other aspects of moral functioning.

The second rationale for this research project involves generating research in adult moral development while accounting for affective variables in moral development. Kohlberg's theory has received tremendous research support for the earlier stages of moral development, but far less research has been devoted to testing his later stages of

moral development found in adults. The increase in usage of the DIT and DIT-2 in moral development research has tapped into adult populations and generated evidence for Rest's concepts of conventional and postconventional moral reasoning, which are primarily based upon Kohlbergian theory. Some psychologists suggest that the interaction of cognitive and emotional experiences may actually promote the development of both (Hoffman, 1976). Could this phenomenon also be true of moral development, since it is has been theoretically related to cognitive development? If emotions are a powerful part of the experience of moral judgment, as Kohlberg (1984) and the Neo-Kohlbergians (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999b) suggest, could affective experience be more than just an ancillary phenomenon that does not impact the actual decision-making process?

Instead of viewing emotional experience as an "extra" variable in the relationship between cognition and moral judgment, this study is an exploration of the types of emotions experienced as adults make moral judgments. This perspective acknowledges the complexity of adult moral reasoning while adding to the body of research on more advanced Kohlbergian and Neo-Kohlbergian levels of moral development. This study was an initial attempt to better understand how two important aspects of human experience, cognition and affect, come together in the moral domain. As Gilligan, Murphy, and Tappan (1990) once wrote about the problems inherent in being overzealous about continuing to separate and isolate aspects of human moral functioning, "reason must be reunited with relationship, thereby making feelings an inseparable part of human thought" (p. 224).

Importance of This Study for Counseling Psychology

Counseling psychologists rely heavily on theoretical concepts and concomitant research to inform practice. In the area of professional practice, counseling psychologists often refer to several theories to develop holistic, comprehensive conceptualizations of clients and their problems, with the ultimate goal of providing the most effective services possible for clients. In addition, counseling psychologists are known for their focus on theories and research endeavors that explore the many facets of human development, like cultural development, cognitive development, emotional development, and moral development. In clinical settings, they closely attend to any possible developmental issues their clients bring to therapy. Clients often have problems with moral and ethical dilemmas, and their difficulties in coping with such dilemmas may constitute the primary reason that they seek treatment. In order to understand these dilemmas better, counseling psychologists may employ Kohlbergian and/or Neo-Kohlbergian theories of moral judgment development to ascertain the primary moral developmental level at which each client operates. These theories help practitioners to assess and conceptualize the cognitive and moral functioning of their clients as they think about their moral dilemmas, but it offers little assistance in understanding how those cognitive processes are connected to certain emotions.

Research that investigates the relationship between affective functioning and the ideas of Kohlberg and the Neo-Kohlbergians would give clinicians a broader theoretical basis for understanding and exploring both the cognitive and emotional aspects of moral reasoning with their clients, thus enhancing the development of therapeutic goals, counseling process, and therapy outcomes. Taken alone, Kohlbergian and Neo-

Kohlbergian concepts can seem rather abstract and difficult to apply in clinical settings. However, providing both cognitive and affective indicators of moral developmental level could give counseling psychologists multiple points of assessment, thus making the theories more amenable to clinical applications.

Counseling psychologists frequently study the relationship between emotion and cognition from the perspective of cognitive-behavioral theories, and contribution of cognitive-behavioral approaches to clinical work is corroborated by vast amounts of empirical research. Since this study is an exploration of the relationship between emotions and a more specific form of cognition, namely moral cognition, its results also may be applicable to counseling practice, even though the this study is not based specifically in cognitive-behavioral theory. In addition to helping clinicians gain insight into the links between affective functioning and moral cognition with their clients, the use of an integrated approach could help clinicians gain insight into countertransference issues that may arise, particularly if they have different moral views than their clients. Increasing sensitivity to this realm of human functioning could allow counseling psychologists to explore their own moral and emotional reactions in therapy and increase their awareness of how such differences could impact the therapeutic relationship.

Like counseling psychologists, both Kohlberg and Rest valued a holistic view of human functioning that honors the complexity and richness of human experience. Each of them believed that their admittedly limited, cognitive-based approach leaves much of the moral domain unexplored. Rest and the Neo-Kohlbergians offered a four component model that frames the moral domain as a function of moral judgment, motivation, sensitivity, and character. They theorize that emotions have a substantial influence on

each component, but they propose very few specific ideas about how emotions are related. This study serves to explore this idea by first identifying if such a relationship exists between general categories of affect and one aspect of moral judgment, the development of justice reasoning. If affective experience does correspond with different levels of moral development, then moral developmental theory should be modified to account for this information. Perhaps results like these could influence a shift in the trend of moral developmental theory and research from an analytical focus on pure cognition, to an integrative perspective that caters to the multiplicity of psychological processes involved in the psychology of morality. Likewise, research that attempts to bring aspects of human functioning (i.e., moral cognition and affect) together would truly reflect the synthetic, holistic view of humans that Kohlberg, the Neo-Kohlbergians, and counseling psychologists have traditionally held in such high regard.

Definitions and Variables

Affective Experience. Affective experience is defined as a state of being within which one consciously senses emotions and possibly becomes aware of a change in one's physiological state, all in response to some environmental or intrapersonal stimulus. In this study, affect will be measured and quantified as subscale scores on the Positive and Negative Affect Schedule-Expanded Form (PANAS-X) (Watson & Clark, 1994b).

Dependent Variables. The two dependent variables in this study are Positive and Negative Affective Experience, as defined above and quantified in the Positive Affect scale and Negative Affect scale scores on the PANAS-X (Watson & Clark, 1994b).

Independent Variable. The independent variable in this research study is the level of moral development at which each research participant is functioning, as defined by

Kohlberg's theory of moral development and Rest's Neo-Kohlbergian approach. Each person will fit into one of the three levels of moral development that Kohlberg delineated in his stage model, which is corroborated by Rest.

Moral Development. Moral development is defined by Kohlberg and Rest as a process of continual change in the way people understand and judge what is right or wrong, good or bad. This change occurs over the course of human life, from birth to death. For the purposes of this study, the level of moral development will be expressed as a score on the Defining Issues Test-2 (DIT-2) (Rest & Narvaez, 1998).

Negative Affective Experience. Negative affective experience is defined as stated above, with the specification that negative emotions such as fear, guilt, and irritability may be involved. These emotional states are generally viewed as painful to experience. In this study, negative emotions will be measured and quantified as scores on the Negative Affect scale of the PANAS-X (Watson & Clark, 1994b).

Positive Affective Experience. Positive affective experience is defined as stated above, with the specification that positive emotions such as excitement, pride, and confidence may be involved. These emotional states are generally viewed as desirable and pleasant to experience. In this study, positive emotions will be measured and quantified as scores on the Positive Affect scale of the PANAS-X (Watson & Clark, 1994b).

Research Questions and Hypotheses

The overarching research question set forth for this study was as follows: Do people at different levels of moral development have different affective experiences as they engage in the process of moral decision making? Taking into account the theoretical positions used in this study, the empirical research on these positions, and the instruments

that will be used to measure the variables, The more specific research question posited for this study was as follows: Do people at different levels of moral development have different positive and negative affective experiences as they engage in the process of moral decision-making? Three theoretical positions are used to explore this phenomenon: the moral developmental theory of Lawrence Kohlberg, the moral developmental theory of James Rest and the Neo-Kohlbergians, and the approach to affective experience espoused by Watson. The following two null hypotheses were generated to address the research question.

Ho1: There will be no statistically significant difference in Positive Affective Experience for participants at different Levels of Kohlbergian/Neo-Kohlbergian Moral Development.

Ho2: There will be no statistically significant difference in Negative Affective Experience for participants at different Levels of Kohlbergian/Neo-Kohlbergian Moral Development.

The following two alternative forms of these hypotheses were generated as well.

Ha1: There will be a statistically significant difference in Positive Affective Experience for participants at different Levels of Kohlbergian/Neo-Kohlbergian Moral Development.

Ha2: There will be a statistically significant difference in Negative Affective Experience for participants at different Levels of Kohlbergian/Neo-Kohlbergian Moral Development.

Kohlberg conceptualized a series of developmental shifts in justice reasoning, from externalized, self-interested moral heteronomy toward the increasing moral autonomy. Moral autonomy is characterized by heightened awareness of one's individualized moral principles, one's responsibility in upholding broader moral principles and respecting the inherent worth of all people, and one's commitment to

creating society. This level of justice reasoning is known as the postconventional level. The level of development preceding postconventional morality is that of conventional morality, which is a heteronomous state where justice-based decisions are made by following the accepted norms, laws, and roles of society, and never questioning them. The stage preceding conventional morality is known as preconventional morality, another heteronomous state where people make moral decisions based on gaining approval or reward from others, or avoiding punishment.

Rest and the Neo-Kohlbergians offered a modified version of Kohlberg's theory, where moral judgment is seen as one component of a four component model for conceptualizing the psychology of morality. Like Kohlberg, they focused solely on moral judgment, and a specific type of it, justice reasoning. The Neo-Kohlbergians suggested that moral development is better explained by using schema theory as opposed to a hard stage model, as Kohlberg originally had proposed. According to them, development is an overlapping progression where a person may use all three schemas regardless of developmental level, but over time he or she utilizes increasingly advanced (postconventional) moral schemas more frequently over less advanced moral schemas (preconventional, conventional) while making moral decisions. They maintained Kohlberg's descriptions of three different levels of moral development to describe their three moral schemas; personal interests, maintaining norms, and postconventional. They also developed the DIT and the DIT-2, instruments that were meant to assess for level of moral development as defined by Kohlberg and themselves.

After considering prominent theories of emotions and his research on mood, trait affect, and temperament, Watson (2000) defined affective experience hierarchically with

two overarching dimensions, Positive Affect and Negative Affect. More specific, discrete emotions may be subsumed under these two primary dimensions, or they may be investigated on their own. He developed the PANAS and the PANAS-X from factor analysis, and subsequently it has been used to support his theoretical assumptions and hierarchical model. Because his work expresses broad themes about the complexity of human functioning in a manner consistent with the work of Kohlberg and the Neo-Kohlbergians, Watson's theory serves as the perspective from which affective experience will be viewed in this study.

CHAPTER TWO: LITERATURE REVIEW

This literature review will provide an outline of Kohlberg's theory of moral development and the Neo-Kohlbergian approach to moral development, along with applicable instrumentation and research. After that, Watson's theory of affective functioning is reviewed, as are his theoretical and research based influences for the theory. A description of his assessment instrument is included in the review. The last section of this literature review covers how Kohlbergian theory, Neo-Kohlbergian theory and Watson's approach to affective functioning can be integrated to form the theoretical basis for this current research study.

Kohlberg's Theory of Moral Development

Introduction

Lawrence Kohlberg was one of the first psychological theorists to ponder and investigate how and why people judge what is right or wrong, and how those judgments change over the course of human development. In the 1950's, Kohlberg (1958/1994) first publicized his stage theory of moral development in his doctoral dissertation, where he also introduced a theory-based assessment instrument he created in order to test his ideas. Until his death in 1987, Kohlberg pursued a prolific career within which he consistently tested and revised both his assessment instrument and his theory. Kohlberg's perspective on moral development has drawn considerable praise and criticism over many decades,

and his work continues to inspire psychologists to create new directions in theory and research. A review of Kohlberg's theory of moral development is presented in this section, as well as a summary of the research on adult moral development relative to Kohlberg's theory. A survey of relevant assessment instruments is followed by a critique of the theory, along with a consideration of some of the unanswered questions generated by reviewing Kohlberg's theory.

The Development of Moral Reasoning: A Stage Theory

Philosophical Assumptions of the Theory

Before Kohlberg's theory of the development of moral reasoning can be introduced, it is vital that the philosophical underpinnings of his approach to research and theory are revealed. The three basic philosophical assumptions that buttress Kohlberg's approach to defining and measuring the development of moral judgment are phenomenalism, structuralism, and constructivism (Colby & Kohlberg, 1987). The first precondition, phenomenalism, is described by Colby and Kohlberg (1987) as a fundamental element of the research and assessment process. During research and assessment encounters with participants, it is assumed that any moral judgments that they make are meaningful elements of their own subjective moral reality, not irrational or trivial expressions. One must interpret the meaning of all responses by entering the frame of reference of the participants, and then understanding what the participants mean in their own words. Kohlberg, Levine, and Hewer (1984) argue that moral reasoning is an active and conscious process that takes place in the present and is not influenced by unconscious forces. Responses to moral dilemmas are considered moral actions that directly reflect the motives and constructions of moral meaning for each person.

The next underlying assumption of Kohlberg's theory is structuralism. Colby and Kohlberg (1987) define structure as the forms and patterns of thoughts, not the content of thoughts. Structure is the conceptual framework of relationships among ideas that ultimately creates moral beliefs, opinions, and judgments. There is a generalizable and consistent quality in the subjective meanings of moral judgments, even if the judgments differ between people. From this common thread, responses can be categorized into appropriate developmental levels. For Kohlberg (1984), this structure is completely cognitive in nature, as evidenced by the following passage:

> Cognitive structure refers to rules for processing information or for connecting experienced events. Cognition means putting things together or relating events, and this relating is an active connecting process, not a passive connecting of events through external association and repetition. In part this means that connections are formed by selective and active processes of attention, information gathering strategies, motivated thinking, and so forth. More basically, it means that the process of relating particular events depends upon prior general modes of relating developed by the organism. The most general modes of relating are termed "categories of experience." (p.10)

The cognitive structure beneath an individual's moral judgments is discovered and interpreted phenomenologically in the assessment experience when the interviewer utilizes the participant's own viewpoint. This interaction between participant and interviewer is a hermeneutic experience where the two parties create and share meaning (Colby & Kohlberg, 1987). The shared meaning is interpreted to determine the participant's moral developmental level. Though this process does not seem to abide by

the scientific method, Kohlberg cautions that the integrity of the scientific method is honored in the interpretive process. Each interviewer must score the responses of participants by using explicit and objective sets of interpretive rules that are outlined in the interview manual (Colby & Kohlberg, 1987).

Constructivism is the final philosophical assumption that Kohlberg applied to his theory. Colby and Kohlberg (1987) write that humans constantly construct meaning and reality for themselves as they actively experience the world around them. Even though reality is reconstructed in every moment, the cognitive structure of that reality is largely determined by that person's current level of moral development. Colby and Kohlberg explain the developmental progression of moral judgment by writing, "The individual's current developmental stage has arisen from his or her developmental history such that the present mode of construction is an outgrowth of the prior mode" (p.5). Kohlberg cites Piaget's (1932/1965) cognitive developmental theory as a major constructivist influence. Like Piaget, Kohlberg asserts that development proceeds as cognitive structures build upon one another and reintegrate.

Moral principles themselves are developmental constructions because they are the result of a person's constant interaction with the environment over time (Kohlberg et al., 1984). This is a crucial point because many critics have incorrectly assumed that Kohlberg's theory defines moral principles as *a priori* maxims. On the contrary, moral principles are dynamic in nature. Kohlberg explains that moral principles, like other cognitive constructions, are "bootstrapped," meaning that principles are applied to moral issues in order to find a solution and create a new reality. If the principles do not lead to problem resolution, the principle may be reformulated, and may augment the moral

developmental level of the participant (Kohlberg et al., 1984). Moral development proceeds with the continual construction of new cognitive structures that allow people to make more complex and consistent moral judgments in an ever-changing environment.

Kohlberg's Historical and Philosophical Influences

To understand the concept of moral development from the perspective of Kohlberg, it is first necessary to frame it in a broader philosophical context. Kohlberg was influenced greatly by the ethical philosophy of Immanuel Kant. Kant (1785/1948) believed that a universal moral law existed which carried a particular form, and morally autonomous humans who used reason to its fullest extent are the embodiment of this law. Thus, autonomy is the basis of all moral principles, and of ethics in general. Humans have the ultimate responsibility to form moral law by being morally autonomous.

Kant believed that humans are free and rational beings. The human ability to reason and then act freely upon that reasoning, as opposed to acting upon our own selfish interests, is an indication that humans have feelings of moral obligation and a sense of fairness. These senses are the basis of moral autonomy, one of the cornerstones of ethics. Kohlberg, like Kant, wanted to know where this sense of moral obligation originates, and what conditions are necessary for the development of this sense. Tappan, Kohlberg, Schrader, Higgins, Armon, and Lei (1987) define moral autonomy as "an independent and self-legislative stance taken in making moral judgments in the domain of justice" (p. 315). Using this definition, Kohlberg set out to describe the development of moral autonomy from a state of moral heteronomy.

Kohlberg's idea that moral autonomy must develop in stages was created under the influence of Piaget (1932/1965), who wrote extensively about heteronomous and

autonomous morality, and its relationship to deontology, or theories of moral obligation. Piaget approached his work from a justice orientation and from a cognitive perspective, both of which will be described in later sections of this review. The cognitive perspective tied moral philosophy directly to human operations. Piaget's theory of cognitive development hypothesized about the structure, evolution, and observable characteristics of human thought. Piaget and Kohlberg believed that moral development is but one aspect of cognitive development, along with logicomathematical and social cognitive development. Piaget theorized about the development of logicomathematical reasoning, and Kohlberg chose to look at the cognitive aspects of moral development. Using Kantian ethics and Piaget's stages of cognitive structural development as tools, Kohlberg (1958/1994) developed the first incarnation of his moral developmental theory.

The Principle of Justice

The theory of moral development that Kohlberg created is a specific theory about the development of moral reasoning, but Kohlberg attempted to refine the scope of his theory by focusing on the justice operations of moral reasoning (Kohlberg et al., 1984). There are several people that influenced this direction in his thinking, namely Rawls, Piaget, and Aristotle. In order to comprehend Kohlberg's theory, it is important to understand how these people impacted Kohlberg's perspective.

Within the domain of moral philosophy, Kohlberg identified with the work of John Rawls. Rawls (1971) used a Kantian rational orientation to morality, and saw justice as the ultimate logical construction. Though they agreed with Kant about the primacy of logic and reasoning in the development of a justice orientation, both Rawls and Kohlberg rejected the idea that justice is a Kantian *a priori* condition, an objective moral reality.

Instead, they proposed that justice is a constructivist process where morally autonomous, rule-following people engage in dialogue to create a reality rooted in fairness and responsible action (Kohlberg, et al., 1984). Rawls (1971) framed this dialogue as a "thought experiment," where people think imaginatively to arrive at an ideal, justice-based solution to social problems. Rawls (1971) regarded justice as a dynamic feature of human social life, the primary virtue of any society. He also wrote that justice is what all people can agree upon when they strive for fairness in their dealings with others. Kohlberg utilized this philosophical conceptualization heavily in his theory.

Kohlberg (1984) extols justice as the essential structure of morality, and wrote, "a person's sense of justice is what is most distinctively and fundamentally moral" (p. 184). Justice is seen as the "distribution of rights and duties regulated by concepts of equality and reciprocity" (p. 184). Kohlberg elaborated upon justice as "the normative logic, the equilibrium, of social actions and relations" (p. 184). This conceptualization of justice is closely related to that of Piaget (1932/1965). Piaget saw justice as a fundamental condition of social relationships that supplies a sense of equilibrium and balance in society. Furthermore, Kohlberg agreed with Piaget that justice reasoning is a cognitive operation that develops over time, and could have a cognitive developmental structure of its own (Kohlberg et al., 1984).

Another theory of justice that Kohlberg utilized in his own theory was that of Aristotle. In his *Ethics*, Aristotle discussed three problems of justice (as cited in Kohlberg et al., 1984). First was the problem of appropriating honor, wealth, and other benefits among members of society, known as distributive justice. Second was the problem of how people reach agreements and make contracts, known as commutative justice. The

third problem involved the process of "righting the wrongs" when people have been violated in some way, known as corrective justice. Kohlberg maintained people at different stages of moral development use stage-specific methods of justice reasoning to solve these problems in different ways, even if the final judgment is the same. Kohlberg et al. (1984) explain the distinct approaches that people in different moral developmental stages use to solve these philosophical dilemmas. Thus, Kohlberg uses these descriptions to display differences in justice reasoning between the stages in his theory.

The Moral Domain and Its Cognitive Structure

Kohlberg followed Piaget's lead by hypothesizing that in the moral domain of human life, justice reasoning is organized within certain cognitive structures, and these structures develop in a series of stages. At this point in the development of his theory, Kohlberg needed to establish a connection between the moral domain, specific structural aspects of justice reasoning, and the developmental course of the entire phenomenon. To accomplish this, Kohlberg began with the most recognizable cognitive operation that humans use in the moral domain, moral judgment.

Piaget (1932/1965) and Kohlberg (1984) believed that moral judgments are driven by a sense of justice. People mature in their ability to conceptualize the universal principle of justice, and their moral judgments reflect that growth. Colby and Kohlberg (1987) define moral judgment as "a mode of prescriptive valuing of the obligatory or right" (p. 9). Colby and Kohlberg (1987) also describe moral judgments as social judgments that involve many people. Moral judgments indicate values, not facts, and they are prescriptive, which means that people view moral judgments as something more than opinions or preferences. Prescriptive moral judgments are imperatives that inform us of

our rights and obligations. Thus, people use them as the impetus for moral actions. Moral judgments are not a universalizable set of "thou shalt nots" that apply to all humans, but they are justifiable because they reflect universal moral laws and principles, like justice.

Using this view of moral judgment, Kohlberg attempted to define a fundamental developmental concept that displays how moral judgment is cognitively organized, and how it develops. He coined the concept "sociomoral perspective" for this purpose. Sociomoral perspective is "the characteristic point of view from which the individual formulates moral judgments" (Colby & Kohlberg, 1987, p.15). It is also a form of normative ethical thinking, which refers to thinking about what is right or wrong, good or bad. Kohlberg theorized that people who have differing sociomoral perspectives actually differ in their level of cognitive structural organization as it applies to moral judgment in the moral domain. Thus, the sociomoral perspective that people take on certain moral issues can be used as an indicator of how they organize moral rules, rights, obligations, and values, as well as how they justify what is right or wrong (Colby & Kohlberg, 1987).

Over the course of human development, sociomoral perspective evolves interdependently with other types of cognitive structures, like logicomathematical reasoning or social cognitive reasoning. Like these other types of cognitive structures, Colby and Kohlberg (1987) proposed that there are levels of sociomoral perspective development, and different characteristic types of justice reasoning prevail at different levels. In other words, a person's moral point of view is organized in different ways that correspond with their level of moral development. Types of justice reasoning are the operations that lie within each discrete sociomoral viewpoint, which Kohlberg conveniently organized into six stages.

In order to develop and test his theory, Kohlberg realized that he must operationalize justice reasoning into a set of observable operations that he could fit within each stage. Kohlberg (1984) began this process by delineating four basic moral orientations by which people operate, based upon his studies of moral philosophy. There is a normative orientation that compels people to follow rules and norms, and there is a utilitarian orientation where people attempt to contribute to the welfare of others. There is also an orientation toward seeking internal balance and harmony with others. The most relevant moral orientation is the fairness, equity, and social contract orientation. The concept of justice pervades all the orientations, but is most evident in the last one.

Within the fairness orientation, Kohlberg sought to pinpoint the cognitive operations inherent in justice reasoning. He defined five such operations: reciprocity, prescriptive role taking, equality, universality, and equity. People who use all of these orientations have developed to the highest level of justice reasoning. Reciprocity is the fair delivery of reward or punishment for one's actions. Equality is the identical distribution of goods, or the equal consideration of differing claims, or the equal participation of all in the process of considering claims. Prescriptive role taking involves taking the perspectives of others and balancing those fairly with one's own perspective. One can imagine that he/she is in the position of others and see the consequences his/her own actions. Universality is the acknowledgment that judgments must be fair to all, and asks the question, "is it right for *anyone* to make this particular judgment?" (Kohlberg, 1984, p. 623). Finally, equity is achieved by compensating others in response to injustice that has befallen them. At different developmental stages, people will use these five

operations at variable levels. The only stage that employs every single justice operation is the sixth and final stage of moral development.

Basic Theoretcial Assumptions and Predictions

The stage model in Kohlberg's theory of moral development is meant to emphasize progressive changes in the structure of sociomoral perspective that ultimately affect the functioning of sociomoral perspective (Colby & Kohlberg, 1987). Within each stage, different cognitive operations produce different forms of sociomoral reasoning. Kohlberg believed that a hard stage model offered the most accurate view presentation of how moral development progresses. The four general assumptions that characterize a hard stage model were adopted from Piaget's model of cognitive development, and are as follows: qualitative shift in structures with each stage; invariant sequencing of stages; hierarchical progression of stages; and the structural wholeness of each stage. All of these elements combine to form the model, as Colby and Kohlberg (1987) describe in the passage below.

> Each new stage of development represents a qualitative reorganization of the individual's pattern of thought, with each new organization integrating within a broader perspective the insights achieved at prior stages. Thus, as they develop, patterns of thought become more complex, differentiated, and adaptive. Because each stage presupposes the understanding gained at previous stages, development occurs in a predictable sequence of stages. It is assumed that individuals will pass through each stage in order, without skipping any stage in the sequence. (p. 5)

Another assumption upon which Colby and Kohlberg base their model is that of universality; Kohlberg proposes that all people move through these stages regardless of

individual differences in gender, race, or culture. The cultural background of a person may affect the pace of moral development, but not the sequence of it (Colby & Kohlberg, 1987). Though this assumption is controversial, Kohlberg insists that if a model is to be structural in nature, it must assume that all people have the potential to progress through the same core moral developmental structures, in the same sequence.

Kohlberg (1984) asserted that every hard stage model must have an end point. In his theory of moral development, Kohlberg made the assumption that the ultimate, idealistic end point is the achievement of moral autonomy, in the Kantian sense. A morally autonomous person is a free and rational being who is able to choose independently held moral judgments and monitor her or his own moral perspective by using all of the five justice operations previously mentioned (equity, reciprocity, etc.). This level of moral structure is juxtaposed with moral heteronomy, which is a state of dependence on external cues in making moral judgments. These people would hold a nonconstructivist view of moral laws; they would be the "bystanders" of society, whereas autonomous individuals would engage in the construction of a moral society. One example of a heteronomous orientation would be consistent obedience to authority figures.

As Kohlberg developed increasingly consistent theoretical concepts and sought to develop an assessment instrument that tested his theory, he realized that he must generate some basic predictions about the course of moral development that his theory and research would attempt to corroborate (Tappan et al., 1987). First, Kohlberg and his colleagues predicted that as people age, they will become more morally autonomous. Second, they predicted that the evolution of this moral autonomy will occur in a series of

stages. Third, social environments that emphasize mutual respect and cooperation will engender the development of a greater number of morally autonomous individuals, while social environments that stress respect for authority will encourage the maintenance of moral heteronomy. Last, morally autonomous individuals will exhibit higher incidences of moral action than will morally heteronomous individuals.

Developmental Levels and Stages of Moral Judgment

Unless otherwise indicated, it can be assumed that all of the descriptive information about each level and stage that follows was taken from Colby and Kohlberg (1987).

Level one: Preconventional moral judgment. According to Colby and Kohlberg (1987), the initial level of moral development is marked by a self-interested, egoistic perspective to sociomoral reasoning. People in this stage view rules and social expectations as external to self, so they do not understand or uphold socially shared moral norms. Colby and Kohlberg refer to this orientation as a "concrete individual perspective," meaning that people in this stage only see self and others as individuals who are interested primarily in getting their interests met. There is some concern for the interests of loved ones, but only as individuals who are not connected to a larger social system. Also, authorities create and enforce the laws, and people in the preconventional stage abide by laws in deference to authority, but not because the laws serve some greater social purpose. Moral decisions are mostly based upon gaining a reward or avoiding punishment. This first level of moral development is usually restricted to children under the age of nine, some adolescents, and some adults who may have criminal histories.

Stage 1 is known as the stage of "Heteronomous Morality." This term refers to the primary moral orientation of people in this stage, which is obedience to authority (Colby & Kohlberg, 1987). Right is defined as concession to authorities, and people do right in order to avoid the wrath or punishment delivered by people in power. If one does not follow the rules, he or she is considered bad. People in this stage are egocentric because they have little regard for the welfare of others; they mostly consider themselves. However, one may have concern for the individual welfare of isolated individuals who are close to him or her, like a primary caregiver.

The justice operation in this stage is a "naïve moral realism," where rules are literal, authorities define right and wrong, and one cannot see multiple perspectives on a moral issue. Moral judgments do not need justification because they simply *are*; since someone else defined those rules, there is no need to understand them. The three justice orientations within this stage reflect naïve moral realism. Distributive justice should be carried out with strict equality among parties, regardless of individual need. Corrective justice is based upon punishment, stringent reciprocity, and retribution with no concern for the intent of the "bad" act. Finally, the commutative justice of exchanges and agreements is governed by following narrowly defined rules, thus avoiding the punishment and "badness" that would come if one were to violate an agreement.

Colby and Kohlberg refer to Stage 2 as the stage of "Individualism, Instrumental Purpose, and Exchange." Within this stage, people define right as following the rules to serve their own interests, allowing others to do the same, and making fair exchanges with one another so that everyone's individual needs can be met. (Colby & Kohlberg, 1987). The justification for doing right rests on the acknowledgement that everyone has needs

that are equally valid, and people should be able to fulfill their needs. This ostensible concern for others' welfare stems from the egocentric idea that one might need something from someone else in the future. Thus, moral judgment is guided by the anticipation of a future exchange with another, not by the avoidance of punishment, as in Stage 1.

Kohlberg views the justice operations in this stage as "concrete individualism," whereby everyone's pursuit of their own individual needs is pragmatic and acceptable. Personal rights are relative and externalized in this stage, so people of this orientation do not understand how to prioritize needs or negotiate conflicting individual claims. The distributive justice orientation is highly utilitarian and rooted in equality, with no consideration of deservedness. People within this moral stage evaluate a person's individual needs, and intent to meet those needs, when they must consider corrective justice. They also display a sense of commutative justice by relying heavily on the concrete terms of agreements and exchanges. They keep their promises so that other will keep promises to them in the future.

Level two: Conventional moral judgment. Most adolescents and adults in Western and non-Western societies exhibit this level of sociomoral reasoning (Colby and Kohlberg, 1987). At this level, people act as compliant members of society. They internalize and follow social norms and rules, and they can identify with the rules and expectations of others. Authority figures are respected by expressing loyalty toward them, and by seeking social approval from them. Likewise, social approval is sought from others, and people act in relationships by adopting socially sanctioned roles and expectations. People at this level show concern over the welfare of others, share their resources, and acquiesce their personal needs to support the needs of the relationship or

the larger group. Laws are viewed as social rules that are made by the people, for the benefit of the people. This perspective is largely seen as a "society-maintaining" level of development.

Stage 3 is the stage of "Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity." The sociomoral perspective of people within this stage is rooted in sustaining relationships with others, with the ultimate goal of being viewed as a good person by self and others (Colby & Kohlberg, 1987). The Stage 2 egocentrism and focus on getting one's needs met is traded for a primary concern with gaining social approval. In order to achieve these ends, people in this stage show their caring for others by sharing, following the "The Golden Rule," respecting authority, following social roles, and enacting the social roles that are expected of them. All of these activities constitute goodness and righteousness. A person in this stage does not have a full awareness of how his or her roles are relevant to society, for his or her immediate goal in playing these roles is the maintenance of interpersonal relationships. This stage is commonly known as the "good boy/good girl stage."

Living by shared moral norms characterizes the justice operations that people utilize within this stage. Moral norms such as the "The Golden Rule" are relevant to all people and contexts, and they are followed to engender prosocial behavior, interpersonal trust, and social approval. Distributive justice is carried out with equity, equality, and reciprocity. Deservedness is a consideration that depends on good or bad behavior toward others. Corrective justice, or the determination of punishment, is moderated by taking a third-person perspective and considering the motivation behind a person's actions. Finally, commutative justice revolves around fairness, and playing one's social role in

carrying out agreements. People are more apt to engage in exchanges with those who follow shared norms and meet the social expectations of others.

Stage 4 is labeled "Social System and Conscience." People who fall into this developmental stage of sociomoral reasoning have a primary concern for the rights and welfare of each person who contributes to the maintenance of society (Colby & Kohlberg, 1987). Right is defined as the fulfillment of social duties, upholding the law, and contributing to society and its institutions. These actions are considered right because they maintain the social structure and do not attempt to undermine it. People in this stage are different from people in Stage 3 because they now see a broader societal force that drives the roles and expectations to which they ascribe. Interpersonal relationships are still important, but they are no longer viewed merely as a means to gain social approval. In Stage 4, relationships are understood as one part of a larger social system that must be upheld.

Justice is achieved through promoting the common good by conforming to the legal and moral codes of society. These codes are seen as fair and impartial, so they apply to all people. When individual claims conflict, people in this stage rely on legal, social, and/or religious institutions to resolve these conflicts. Impartiality and respect for social institutions, like authority and the right to personal property, mark the distributive justice orientation of people in this stage. People are worthy of respect when they have shown personal responsibility in fulfilling their social obligations. For those who have faltered in some way, corrective justice is carried out by an impartial application of the law. Deterrence is valued, and people are allowed to pay their debts to society. It is important to note that regard for procedural justice appears in this stage. This means that people

become concerned with the impartiality of the legal process, not just the outcome. Commutative justice involves the use of contracts to ensure that society runs smoothly. People who abide by contracts have honor and integrity because their compliance proves their commitment to the maintenance of society.

Level three: Postconventional or principled moral judgment. Colby and Kohlberg (1987) maintain that this highest level of sociomoral reasoning is a "prior-to-society perspective" because people at this level recognize the broader moral principles upon which social rules, laws, and expectations are based. They understand that they are members of a society and they accept and uphold the rules of society, but they can differentiate their own justice-based, personal moral principles from socially sanctioned rules. They fulfill their legal and social obligations, but unlike people in Stages 3 and 4, they know that legal and moral rules can be inconsistent. When this conflict happens, people who employ postconventional moral reasoning recognize their moral obligations, judge the situation based upon general moral principles underlying the social laws, and make a commitment to moral rules from which all people can benefit. These people have the ability to identify flaws in the social rules and expectations through this advanced reasoning process. They may apply their reasoning toward changing the social system so that it honors the worth and dignity of all people, and so that it becomes more consistent with universal principles, mainly justice. For this reason, the postconventional level of sociomoral reasoning is known as a "society-creating perspective."

Stage 5 is the stage of "Social Contract or Utility and Individual Rights." The shift from a "society-maintaining perspective" to a "society creating perspective" begins with a new consideration of the individual. There is awareness in this stage that people

are individuals before they make social attachments and commitments as members of a society (Colby & Kohlberg, 1987). People in Stage 5 define "right" as the recognition and honoring of individual liberties. The internalized values and opinions of people differ widely, and these various perspectives should be viewed with respect. These individual values and opinions are usually relevant to all people, and they often reflect more global values like reverence for life and liberty. One must uphold these values impartially in order to fulfill his or her obligation to protect the rights and welfare of all. When many individuals act in this way, they create functional social systems.

Rational individuals who willingly integrate their individual moral perspectives to make and maintain contractual commitments take part in creating society. Upholding the law is one example of a contractual commitment to others, for the legal system protects universalizable human rights upon which all laws are based. However, unlike the indiscriminant compliance to laws that is displayed by people in Stage 4, those in Stage 5 evaluate the laws of society by balancing moral and legal perspectives to determine each law's utility in serving the greatest good for the greatest number of people. This rationale is central to the justice operations of this stage of development. When legal and moral perspectives conflict, Stage 5 individuals have problems integrating the two perspectives. Nevertheless, some rights are inalienable, and Stage 5 individuals choose to endorse these rights when they conflict with the law.

Distributive justice is structured around honoring basic human rights. The rights of those in minorities are protected, and people cooperate to ensure fairness to all. The cooperative process allows distributive justice to emerge. The same regard for due process, or procedural justice, is found in the corrective justice orientation. Punishment is

not valued, and there is a reliance on legal authorities (i.e., judges) to create social change through their rulings. Commutative justice is based upon the social contract, but in this stage, contracts are seen as the foundation of human relationships based upon mutual obligation. When one freely adheres to one's social contracts, one engenders a process of social change that is directed toward supporting fundamental human rights and values.

Kohlberg has long regarded Stage 6, "Universal Ethical Principles," as an idealistic universal justice orientation. Few, if any, people fit into this developmental stage, but Kohlberg does give the example of Martin Luther King, Jr. as someone who might fit this stage. Kohlberg deems this stage as the ultimate end point of development for the simple fact that a hard stage model requires an end point. With respect to this caveat, people in Stage 6 exhibit understanding of universalizable, reversible, and prescriptive ethical principles that embody the Western philosophical conceptualization of justice. These people are autonomous in that they follow self-chosen principles that coincide perfectly with valid universal moral principles. People in Stage 6 follow this path of ultimate rationality via a process of creating reality as they enter into agreements with others. The process of commitment/relationship to others is the venue where they display their sense of respect for the dignity of autonomous individuals, and where they treat others as ends in themselves.

The justice orientation of people in Stage 6 involves several operations, all of which allow the person to make a fair moral judgment. First, they acknowledge that interpersonal and intrapersonal dialogues are processes that create society, so they attend to all aspects of the dialogue. Second, they engage in prescriptive role taking, which Kohlberg calls "moral musical chairs." In other words, they take the perspectives of

others and attempt to understand how their moral judgments will impact others. In this way, they are able to balance all viewpoints in any situation. Third, they apply the universalizability criterion to their principles by asking themselves if they would expect all people to make the same decisions they are about to make. Fourth, they ask if they would be harmed themselves if others made the same tentative judgment toward them. This is the application of a reversibility criterion. Last, they use general principles, not rules, to define their rights and responsibilities and make their moral judgments. These principles of justice, respect, benevolence, agape, and liberty are positive prescriptions for making a decision, not negative proscriptions like "thou shalt not." Principles are always followed over laws when the two come into conflict.

The process-driven approach to justice reasoning pervades all of the justice orientations of people in Stage 6. Distributive justice is based upon equity, fairness, and equality. The positions of the underserved are considered in the development of an impartial "lottery" system that does not show preference to any one person or group. Corrective justice is moderated by respect for the dignity and humanity of offenders, and punishment, retribution, and death are not seen as viable alternatives in achieving justice. Dialogue creates the appropriate solution. Commutative justice is founded on agreements that exemplify moral relationships among people. Promises that people make reflect the trust, respect, worth, and dignity of all people involved, and violation of a promise constitutes a violation of humanity. However, promises can be broken if others are in urgent need, and the reason for the violation is explained to all parties involved. People in Stage 6 view others as brothers and sisters, according to Kohlberg, and the moral point of

view that they employ uplifts individuals, relationships, and society to an increasingly consistent expression of universal justice.

Instrumentation Based on Kohlberg's Theory

The Moral Judgment Interview

In 1958, Kohlberg (1958/1994) developed the first version of the Moral Judgment Interview (MJI) to test his stage theory as a part of his doctoral dissertation. Since that time, Kohlberg has subjected his instrument to numerous reliability and validity checks, all of which have resulted in the three different revisions of the instrument (Colby & Kohlberg, 1987). The instrument is both theory-based and empirically based because research results and changes in Kohlberg's theory have necessitated changes in the MJI. Kohlberg (1984; Colby & Kohlberg, 1987) called this research orientation "bootstrapping." Through its revisions, the MJI remains a production task where participants are asked to discuss their responses to the test material. The interview itself is an example of a phenomenological encounter, where the participant and interviewer interact in the here and now to create reality and meaning.

The most recent version of the MJI has three parallel forms. Each form of the interview contains three ethical dilemmas that are presented to the participant by a trained interviewer. Kohlberg constructed each of the dilemmas as a conflict between two important moral issues, like the value of human life and the value of obeying the law (Colby & Kohlberg, 1987). Within the primary conflict, other moral values in each scenario may conflict as well. Perhaps the most well-known of the MJI moral dilemmas is the story of Heinz, a man whose wife is dying, but can be saved with a very expensive drug. Heinz entertains the idea of stealing the drug because the druggist who invented it

would not reduce the price of the drug, and Heinz cannot afford to pay the full price. Participants are asked to decide whether or not Heinz should steal the drug, and then they are asked to justify their answers by responding to 9-12 open-ended questions that allow the participant to elaborate. Each of the three dilemmas is followed by a series of questions.

After the interview, the moral judgments and justifications within the participant's transcript are compared to sets of state-specific criterion judgments described in his Standard Issue Scoring System. The criterion judgments are used first to evaluate the content of the responses, but ultimately the response patterns indicate the developmental structure of the participant's sociomoral reasoning (Colby & Kohlberg, 1987). Since the responses of participants often do not fit neatly within categories, the interpretive evaluations of the interviewer play a large role in determining the best fit. At the end of this objective and interpretive process, a person receives a score that reflects her or his stage of moral development.

It is apparent from the format and scoring of the MJI that the purpose of the instrument is not to evaluate the initial moral judgment of each participant, but to "elicit justifications, elaborations, and clarifications of the participant's moral judgments" (Colby & Kohlberg, 1987, p. 41). Colby and Kohlberg (1987) maintain that the MJI was developed to measure three variables. The first variable is the participant's construction of sociomoral reasoning, and the second is the participant's moral assumption(s) about right and wrong. The third variable is the way in which these presuppositions are utilized in making and justifying moral judgments. All of these variables combine to indicate the stage of a participant's moral development.

Over the decades, the scoring procedures and stage criteria of the MJI have become increasingly specific and objective in order to improve upon reliability and validity data. Colby and Kohlberg (1987) report the results of several longitudinal studies that indicate the test-retest reliability of the MJI is in the high .90's, and its inter-rater reliability is approximately .98. Alternate forms reliability was .95, and internal consistency (Cronbach's alpha) coefficients range from .92 to .96. Since the MJI is based upon Kohlberg's theory, the most suitable form of validity to investigate is construct validity. Colby and Kohlberg refer to the data collected from several longitudinal studies that appear to support the notion of a sequential moral developmental model. When inconsistent data has been found, it is used to determine whether or not the theory should be modified.

At first glance, the MJI appears to be a stable instrument for measuring moral developmental levels, but many critics question its validity and reliability. Most notably, Kurtines and Greif (1974) were the first to pinpoint three major flaws in the MJI. The first flaw involves the subjectivity and heavy reliance on interviewer interpretations in scoring. Second, the interview coding scheme is not standardized, and third, the coding schemes do not clearly separate the stages into distinct categories. Although Kohlberg and his colleagues have revised the MJI to address these issues, other critics continue to echo these original objections. Nevertheless, the MJI remains the original and standard instrument for measuring moral development.

The Defining Issues Test

James Rest, a student of Lawrence Kohlberg, developed the Defining Issues Test (DIT) in 1974 as an alternative assessment method for moral judgment and development.

Though Rest (1986) based his instrument on Kohlberg's structurally based stage theory, he modified the stage concepts slightly to focus more on the moral content of each developmental stage. Since the development of the DIT, it has been used in over 40 countries for over 1,000 studies on moral judgment and moral development (Rest, 1994).

Rest developed the DIT as a forced-choice, recognition task as opposed to the Kohlbergian production task. The DIT consists of six hypothetical dilemmas much like those presented n the MJI. After each dilemma, participants review 12 possible response fragments to each dilemma. Response fragments represent different levels of moral reasoning. Participants rank the importance of the fragments independently on a 5-point scale (from *greatly important* to *not important*), and then they rank-order the 12 response fragments in order of relative importance. Rest (1994) wrote, "The assumption is that most people define the most important issue of a dilemma in different ways, and that the selection of items indicates a person's developmental level" (p. 12).

Response preferences are scored on a scale that is based on the rankings that participants give to the items that represent Stages 5 and 6. This score is known as the *P* score, or Principled Score. The higher the score on this 0-95 point scale, the higher the participant's level of moral judgment development (Rest, 1994). Rest proposes several assumptions linked to the rationale for this assessment method, as seen in the following passage.

> If subjects understand a particular stage of thinking, then we assume that they will recognize the DIT items written at that stage - otherwise the item appears to subjects as a meaningless jumble of words. We further assume that just because subjects understand an item, they will not necessarily rate the item highly, or rank

> the item as "Most Important." Subjects will find some items simplistic, childish, immature. Such items may be understood, but the subject will not like them or select them as important. (1994, p. 12)

It is important to note that Rest (1986) realized some of the methodological drawbacks of a recognition task, most notably the problem of random response patterns. He included an internal consistency check in the DIT to identify possible random response patterns.

Rest (1986) reported data from several studies that have shown test-retest reliability coefficients ranging in the .80's, and Cronbach's alpha coefficients for internal consistency reliability also ranging in the .80's. Also, the DIT is moderately correlated with the MJI in the .70 range (Rest, 1979). There are some criticisms of the DIT with regard to its validity in measuring moral judgment and development. For example, Emler, Palmer-Canton, and St. James (1998) leveled a growing claim that the DIT really measures political identity. Thoma, Barnett, Rest, and Narvaez (1999) refuted this idea by reviewing the research literature and showing inconsistencies between political identity development measures and DIT scores. Crowson (2003) addressed the same claim along with another claim that the DIT measures verbal ability, but his research results support the validity of the DIT as a measure of moral judgment development.

In 1998, Rest and Narvaez finished revising the then 25-year old DIT to produce the Defining Issues Test- Version 2 (DIT-2). The assessment approach remained the same, but its theoretical basis was modified to reflect the decades of DIT research results that had been gathered (for more information, see the Neo-Kohlbergian Approach section). Its structure and score indexing was streamlined as well. The resulting DIT-2 presents five (instead of six) updated moral dilemmas that correspond better with modern

social problems. It contains more discriminating internal consistency checks to identify bogus data, and it uses a new, more statistically advanced method for calculating a developmental score called the N2 index (as opposed to the *P* score).

The results of the initial DIT-2 statistical analysis indicated an increase in validity measures, in terms of the instrument's ability to detect advancement in moral developmental level that goes along with changes in age and education level (Rest, Narvaez, Bebeau, et al., 1999b; Rest, Narvaez, Thoma, & Bebeau, 1999). Cronbach's alpha coefficient for internal consistency reliability was .81, and the correlation between the DIT and DIT-2 was .71-.79, depending on the score indices that were evaluated. The Neo-Kohlbergians concluded that the DIT-2 is an improvement over the DIT because it is shorter, more amenable to group administration, and more consistent with modern social concerns (Rest, Narvaez, Bebeau, et al., 1999b; Rest, Narvaez, Thoma et al., 1999). The DIT-2 also reduces the number of false positives for bogus score profiles, and has better validity characteristics. More information on the DIT-2 can be found in Chapter Three of this study.

The Sociomoral Reflection Measure-Short Form

A group of researchers who had worked extensively with both the MJI and the DIT were critical of both approaches to assessing Kohlberg's levels of moral development. Gibbs, Basinger, and Fuller (1992) believed that the presentation of moral dilemmas was not necessary to assess moral judgment. These researchers were concerned that the length of the moral dilemmas presented in the MJI and DIT would be difficult to read for participants who do not have adequate reading skills. Furthermore, they criticized the overall length of both instruments. In 1992, Gibbs, Basinger, and Fuller

published the Sociomoral Reflection Measure-Short Form (SRM-SF), a production instrument based upon Kohlberg's theory. Though the instrument follows Kohlberg's stage theory, the test developers condensed the six moral developmental stages into four stages, thus altering the original theoretical model. The SRM-SF consists of 11 brief, open-ended questions designed to assess moral reasoning levels for children and adults. For example, some items are questions on the importance of keeping promises and telling the truth, and each item is followed by a request to explain why the participant believes these behaviors are or are not important.

The SRM-SF has demonstrated validity and reliability through a large scale investigation conducted by Gibbs, Basinger, and Fuller (1992). The researchers reported statistically significant levels of concurrent validity with the MJI ($r = .69$), as well as statistically significant levels of discriminant validity with measures of social desirability. An analysis of variance showed that the SRM-SF exhibited significant sensitivity in distinguishing between different age groups, and between delinquent and non-delinquent adolescent males. The instrument also evidenced statistically significant convergent validity among people of different socioeconomic statuses, verbal intelligence levels, and ages. With regard to reliability, test-retest correlations were statistically significant at $r = .88$, and inter-rater reliability coefficients ranged from .94 to .99 among a group of raters with various levels of training experience in administering the instrument.

Research on Kohlberg's Theory and Adult Moral Development

From the inception of his theory, Kohlberg exhibited a strong commitment to conducting research on the ideas that he developed. Kohlberg referred to his research strategy as "bootstrapping," which meant that he based the direction of his research upon

changes in his theory that he made according to previous research results (Colby & Kohlberg, 1987). Over the years that commitment to progress has materialized into a vast body of research literature on his stage theory. The fact that a few assessment instruments (see previous section) have been generated directly from Kohlberg's theory has made his ideas easier to test, and that convenience has enabled researchers to study his theory extensively. The sheer volume of research that is available necessitates placing some limits on this review of the research, as does the restriction of this current study to the adult population. Therefore, this review will present broad research trends and a discussion of the moral development literature that applies to adults.

Research Concerning Aspects of the Stage Model

The developmental sequencing of stages. The original research on the stage model of moral development that Kohlberg conducted is found within his doctoral dissertation (1958/1994). The dissertation involved a cross-sectional investigation of stages in moral reasoning among 10-16 year-old white males. The MJI was developed to test Kohlberg's stage hypothesis at this juncture. Kohlberg found that older participants manifested moral reasoning characteristics that resembled the higher stages of his theory, while younger participants showed reasoning consistent Kohlberg's lower stages of development. This initial support for his ideas was statistically significant.

In order to engender support for the full developmental model, Kohlberg and his colleagues initiated many longitudinal studies, some of which lasted as long as 20 years. The results of the latest 20-year longitudinal study that Kohlberg completed in 1983 are reported in Colby and Kohlberg (1987). Eighty-four U.S. males of three different age cohort groups were interviewed on six separate occasions at three to four-year intervals.

Kohlberg intended to find support for the idea of invariant developmental sequencing, as well as the idea that the logic operations of each stage are qualitatively different than those of preceding stages. Kohlberg found significant age trends in MJI scores, and he found that participants who changed stages graduated to higher stages, not lower ones. There was negligible stage regression and no stage-skipping. Also, results indicated very high inter-rater agreement in scoring the participants over time. Kohlberg's data appears to support a sequential progression of moral development through the stages he delineated. Each age cohort group seemed to follow the same pattern of development when evaluated separately. With regard to the developmental changes that Kohlberg found, he wrote the following statement.

> Perhaps most noteworthy is the orderliness and regularity of the developmental curves, with earlier stages dropping out as later stages enter such that the subject seems to be always in transition from one stage to the next. Also noteworthy is the fact that development continues throughout the age range sampled, never reaching a final plateau. (Colby & Kohlberg, 1987, p. 102)

Factor analysis showed that the variance in scores over time was accounted for by one factor, moral judgment. There was a clear relationship between moral stage and age as well. Colby and Kohlberg (1987) reported that most 10 year-old participants scored at Stages 1 or 2, most 13-14 year-olds were in Stages 2 or 3, and most participants in their early 20's scored in the range of Stages 3 and 4. Stage 4 did not occur before age 20, and the proportion of participants who scored at Stage 4 increased with age, up to 36 years.

There was no Stage 5 moral judgment before the mid 20's age range, and Stage 6 moral reasoning was not observed. These patterns seem to support a developmental progression of stages.

Kohlberg (1984) took into account other variables that could have an effect on his results, such as age, socioeconomic status, sociometric status, education level, and intelligence quotient. There appear to be strong relationships between educational level and moral stage when socioeconomic status and intelligence are statistically controlled. Colby and Kohlberg (1987) maintained that the educational experience itself was more important than the actual level of education attained. With regard to intelligence, Kohlberg concluded that adult intellectual capacity to achieve the highest levels of moral development is more salient than childhood and adolescent intelligence factors. Socioeconomic status has a strong, positive correlation with moral stage as well, but is confounded with educational attainment. Sociometric status, or level of involvement with peers, does not show a clear relationship with moral stage.

This most recent longitudinal study by Kohlberg (in Colby & Kohlberg, 1987) yielded more data about adult stages of moral development, perhaps due to the clarification of those stage criteria in the MJI Standard Issue Scoring System. Stage 4 is common among adults, but no participant in this current study reached Stage 4 without some college attendance. Only in adulthood does Stage 5 appear, and Kohlberg speculates that only about 15% of the adult population reaches Stage 5 moral judgment. Instances of Stage 6 reasoning among adult samples are most rare, so much so that Stage 6 has been designated as more of an idealistic end-point to the model than a realistic one. With more complete information, Kohlberg received much more research support for his

strict stage model, which appears to have an invariant sequence and a structured wholeness to each separate developmental stage (Colby & Kohlberg, 1987).

The Kohlberg studies mentioned above are not the only pieces of research that support sequentiality and qualitative differences in stage structure, but they are the first to lend support to his revised Standard Issue Scoring System. Other studies Kohlberg reported on between 1963 and 1973 yield similar results, but they are based on earlier versions of the scoring system (as cited in Kohlberg, 1984). Several cross-sectional and longitudinal studies by Rest and his colleagues (1979, 1986; Rest, Davison, & Robbins, 1978) have employed the DIT to lend support to the hierarchical organization of stages, the relationships between education and moral development, and the age progression of stages. Many studies using the DIT and its later version, the DIT-2, have shown that larger proportions of adults do reach the Postconventional level of moral development than Kohlberg had estimated (Rest, 1979, 1986, 1994; Rest, Narvaez, Bebeau, et al., 1999b; Thoma, 1986). One of these studies, a meta-analytic investigation of DIT-based research by Thoma (1986), shows that age and education accounts for a significant proportion of the variance in DIT scores, scores increase over time, and adults achieve the Postconventional level of moral reasoning with moderate frequency. Rest's 1986 compilation of 12 DIT-based longitudinal studies shows the same developmental progression over time. Rest (1986) made the following conclusion in reviewing this research.

> Taking all of this together (including Kohlberg and the DIT studies, the cross-sectional and longitudinal studies, and the cross-cultural studies) one must come

to the conclusion that the evidence for a general developmental trend in moral development (as measured in the Kohlbergian tradition) is overwhelming. (p. 29)

Although this research evidence is impressive, there have been some contradictory research results that have caused Kohlberg to revise his theory over time. One such study by Kohlberg and Kramer (1969) illustrates this point. This study was the first in a line of a few studies to find developmental regression to Stage 2 among college students who had previous scores in the Stage 4 range (Fishkin, 1983; Colby & Kohlberg, 1987). Kohlberg termed the phenomenon "college relativism," or "Stage 4 ½ ." These participants appeared to be more advanced (Stage 4) than others in their high school years, but regressed to Stage 2 in college, then rebounded to Stage 5 in their adult years. Kohlberg (1984) addressed this discontinuity as related to a developmental crisis in identity, akin to Erik Erikson's (1959/1980) psychosocial stages of ego development. Kohlberg proposed that people in this predicament come to see conventional morality as a way for society to impose its authority upon free individuals. Hence, they viewed conventional morality as oppressive, and adopted a self-protective, seemingly relativistic stance in response to this injustice. If this is true, then these people displayed an acute awareness of the underlying justice structure of society, but they questioned it with vigor. Kohlberg maintained that this questioning mode was essential in the transition to postconventional reasoning, and this level of development involved awareness of personal experiences of responsibility and the conflicts that go along with it. One must understand these complex issues as a precursor to comprehending the justice structure of society. As a result, Kohlberg regarded it as a substructure necessary for the development of Stage 5 reasoning.

The transformational progression of stages. Though most of the longitudinal studies show support for the sequential nature of moral development stages, Rest (1986) contends that sequentiality alone does not account for the qualitative, hierarchical transformations that Kohlberg (1984) described in his theory. Rest, Turiel, and Kohlberg (1969) studied the preferences that children have regarding moral statements relevant to each stage of development. They found children significantly rejected statements that were below their assessed moral stages, and children understood moral statements both one stage below and one stage above their assessed stage of moral development.

Rest (1973) applied the same task to high school seniors and found similar results. His participants could comprehend the statements associated with all the stages below the participants' assessed stages of development, and they showed a significant preference for the highest-staged statement that they could understand. They did not understand the statements that were far above their own assessed level of development. The results of these two studies compelled Rest (1986) to support the idea that each stage is increasingly more complex, integrated, and cognitively different than the stage before it. Dawson (2002) has reached a similar conclusion by using advanced statistical procedures to review four longitudinal research projects. Dawson found that the moral stages not only appear to have order and similar modes of transition between stages, but that each stage appears to be qualitatively different.

Evidence concerning heteronomy and autonomy in moral judgment. Specific studies have addressed Kohlberg's conceptualization of two primary types of moral decisions, heteronomous judgments and autonomous judgments. Kohlberg (1984) believed that heteronomy was associated with preconventional and conventional levels of

moral development, and people could gradually transition to more autonomous moral reasoning in the postconventional level of his model. Validity and reliability data from the 1987 version of the MJI Standard Issue Scoring System supports the idea that the MJI does appear to measure both heteronomy and autonomy (Tappan et al., 1987). The data from Kohlberg's longitudinal study of American males suggests that as age increases, participants are significantly more likely to make autonomous moral judgments (Colby & Kohlberg, 1987). Regressions or reversals from autonomy back to heteronomy were negligible. Possible confounding variables such as socioeconomic status and sociometric status (level of involvement with peers) did not affect these results.

Cross-cultural studies have given support to the existence of heteronomy and autonomy in moral judgment. Colby and Kohlberg (1987) refer to a few unpublished research projects to lend research support to their position. For example, in an unpublished manuscript, Logan, Snarey, and Schrader (1984) analyzed data from a previous cross-cultural study by Snarey, Reimer, and Kohlberg (1985), who conducted a longitudinal study of adolescents in an Israeli kibbutz (see next section). Logan, et al. also included data from yet another cross-cultural study by Snarey (1982). Logan and colleagues found patterns similar to the American longitudinal study previously reported, but with a higher frequency of participants displaying autonomous moral reasoning. An unpublished longitudinal study of Taiwanese participants by Lei (1983) revealed different developmental patterns from U.S. participants. In Taiwanese participants, development of autonomy occurred rapidly over a short period, whereas U.S. participants tended to develop autonomy more slowly over a longer period of time. These studies indicate that heteronomy and autonomy do appear to be universal developmental variables, because

movement from heteronomy to autonomy seems to occur in all of the cultures studied to date. However, there seem to be some cultural differences in the developmental patterns and cultural values that contribute to autonomous moral reasoning.

Kohlberg and Candee (1984) developed an American project that focused on heteronomy and autonomy. They analyzed data from an earlier study by Haan, Smith, and Block (1968), who had used the MJI to assess moral development in college students. Among those participants were students who had been arrested for demonstrating in favor of the Free Speech Movement. The protesters showed higher levels of moral development than non-protesters, and more concern for the rights and welfare of others. Consequently, Kohlberg and Candee (1984) found that these people showed more autonomous moral judgments as well. They posited that autonomous individuals were significantly more likely to engage in moral action than heteronomous individuals. In the same study, Kohlberg and Candee (1984) completed another project with the same theme by re-enacting the famous Stanley Milgram obedience study. Participants were instructed to give confederates increasingly intense shocks after the confederates deliberately gave wrong answers. People who prematurely quit delivering shocks to the confederates were significantly more likely to display an autonomous moral orientation. None of the heteronomous participants refused to continue delivering the shocks. Based on the results of these two projects, Kohlberg and Candee concluded that autonomous individuals are more likely to engage in moral action than are heteronomous individuals, though the relationship between thought and action may not be a perfectly consistent.

Research Concerning the Universality Claim

Cross-cultural research. Most of the research investigating Kohlberg's claim that moral development is universally uniform in nature is cross-cultural research. Through cross-sectional and longitudinal research in dozens of countries, the universality claim has received substantial support. This review will focus on studies conducted in Turkey and Israel because Kohlberg conducted most of his cross-cultural research in these countries. Meta-analytic reviews of studies conducted in other nations are also included.

Turiel, Edwards, & Kohlberg (1978) conducted a longitudinal and cross-sectional study using the MJI to assess moral development in children, adolescents, and adults who lived in urban and rural Turkey. Their results statistically supported a sequential model of development, and it showed that participants who lived in the rural areas progressed through the stages at a significantly slower rate that did the urban participants. In addition, people did not significantly regress to earlier moral stages over time. Nisan and Kohlberg (1982) replicated the aforementioned study over an 8-year period with males ages 10-28, and they found highly similar results. The responses given by rural and urban Turkish males fit the stage criteria in Kohlberg's model, and the stage sequence appeared to be constant. Nisan and Kohlberg also noted that the moral development of the rural Turkish participants showed a sequential advance up to Stage 4. Based on these results, they suggested that cultural differences in the valuing of social order and consensus in the traditional rural culture may be a possible explanation for why the rural participants did not appear to develop beyond Stage 4, while the urban participants did show Stage 5 moral reasoning.

Another cross-cultural, longitudinal study was conducted among male and female, 10-26 year-old participants who lived in an Israeli kibbutz (Snarey et al., 1985). Over a 9-year period, participants were assessed with the MJI a maximum of five times. The researchers found significant support for the universality of Kohlberg's stages, reporting that "stage change was consecutive, gradual, and upward" (Snarey et al., 1984, p. 147). They also found no significant stage regressions or skipping of stages in the participants. Age clearly was related to stage progressions as well. It is important to note that these participants received significantly higher mean scores than the mean scores found in earlier studies on Turkish and American participants. Snarey and colleagues (1985) proposed that this phenomenon may be due to cultural valuing of social solidarity and collective happiness, which is a characteristic of the higher stages of Kohlberg's model.

Several meta-analytic studies of cross-cultural research on Kohlberg's stage model have been developed to condense the vast amounts of data that have been gathered. One such study compiled by Edwards (1985) reviews 45 research projects in 23 countries. Edwards found a stepwise stage progression that supports Kohlberg's model. Likewise, Snarey (1985) surveyed 45 longitudinal and cross-sectional studies in 27 countries, some of which overlapped with the Edwards review. Snarey found that Kohlberg's MJI is applicable and does have acceptable validity and reliability with non-U.S. populations. Also, he reported significant support for the invariant stage sequence, with rare cases of stage regression and skipping that was within the range of measurement error. Stages 1-4 were evident in all cultures, and Stage 5 moral judgment was reported in approximately 67% of the studies. Studies that did not find Stage 5 reasoning were restricted to more rural, traditional folk cultures, whereas studies that

found postconventional moral reasoning were conducted among more urban populations. Based on these results, Snarey (1985) suggested that Kohlberg's theory should be modified in the higher stages to account for various cross-cultural manifestations of postconventional moral judgment.

In addition to the studies conducted by using the MJI, the DIT has been used extensively in cross-cultural research on moral development as well. In his 1986 book, Rest examined the results of DIT-based research that investigated Kohlberg's universality claim. Rest reviewed studies in 15 different cultures and reported that many more studies supported universality than refuted it. The studies that compared Western to non-Western DIT scores showed some cultural differences, but Rest remarked that inconsistent translations of the DIT may be the reason for this inconsistency. Rest also reported that some non-Western samples scored significantly higher than Western participants on the DIT. Rest discovered that age and education level were the most significant correlates of DIT scores across cultures, and the justice emphasis in Kohlberg's model appears to be relevant in many other cultures.

Research on gender and moral development. The idea of universality in moral development does not apply only to people of different cultures, but to people of different genders as well. One of the most widely recognized criticisms of Kohlberg's theory came from one of his own students, Carol Gilligan. In her 1982/1993 book, *In a Different Voice*, she charged that Kohlberg's attention to justice as the most vital principle in moral development largely was oriented toward a male perspective. She claimed that Kohlberg neglected to include more female-oriented moral principles, especially Care. Also, she noted that Kohlberg developed his theory and assessment instrument on white male

participants. Gilligan concluded that women would score lower on Kohlberg's MJI because it represents a system of thought that is male-oriented, and that the general theory suggested that women's moral development was somehow inferior to that of men.

Gilligan's claims ignited a storm of controversy and a wave of research designed to investigate her hypotheses. Colby and Kohlberg (1987) stated that they did see occasional patterns of lower scores among female participants, but these score differences were minute and trivial. In 1991, Walker published a meta-analysis of 80 studies investigating Gilligan's claim. Walker did not find support for Gilligan's ideas. Though some studies did report higher scores for men in their raw data, Walker found no significant differences in male and female MJI scores. For studies that used the DIT instead of the MJI, Thoma (1986) conducted a meta-analysis to test Gilligan's hypothesis as well. Thoma discovered that female participants scored consistently higher on the DIT than males, and this difference was moderate but statistically significant. Finally, cross-cultural research results have not lent support to Gilligan's ideas, because such studies have found no significant differences in male and female scores, either (Nisan & Kohlberg, 1982; Snarey et al., 1985). Since little or no existing research evidence appears to support Gilligan's ideas about a male-dominated justice orientation in Kohlberg's theory, the universality claim appears to apply within the context of gender.

Research on Adult Populations

Most of the research involving the moral development of adult populations has been conducted within the context of longitudinal studies. The results of those studies have been reported in previous sections of this review, and will not be repeated here. Instead, the following research studies focus exclusively on aspects of adult moral

development according to Kohlberg's theory. It is important to note that most of the adult populations in these studies are college students and young adults.

In 1983, Bakken conducted a cross-sectional study of age differences in moral development among participants ages 30-55. The results showed that 10% of participants in their 30's scored at stage 4/5, a transitional stage, and 50% of participants in their 40's scored at stage 4/5. Also, there was a significant correlation between education and moral developmental level for women, but not for men. Research by Pratt, Golding, and Hunter (1983) found similar age trends among adult participants which suggest that moral development does continue after formal education ends, and it may be a lifelong process.

Research on young adults has yielded more evidence for stage structure in Kohlberg's theory, but not stage consistency. Krebs, Vermeulen, Carpendale, and Denton (1991) completed 11 studies that compared responses to Kohlbergian dilemmas with responses to non-Kohlbergian moral dilemmas. They found that young adults sometimes used lower level stage reasoning in response to different real-life situations. The researchers concluded that people retain the old stage structures and use them on certain occasions, but that the higher stage structures still remain intact at those times.

The connection between moral stage structure and moral action in adults has received some research attention, even though Kohlberg (1984) does not endorse a direct connection between moral thought and moral action. Nevertheless, there is support for the idea that people in higher stages of moral development may be more prone to moral action. Candee provided support for the structure of moral stages in his 1976 study, which found that adults in higher stages make moral choices based more upon human rights and less upon social convention. This phenomenon can be seen in the previously

mentioned Haan et al. (1969) study, where college students who rallied for the Free Speech Movement and were arrested showed higher stages of moral development than student controls. The previously mentioned Kohlberg and Candee (1984) study replicating the Stanley Milgram shock experiment yielded similar results.

Other aspects of principled, postconventional reasoning have been studied, such as the tendency toward perspective taking. Sociomoral perspective taking is a hallmark of Stage 6 reasoning. Kurdek (1981) asked adult participants to complete the DIT, a measure of social sensitivity, and a measure of social perspective-taking. Kurdek found a significant, positive correlation between all these variables in female participants, but not in male participants. Also, Kurdek found that both men and women in higher stages used significantly more prosocial responses than prohibitive responses to dilemmas. This evidence supports the social welfare perspective of the higher stages, thus lending validity to Kohlberg's conceptualization of the structure of postconventional moral reasoning.

Critique and Important Unanswered Questions Regarding Kohlberg's Theory

Since Kohlberg first presented his dissertation on the development of moral judgment, his work has spawned considerable support, skepticism, and research. There are several strong reasons why Kohlberg's work has received such acclaim in the academic community. Kohlberg's commitment to research and the scientific method is laudable, and he provided an excellent example of the application of the scientific method. Research and theory clearly inform each other in Kohlberg's approach. His phenomenological and constructivist approach to research has produced rich, complex data that inspire further theory and research development.

His overall approach to theory and research may be the primary reason why his ideas have repeatedly been subjected to empirical testing and have gained empirical support.

Another aspect of Kohlberg's work worthy of mentioning is his attention to the full range of human moral development over the lifespan. So many developmental psychologists focus exclusively on childhood development, as if development somehow stops when people reach adulthood. Kohlberg made a bold attempt to understand how adults use justice reasoning to maintain and create society. This undertaking involved integrating several complex theoretical and philosophical orientations, and the end result is a thought-provoking contribution to the developmental literature.

Within the higher stages of moral development that Kohlberg attributed to adults, he placed a high value on the human capacity for self-reflection as a crucial component of moral reasoning (Colby & Kohlberg, 1987). This seems to soften his hard stage model somewhat, leaving room for the possibility that other factors like self-concept and emotions may factor into the moral reasoning process. Similarly, Kohlberg stated that prescriptive role-taking is another critical justice operation involved in higher moral reasoning. Though he specifically did not refer to any other human experiences that may take place as a person performs the role-taking operation, once again there is room for other factors to influence the moral reasoning process. The most obvious factor inherent to role-taking is empathy. Kohlberg's attention to the complicated nature of advanced levels of moral reasoning is commendable. Could his more flexible, less cognitively rigid approach to these higher developmental stages indicate that he valued other aspects of human experience in the moral reasoning of adults?

A realistic, objective view of Kohlberg's theory must combine supportive views as well as more critical views. Indeed, numerous critics have taken issue with several aspects of his theory. For example, Kohlberg's insistence on the cultural universality of moral development, and his focus on justice as the primary concept relevant to moral development with little regard for other aspects of moral development have met with considerable opposition among many psychologists (Evans, Forney, & Guido-DeBrito, 1998). With regard to the cultural universality argument, Vine (1985) summarized the popular counterargument of many by stating that justice and autonomy are not primary goals in more collective cultures that emphasize relationship and responsibility to others. Also, autonomy is not a suitable goal in cultures that espouse less independent views of self in relation to other.

Kohlberg's focus on justice as the sole foundation of moral reasoning has been criticized by Gilligan (1982/1993) because the model excludes other relevant factors such as care and personal responsibility. Gilligan proposed that the model also appears to favor the justice reasoning process of men over the response/care orientation of women. This author supports Gilligan's claim about the short-sightedness of excluding other factors that impact moral reasoning, but not her argument that the model has a clear sex bias. Surely other human experiences like emotions, interpersonal relationships, and self-concept interact with cognitive factors in the process of moral reasoning. In Kohlberg's defense, he did write that he believed other factors impacted the process of moral development, but he chose not to focus on those concepts; instead, he attempted to isolate only the cognitive aspect of the moral domain. (Kohlberg, 1984; Colby & Kohlberg, 1987).

In researching moral development, Kohlberg focused heavily on children and less on adults, even though his model includes higher stages of moral reasoning that apply to adults. As a result, evidence for the validity of Stages 1-3 is stronger than evidence for Stages 5-6. Also, extensive research involving the MJI has shown that MJI scores rarely reach into the Stage 5 range, much less the Stage 6 range (Colby & Kohlberg, 1987). Though Kohlberg admitted that Stage 6 was a more idealistic proposition, could he have operationalized his terms better and provided more examples of stage 5-6 sociomoral reasoning? It seems that if some of his stages had less research support, he would have attempted to modify them and test them even further, but this is not the case.

In aiming a more discerning eye toward Kohlberg's philosophical assumptions and foundations for his theory, there are several issues that warrant criticism. Kohlberg's work is based on a mixture of modern and postmodern philosophical approaches, which is confusing at times. His description of the justice concept is inconsistent in this regard. At one point he claims that justice is a universal characteristic of society, and that a morally autonomous being in Stage 6 will utilize all of the requisite operations of justice. This stance sounds positivistic and Kantian, as if justice is a universal moral law that manifests itself within the process of logic. On the other hand, Kohlberg insists that justice is a postmodern constructivist notion because it emerges as a result of dialogue, and there is no one correct conceptualization of justice.

This modern versus postmodern dilemma brings to mind Plato's *Meno* (1984/388 B.C.E.), where Plato chronicles Socrates' dialogue with many Sophists regarding the definition of virtue. The Sophists insisted that they knew what virtue was, but they never could define it upon Socrates' questioning. Socrates concluded that neither he nor the

Sophists knew the essence of virtue, but it is one of many ideas that comprise the essence of human nature. As with Socrates' conceptualization of virtue, Kohlberg, too, seemed to believe that justice is an essential form of morality that rests within the structural nature of humans, and it can emerge through dialogue. In modern philosophy, essential forms universally apply to everyone, and it is clear that Kant believed morality consisted of universal laws. Thus, Kohlberg appears to follow Kantian modern philosophy in his conceptualization of justice.

Though constructivism is one of the philosophical tenets of Kohlberg's theory and research orientation, it does not appear that he used constructivism in its postmodern sense to refer to the invocation of justice through dialogue. In other words, the process of creating justice and society may be constructive, but with a universal end (justice) in mind. These positions are philosophically inconsistent because postmodern constructivism is the moment-to-moment creation of reality without presupposing any universal forms.

Along the same line of reasoning, another inconsistency in his theory is the juxtaposition of constructivism with a hard stage model that presupposes an endpoint. Again, Kohlberg appears to use postmodern methods to defend a distinctively modern philosophical view. In 1984, Kohlberg wrote the following passage, indicating that he understood the limitations of using a modern philosophical viewpoint to explain a phenomenon that has decidedly postmodern, constructivist, and existential underpinnings.

> The reasons for the success of the Piagetian hard scheme in charting logical and moral development may be precisely the reasons that it will not be successful for

> charting the experience and wisdom of adulthood. Hard-stage models leave unanswered the great questions, including "Why be moral?" The answers to these questions cannot be given within a rational logic of justice; that is, balancing the claims of individual egos. Such a rational logic cannot explain the unique characteristics of adult development, with its existential reflective theories and postconceptual experience. (p. 206)

The passage provides a juxtaposition of modern and postmodern philosophies. It also provides evidence that Kohlberg believed there was more to moral development than logic and reason, and that other aspects of human experience should be considered in understanding the moral domain. The hard stage model is but one piece of the puzzle of moral reasoning and development, according to Kohlberg.

Clearly, Kohlberg believed that there was room for more diverse aspects of human experience, not just cognition, in exploring and explaining the moral domain of human functioning. What other kinds of experiences could be tied to moral development? Could Kohlberg be referring to affective experience as one of the "post-conceptual experiences" that would enhance our understanding of moral judgment and development? Could emotional experiences be linked to the thought structures that Kohlberg proposes in each level and stage? Are the different thought structures in each level and stage accompanied by different emotions? Are people aware of the influence of affective experience in their moral decisions, and do they acknowledge it? Does the emotional experience of moral decision-making change along with developmental changes in moral reasoning, and does emotional experience play a role in facilitating moral development?

These are some of the core questions that will be addressed within the context of this current research project.

The Neo-Kohlbergian Approach to Moral Development

Introduction

Kohlberg mentored many individuals as he labored over his theory of moral development, and James Rest was among his most devoted students. Kohlberg (1979) considered Rest's 1969 dissertation to be a major landmark in validating the orderly, hierarchical progression of his stage theory, and this work was the first in Rest's vast repertoire of research and thoughtful discourse on the progression of moral development. When Rest developed his Defining Issues Test (DIT) in 1974, he initiated a multi-decade research program that, along with the DIT research of other scholars, caused Rest to notice and clarify some of the flaws in Kohlberg's theory. Over time Rest modified his stance on moral developmental theory while retaining many of the basic tenets of Kohlberg's work. He and his colleagues coined their ideas the "Neo-Kohlbergian" approach. In keeping with these modifications, Rest also revised his DIT in a second version that was intended to test his new ideas in conjunction with the Kohlbergian ideas that inspired him. Although Rest died in 1999, the research program that he inspired continues to be implemented to the present day. The following section outlines the major flaws that Rest and his colleagues identified in Kohlberg's theory, and provides information about how DIT research was used to address and investigate these flaws. The Neo-Kohlbergian approach is then described, along with a general description of the research results that informed this approach. Last, a critique of the Neo-Kohlbergian

approach is offered, as is a listing of questions that the Neo-Kohlbergian approach does not answer with respect the affective experience of moral judgment.

Neo-Kohlbergian Criticisms of Kohlberg's Moral Developmental Theory

As James Rest and his colleagues continued to study and question their mentor's theory, they discovered many philosophical and practical fissures in its framework. Rest also attended to the critiques of Kohlberg's work offered by moral philosophers, psychologists, and other scholars. While the Neo-Kohlbergians defended many aspects of Kohlberg's position and incorporated those ideas into their approach, they realistically acknowledged several problems. In the book *Postconventional Moral Thinking*, which Rest co-authored with Narvaez, Bebeau, and Thoma (1999b), the authors discussed several major flaws with Kohlberg's ideas. The following review outlines these flaws as described in that text, unless otherwise noted.

First, the Neo-Kohlbergians acknowledged, as Kohlberg did later in his career (Kohlberg, 1984), that Kohlberg's theory does not address the entire moral domain of human functioning. Earlier in his work, Kohlberg attempted to apply his stage theory to the overall process of moral reasoning, but later, he narrowed the applicability of his theory to describe "the rational reconstruction of the ontogenesis of justice thinking" (Kohlberg, 1984, p. 217). The Neo-Kohlbergians limit the scope of Kohlberg's theory even further, stating that moral judgment is only one of four elements that constitute the psychology of morality. Their four component model of the moral domain is explained later in this chapter.

In reviewing Kohlberg's theory of justice reasoning as a form of moral judgment subsumed under the four component model of the moral domain, the Neo-Kohlbergians

noted that the six-stage model was a quite abstract description of moral development, and did not seem to coordinate well with more concrete aspects of moral reasoning. For example, they saw that Kohlberg's theory discusses how people develop broad, abstract ways of moral reasoning that hearken to the general principle of justice, and form the moral structure of a society. This emphasis on societal systems is known as a macromoral view, as opposed to a micromoral approach that focuses on the personal, everyday moral issues people face, like the morality of relationships. They regarded Kohlberg's broad approach as confusing and difficult to apply in this respect. Even though the Neo-Kohlbergians maintained their focus on macromoral issues in developing their approach, they agreed with contemporary ethicists like Beauchamp and Childress (1994) and Callahan (1988, as cited in Rest, Narvaez, Bebeau, et al., 1999b), who theorized that this level of morality was actually multilayered, as they described in the following quote:

> In sum, there are three levels of abstraction: the justification for a moral system in society (i.e., Kohlberg's stages), intermediate-level concepts that provide the rationale for certain kinds of decision making (e.g., informed consent, due process), and specific codes of ethics (e.g., psychologists should respect the confidentiality of information about clients). (Rest, Narvaez, Bebeau, et al., 1999b, pp. 11-12)

Thus, the Neo-Kohlbergians believed that a theory about moral development should include how people refer to the broad brush strokes of a moral system as well as more specific concepts to inform their everyday moral reasoning.

In addition to the problems with understanding the scope of Kohlberg's theory, the Neo-Kohlbergians were concerned with how Kohlberg's theory relied heavily on

foundational principlism, appeared to endorse inconsistent philosophical positions, and "crossed over" into a position on moral philosophy (Rest, Narvaez, Bebeau, et al., 1999a, 1999b). Even though Kohlberg theorized that Stage 6 moral reasoning involved a postmodern, constructivist dialogue, the result of moral reasoning should be one solution that somehow epitomizes the justice principle. This seems to be a modern philosophical view, not a postmodern one. His idea of "just communities," where people use a democratic process to make group decisions and arrive at a "common morality," still alludes to the creation of one moral solution which reflects a foundational principle (justice). Furthermore, this idea can be construed as a moral philosophical position about how societies create their moral norms. In other words, Kohlberg suggests a theory of normative ethics, even though he initially set out to describe a psychological process of moral development.

The idea that justice exists as a foundational principle, an ultimate answer to all moral questions, seems closely tied to the Kantian categorical imperative, which is the rational development of a universal principle based on fairness. The Neo-Kohlbergians disagreed with this approach and endorsed the ideas of Pritchard (1991, as cited in Rest, Narvaez, Bebeau, et al., 1999b), who charged that these modern philosophical views do not account for the possibility that different people can arrive at different solutions or courses of action, and yet maintain logical consistency. Another problem with the foundational principlism espoused by Kohlberg is the assumption that people process through their moral judgments in a deductive, "top-down" way based upon principles, like justice. The Neo-Kohlbergians believed that people also use inductive, "bottom-up"

processing by employing existing common sense ideas to arrive at moral decisions. They borrowed this idea from Beauchamp and Childress (1994).

The foundational principlism espoused by Kohlberg was tied to the justice-based ideas of Rawls (1971), who himself used post-modern, constructivist notions to develop justice as a seemingly universal form in the modern philosophical tradition. Justice is the cornerstone of the rules, laws, and institutions that form the structure of society, and this is a macromoral viewpoint. Although the Neo-Kohlbergians defended Kohlberg's focus on macromorality as a crucial aspect of moral development, they also believed that Kohlberg was so intently focused on justice as the pinnacle of macromoral functioning that he neglected to consider other important macromoral concepts (Rest, Narvaez, Bebeau, et al., 1999a, 1999b). *Right* is emphasized over *good*, and the concept of right is wedded to Rawls' political philosophy. This viewpoint lends to a normative theory of ethics riddled with political overtones and controversy. The Neo-Kohlbergians would prefer to focus on a psychological theory of moral development, without ties to any political ideologies or philosophical theories about the development of ethics in society.

In addition to being overly concerned with justice reasoning, Rest, Narvaez, Bebeau, et al. (1999a, 1999b) charged that Kohlberg's work was inflexibly tied to the hard stage, structure-based model of cognitive development offered by Piaget. Indeed, Kohlberg based his work on that of Piaget, as described earlier in this chapter (1979; 1984; Colby & Kohlberg, 1987). Rest, Narvaez, Bebeau, et al. (1999b) cited Piagetian theorists and researchers who have since challenged the staircase model of development, with its qualitatively different, structurally whole stages and the use of only one set of cognitive operations at each stage. Advances in developmental theory and research seem

to favor overlapping use of less sophisticated and more sophisticated ways of thinking during problem solving, and this cognitive processing seems to occur throughout the course of cognitive development, even in childhood. In addition, Kohlberg's rigid focus on the structure of moral operations does not account for the ways that the content of moral thoughts can evolve over time. Rest, Narvaez, Bebeau, et al. (1999b) believed that content was just as critical as structure in distinguishing different levels of moral development.

Finally, the Neo-Kohlbergians noted that Kohlberg's lack of empirical evidence for the postconventional level of development weakened his theory considerably (Rest, Narvaez, Bebeau, et al., 1999b). If Stage 6 represented the highest form of moral reasoning to which all "lesser" forms of reasoning are contrasted, then there should be compelling evidence of the existence of this stage in order to give credibility to the theory. Unfortunately, Kohlberg's work focused on research with children and adolescents, who, by his own definition, probably could not employ postconventional reasoning. Furthermore, Kohlberg only offered a few examples of people who used postconventional moral reasoning. Rest (1979, 1986) and Rest, Narvaez, Bebeau, et al. (1999b) suggested that the lack of empirical evidence may originate from problems with Kohlberg's assessment method, namely the MJI. Perhaps the interview method cannot tap into more tacit, implicit forms of morality because it is a production task, not a recognition task like the DIT. Just because participants may not spontaneously exhibit postconventional moral reasoning in their interview responses does not mean they are incapable of it, they argued.

Research That Influenced the Neo-Kohlbergian Approach

As a student of Kohlberg, Rest developed the Defining Issues Test (DIT) in 1974 in order to create a quicker, more quantitative approach to measuring Kohlberg's stages of moral development. Although information on the DIT and results of DIT research were provided in a previous section of this review, it is important to elaborate on the rationale Rest had for designing it. He was influenced by some of the flaws in Kohlberg's theory that were described in the previous section, and he intended to create an instrument that would make up for those flaws. The resulting 20+ years of DIT research briefly described in this section caused him to form the Neo-Kohlbergian approach, as well as modify the DIT to create the DIT-2.

Since Rest was concerned with the problem of foundational principlism and Kohlberg's resulting over-reliance on a production-type interview assessment method designed to elicit justice reasoning (MJI), Rest (1979, 1986) decided that the DIT should not be a production task, but a recognition task. A recognition task could remedy the theoretical and philosophical problems associated with foundational principlism in a few different ways (Rest, Narvaez, Bebeau, et al., 1999b). First, recognition tasks do not require participants to speak articulately about their abstract moral judgment processes, which is a difficult task in and of itself. This type of task could elicit more tacit and implicit forms of moral reasoning, thereby allowing potentially more participants to score in the postconventional level. A recognition task could permit the use of inductive reasoning (bottom-up) in addition to deductive reasoning (top-down) in making moral decisions. Thus, more people could score in the postconventional range of moral development. Rest designed the DIT for administration to people ages 12 and older in a

deliberate attempt to assess for higher levels of moral development. The fact that the DIT was less time consuming and easier to score than the MJI also meant that research results could come more quickly, hence broadening the body of research on adult moral reasoning. Ultimately, more evidence for postconventional moral reasoning would strengthen Kohlberg's theory. Indeed, these results materialized in over 800 published and unpublished studies over the decades of DIT research. Rest's DIT research (1979, 1986), along with collaborative DIT research efforts of his colleagues (Rest, Narvaez, Bebeau, et al., 1999b) and other researchers, show tremendous support for the concept of postconventional reasoning as a level of moral development more advanced over that of preconventional and conventional moral reasoning. Furthermore, preference for postconventional reasoning seems to increase predictably along with other indices of development, like increases in age and educational level, suggesting that it is a developmentally advanced form of moral reasoning (Davison, 1979; Rest, 1979, 1986; Rest, Cooper, Coder, Masanz, & Anderson, 1974; Rest, Thoma, & Edwards, 1997; Thoma, 1986).

The DIT is a recognition task that assesses how much people *prefer* to use postconventional thinking to solve moral dilemmas. Assessing for preference in the content of the statements as opposed to cognitive structure alone aligns the DIT with more contemporary ideas about cognitive functioning, like the aforementioned theory that people use lower and higher levels of reasoning simultaneously to solve a problem (Rest, Narvaez, Bebeau, et al., 1999b). A Piagetian-type stage scheme like Kohlberg's only acknowledges use of one discrete level of moral reasoning for each moral dilemma, so people in earlier stages must not be capable of more advanced ways of thinking,

according to this theory. But that is not what the DIT research suggests. According to decades of DIT research, people who ultimately score at lower levels of moral development still prefer postconventional reasoning, which means that they are capable of it (Rest, 1979, 1986, 1994; Rest, Narvaez, Bebeau, et al., 1999a, 1999b). This same DIT research that was used to lend support to stages and levels of moral reasoning also showed that people in the conventional and preconventional levels do sometimes prefer postconventional reasoning, just as people in the postconventional level sometimes prefer the less advanced ways of justifying their moral decisions. The developmental differences between people do not manifest in the existence of postconventional reasoning, but in the amount that people prefer it. The more it is preferred, the higher a person's level of moral development. This design feature of the DIT, and the results that followed, ultimately caused Rest to depart from Kohlberg's hard stage model and endorse an overlapping-level, schema model of development which is explained in a forthcoming section of this review.

Another influential set of research results that influenced the Neo-Kohlbergian approach involved the quest to validate each of Kohlberg's six stages. In previous sections of this review, DIT research was cited to support several of Kohlberg's theoretical claims, including the following: the developmental sequence of stages; the transformational progression of stages; cross-cultural universality of the model; and existence of adult stages of moral reasoning. As the body of DIT research grew over time, Rest started to question what the DIT was really measuring, especially with regard to distinguishing between stages of Kohlberg's model (Rest, Narvaez, Bebeau, et al, 1999a, 1999b). Due to philosophical inconsistencies, the DIT recognition task precluded

the measurement of hard stages as outlined in Kohlberg's model. Likewise, the level of abstraction Kohlberg used to describe each stage of his model made the task of operationalizing each stage extremely difficult. These issues, along with their growing interest in cognitive schema theory as a way of describing development, motivated Rest and his colleagues to conclude that the DIT was really measuring three overlapping moral schemas rather than six discrete stages. It is important to note that the moral schemas directly reflect Kohlberg's three levels of moral development. Rest, Narvaez, Bebeau, et al. wrote that "DIT research does not disprove, but neither does it support, many of the finer distinctions of Kohlberg's theory (e.g., six or seven stages, A and B substages, justice operations)" (1999b, p. 58). Neo-Kohlbergian moral schema theory is outlined later in this review.

In keeping with Rest's intention to research adult moral development, the Neo-Kohlbergians were particularly interested in distinguishing between conventional and postconventional forms of moral reasoning in order to compensate for the abstract descriptions given by Kohlberg. Using a sample of 45,856 DIT profiles from over 800 studies, Rest, Narvaez, Bebeau, et al. (1999b) generated results that strongly supported the existence of postconventional reasoning. Another set of research that supports the distinction between conventional reasoning and more advanced postconventional reasoning can be found in the Neo-Kohlbergians' program to define the construct validity of the DIT. Establishing construct validity requires the Neo-Kohlbergians to demonstrate evidence for the following: there are different developmental groups; reasoning improves over time and/or with the help of educational interventions; higher levels of reasoning are advanced over lower levels of reasoning; the DIT predicts moral behavior in real life; and

the DIT is a reliable instrument. Rest, Narvaez, Bebeau, et al. (1999b) reported support for these criteria extensively in their book, citing hundreds of published and unpublished studies and meta-analyses. The results of these studies suggest general trends that the Neo-Kohlbergians used to develop their theoretical concepts of conventional and postconventional moral reasoning to a degree that Kohlberg was not able to accomplish during his lifetime. These concepts are explained further in the following section.

The Neo-Kohlbergian Theory of Moral Development

Elements of Kohlberg's Theory Maintained

In describing their theoretical approach, Rest, Narvaez, Bebeau, and Thoma (1999a, 1999b) first pointed out the elements of their work that stem directly from Kohlberg's work. They maintained that they were continuing the work of Kohlberg in attempting to describe the ontogenesis of justice reasoning with a cognitive, constructivist viewpoint, while modifying the theory in accordance with criticisms of Kohlberg's work, and with DIT research results (both described in previous sections). While acknowledging the importance of micromoral issues, Rest, Narvaez, Bebeau, et al. (1999a, 1999b) maintained Kohlberg's focus on the development of macromorality, or how people internally construct the social world and make judgments based on that construction. They explained that "the conditions for establishing a societywide system of cooperation (cooperation among strangers, not only among friends) require impartiality and acting on shared ideals, not acting on behalf of our friends and kin" (Rest, Narvaez, Bebeau, et al., 1999b, p.5).

They espoused Kohlberg's view that people construe macromorality in qualitatively different ways over the course of life in such a way that a sequence of

developmental levels can be distinguished. The three levels of development the Neo-Kohlbergians described fit closely with the preconventional, conventional, and postconventional levels described by Kohlberg. Furthermore, Rest and colleagues defended Kohlberg's attention to the contextual influences on moral development. They believed, as Kohlberg, that historical, cultural, and community-based factors play a role in the developmental process. The evolution of justice reasoning requires that each person construct a moral point of view, and at the postconventional level, that point of view is created when a person imaginitively role-plays the context of every person involved in a moral dilemma. In this way, justice reasoning is not about mindlessly forming absolute rules based on justice, but rather it is a mindful, dynamic process of "appreciating the contextualism of real-life moral dilemmas or special circumstances" (Rest, Narvaez, Bebeau, et al., 1999b, p. 29).

The Four Component Model for the Psychology of Morality

The Neo-Kohlbergians agreed with Kohlberg that a theory of how justice reasoning evolves does not account for the entire process of moral development, nor does it explain all there is to the psychology of morality. Kohlberg never proposed just where his model fits within the psychology of morality, so the Neo-Kohlbergians set about framing Kohlberg's work, and theirs, within a comprehensive, four component model that represents the psychology of morality. Rest (1986) believed that the moral domain must take into account the respective roles and interactions between cognition, affect, and behavior, writing that "there are no moral cognitions completely devoid of affect, no moral affects completely devoid of cognitions, and no moral behavior separable from the cognitions and affects that prompt the behavior" (p. 4). Thus, the model was created as a

way to approach the question "What must we suppose happens psychologically in order for moral behavior to take place?" (Rest & Narvaez, 1994, p. 23).

The first component of the model is moral sensitivity, which generally refers to a person's ability to recognize that a problem is indeed a moral problem, and that several courses of action are possible (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999b). Moral sensitivity requires empathy toward the circumstances of all people involved in the problem, and awareness of how different courses of action may impact all parties involved. Taking into account the needs and welfare of others during a moral dilemma seems critical to Kohlberg's idea of moral musical chairs, where a postconventional thinker must consider all parties involved before making a truly fair judgment. If people cannot be sensitive to the existence of a problem and the context of each participant, then just action would be impossible.

Moral judgment is the second component of the model, and the main focus of Kohlbergian and Neo-Kohlbergian theory. It addresses how people define right and wrong, then decide what is action is most morally justifiable in any given situation, based on their ideas of right and wrong (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999b). Kohlberg's research and DIT research are attempts to understand the cognitive processes involved in making moral judgments. Indeed, the major task of the DIT is to decide a course of action and select which of the justifications of that action are most important. Kohlberg and the Neo-Kohlbergians would suggest that a person's sense of what's right in a situation is driven by a sense of fairness and justice, which is defined in different ways over the course of development. For example, Rest (1986) describes that the conventional sense of fairness is derived from loyalty to others

and concern for the welfare of others. If people can count on each other, do their part, and have the best interests of others at heart, then they are being fair. In contrast, people at the preconventional level may define fairness as getting something of value in return for something of equal value that they have given (Rest, 1986). The Neo-Kohlbergians caution that the focus of their work, justice reasoning, is only one way that people may be able to determine wrong and right (Rest, 1986). There could be other moral concepts that drive that decision, like care for others, as suggested by Gilligan (1982/1993), or religious beliefs.

The third component of the model, moral motivation, takes into account all of the other values, aside from moral values, that may influence a particular course of action. For example, valuing the acquisition of money or material possessions may feel more important than considering the welfare of others in the case of a business executive who chooses to embezzle money from his company's employee retirement funds. There are times when choosing to behave in a morally right way may prevent a person from honoring other values or attaining other important goals, so morality must compete with other values (Rest, 1986). Rest and Narvaez (1994) suggest that some of the most infamous people in the world, like Hitler and Stalin, were aware enough to know if an issue was moral and know the consequences of their actions (moral sensitivity), and intelligent enough to decide the fairest course of action (moral judgment), but other values were a far stronger motivating force.

Moral character is the final component of the model, and it is the degree to which people persevere in executing moral action or pursuing a moral goal. Often, a moral course of action, like Martin Luther King's quest to gain civil rights for of people of

color, may result in years of toil, fatigue, threats to one's safety, and ardent opposition. Nevertheless, people with high moral character stay focused on a moral goal and display courage and strength of conviction in realizing that goal (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999b).

Rest and Narvaez (1994) wrote that all four components interact constantly, just as the cognitions, feelings, and behaviors that represent them. They suggested that any failure to act morally could be a failure in one or more of the dimensions. Ironically, focusing intently one of the components of the model could cause neglect toward the other components, and eventual moral failure (Rest, 1986).

Three Moral Schemas

In scrutinizing Kohlberg's six-stage theory, the Neo-Kohlbergians decided that they must alter the notion of hard stages, and modify the emphasis on cognitive structures and operations that are discrete. They accomplished this goal by referring to their levels of moral development as schemas, defined by cognitive theorists as cognitive structures that serve as broad frameworks for storing general knowledge in memory, as opposed to storing individual "pieces" of knowledge (Fiske and Taylor, 1991). Stimuli activate these schemas so that people can attempt to recognize, understand, and act to solve the problems of everyday life. Unlike cognitive operations, cognitive schemas are both structure and content based. Instead of people learning how to juggle more and more ways of reasoning through moral dilemmas, as Kohlberg describes, people develop increasingly complex representations of broad schemas, like role schemas (e.g., teacher, police officer, banker) (Rest, Narvaez, Bebeau, et al., 1999b). A person will retrieve all schemas, moral and otherwise, in order to solve moral dilemmas.

Previous sections of this chapter elaborate on how DIT research results influenced the Neo-Kohlbergians to adopt a schema theory approach. They wrote, "We describe development in terms of shifting distributions of schemas, the higher stages gaining in use whereas the lower stages diminish. We do not use the concept of justice operations to characterize development" (Rest, Narvaez, Bebeau, et al., 1999b, p. 57). People may use all three levels of schemas in solving moral problems, but they are grouped developmentally according to the schemas they prefer and use most frequently. After making this modification to Kohlberg's theory, they quickly disclose that their ideas on the preconventional, conventional, and postconventional levels are essentially Kohlberg's ideas.

The Neo-Kohlbergians do not mention any modifications to the preconventional level of development in their writings, other than renaming it the Personal Interest Schema, and specifying that it corresponds with Kohlberg's Stages 1, 2, and 3 in the research literature (Bebeau & Thoma, 2003). Rest, Narvaez, Bebeau, et al. (1999a) refer to this level as "presociocentric," meaning that the person does not use the concept of organized society in his or her moral reasoning. Personal interest schema thinking is marked by the moral agent's focus on how he or she will benefit from or be punished by his or her actions. Bebeau and Thoma (2003) note that fairness is defined by how people exchange simple favors, and by how positive the intentions of each party are. Maintaining relationships and getting approval are also primary motivators for moral action. There is a dearth of literature available on the personal interest schema. This is likely due to the fact that DIT research does not involve people younger than 12 years

old, and most people transition out of the preconventional level of development around age nine (Bebeau & Thoma, 2003; Colby & Kohlberg, 1987).

The conventional moral schema corresponds best with Kohlberg's Stage 4, and is renamed the Maintaining Norms Schema by the Neo-Kohlbergians (Rest, Narvaez, Bebeau, et al., 1999a, 1999b). Its new name directly reflects the primary concern for people in this level, which is the maintenance of existing social structures, roles, and systems associated with delivering justice. Rest, Narvaez, Bebeau, et al. (1999a, 1999b) presented five elements that comprise the Maintaining Norms Schema. First, people in this level recognize the need for norms that eradicate many potential sources of conflict, so that people need not "reinvent the wheel" every time there is a moral dilemma. Such norms are a source of security, and moral action is often centered on these norms. Second, they know that they must cooperate with friends, family, enemies, and strangers alike, and that there must be rules to define that type of cooperation for everyone. All people need to know these rules. Third, people of this moral disposition also understand that laws are useful in setting the tone for social cooperation. Laws can be specific kinds of social norms, whether they are civil laws or religious laws. They believe that everyone is protected by the law and everyone must obey the law.

Laws dictate everyone's responsibilities according to their social roles, and the fourth element emphasizes knowing one's duty, and doing one's duty to uphold one's responsibilities. This element accounts for reversibility in the Maintaining Norms Schema, since people expect that if they do their duty, others will, too. Finally, the fifth element involves authority, because people in this schema rely on a hierarchy of authorities to enforce norms and maintaining the social structure. One must defer to

authority in order to keep the social system in tact. The essence of the Maintaining Norms Schema lies in taking moral action and making moral decisions that directly correspond to laws and norms because without those, there is no order. Thus, the Neo-Kohlbergians often refer to this level as "law and order" morality, just as Kohlberg did. People of this orientation may find so much security in laws and norms that they may regard them as absolute truth. Consequently, these folks might believe they know the truth, and may develop oppressive, even totalitarian practices to defend the "truth" against people who have different views (McClosky & Brill, 1983). This represents the more unseemly side of an otherwise compliant, cooperative, society-maintaining perspective.

If the Maintaining Norms Schema exemplifies a society-maintaining moral perspective, then the Postconventional Schema represents a society-creating moral perspective (Rest, Narvaez, Bebeau, et al., 1999a, 1999b). Even though the Postconventional Schema corresponds closely with Kohlberg's Stages 5 and 6, the Neo-Kohlbergians take care in assuring that their theoretical ideas are not derived from Kantian or Rawlsian moral philosophies, nor do they attempt to suggest this schema as a model of developing normative ethics. They maintain that this schema potentially fits with several different contemporary moral philosophies, but is wedded to none. They also reveal that their descriptions of this schema are broadly defined, less detailed, and more timid, for they make fewer assumptions than Kohlberg did. People who make moral judgments using postconventional reasoning realize that "rights and duties are based on sharable ideals for organizing cooperation in society, and are open to debate and tests of logical consistency, experience of the community, and coherence with accepted practice" (Rest, Narvaez, Bebeau, et al., 1999b, p. 41). With these defining characteristics in mind,

the Neo-Kohlbergians propose that four elements are critical to the postconventional schema (Rest, Narvaez, Bebeau, et al., 1999a, 1999b).

Postconventional moral thinkers appreciate the value of social norms and laws, but they attend to the moral purposes underlying those laws, and they question those laws and norms if they believe such conventions no longer represent the original moral point. Just because a law *is* does not mean it *ought* to be followed in all circumstances. This first element of this schema involves focusing on the primacy of moral criteria. The second element refers to the postconventional thinker's ability to conceptualize ideals about how people should relate to each other, and then promote those ideals and attempt to organize society around those ideals. Social ideals could include concepts like providing for people in need, developing the inherent potentialities of people, or ensuring fair treatment for all.

The ideals that postconventional moral thinkers create must meet the criterion of sharability, as established in the third element. The ideals must be justifiable to all other relevant parties, and they must agree on them. This element could prevent the festering of personal agendas, favoritism, or development of privilege in a social system. Of course, these sharable ideals are always subject to scrutiny or evidence to the contrary, and may be changed if the circumstances are logically warranted. The fourth and final element of postconventional moral reasoning is its full reciprocity, meaning that social norms must apply to all parties involved, and the norms must not be biased toward anyone, at anyone else's expense. The Maintaining Norms Schema espouses partial reciprocity when operating on the idea that laws and norms apply to all. Someone who relies on Postconventional Schema knows this, but she also knows that laws may not always

benefit everyone equally. Both types of schemas rely on gaining a consensus to establish rules and norms, but the method of gaining consensus differs. People in the Maintaining Norms Schema defer to authorities and to the laws and norms as they are, whereas postconventional thinkers create ideals and use reflective dialogue with others to find which norms and laws are most logically consistent and most closely matched to societal ideals.

Instrumentation: The Development of the DIT-2

After over 20 years of DIT data collection and the development of a refined model of moral development based on empirical findings, Rest, Thoma, and Edwards (1997) began thinking about how they could modify the DIT in a way that better reflects Neo-Kohlbergian ideas about schema theory. They realized that they need not overhaul the instrument to make it fit schema theory. In fact, Rest, Narvaez, Bebeau, et al.(1999b) concluded that even though the DIT was initially developed to assess Kohlbergian stages of moral development, the DIT always seemed to be measuring schemas more than stages. Thus, instead of modifying the instrument drastically, they modified their conceptualization of what it really measures.

Rest, Narvaez, Bebeau, et al.(1999b) believed that schema theory was a far more comprehensive way of understanding how the DIT works than was Kohlberg's theory. They re-evaluated and reframed the DIT based on the work of Taylor and Crocker (1981), prominent schema theorists who explained how schemas account for the following seven cognitive functions: lending structure to experience; determining what information will be encoded or retrieved from memory; influencing processing speed and rate of problems solving; enabling the participant to fill in data the may be missing from a

presented stimulus situations; providing a framework for problem solving; providing a framework for evaluating experiences; and providing a means for setting goals, making plans, and developing behavior patters to meet those goals. The Neo-Kohlbergians noted how the DIT structure and research results seemed to conform well to these major tenets (Rest, Narvaez, Bebeau, et al., 1999b).

Revitalized with their new theory and new perspective of the DIT, Rest, Narvaez, Bebeau, et al. (1999b) outlined their new ideas about how the DIT works and what it measures. They wrote:

> The DIT can be viewed as a device for activating (triggering, eliciting) moral schemas from long-term memory to process what is in working memory. The dilemmas and items serve to activate moral schemas of the subject has developed them. That is, to the extent that the subject has acquired the postconventional schema through development. (p. 142)

The Neo-Kohblergians hoped that linking their work to schema theory and launching the concept of moral schemas may help to integrate moral developmental theory with other cognitive developmental theories, as well as theories of social cognition.

The final revision of the DIT-2 was completed by Rest and Narvaez in 1998, and an updated version of the DIT-2 manual was published by Bebeau and Thoma in 2003. The assessment method was unchanged, even though the theoretical basis for the instrument was slightly modified in response to the plethora of previous DIT research results. Its structure and score indexing were streamlined. First, the instructions for completing the instrument were modified to increase clarity. Next, the DIT-2 consists of five (instead of six) updated moral dilemmas that correspond more appropriately with

modern social problems. The DIT-2 includes more discriminating internal consistency checks to identify bogus data. This instrument uses the *P* Score as in the original DIT, but it also uses a new, more statistically advanced method for calculating a developmental score called the N2 index. The N2 index is a combination of two scores. The first score indicates the degree that a participant prioritizes Postconventional Level answers, while the second score represents the degree that a participant does not prioritize answers characteristic of lower stages (Rest, Narvaez, Bebeau, et al., 1999b; Rest, Narvaez, Thoma, et al., 1999). Additionally, participants are also given a Type score of One through Seven, which categorizes each participant according to his or her moral primary response schema (Personal Interests, Maintaining Norms, or Postconventional), secondary response schema (Personal Interests, Maintaining Norms, or Postconventional), and degree of consolidated or transitional schema characteristics in the score profile (Bebeau & Thoma, 2003). This score may be used to ascertain each participant's overall level of moral development (Preconventional, Conventional, or Postconventional).

The results of the initial DIT-2 statistical analysis indicated an increase in validity measures from the first DIT, in terms of the instrument's ability to detect advancement in moral developmental level that goes along with changes in age and education level (Rest, Narvaez, Thoma et al., 1999). Since the DIT-2 correlates strongly with the DIT, and since the DIT-2 is based upon the DIT, the developers of the DIT-2 maintain that the extensive psychometric research done on the first DIT is relevant to the validity and reliability of the DIT-2 (Bebeau & Thoma, 2003).

Rest, Narvaez, Bebeau, et al., (1999b) review over 800 studies, over 400 of which have been published, that support the construct validity of the DIT. For example, The DIT has shown discriminant validity and convergent validity characteristics. Furthermore, the DIT corresponds well with Kohlberg's theory of moral development because the DIT has the ability to track developmental gains over long time periods, and it displays sensitivity to moral education interventions. A smaller amount of research has been completed to establish the validity of the DIT-2, but Bebeau and Thoma (2003) and Rest, Narvaez, Thoma, and Bebeau (1999) report that the DIT-2 shows highly consistent validity characteristics with the DIT. Rest and his colleagues (Rest, Narvaez, Bebeau, et al., 1999b; Rest, Narvaez, Thoma et al., 1999) have proposed that the DIT-2 is an improvement over the DIT because it is shorter, more amenable to group administration, and more consistent with modern social concerns. Also, it displays stronger reliability and validity characteristics. Since its development, the DIT-2 has been used to determine the effect of moral education interventions, and to assess moral development as a variable in a broad range of empirical studies (Bebeau & Thoma, 2003). Thus, it has been used in ways highly consistent with its predecessor, the DIT. More information on the DIT-2 can be found in Chapter Three of this study.

Critique and Important Unanswered Questions Concerning Neo-Kohlbergian Theory

After working with Kohlberg, researching his work, developing and revising the DIT, and attending to scholarly critique of Kohlberg's theory, it appears that Rest and the Neo-Kohlbergians have developed a thoughtful, less politicized, and less controversial theory of the ontogenesis of justice reasoning. They view morality as a sociocultural phenomenon that materializes through the deliberations of a community as well as

through the evolving moral viewpoints of individuals, and they developed a model of various aspects of the psychology of morality, placing their work on justice reasoning in its proper perspective. In his day, Kohlberg modified his approach constantly and attempted to explain its limitations, but it seemed difficult to comprehend without placing it within some broader contextual framework. Perhaps this confusion gave rise to some of the criticisms of his work. The Neo-Kohlbergians seemed to be aware of this lack of clarity, so they exerted tremendous effort in answering the criticisms of his approach, separating out the valid and unwarranted criticisms, and modifying some of the major philosophical and methodological problems of the approach accordingly. In addition to modifying theory based on scholarly criticism, they also modified it based upon decades of DIT research results. They remain consistently aware of the limitations of their new approach and seem open to altering it as new criticism and research results become available.

The Neo-Kohlbergians seem to be successful in moving Kohlberg's ideas forward. They keep the spirit of his work intact, yet they update it to coincide with some of the latest ideas in cognitive developmental theory. This change potentially bridges the gap between moral development and cognitive development, and could generate new avenues of theory and inquiry. They also take into account the current viewpoints in moral philosophy, and they do not wish for their work to be misconstrued as supporting any one moral philosophical approach. On the contrary, they want their work to be associated with the psychology of morality, and with only one particular piece of that puzzle.

For as much as the Neo-Kohlbergians have promoted a theoretically and empirically appealling approach to moral development, there are some shortcomings to their approach that should be mentioned. The most obvious change they made to Kohlberg's theory is modifying it from a model with six hierarchical, hard stages to a three-level model that has more of an overlapping developmental progression. As a result, the theory has lost some of its specificity. It may be more difficult to develop pointed research questions to test it. In addition to losing some of its specificity, the integration of new approaches (i.e., schema theory) can be confusing at times, as can the subtraction of important philosophical bases for their approach. Even though they attempt to divorce themselves from inadvertently commenting on moral philosophy, no theory is without philosophical underpinnings, and any work on the concept of morality inevitably will be tied to western philosophical concepts. For now, it seems they have unraveled Kohlberg's theory and are slowly piecing together a new perspective, but its current form is a bit fragmented.

Another criticism of the Neo-Kohlbergian approach alludes to DIT research. Some of the research that the Neo-Kohlbergians cite is unpublished work, which is difficult to access and evaluate. Furthermore, this problem makes it difficult to fully understand their long-term research strategy, or keep up with some of the latest research. The DIT (and DIT-2) has limitations as well. Because it is a recognition task, the data is less detailed, and not as rich as the interview data from Kohlberg's MJI, meaning that one could not gain as much insight into the structure and content of moral schemas from DIT results. Since it is a self-report instrument, DIT results are limited to each participant's ability to accurately self-reflect and give answers that truly are consistent with his or her

approach to moral reasoning. Also, the testing floor for the DIT is age 12. It cannot be used with younger children, so a large portion of Kohlberg's theory, and a third of the moral schema theory the Neo-Kohlbergians espouse cannot be tested. They seemed to trade the problems that Kohlberg had finding participants who scored in the postconventional level by generating and instrument and subsequent research that neglects the preconventional level. The DIT should not be the only way of testing this theory. Other methods should be developed that use different types of tasks geared toward assessing all levels of development. Perhaps linking moral developmental theory to schema theory will open new avenues for creating more comprehensive instrumentation and research strategies.

While balancing the strengths and limitations of the Neo-Kohlbergian approach to moral development, many of the same unanswered questions emerge that also applied to Kohlberg's approach. Here is the question that most applies to this current research study: What other kinds of experiences could be tied to the levels of moral development that Kohlberg and the Neo-Kohlbergians have proposed? Could emotional experiences be linked to the thought structures that Kohlberg and the Neo-Kohlbergians posit in each level? Are the different thought structures in each level accompanied by different emotions? Are people aware of the influence of affective experience in their moral decisions, and do they acknowledge it? Does the emotional experience of moral decision-making change along with developmental changes in moral reasoning, and does emotional experience play a role in facilitating moral development?

In addition to these familiar questions, the four component model created by the NeoKohlbergians also invites questions relevant to this research project. The model is a

far more holistic conceptualization of the moral domain than Kohlbergian and Neo-Kohlbergian theories can offer, yet it also serves an analytical purpose by parsing the psychology of morality into different functional components (moral sensitivity, moral judgment, moral motivation, and moral character). The Neo-Kohlbergians suggest that these components are integrated and inform each other (Rest, Narvaez, Bebeau, et al., 1999b), but they do not have any research to support that claim. Can one component of the model inform other components? More specifically, do different components of this model coordinate and change together in orderly, predictable ways over the course of development? Where does affective experience fit into this model? Does it have different relationships with each component? Are there different affective experiences that have a predictable, orderly relationship with the non-affective elements of each component, particularly moral judgment?

Watson's Theory of Affective Experience

Introduction

Within this section, David Watson's theory of affective functioning is described, along with some of the research and theoretical approaches that influenced his work. A discussion of his research instrument follows that review, along with an overview of relevant research on his theory. The section will conclude with a critique and consideration of important unanswered questions about his approach to affect.

Theory of Mood and Affect

Theoretical Influences

Theories of human emotions have existed throughout history, from the writings of philosophers such as Aristotle, Descartes, and Spinoza, to the work of luminaries such as

Charles Darwin, William James, and Sigmund Freud. Plutchik (1994) suggests that there are several overarching schools of thought from which most early and contemporary theories of emotions originate. The evolutionary tradition started by Darwin rests on the premise that emotions serve a vital adaptive purpose, and human survival partly depends on them. The psychophysiological tradition founded by William James built on the adaptive function of emotions by proposing that feelings result from instinctive changes in physiological mechanisms, especially the autonomic nervous system. Similarly, the neurological tradition of Walter Cannon focused on finding the "seat of emotions" somewhere within the brain. Freud suggested that emotions are instinctive as well, and they reflect complex, unconscious energy forms that are directed toward an object outside of oneself (Plutchik, 1994; Solomon, 2003). Finally, Heider and Arnold developed the cognitive tradition because they were among the first to link thoughts and emotions together in a continuous feedback system (Plutchik, 1994; Solomon, 2003).

Building on these traditional schools of thought, dozens of contemporary theories exist to define, describe, and explain human emotions. Several of them influenced the work of David Watson, and should be mentioned in this review. First, Plutchik (1962, 1994) took an evolutionary approach, suggesting that there are a few genetically-based, basic emotions from which all others are derived. Emotions are critical for survival, interacting with other sensory, perceptual, and physiological bodily systems in a series of feedback loops. The feedback loops influence behavior that promotes survival. Emotions are also a part of human personality.

Tomkins (1962a, 1962b, 1991) concurred with Plutchik that emotions are genetically based, and that there are eight basic emotions. He also categorized emotions

into positive affect and negative affect categories. Tomkins wrote that emotions serve a motivational purpose because they are strong signals that the body is in need. Emotional expressions through the face and body are innate responses to environmental stimuli. Izard (1971, 1991) built on the ideas of Tomkins by developing his own list of basic emotions based upon his extensive research into facial expressions. He proposed that each basic emotion has its own unique facial expression and neurological properties that evolved through human history. He also agreed that emotions serve to motivate people to meet their adaptive needs, and that they are a subsumed within personality. Since emotions are directly linked to survival instincts, they need not be linked to cognitive processes, according to Izard. Izard produced a wealth of research on universal facial expressions of emotions, and Ekman (Ekman & Friesen, 1975; Ekman, 1982) attempted to refute this evolutionary, motivational approach by generating his own facial expression research. Ekman developed a precise system for distinguishing facial expressions, and his research ultimately supported that of Izard. Ekman concurred that there are universal facial expressions that express and communicate a limited set of basic emotions. Emotions are biological phenomena that serve the adaptive purpose of communication. Beyond these basic emotions, other, more complex emotions exist, and they are derived from processing thoughts about oneself and one's interactions with the environment. These theories, among others, motivated Watson to develop a structural model of affect and an assessment instrument that tests his model.

Watson's Theoretical Assumptions

In considering the above theories as well as the growing trends in emotion theory and research, Watson (2000) developed five basic assumptions that drive his theory of

affect. His first assumption was that subjective mood states are the primary phenomenon of interest in his theory. In part, he was responding to the abundance of theory and research on the links between cognition and affect, like the work of Lazarus (1991), and Ortny, Clore, and Collins (1988). Even though behavior, cognition, and facial expressions are important parts of human experience that should be studied, Watson wanted to limit his attention to the conscious, subjective experience of feelings. He acknowledged several limitations in the way subjective mood states are measured, primarily the problems of relying on self-report instruments like his own Positive and Negative Affect Schedule-Expanded Form (PANAS-X). He suggested that certain experimental designs could reduce the threats to validity and reliability that self-report instruments usually carry.

Watson's (2000) second assumption echoed the psychophysiological and neurological traditions of James and Cannon, respectively. He believed that moods and emotions are components of overarching biobehavioral systems that include affective, cognitive, biological, and behavioral components. Each component constantly interacts with the others. There is much debate on which of these components is the first to respond to environmental stimuli. For example, Lazarus (1991) insisted that cognition precedes affect, while Zajonc (1980) argued that affective responses precede cognitive interpretations of stimuli. Instead of assuming that one or another goes first, Watson believes that all these systems respond to the environment synchronously in a complex series of feedback loops called biobehavioral systems. Watson cited several authors who have completed neuropsychological research supporting the idea of such systems. This type of research has spawned a model of interacting biobehavioral systems that explain

human functioning in terms of systems that inhibit or activate cognitive, affective, behavioral, and biological functioning (e.g., Behavioral Inhibition System, Behavioral Activation System). Watson had great confidence in this systemic model.

Watson's (2000) third assumption flows naturally from the second. When one component of a biobehavioral system is altered in some way, all the other components must change as well. The components act both as causes and effects. Even though several modern theories state that cognitions precedes affective experience, Watson takes care in noting that "moods are not simply effects. They are also important causal variables that can motivate and direct behavior, produce systematic changes in thoughts and attitudes, and so on" (p. 25). The fourth assumption that Watson makes is that the biobehavioral systems which regulate mood are the product of natural selection, as Darwin proposed long ago. Affect serves many important adaptive functions. Negative moods are unpleasant and reactive in that they accompany physiological arousal to dangerous stimuli. Thus, they promote survival by enabling us to avoid situations that may harm or kill us. Positive moods motivate us to approach environmental stimuli, maintain higher energy levels, and acquire resources that may enhance survival. Watson gives the example of how humans find pleasure in food, warmth, shelter, cooperation with others, and sexual experiences, all of which are essential to survival.

Finally, Watson (2000) relied on the results of his extensive PANAS-X research base to inform his fifth assumption. He wrote that positive affect (PA) and negative affect (NA) coexist, but they operate independently of each other, and should be treated as two separate concepts. Watson gave the example of how someone could feel the negative affect of being anxious along with the positive affect of feeling excited, like when trying

a new activity. He explains that NA and PA always coexist at low intensity levels in the stream of affect (to be discussed later), which is like a baseline state of functioning. He also explained that NA was a part of a Behavioral Inhibition System, and PA was part of a Behavioral Activation System (both mentioned earlier), thus they operate in separate dimensions of human functioning.

Emotions, Moods, Trait Affect, and Temperament

Watson chose to focus his theoretical approach and his research on the concept of mood, rather than the concept of emotion. He defended his stance first by defining emotions as "an organized, highly structured reaction to an event that is relevant to the needs, goals, or survival of the organism" (Watson, 2000, p. 3). In contrast, he defined moods as "transient episodes of feeling or affect" (p. 4). He preferred to study mood because moods can last hours or days, but emotions are intense and fleeting, lasting only a few seconds or minutes (Izard, 1991). Therefore, it is more difficult to measure emotions. Another reason he chose to study mood involves the reactionary nature of emotions, as they appear to be immediate responses to certain events.

Moods not only encompass reactions to events, but they also are influenced by internal processes, and they seem to follow cyclic patterns. Thus, they are more inclusive constructs because they reflect many different sets of emotions, not just one.

Moods vary more in intensity than discrete emotional reactions, which typically are quite intense. Watson argued that low intensity mood states are extremely relevant to affective research because they more accurately represent how people experience mood and affect in everyday life. People rarely experience a "pure" state of emotion (Izard, 1991). On the contrary, research repeatedly suggests that people spend most of their time

in mixed affective states of mild to moderate intensity (Clark, Watson, & Leeka, 1989; Watson, 2000; Watson, Wiese, Vaidya, & Tellegen, 1999). Based on his belief that mood is a richer, broader construct than emotion, Watson suggested that mood is omnipresent in a continuous "stream of affect." He concurred with Izard (1991) by writing that "we all show profound fluctuations in *what* we are feeling….However, while we are awake and conscious, we are always feelings *something*" (Watson, 2000, p. 13).

While Watson focused his attention on the short-term experience of mood, he also could not ignore long-term, stable mood patterns lasting weeks, months, and/or years that seemed to emerge in his research results. He referred to these patterns as affective traits, and he has produced research that supports this construct (see the research section of this review). Watson (2000) wrote, "there are important individual differences in positive and negative affective experience that (1) persist over time, (2) generalize across situations, and (3) are largely independent of one another" (p. 144). These individual differences in disposition exert a tremendous influence on how we interpret our subjective experiences. For example, people high on the affective trait of fear may experience a fearful mood more often and approach most situations with a more fearful stance.

In addition to considering trait affect, Watson (2000) integrated his PANAS-X research with existing models of personality to form the construct of temperament. Like trait affect, temperament includes an individual's propensity to experience a particular mood pattern, but Watson and Clark (1994a) distinguish the two concepts in two ways. First, trait affect does not account for the complex interaction between heredity and environment, while temperament emerges from this constant interaction. Second, temperament has a broader scope. It encompasses cognitive and behavioral traits as well

as affective disposition, so trait affect is subsumed under temperament. Watson's interest in understanding the interface between temperament and personality led him to combine his approach with the "Big Five" factor model of personality offered by McCrae and Costa (1987). The results of his research (to be discussed in detail later) show that Negative Affect (NA) is closely related to McCrae and Costa's Neuroticism factor of personality, while Positive Affect (PA) is strongly related to the Extroversion factor. Furthermore, more specific affects seem to have significant, stable relationships with two of the other factors in McCrae and Costa's model, namely Conscientiousness and Agreeableness. These relationships seem to persist regardless of changing life circumstances, leading Watson (2000) to conclude that "individual differences in Negative and Positive Affectivity, respectively, comprise the central cores of Neuroticism and Extroversion; that is, they represent the unifying 'glue' that forms these higher-order dispositions and maintains them as integrated wholes" (p. 203).

Schematic Model of Affective Experience and the Hierarchical Structure of Affect

In considering the realm of affective experience, Watson (2000) preferred not to limit his theory by endorsing the primacy of either innate factors or environmental factors, known as the "Nature vs. Nurture" debate. Instead, Watson (2000), and Watson and Clark (1994c) set forth a comprehensive model that includes the influence of both factors in determining mood, trait affect, and temperament. The first of the four factors is *affective traits and temperaments*, which represent long-term patterns and individual differences in those affective patterns. The second is *exogenous factors*, the environmental variables that impact affect over the short term, such as certain events and activities (e.g., traveling), consumption of substances (e.g., meals), and the physical

characteristics of the environment (e.g., weather conditions). *Endogenous and sociocultural rhythms*, the third factor, account for the natural, cyclic nature of affect. These cycles include circadian rhythms, weekly patterned variations in mood, menstrual cycles in women, and mood changes that correspond with different seasons of the year. The last factor mentioned is *characteristic variability*, which simply refers to individual differences in mood fluctuations, known in the vernacular as "moodiness." These fluctuations could be mild in some and extreme in others. People who have bipolar disorder represent the most extreme type of mood variability. In sum, the diverse aspects of all four of these factors have a significant impact on affective experience.

Watson does not attempt to account for all of these factors in his PANAS-X research, he merely suggests that the PANAS-X scores reflect all these dimensions of affective experience. As research using the PANAS-X accumulated, several patterns of affective experience emerged, and they were replicated time after time. These patterns influenced Watson and his colleagues to develop a hierarchical structural model of affect (Tellegen, Watson, & Clark, 1999; Watson, 2000; Watson & Tellegen, 1985). This model embodied the three most robust findings in PANAS-X research thus far. The first finding was that affects of the same valence (basic negative or positive mood state category) tend to have strong positive correlations with each other. Thus, they have convergent properties and seem to cluster around two basic dimensions of affect – positive affect and negative affect. Secondly, affects with the opposite valence have discriminant properties because they tend not to be correlated. In other words, positive affect and negative affect seem to coexist, yet they operate independently of each other. Third, Watson and his colleagues found that affective experiences seem to be arranged according to a hierarchy.

The two general dimensions of positive and negative affect are at the top of the hierarchy, and they can be divided into specific types of affect at the second level (e.g., fear, sadness, excitement). The lower level affects are content specific and intercorrelated, yet Watson (2000) concludes that they are distinct affective types. The strong intercorrelations found between these affect types signifies that these types have nonspecific negative or positive qualities in addition to distinctive features. Even though this model has extensive empirical support (to be discussed later), Tellegen and colleagues (1999) caution that the model is not exact, nor is it an exhaustive model of affective experience. It provides a framework for describing results from this particular vein of research on affect.

Instrumentation: The Positive and Negative Affect Schedule-Expanded Form

When Watson decided to focus only on studying subjective affective states, he entertained a few different ideas about how to measure the phenomenon. He and his colleagues decided that self-report was the only feasible method, and based on previous research into the structure of affect, they developed an affect checklist called the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, and Tellegen (1988). Over time, the PANAS was extended in length to create the Positive and Negative Affect Schedule – Expanded Form (PANAS-X) (Watson & Clark, 1994b). Watson (2000) seemed to have a clear understanding of the limitations of this measurement approach. He realized that people may respond in socially desirable ways, try to answer based on their expectations of what the researcher wants, or have idiosyncratic ways of interpreting the meanings of the items on the PANAS-X, and all of these factors could compromise the validity and

reliability of the instrument. Nevertheless, Watson concluded that this method was the best way that people can communicate their subjective emotional experiences.

Both the PANAS and PANAS-X were developed from several factor analytic studies designed to explore the structure of mood. Watson and colleagues (1988) offered the initial PANAS in order to test a two-dimensional model of affect offered by Watson and Tellegen (1985), which was also derived from factor analytic research. Watson and Clark's (1994b) PANAS-X had the same factor analytic origin and purpose, and both instruments have been used to test the same two-dimensional model. The first dimensional factor, Positive Affect (PA), represents the intensity at which people feel alert, energetic, and enthusiastic, while the second factor, Negative Affect (NA) reflects an emotional state of distress that often involves emotions like anger, sadness, and guilt (Watson et al., 1988).

According to the two-dimensional model, PA and NA are independent constructs. People may have high or low levels of NA and PA as a response to a situation, as a longer term affective trait, or as an enduring personality trait (Watson, 2000; Watson et al., 1988; Watson et al., 1999). This model was later extended to include two levels (Tellegen, Watson, & Clark, 1999; Watson, 2000; Watson & Clark, 1992a). The upper level of the hierarchy consisted of NA and PA since most discrete emotions can be arranged according to valence, which refers to how each emotion can also represent either one of these two broad mood states. The lower level of the hierarchy consisted of intercorrelated, yet specifically described emotions.

Confident in the theory and research foundations of their approach to measuring subjective mood, Watson and colleagues (1988) designed the first version of the PANAS

as a self-report mood adjective checklist. It consisted of 20 affect adjective items that each participant is asked to rate on a five-point Likert-type scale (5=*Extremely* to 1=*Very Slightly/Not At All*). Instructions could be altered to suit different purposes. For example, participants could be asked to rate each adjective depending on how they feel at the present moment, or how they feel today, or how they have felt over the past few days, weeks, months, or during the year. Also, participants may be asked to rate how they feel in general, or on the average. Each adjective is linked to one of two 10-item scales, PA and NA. The use of this instrument in longitudinal studies of mood and trait affect yielded further information that Watson used to support and modify his theoretical model. Several versions of the PANAS exist, including the original version, versions for children and adolescents, and versions in several different foreign languages.

This current study used the PANAS-X (Watson and Clark, 1994b). The PANAS-X is longer than its original form for the purpose of assessing more discrete, hierarchical dimensions of PA and NA that are proposed in the two-factor model of affect. The resulting instrument follows the same format as the original PANAS, but it contains 60 items to be rated by participants. The items correspond with 13 scales, including the General Dimension scales of PA and NA, and the Basic Negative Emotions scales of Fear, Hostility, Guilt, and Sadness. The Basic Positive Emotion scales consist of Joviality, Self-Assurance, and Attentiveness, while Other Affective scales measure Shyness, Fatigue, Serenity, and Surprise (Watson & Clark, 1994b). All of these scales were derived from factor analytic studies. Watson and Clark estimated that the instrument takes about 10 minutes to complete. Both instruments have been used and tested on

several populations, including college students, adults, high school students, and psychiatric inpatients (Watson, 2000; Watson & Clark, 1994b).

A wealth of psychometric data exists on both the PANAS and the PANAS-X. Since they are different versions of a similar instrument, they have similar validity and reliability characteristics. Both versions boast strong internal consistency reliability, test-retest reliability, discriminant validity between the PA and NA scales, convergent validity within similar affective constructs, and strong correlations with other instruments that measure related affective constructs (Watson, 2000; Watson & Clark, 1994b; Watson et al., 1988). For a detailed review of research into these psychometric properties, please refer to the PANAS-X section in Chapter Three of this study.

Referring to his PANAS and PANAS-X research as well as to other research results and theories of affect, Watson (2000) concluded that mood is best measured using broad, nonspecific constructs like PA and NA, and he commented that this is the current trend in affect research. Discrete emotions are fleeting so they are hard to capture in assessment, and they are often highly intercorrelated, whereas broader dimensions can be established as relatively independent constructs. Furthermore, since most people experience mood states as conglomerations of several different emotions, testing broad dimensions better reflects the human subjective experience of mood. This approach has some face validity because many people initially identify their moods states as generally "good" or "bad." This common sense approach not only makes sense to the general population, it also has strong research support in academic circles.

Research into Affective Experience from Watson's Perspective

Watson's approach to understanding affective experience is primarily derived from a vast amount of research results. This discussion of empirical support for his theory will be divided according to the major theoretical constructs he presented, which include: hierarchical structure of affect, trait affect, temperament, and certain characteristics of mood. For a discussion of research that supports the validity and reliability of the PANAS-X, please see Chapter Three of this study.

Research Concerning the Hierarchical Structure of Affect

Support for the hierarchical structure of affect comes from three types of results, according to Watson (2000). First, the hierarchical structure requires that affects with the same valence, or general affective meaning, should have strong positive correlations with each other to show convergent validity. Using both within-subjects and between-subjects designs as well as longitudinal data, several studies indicate strong intercorrelations among the PA scale and the three Basic Positive Affect scales (Joviality, Self-Assurance, Attentiveness), as well as significant correlations between each of those three scales (Tellegen et al., 1999; Watson, 2000; Watson & Clark, 1991; Watson & Clark, 1992a, 1992b; Watson et al., 1988; Watson & Tellegen, 1985). The positive affects tend to covary consistently and strongly over different time and over various contexts. Watson (2000) defines the PA scale statistically as the "empirical covariation among the various positive mood scales" (p. 43). Thus, the PA scale was created to partial out the overlapping variance of the Basic Positive Emotions scales so that a general affect dimension could be created while simultaneously preserving the unique variance

accounted for by each of the Basic Positive Emotions scales. This action would allow the PANAS and PANAS-X to maintain construct validity for all of its scales.

The same research studies show highly similar results between the NA scale and the Basic Negative Emotions scales (Fear, Sadness, Guilt, Hostility) (Tellegen et al., 1999; Watson, 2000; Watson & Clark, 1991; Watson & Clark, 1992a, 1992b; Watson et al., 1988; Watson & Tellegen, 1985). People who report having a higher level of one of the negative emotions are highly likely to report all of the other ones on the PANAS and PANAS-X as well, so the Basic Negative Emotions scales are strongly correlated. The NA scale was derived in the same way as the PA scale was, as explained above. Even though the Basic Negative Emotions have strong relationships, Watson (2000) stated that they are not totally independent. However, when the unique variance of NA is partialled out, the correlations among the Negative Emotions drop to almost zero, producing highly similar results as the same procedure did for the PA scale. All of these results make a strong case for the convergent properties of the hierarchical model.

The second property of the hierarchical model involves discriminant validity, which requires that affects of the opposite valence have no significant relationships with each other. Discriminant validity between the PA and NA scales appears strong, as no statistically significant relationships have been found between the PA and NA scales (Schmukle, Egloff, & Burns, 2002; Watson, 1988; Watson, 2000; Watson & Clark, 1991; Watson & Clark, 1992a; Watson & Clark, 1997; Watson et al., 1988; Watson & Tellegen, 1985). The two constructs repeatedly show a slight correlation with each other, which gives evidence for the stream of affect idea that Watson (2000) proposed, as well as

offering support for the idea that most people experience mixed affective states in everyday life as opposed to distinct, pure emotional states.

Through extensive research across different measures, time periods, and methods, discriminant validity has been observed between the NA / Basic Negative Emotions scales and the PA / Basic Positive Emotions scales (Tellegen et al., 1999; Watson, 2000; Watson & Clark, 1991; Watson & Clark, 1992a, 1992b; Watson et al., 1988; Watson & Tellegen, 1985). The same studies present correlational matrices showing that differently valenced affect scales are not opposites, because if they were then the research would show strong negative correlations between them. On the contrary, the above studies show that scales of the opposite valence have weak, non-significant relationships. The strongest relationship among them is that of Sadness and Joviality, which repeatedly have a moderate negative correlation. Thus, each of these scales of opposite valence appears to exist independently of each other and represent different aspects of affective experience.

Third, the general dimensions of PA and NA should be divided into different specific affective states that are intercorrelated. The evidence for this robust empirical finding was presented earlier in the discussion of convergent properties among the affective scales of the same valence. The individual Basic Negative Emotions scales correlate strongly with one another across research contexts, just as the individual Basic Positive Emotions scales do (Tellegen et al., 1999; Watson, 2000; Watson & Clark, 1991; Watson & Clark, 1992a, 1992b; Watson et al., 1988; Watson & Tellegen, 1985). The PA and NA scales are considered higher level constructs in the model because all the other similarly valenced emotions scales contribute some of their shared variance to form the PA and NA scales. The partialling out of this covariance allows the Basic Positive and

Negative Emotions scales to represent independent affective constructs and form the lower, more content-based level of the hierarchical model (Tellegen et al., 1999; Watson, 2000; Watson & Tellegen, 1985; Watson & Clark, 1992a).

Even though the remaining set of scales known as Other Affective States (Shyness, Fatigue, Serenity, Surprise) were not mentioned in the above explanations, they still figure into the hierarchical model because each of these scales has some correlation to either the PA scale or the NA scale, or both, and can be considered lower level affects in the hierarchy (Tellegen et al., 1999; Watson, 2000). Shyness correlates strongly with NA, but not as strongly as the other Basic Negative Emotions scales do, thus it has less overlapping variance with those scales. The Fatigue scale shows an inconsistent relationship with NA; sometimes the correlation is strongly positive and sometimes it is weakly positive. However, Fatigue does show a consistent, moderate negative correlation with PA, which led Watson (2000) to conclude that Fatigue may refer to a lack of PA at any one time. The Surprise scale shows moderate and consistent positive correlations with both PA and NA, so it could indicate some aspect of affective arousal critical to both NA and PA dimensions (Watson, 2000). Finally the Serenity scale often is strongly negatively correlated with NA, yet moderately positively correlated with PA. However, these relationships tend to vary among different experimental conditions (Watson, 2000; Watson & Tellegen, 1985).

Research Concerning Characteristics of Mood

Along with his colleagues, Watson has found in several studies that positive affect and specific positive emotions are experienced much more frequently than negative emotions (Clark, Watson, & Leeka, 1989; Watson, 2000; Watson & Clark, 1994b;

Watson et al., 1988; Watson et al., 1999). Furthermore, the observations from these same studies reveal that affective experience usually remains at low intensity levels, with high intensity mood states being rare. Finally, these studies revealed that high intensity negative emotions were experienced the least of all reports of affective experiences. Thus, these reports suggest that "the bulk of affective life is experienced as pleasant, at least in people without diagnosed psychological disorders" (Watson, 2000, p. 15). The participants in these studies were college students, and they were asked to complete the PANAS or PANAS-X daily over varying amounts of time, from one week to several weeks.

Research Concerning Trait Affect

In establishing the temporal stability of affect, Diener and Larsen (1984) conducted an early study where students were asked to complete the brief measures of positive and negative affect twice daily for 6 weeks, and the results indicated that ratings for PA and NA were highly consistent over time, and across various social situations. Watson (2000) replicated this study with the PANAS-X and found highly similar results that were so stable that participants' PA and NA ratings on any one day could be predicted from previous daily ratings. Results supporting consistent PA and NA ratings have been replicated in between-subjects designs with various test-retest intervals from a few weeks to two months (Watson & Clark, 1994b; Watson et al., 1988).

Watson and Walker (1996) completed a large study where participants completed the PANAS-X with different instructions, like rating affect over the past year, or rating general affect. Different experimental groups were tested and retested at two month intervals and various other intervals ranging from 1 year to 7.5 years. PA and NA were

significantly stable in all experimental groups, even in the 6-year, 7-year, and 7.5-year cohorts. The one exception was found in one of the cohorts who reported a significant decrease in NA over the course of 17 months. These results remained consistent despite the fact that many of the participants underwent major life changes, like completing college, getting full-time jobs, and marrying.

Specific affective states measured by 10 of the 11 other scales of the PANAS-X also may have trait-like stability over time. Watson and Clark (1994b) found temporal stability of the all of the additional emotions scales over a two-month testing interval, with the exception of the Surprise scale. These and other studies have led Watson (2000), as well as Watson and Clark (1994b) to state that NA and PA, as possibly some more specific types of affect, persist over time, generalize across situational contexts in life, and remain independent constructs in the process.

Research Concerning Temperament

Watson and his colleague have conducted research on temperament, which is designed to link affectivity with enduring personality traits identified in McCrae and Costa's (1987) Big Five model of personality. The five personality dimensions in their model are Neuroticism, Extroversion, Agreeableness, Conscientiousness, and Openness to Experience. Watson merged data from his 1992b study with Clark, which consisted of four large student samples, along with two other large student samples he was reporting for the first time in his 2000 book. These studies yielded robust and significant positive correlations between PA and Extroversion, and between NA and Neuroticism. Regression analysis showed that the personality trait scores predicted the NA and PA affective trait scores. These effects seem to persist independently of life circumstances. Neuroticism

was also significantly positively correlated to the PANAS-X subscales for Sadness, Guilt, Fear, Shyness and Hostility while it had a significant negative correlation with Serenity. Extroversion had a significant negative correlation with Shyness, while it had significant positive correlations with Joviality, Attentiveness, and Self Assurance.

In addition to looking at PA and NA results, Watson also reported less robust, yet significant relationships between Conscientiousness and the PANAS-X Attentiveness scale (positive correlation), as well as a significant negative correlation between Agreeableness and the PANAS-X Hostility scale. Even though he acknowledged that this evidence is only a beginning in establishing the construct of temperament, he believed that the evidence is compelling and the link between affect and personality should be studied further. On the basis of all these results, Watson (2000) wrote, "Neuroticism and Extraversion represent basic dimensions of affective temperament. Put another way, affectivity is an intrinsic aspect of these traits, so that individual differences in affect and personality ultimately reflect the same common, underlying processes" (p. 190).

Critique and Important Unanswered Questions

Watson's theory of affective experience has several strong points. His theory exhibits parsimony by intently focusing on the concept of subjective affect, but explains a comprehensive range of phenomena relevant to affect, like biological systems, cognition, environmental changes, and so on. Watson also pushes his theory of mood beyond short-term experiences to encompass trait affect and even personality, giving his work considerable heuristic value. He generated his concepts by drawing upon the ideas of prominent emotion theorists in emotion, and he used a broad empirical research base to inform his theory. For example, his theory on the hierarchical structure of affect is

completely derived from factor analytic research. Furthermore, he proposes several hypotheses that are testable, and generates a great deal of research to test his theoretical constructs, like trait affect, temperament, PA, and NA, and his hierarchical model. The idea of studying mood instead of discrete emotions is a fresh perspective in the field, and it has a great deal of applied value because he attempts to understand the everyday affective functioning of humans. Also, his instrument, the PANAS-X, can be used in a wide variety of research and clinical contexts.

In considering his theoretical approach, Watson does not offer any information about how the model of the hierarchical structure of affect figures into his other schematic model of affective experience. Because he names the two models using similar terms, it is sometimes confusing to figure out which model he is discussing in his writings. Also, it is unclear if his hierarchical model has three levels or two. Both schemes were mentioned in his book, but only the two dimensional scheme was explained (Watson, 2000). Another flaw within the schematic model of affective experience (exogenous factors, characteristic variability, etc.) is that it does not appear to account for how long-term environmental variables influence mood. Surely long-term influences like cultural worldview, values, and culturally-related practices influence everyday mood as well. On a related note, while Watson explains the factors that influence everyday moods, he does not seem to explain what variables influence trait affect or temperament. He gives attention to biological etiology in trait affect and temperament, but not much beyond that.

With regard to instrumentation and research, the drawbacks of his approach include the obvious pitfalls of using a self-report instrument to measure mood, or any

construct. The data has many potential threats to validity, including response biases like expectancy effects and social desirability effects, along with the danger of participants using idiosyncratic meanings of constructs in their responses, and random responding. However, he openly acknowledged these threats (Watson, 2000). In terms of his research program, it appears that the vast majority of his research was performed with participants from the college population. Perhaps his theory would be more generalizable if he were to recruit participants from different populations.

The theory of affective experience proposed by Watson lends itself to a few important unanswered questions that are relevant to this current research project. First of all, since Watson considers cognition and affect two aspects of human biobehavioral systems that serve as each other's causes and effects, could moral cognition actually cause affective change? Could affective experience actually cause developmental changes in moral cognition? If moral development is a form of cognitive change, and change in one component of a biobehavioral system incites change in the other systems, could moral developmental change correspond with changes in trait affect or everyday mood? In Watson's schematic model of affective experience, could moral conflicts be considered exogenous factors that influence mood? With regard to Watson's hierarchical model of affective experience, what levels of the hierarchical model would be activated during moral decision-making. Would moral decision-making activate PA, NA, both, and/or some of the more discrete emotions on the lower level of the model?

Integration of the Literature on Kohlbergian and Neo-Kohlbergian Theory, and Watson's Theory of Affective Experience

Introduction

Kohlbergian and Neo-Kohlbergian views on affect in moral development are explained in this section, followed by a discussion about how Watson's work on affective experiences can be applied to better understand the moral domain. The final portion of this section summarizes the rationale behind integrating Kohlbergian/ Neo-Kohlbergian approaches with the study of affective experiences in order to enhance our understanding of decision-making processes through the course of moral development.

The Role of Affect in Kohlbergian and Neo-Kohlbergian Models of Moral Development

There is no question that Kohlberg created a cognitively oriented theory of moral development that stresses structural changes in moral reasoning, and little else. Kohlberg chose to limit his theory in order to apply a hard stage model of development in the tradition of Piaget, while following some of Piaget's philosophical views. In narrowing the focus of their theories, both Piaget and Kohlberg developed inconsistencies between their philosophical and theoretical positions. This inconsistency is particularly evident with regard to Kohlberg's stance on emotions in moral development.

In a previous section, it was revealed that Kohlberg espoused a holistic and constructivist view of people and their moral developmental processes, and this position is apparent in his ideas about affective experience in moral development. Kohlberg (1984) wrote, "The development of cognition and the development of affect have a common structural base" (p. 62). He also wrote that "Affective development and functioning and cognitive development and functioning are not distinct realms. Affective

and cognitive development are *parallel*; they represent different perspectives and contexts in defining structural change" (p. 9). In the same writings, Kohlberg also identified empathy, shame, and guilt, as primary moral emotions. It is clear from these passages that Kohlberg valued the affective aspects of moral development, yet he chose not to focus on the phenomenon because he believed that the cognitions involved in moral judgment directly affected the emotions involved in the same moral judgment. Kohlberg's position is clarified in the following passage.

> With regard to moral emotion, then, our point of view is that the "cognitive" definition of the moral situation directly determines the moral emotions which the situation arouses. This point of view has been generally held by the "symbolic interactionist" school of social psychology, which has stressed that socially communicated symbolic definitions determine the actual felt attitudes and emotions experienced by the individual in given situations.(1984, p. 67)

Even though Kohlberg acknowledged that emotions accompanying moral conflict can be quite intense, he asserted that emotions still play a secondary role in comparison to the primacy of cognitive processes in moral development (Kohlberg, 1984). Beyond this acknowledgment, Kohlberg did not offer any more insight into the affective experience of moral reasoning. Many critics have noted the fact that Kohlberg focused on cognition at the expense of other aspects of moral development, especially emotions (Conn, 1981; Gilligan, 1982/1993; Kurtines & Greif, 1974). This problem is apparent not only in Kohlberg's writings, but also in his exclusion of affective variables in his research. These facts are especially puzzling when one considers the philosophical value that Kohlberg initially placed upon a holistic, constructivist perspective that synthesizes all aspects of

human experience. Thus, it is clear that Kohlberg believed affect played a role in moral reasoning and development, but he did not elaborate on that role, and he did not test it.

For as little attention as Kohlberg gave the affective experiences associated with moral development, Rest did not appear to address this paucity of information in his quest to improve Kohlberg's ideas, either. Over the course of his career, Rest focused on addressing the philosophical and structural inconsistencies of Kohlberg's theory, the limited range of research on moral development through the entire lifespan, the adoption of schema theory to explain the progression of justice reasoning in the macromoral sense, and refining an instrument to measure levels of moral development. Rest, Narvaez, Bebeau, and Thoma (1999a, 1999b) thoughtfully described the limitations of Kohlberg's approach as well as their own, and stated that no one theory exists that represents the entirety of the moral domain. After acknowledging these shortcomings, they defended Kohlberg's perspective in the following statement:

> Some critics have said that Kohlberg's theory (dealing with moral judgment) is too cerebral, that it misses the "heart" of morality (e.g., Gilligan, 1982/1993). But the special function of the construct of moral judgment is to provide the conceptual guidance for action choice in situations in which moral claims conflict. In contrast, there are other constructs that deal with the agony of divided loyalties, with the amount of compassion and emotional energy involved in moral conflict, and with the acceptance of responsibility and the motivation (or lack thereof) to do the right thing (right as defined by moral judgment). (1999b, p. 10)

In order to address the complexity of the moral domain, Rest, along with his colleagues, theorized that moral judgment (deciding which decision or action is most

morally justifiable) was one of four components of the psychology of morality, along with the components of moral sensitivity, moral motivation, and moral character (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999a, 1999b). Moral sensitivity involves awareness of how our actions affect other people, while moral motivation concerns how people juxtapose and prioritize the importance of their moral values with other values they may have. Moral character refers to the perseverance, courage, and strength of conviction that people exhibit when attempting to solve moral problems. Rest and his colleagues chose to focus only on moral judgment in order to design a more concise program of research and theory development.

Be that as it may, Rest's 1986 writings on the four components reveal his belief that emotions are a vital part of moral functioning that needs to be interpreted when facing moral dilemmas. For example, when discussing the moral judgment component, he wrote that "the interconnectedness of cognition and affect is presupposed in the association of a person's conceptions of organizing social cooperation and the distinctive sense of fairness that accompanies them" (1986, p. 12). Rest was able to provide more support for the role of affect in the other three components. When considering the moral sensitivity component, he posited that feelings influence our moral judgment in productive or counterproductive ways, and he used the example of how strong, immediate dislike for someone may hamper one's ability to take that person's perspective, short-circuiting thoughtful reflection on a moral problem and leading to a premature, unjust decision. People must strive to "understand our gut feelings on the matter" (p. 7), while making moral judgments. Rest (1986) relied on research by Zajonc (1980) that showed how feelings often precede cognitive processing of a situation.

Furthermore, Rest cited the work of Hoffman (1976), who studied how empathy develops in children and interacts with cognitive developmental processes.

When considering the component of moral motivation, Rest (1986) suggested that strong desires or positive affect for one outcome may influence a person to select a behavior that may not be morally just. If a teenage girl steals a trendy-looking coat because she feels left out, and thinks wearing it would make her peers accept her, then her feelings of loneliness and inadequacy may be stronger than her reverence for the law. Valuing acceptance and the opinions of others was more of a motivation than the belief that stealing is wrong. Research by Isen (1970) and Staub (1978) suggested that people who are in a good mood generally cooperate better with others, thus promoting the development of an organized social system (as cited in Rest, 1986). Rest also suggested that affective processes may impact the moral character component in certain ways. People who feel depressed and sad may have a difficult time mustering the energy to follow through on their moral decisions. Rest cited research by Masters and Santrock (1976), and Bandura (1977), who found that people with positive affect tend to be more persistent in their efforts, and this process may be regulated by self-efficacious beliefs and expectations. Taking all this research into account, Rest (1986) summarized his position by stating, "Affect (empathy) is never completely separate from cognition, and the development of cognition transforms the quality of affect" (pp. 7-8). Perhaps affective experience runs through each component of the model, and may have a different impact on each component. If this is true, what types of affective experiences are associated with the moral judgment component? The current research study is an attempt to investigate this question.

The Applicability of Watson's Model in the Present Study

The theory and research proposed by David Watson offers a theoretically sound, empirically based, well-matched, affective counterpart to Kohlbergian and Neo-Kohlbergian theories on the cognitive development of morality. Like Kohlberg and the Neo-Kohlbergians, Watson (2000) believes that human experiences are intricately complex and require consideration of many endogenous and exogenous factors. Even though Watson did not mention the specific interaction of affect and moral cognition in his work, several aspects of his theory are still applicable to the current research questions. Watson (2000) and the Neo-Kohlbergians (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999b) may agree that cognition and affect continuously inform each other and instigate change in each other. It is also feasible that the Neo-Kohlbergians would concur with Watson's assertion that cognition and affect serve reciprocally as causes and effects for each other. Mood could impact moral decision-making, and vice versa. In addition, each theorist proposes an even broader model where affect and cognition interact with biological and behavioral systems to inform human functioning. Watson did not propose any ideas about the development of affect, but he did provide support for the existence of trait affect, long-standing mood states that may last for years. There seems to be room in his theory for the idea that the development of moral reasoning could correspond with changes in trait affect.

In addition to the relevance of trait affect, Watson's (2000) ideas about short-term mood states are relevant to the current study. He believed that mood states operate in a continuous stream of affect, and that we rarely, if ever, cease to have feelings. The idea that mood is a constant in everyday life implies that mood states exist while people make

moral decisions, and people make moral decisions practically every day. Watson's choice to focus on mood and stream of affect, as opposed to more discrete emotions, honored the complexity of affective experience, just as Kohlberg and the Neo-Kohlbergians honored the complexity of moral judgment processes.

Watson and Clark's (1994b) PANAS-X informed their hierarchical theory of affect, casting a wide net around the affective experiences of individuals. Since most people experience multiple emotions during the day instead of pure emotional states, PA and NA more accurately assess the complex nature of affective experience (Watson, 2000). While providing broad-based information on basic affect, the PANAS-X can also provide information on more specific emotional states. In assessing affect concomitantly with level of moral development (i.e., this current study), considering both dimensions of affect could yield valuable information about the general affective trends in moral judgment and development, as well as more detailed aspects of how the two domains of human functioning may interact. This wealth of information expands the heuristic and applied value of the current study.

Relevant Research on the Interface Between Affect and Moral Decision Making

An extensive literature review yielded only two research studies that integrate Kohlbergian and/or NeoKohlbergian approaches with affective experience. In the first study, Olejnik and LaRue (1980) induced positive, negative, and neutral mood states in their participants (college students) by asking them to read positive, negative, or neutral statements, respectively. The researchers then asked them to complete the DIT along with a mood adjective checklist that they developed for the purposes of the study. Participants in the positive mood-induced condition scored significantly higher on the DIT than

participants exposed to the other two conditions. The researchers concluded that inducing a positive mood state "provided a condition which was conducive to using more principled level moral reasoning" (p. 78).

The second study of this review was a set of two projects conducted by Biaggio (1991). In the first study, Biaggio used female Portuguese college students in her research. She asked participants to complete a DIT, and after they finished it, the participants were divided into groups to discuss a moral dilemma. Before the discussion ended, the participants were asked to complete the State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, & Lushene, 1970). Biaggio found that discussing the moral dilemma in groups did not significantly increase trait anxiety as she suspected it would. She also found that STAI scores exhibited a significant positive correlation with the DIT P-Score. That is, the higher the level of moral reasoning, the higher the level of trait anxiety.

In the second study, Biaggio asked Portuguese 10th grade students to take the DIT as a pre-test measure. The participants were then divided into experimental and control groups. Control groups completed a placebo activity, and the experimental group participated in group discussions of a moral dilemma. All participants completed the STAI after the experimental or control tasks were completed. One week later, all participants completed the DIT and the STAI as post-test measures. There were no significant gains in moral maturity from pre-test to post-test. Female participants showed significantly more state anxiety during the discussion than in the post-test condition. There was a significant positive correlation between state anxiety and gains in moral maturity for boys only. Also, there was a significant negative correlation between trait

anxiety and gains in moral maturity for boys only. Biaggio concluded that there could be gender-related differences in how males and females experience affect during the course of moral decision-making, and that the relationship between anxiety and moral decision-making in females needs further investigation.

Each of the studies reviewed above indicate some relationship between affective experiences and moral decision-making. The Olejnik and LaRue (1980) study focuses on affect as a potential factor influencing changes in level of moral judgment, while the Biaggio (1991) studies center on gender differences in the relationship between anxiety and moral reasoning. While all of these studies presupposed a connection between affect and moral judgment, none of these studies attempted to assess if adults at different levels of moral development have similar or different affective experiences.

Concluding Remarks

The theory of moral development proposed by Kohlberg provides a comprehensive conceptualization of the cognitive processes and structures that accompany moral development. Though his philosophical position supports a holistic view of human functioning and experience, his theory and research efforts do not support holism. His neglect of the crucial role of emotions in moral functioning undercuts his efforts to provide a comprehensive view of moral development. Kohlberg made minor references to affect in moral development, but several other theorists suggest that affective experience may play a larger role than Kohlberg had suspected. In light of this information, perhaps Kohlberg's theory could be combined with a theory of affective experience that has similar philosophical underpinnings.

Even though James Rest initially set out to gather support for Kohlberg's work, he and his colleagues ended up questioning several aspects of Kohlberg's theory. Consequently, they created the Neo-Kohlbergian approach. It includes a schema-based model of justice reasoning, as well as a four component model of the psychology of morality that was designed to clarify the scope of their work and give credence to other aspects of moral functioning, such as affective experiences. Like Kohlberg, the Neo-Kohlbergians focused on cognition, but they more readily acknowledged the limitations of this narrow focus, and they conceptualized how cognition and affect may exert a reciprocal influence on each other in several areas of the moral domain. Although the Neo-Kohlbergians realized the potentially tremendous influence of emotions on all aspects of moral functioning, they did not research the link between cognition and affect in moral development.

Watson's approach to understanding affective experience provides a succinct, yet comprehensive interpretation of the subjective emotional experiences people have as they go about their everyday lives. Everyday life inevitably involves making moral decisions. Kohlberg and Rest seemed to understand that there was more to the moral domain than justice reasoning, and that affect is somehow related to moral decision making, but neither of them conjectured about the nature of that relationship. Watson acknowledged how cognition and affect reciprocally influence each other, but he has not researched this idea and he does not provide specific examples.

Since all three approaches represented in this study attest to the relationship between cognition and affect, Watson's theory shares common ground with Kohlbergian and Neo-Kohlbergian concepts. The thoughtful application of Watson's ideas about

affect to Kohlbergian and Neo-Kohlbergian ideas about the development of moral judgment may strengthen the moral developmental theories by making them more understandable, more internally consistent, more amenable to practical/clinical applications, and more applicable to the broader concept of human moral functioning. Conversely, studying how moral cognition and subjective affect relate to each other may shed more light upon the credibility of Watson's theoretical assumption about how cognition and affect influence each other.

CHAPTER THREE: METHOD

Participants

The participants for this study were graduate students at Auburn University who were at least 19 years old. They were selected from a list of 2,057 graduate students who allowed their contact information to be published by the Auburn University Office of Planning and Analysis in Fall 2004. Since mailed research materials often have a low return rate, a much larger pool of participants was selected to receive the research materials, with the expectation that enough would participate to ensure adequate statistical power. The researcher used SPSS to randomly select a sample of 400 from the entire population of 2,057 graduate students. A sample size of 400 was more than adequate to satisfy an effect size of .39, with an alpha level of .05, and a beta at 1-beta (.90) probability level of rejecting the null hypothesis. Of the 92 research packets that were returned, five were purged from the analysis due to incomplete data or validity problems with their DIT-2 scores.

The final sample consisted of 87 participants, 55.2% of whom were female. The participants ranged in age between 21 and 63 years old, with a median age of 25, and a mean age of 29.18 (standard deviation of 9.62). Most of the participants were in their 20's (70.1%) or 30's (14.9%). Of the remaining participants, 8% were in their 40's, 3.4% were in their 50's, and 3.4% were in their 60's. The ethnicity of participants was

primarily White/Euro-American (85.1%), with 5.7% of participants identifying as Black/African American, 8.0% of participants identifying as Asian/Pacific Islanders, and 1.2% of participants identifying as Multi-Ethnic. Most of the participants were never married (64.4%), while 35.6% of them were currently married. The data on years of graduate study completed was converted to semesters in graduate school. The highest percentage of participants had been in graduate school for one semester (27.6%), and the remainder of participants reported spending three semesters (23%), five semesters (14.9%), seven semesters (11.5%), nine semesters (9.2%), eleven semesters (5.7%), thirteen semesters (2.3%), fifteen semesters, (3.4%), and 19 or more semesters (2.3%) in graduate school. The grade point average range of participants was 2.98 – 4.0, with a mean GPA of 3.74 (standard deviation of 0.29).

Instruments

Defining Issues Test-Version 2

This study employed the Defining Issues Test- Version 2 (DIT-2) (Rest & Narvaez, 1998), which is a revision of the Defining Issues Test (Rest, 1974; Rest, Cooper, Coder, Masanz, & Anderson, 1974) (see Appendix E). Thus, information on the DIT will be presented first in order to understand how the DIT-2 was developed. James Rest, a student of Lawrence Kohlberg, developed the Defining Issues Test (DIT) in 1974 as an alternative assessment method for moral judgment and development. Though Rest (1986) based his instrument on Kohlberg's structurally based stage theory, he eventually modified the stage concept of a discrete stage model to focus more on the moral schemas, which are knowledge structures with different content at each of the three moral developmental levels. Since the development of the first edition, the DIT has been used in

more than 40 countries for more than 1,000 published and unpublished studies on moral judgment and moral development (Rest, 1994).

Rest developed the first version of the DIT as a forced-choice, recognition task as opposed to the Kohlbergian production task in an effort to elicit more implicit forms of moral reasoning, and to allow respondents to identify preferences for different types of moral cognition (Rest, Narvaez, Bebeau, et al., 1999a, 1999b). The DIT consists of six hypothetical dilemmas much like those presented in the Moral Judgment Interview (Colby & Kohlberg, 1987). Following each dilemma, respondents review 12 possible response fragments to each dilemma. Response fragments represent different levels of moral reasoning. Respondents rank the importance of the fragments independently on a 5-point Likert–type scale where 1= G*reat Importance,* 2= *Much Importance,* 3=*Some Importance*, 4= *Little Importance*, and 5= *No Importance*. Rest (1994) wrote, "The assumption is that most people define the most important issue of a dilemma in different ways, and that the selection of items indicates a person's developmental level" (p. 12).

Response preferences are scored on three scales that are based on the rankings people give to the items that represent the moral reasoning characteristics of the Preconventional Level (Personal Interests Schema), the Conventional Level (Maintaining Norms Schema), and the Postconventional Level. Rankings associated with the Postconventional level are known as the *P* score, or Principled Score, which represents the percentage of items for which a participant chose postconventional moral reasoning. The higher the score on this 0-95 point scale, the higher the participant's level of moral judgment development (Rest, 1994). It is important to note that Rest (1986) realized some of the methodological drawbacks of a recognition task, most notably the problem of

random response patterns. He included an internal consistency check in the DIT to identify possible random response patterns. Rest (1986) reported data from several studies that have shown test-retest reliability coefficients ranging in the .80's, and Cronbach's alpha coefficients for internal consistency reliability also ranging in the .80's. Also, the DIT is moderately correlated in the .70 range with Kohlberg's moral assessment instrument, the Moral Judgment Interview (Rest, 1979).

In 1997, Rest, Thoma, and Edwards began to revise the DIT to produce the DIT-2, and its final revision was completed by Rest and Narvaez in 1998. An updated version of the DIT-2 manual was published by Bebeau and Thoma in 2003. The assessment method was unchanged, and theoretical basis for the instrument was modified in response to the plethora of DIT research results. Its structure and score indexing were streamlined. First, the instructions for completing the instrument were modified to increase clarity. Next, the DIT-2 consists of five (instead of six) updated moral dilemmas that correspond more appropriately with modern social problems. The DIT-2 includes more discriminating internal consistency checks to identify bogus data. This instrument uses the *P* Score as in the original DIT, but it also uses a new, more statistically advanced method for calculating a developmental score called the N2 index. The N2 index is a combination of two scores. The first score indicates the degree that a participant prioritizes Postconventional Level answers, while the second score represents the degree that a participant does not prioritize answers characteristic of lower stages (Rest, Narvaez, Bebeau, et al., 1999b, Rest, Narvaez, Thoma, & Bebeau, 1999).

There were also changes in the scoring system of the DIT-2. Respondents are given a Type score of One through Seven, which categorizes each participant according

to his or her moral primary response schema (Personal Interests, Maintaining Norms, or Postconventional), secondary response schema (Personal Interests, Maintaining Norms, or Postconventional), and degree of consolidated or transitional schema characteristics in the score profile (Bebeau & Thoma, 2003). This score may be used to ascertain each participant's overall level of moral development. People scoring as Types One and Two are categorized in the predominantly Preconventional Level, or Personal Interests Schema, while people scoring as Types Three, Four, and Five are categorized primarily in the Conventional, or Maintaining Norms Schema. People who score as Types Six and Seven are grouped into the predominantly Postconventional Schema Level.

The DIT-2 was tested initially on a sample of 200 participants from the following groups: ninth graders, first semester college freshmen, college seniors, and graduate and professional school students. The results of the initial DIT-2 statistical analysis indicated an increase in validity measures from the first DIT, in terms of the instrument's ability to detect advancement in moral developmental level that goes along with changes in age and education level (Rest, Narvaez, Thoma, et al., 1999). Cronbach's alpha coefficient for internal consistency reliability was .81, and the correlation between the DIT and DIT-2 scores was .71-.79, depending on the score indices that were evaluated.

Since the DIT-2 correlates strongly with the DIT, and since the DIT-2 is based upon the DIT, the developers of the DIT-2 maintain that the extensive psychometric research done on the first DIT is relevant to the validity and reliability of the DIT-2 (Bebeau & Thoma, 2003). Rest, Narvaez, Bebeau, and colleagues (1999b) review over 800 studies, over 400 of which have been published, that support the construct validity of the DIT. For example, The DIT has shown discriminant validity in its ability to

differentiate the age and education levels of people at different moral developmental levels. It also shows convergent validity with measures of political affiliation, cognitive capacity, and prosocial behavior. Furthermore, the DIT corresponds well with Kohlberg's theory of moral development because the DIT has the ability to track developmental gains over long time periods, and it displays sensitivity to moral education interventions. A smaller amount of research has been completed to establish the validity of the DIT-2, but Bebeau and Thoma (2003) and Rest, Narvaez, Thoma, and Bebeau (1999) report that the DIT-2 shows highly consistent validity characteristics with the DIT. The Neo-Kohlbergians have proposed that the DIT-2 is an improvement over the DIT because it is shorter, more amenable to group administration, and more consistent with modern social concerns (Rest, Narvaez, Bebeau, et al., 1999b; Rest, Narvaez, Thoma, et al., 1999). Also, its structure reduces the number of false positives for bogus score profiles, and displays stronger reliability and validity characteristics.

Positive and Negative Affect Schedule-Expanded Form

The constructs of positive and negative affective experience have been studied extensively. The Positive and Negative Affect Schedule (PANAS) was developed from several factor analytic studies of these constructs. Watson, Clark, and Tellegen (1988) offered the initial PANAS in order to test a two-factor model of affect offered by Watson and Tellegen (1985). The first factor, Positive Affect (PA), represents the intensity at which people feel alert, energetic, and enthusiastic, while the second factor, Negative Affect (NA) reflects an emotional state of distress that often involves emotions like anger, sadness, and guilt (Watson et al., 1988). According to the two factor model, people

may have high or low levels of NA and PA as a response to a situation, or as an enduring personality trait (Watson et al., 1988).

The first version of the PANAS consists of 20 affect adjective items that each respondent is asked to rate on a five-point Likert-type scale (5=*Extremely* to 1=*Very Slightly/Not At All*). Instructions may be altered to suit different purposes. For example, respondents could be asked to rate each adjective depending on how they feel at the present moment, or how they feel today, or how they have felt over the past few days, weeks, months, or during the year. Also, respondents may be asked to rate how they feel in general, or on the average. Each adjective is linked to one of two 10-item scales, PA and NA. In this current study, participants were instructed to complete the PANAS-X based on their respective affective experiences "today."

A wealth of psychometric data exists on the PANAS. Watson, et al. (1988) originally developed means for the scales from a large normative population of undergraduate students, but it has since been tested on several populations, including adults, high school students, and psychiatric inpatients (Watson & Clark, 1994b). Results of reliability assessment show that the NA scale has an internal consistency reliability coefficient (Cronbach's alpha) ranging from .84 - .87, while the PA scale shows alpha levels ranging from .86 - .90, depending on the population, and on the time-specific instructions that people are given when they complete the instrument (Watson et al., 1988). Test-retest reliability at an 8-week interval ranges from medium to strong reliability, with NA coefficients ranging from .39 - .71, and PA coefficients ranging from .47 - .68 (Watson et al., 1988). According to these results, the strength of these

correlations appears to increase as the respondents are asked to reflect on feelings they have had for longer periods of time (Watson et al., 1988).

Discriminant validity between the PA and NA scales appears strong, as no statistically significant relationships have been found between the PA and NA scales (Schmukle, Egloff, & Burns, 2002; Watson, 1988; Watson & Clark, 1997; Watson et al., 1988). Watson and colleagues (1988) tested external validity of the PANAS by correlating PA and NA scale scores with several well-known measures of depression and anxiety (i.e., Beck Depression Inventory (BDI) and State-Trait Anxiety Inventory (STAI)). High NA scores had a significant positive correlation with these scores, while low PA scores had significant negative correlations with scores on these instruments.

Several versions of the PANAS exist, including the original version, versions for children and adolescents, and versions in several different foreign languages. This current study will use the Positive and Negative Affect Schedule-Expanded Form (PANAS-X), developed by Watson and Clark (1994b). See Appendix E for a copy of the instrument. The PANAS-X is longer than its original form for the purpose of assessing more discrete, hierarchical dimensions of PA and NA that are proposed in the two-factor model of affect. The resulting instrument follows the same format as the original PANAS, but it contains 60 items to be rated by respondents. The items correspond with 13 scales, including the General Dimension scales of PA and NA, and the Basic Negative Emotions scales of Fear, Hostility, Guilt, and Sadness. The Basic Positive Emotion scales consist of Joviality, Self-Assurance, and Attentiveness, while Other Affective scales measure Shyness, Fatigue, Serenity, and Surprise (Watson & Clark, 1994b). All of these scales

were derived from factor analytic studies. Watson and Clark estimate that the instrument takes about 10 minutes to complete.

The PANAS-X boasts strong psychometric properties similar to that of the PANAS. After extensive research across different measures, time periods, and methods, Watson and Clark (1991, 1992a) observed significant levels of discriminant validity between the NA / Basic Negative Emotions scales and the PA / Basic Positive Emotions scales. Bagozzi (1993) compared PANAS-X scale scores to scores on popular measures of emotional distress (i.e., BDI and STAI), and found strong convergent validity results, but found weaker discriminant validity results depending on the methodology used. Additional external validity data show significant positive correlations between PANAS-X scores and peer ratings of respondents, with the exception of the Surprise scale (Watson & Clark, 1994b). With regard to the validity of the PANAS-X in distinguishing trait affect, Watson (2000), as well as Watson and Clark (1994b) summarize that the instrument is stable over time, shows significant convergent and discriminant validity, and correlates strongly with other measures of similar affective constructs.

Reliability data for the PANAS-X indicates internal consistency reliability coefficient (Cronbach's alpha) levels ranging from .85-.88 for Basic Negative Affects, .78-.93 for Basic Positive Affects, and .76-.88 for the Other Affect State scales (Watson & Clark, 1994b). Due to these results, Watson (2000) confidently stated that these short scales have strong internal consistency reliability. Test-retest reliability appears to be stable for all scales, with coefficients ranging from .51-.70, depending on the scales and the time-specific instruction formats (Watson & Clark, 1994b).

Demographic Questionnaire

Participants were asked to complete a brief demographic questionnaire. The questionnaire had items that participants circled in order to identify their demographic characteristics. Participants circled whether or not they were male or female, and they circled their marital status from the following selections: never married, married, separated, divorced, and widowed. They also circled how many years of graduate study they completed in whole years, from "less than one" to selections of 1, 2, 3, 4, 5, 6, 7, or 8 years, and finally "9 or more" years. They circled their ethnic origin from a standard list of options (Hispanic, Asian/Pacific Islander, etc.), and a space marked "Other" was provided for participants to describe their respective ethnic backgrounds if they did not fit into the categories listed. In addition to these demographic categories, participants were asked to write in their respective ages and grade-point averages. A copy of the demographic questionnaire is located in Appendix E of this text.

Procedures

This study utilized a survey research design. Participants were mailed a research packet, and they were asked to complete it anonymously and return it to the researcher. After the sample of 400 graduate students was generated and one week before the research packets were mailed, an e-mail was sent to each potential participant. The e-mail notified students that they had been selected to participate in a research study, and the e-mail asked them to consider participation. See Appendix B. The e-mail also stated that an incentive will be given to all potential participants, regardless of participation. The incentive was a chance to win one of three $100 Wal-Mart gift cards.

One week after the initial e-mail was sent, the entire research packet was mailed to each potential participant. The packet contained a letter with important information and instructions. See Appendix A. The demographic questionnaire form was included. The Defining Issues Test-2 (DIT-2) and the Positive and Negative Affect Schedule-Expanded Form (PANAS-X) were in the packet as well. See Appendix E. A list of counseling centers was included in case any participants believed that they needed to seek counseling services as a result of their participation in the study. See Appendix D. A postage-paid, addressed envelope was included in order for participants to return the materials. Finally, a postage-paid postcard was included in the packet. See Appendix C. The postcards were used as entries for the three $100 Wal-Mart gift cards.

When the participants received their packets, they were instructed to review the informational/instructional document and keep it. If they chose to participate, completion and return of the questionnaires served as an indication that they consented to all of the terms of this study. Participants were asked to complete the three instruments in the following order, one after the other, in the same sitting: Demographic Questionnaire, DIT-2, then the PANAS-X. Participants were asked to attend to the emotional reactions they experienced while completing the DIT-2, and then report their affective experiences by completing the PANAS-X. It is important to note that participants completed the PANAS-X version that instructed them to report their moods for that day only. That instructional version appeared to be most applicable to the purposes of this study since participants were asked to report their current emotional experiences.

After finishing the instruments, participants were requested to return them in the postage-paid envelope so that the envelopes were postmarked by a specified date, which

was approximately five weeks from the date they should have received their packets. In addition, participants were invited to put their names, addresses, phone numbers, and e-mail addresses on the postage-paid postcards, but only if they wished to be included in the drawing for the Wal-Mart gift cards. Participants were told that entering and winning the drawing was not contingent upon their completion of the research packet, and they were advised that they had approximately a 1 in 133 chance of winning a gift card. Participants were instructed to mail these postcards separately from the research packet in order to preserve anonymity.

Approximately ten days before the packets were due, a follow-up e-mail was sent to all of the 400 potential participants. See Appendix B. This e-mail thanked them for participating and encouraged those who had not yet participated to send in their completed questionnaires. The e-mail also reminded all participants to register for the drawing.

Several steps were taken in order to preserve the anonymity of research participants. After the sample was selected and before the research packets were mailed, the mailing list of potential participants was kept in a locked file cabinet while not in use. Only the researcher and the dissertation chair had access to this list. Within one week after the research packets were mailed, the mailing list was destroyed. No identifying information was requested in the research packets, and participants were instructed not to put their names, or any other identifying information, on any of the instruments.

When anonymously completed data were received by the researcher, each set of completed questionnaires was assigned a 5-digit number in order to keep track of individual participant data. This number was recorded on each of the three

questionnaires. The questionnaires were then separated into three different file folders, one for each questionnaire. Only the researcher and the chair of the dissertation committee had access to the PANAS-X sheets and the Demographic Questionnaires. All of the completed DIT-2 forms were sent to the Center for the Study of Ethical Development at the University of Minnesota. There they were scored by computer, and the score reports were returned to the primary researcher. After the DIT-2 score reports were received, only the primary researcher and the chair of the dissertation committee had access to these reports. The primary researcher scored the PANAS-X and coded the demographic data for statistical analysis. The completed instruments and any removable electronic data (i.e., CD, diskette) were kept in a locked file cabinet while they were not in use. Since the raw data were anonymous, the data will be retained indefinitely, in case it is suitable for future research.

Postcard entries received for the gift-card drawing were kept in a locked file cabinet. Approximately one week after the deadline for mailing the completed instruments, the researcher placed all of the postcards in a large box and shuffled them. The researcher drew three postcards from all of the entries and designated those three as the winners. All of the other cards were shredded and destroyed immediately. Within one week of the drawing, the three winners were mailed a brief letter of congratulations along with a $100 Wal-Mart gift card. See Appendix C. Immediately after these letters were sent, the winning postcards were shredded and destroyed as well.

Data Analysis Specifications

The researcher used SPSS, Version 13.0 software to analyze the data. The independent variable was level of moral development as measured by scores on the DIT-2, and the two dependent variables were the Positive Affect (PA) scale and Negative Affect (NA) scale scores on the PANAS-X. The two dependent variables were separated for the statistical analysis. The research design for this study included one independent variable with multiple levels (Moral Developmental Level: Level One, Preconventional/ Personal Interests Schema; Level Two, Conventional/ Maintaining Norms Schema; and Level Three, Postconventional Schema), and two dependent variables. The dependent variables, Positive Affect and Negative Affect, were statistically and conceptually unrelated, based upon the research of David Watson (Watson, 2000).

An analysis of variance (ANOVA) was used to test Hypotheses One and Two (Ary, Jacobs, and Razavieh, 1996). Furthermore, since neither theory nor previous research indicates an expected direction in which the results may lean, a nondirectional test of significance was used in this study. The alpha level was set at .05, the beta level was set at .10, and along with the sample size (n = 87), power analysis using these specifications indicated that the data would have yielded a moderate effect size if statistically significant results were found (Borenstein & Cohen, 1989).

Both ANOVA procedures began with the categorization of the DIT-2 scores into one of three levels of moral development. Level One represented the Preconventional/Personal Interests Schema Level. Level Two represented the Conventional/Maintaining Norms Schema Level, and Level Three represented the Postconventional Schema Level. After the coding was completed, one-way ANOVAs

were used to determine if there were statistically significant differences between moral development level groups with respect to scores on the PANAS-X Positive Affect (PA) scale, as stated in Hypothesis One, and scores on the PANAS-X Negative Affect (NA) scale, as stated in Hypothesis Two. Levene's test was performed *a priori* to test the assumption of homogeneity of variances among the three developmental groups. Since multiple tests were conducted, the Bonferroni adjustment was performed to modify the critical level of significance in order to reduce Type I error risk, and the Scheffe post-hoc test was also performed on the data to reduce Type I error risk.

CHAPTER IV. RESULTS

The purpose of this study was to investigate whether or not people at different levels of moral development have different positive and negative affective experiences as they engage in the process of moral decision-making. The research question involved the application of three theoretical positions: the moral developmental theory of Lawrence Kohlberg, the moral developmental theory of James Rest and the Neo-Kohlbergians, and the approach to affective experience espoused by Watson. Eighty-seven graduate students voluntarily completed a Demographic Questionnaire, the Defining Issues Test – Version 2 (DIT-2), and the Positive and Negative Affect Schedule – Expanded Form (PANAS-X). Two analyses of variance were performed to determine the effect of the independent variable, which was level of moral development, upon each of the dependent variables, Positive Affect and Negative Affect. Additional analyses of variance were also performed to assess the effect of level of moral development upon each of the remaining 11 affective subscale scores of the PANAS-X. The results of these statistical analyses are reported in this chapter.

Descriptive Statistics

Descriptive statistics for the three groups of participants categorized according to level of moral development were computed. It is important to note that the group sizes in this sample are not equal. Far fewer participants scored at Level One, while Levels Two

and Three are closely matched in numbers. Women outnumbered men at Levels Two and Three in a manner roughly proportionate to the overall percentages of men (44.8%) and women (55.2%) in the study, but men outnumbered women at Level One. Of the 39 men who participated in the study, 15.4% scored at Level One, 43.6% scored at Level Two, and 41% scored at Level Three. Of the 48 women who participated, 10.4% scored at level One, 41.7% scored at Level Two, and 47.9% scored at Level Three. Participants at Level One appeared to have a more restricted age range as compared to those at the other two levels, which exhibited highly similar age ranges. Participants at Level Two appeared to have the highest mean and median ages. The percentage of unmarried people appeared to decline as level of moral development increased, while the percentage of married people appeared to increase along with moral developmental level. Grade point average and number of semesters of graduate school attended appeared to be similar across groups. Descriptive statistics are reported in Table 1.

In addition to the information in Table 1, the distribution of the ethnicity of participants within each categorical level was available. Levels Two and Three appeared to have distributions roughly proportionate to the overall ethnic distribution of participants, but Level One participants had a slightly different ethnic distribution. Level One participants identified as 72.7% White, 9.1% Black, and 18.2% Asian/Pacific Islander for a total of 100 percent. Level Two participants identified as 86.5% White, 5.4% Black, 5.4% Asian/Pacific Islander, and 2.7% Multi-Ethnic. In Level Three, 87.2% of participants identified as White, 5.1% identified as Black, and 7.7% identified as Asian/Pacific Islanders.

Table 1.

Descriptive Statistics on Three Moral Developmental Levels (N = 87)

Category	Level One	Level Two	Level Three
# of Participants	11	37	39
% of total N	12.64%	42.53%	44.83%
Number of Females	5 (45.45%)	20 (54.05%)	23 (58.97%)
Number of Males	6 (54.55%)	17 (45.95%)	16 (41.03%)
Mean Age	25.45	31.46	29.18
Median Age	25	28	25
Age Range	21 - 30	21 - 63	22 – 63
% Unmarried	81.8%	67.6%	56.4%
% Married	18.2%	32.4%	43.6%
Mean GPA	3.56	3.7639	3.74
Mean # Semesters	4.82	4.95	5.23
Mean PA Score (*SD*)	32.00 (9.263)	28.65 (8.6)	27.97 (7.227)
Mean NA Score (*SD*)	14.64 (6.577)	13.97 (5.993)	14.97 (4.804)

The distribution of PANAS-X Positive Affect (PA) Scores and Negative Affect (NA) Scores among all 87 participants, regardless of moral developmental level, is displayed in Table 2. Both scales have a score range of 10-50. For the PA scale, 17.24% of the 87 participants scored from 10-19, 32.18% scored from 20-29, 42.53% scored from 30-39, and 8.05% scored from 40-50. The PA score range was 13-48. The mean PA score

was 28.77 (*SD* = 8.10), representing a moderate intensity level; the median PA score was 30. For the NA scale, 83.91% of the 87 participants scored from 10-19, 12.64% scored from 20-29, 2.3% scored from 30-39, and 1.15% scored from 40-49. The NA score range was 10-42. The mean NA score was 14.51 (*SD* = 5.52), representing a low intensity level; the median NA score was 12.

Table 2.

Descriptive Statistics on PANAS-X PA and NA Scores (N = 87)

Category	PA	NA
Mean	28.77	14.51
SD	8.10	5.52
Median	30.00	12.00
Minimum Score	13	10
Maximum Score	48	42
% of Scores in Range:		
10-19	17.24%	83.91%
20-29	32.18%	12.64%
30-39	42.53%	2.30%
40-50	8.05%	1.15%

Findings for the Hypotheses

Hypothesis One

Statement of the Null Hypothesis

Ho1: There will be no statistically significant difference in Positive Affective Experience for participants at different Levels of Kohlbergian/Neo-Kohlbergian Moral Development.

Findings

Because the group sizes were unequal, Levene's test for homogeneity of variances was conducted, and it revealed that the sample did meet the criteria for this *a priori* assumption, $F = .619$, $p = .541$. The mean Positive Affect scores and their corresponding standard deviations are given in Table 3, along with the results of the one-way Analysis of Variance for the first null hypothesis. The analysis did not yield a statistically significant result, $F(2, 84) = 1.068$, $p = .348$, so the null hypothesis cannot be rejected. Because no statistically significant results were found, post hoc analyses were not conducted. Analysis of the internal consistency reliability of the PA scale scores in this sample revealed a Cronbach's alpha of .87. Because the DIT-2 results for each participant were scored and analyzed elsewhere, information on specific item scores was not available. Consequently, a reliability analysis for the DIT-2 could not be conducted.

Table 3.

Analysis of Variance: Positive Affect By Level of Moral Development (N = 87)

Level	*n*	*Mean*	*SD*
1 (Preconventional)	11	32.00	9.263
2 (Conventional)	37	28.65	8.600
3 (Postconventional)	39	27.97	7.277
Total	87	28.77	8.102

Source	*df*	*Sum of Squares*	*Mean Square*	*F ratio*	*p*
Between Groups	2	139.996	69.998	1.068	.348
Within Groups	84	5505.407	65.541		
Total	86	5645.402			

Hypothesis Two

Statement of the Null Hypothesis

Ho2: There will be no statistically significant difference in Negative Affective Experience for participants at different Levels of Kohlbergian/Neo-Kohlbergian Moral Development.

Findings

Since the group sizes were unequal, Levene's test for homogeneity of variances was conducted, and it revealed that the sample did meet the criteria for this *a priori* assumption, $F = .080$, $p = .923$. Means and standard deviations of Negative Affect scores for each moral developmental group, as well as the results of the one-way Analysis of

Variance for Hypothesis Two, are reported in Table 4. The second null hypothesis was retained in this study because the analysis did not produce a statistically significant result, $F(2,84) = .311$, $p = .734$. Because no statistically significant results were found, post hoc analyses were not conducted. Analysis of the internal consistency reliability of the NA scale scores in this sample revealed a Cronbach's alpha of .87.

Further analysis of the distribution of Negative Affect scores between moral developmental groups revealed that two of the respondents had Negative Affect scores that were far outside the range of scores in the groups. One participant was in the Level One group, while the other was in the Level Two group. Since these outliers could affect the homogeneity of variances assumption as well as the ANOVA results, they were removed and another ANOVA was conducted for exploratory purposes. The differing means and standard deviations for the groups are listed in Table 5, followed by the ANOVA results. Levene's test was conducted, and the resulting F value was 3.690, $p = .029$. Thus, homogeneity of variance could not be assumed in this sample. The ANOVA results showed a considerably reduced p value after removing the outliers, $F(2,82) = 2.150$, $p = .123$. The conclusion was the same with or without the outliers removed. Consequently, no transformations were performed. Since homogeneity of variances could not be assumed in this modified sample, ($p < .05$), the nonparametric Kruskal-Wallis H Test was conducted. Raw Negative Affect scores were converted to ranks. Once again, no statistically significant difference was found between the three moral developmental levels with regard to Negative Affect scores, $H(2) = 0.149$.

Table 4.

Analysis of Variance: Negative Affect By Level of Moral Development (N = 87)

Level	*n*	*Mean*	*SD*
1 (Preconventional)	11	14.64	6.577
2 (Conventional)	37	13.97	5.993
3 (Postconventional)	39	14.97	4.804
Total	87	14.51	5.521

Source	*df*	*Sum of Squares*	*Mean Square*	*F ratio*	*p*
Between Groups	2	19.254	9.267	.311	.734
Within Groups	84	2602.493	30.982		
Total	86	2621.747			

Table 5.

Analysis of Variance: Negative Affect by Level of Moral Development Without Outliers (N = 85)

Level	*n*	*Mean*	*SD*
1 (Preconventional)	10	12.80	2.616
2 (Conventional)	36	13.19	3.725
3 (Postconventional)	39	14.97	4.804
Total	85	13.96	4.224

Source	*df*	*Sum of Squares*	*Mean Square*	*F ratio*	*p*
Between Groups	2	74.681	37.340	2.150	.123
Within Groups	82	1424.213	17.368		
Total	84	1498.894			

Results of Additional Analyses

In addition to the analyses described previously, other statistical tests were performed to gather more information about relationships in the data. First, a paired samples *t*-test was performed to determine if there was a difference between the overall mean PA and NA scores, as they are reported in Table 2. The analysis revealed that the mean PA score was significantly higher than the mean NA score, $t(86) = -12.929$, $p<.001$.

The same ANOVA's that were conducted to test the two null hypotheses were also performed to investigate if the mean scores of the other PANAS-X Affect scales were different across the three moral developmental groups. These additional PANAS-X

scales included: Fear, Hostility, Guilt, Sadness, Joviality, Self-Assurance, Attentiveness, Shyness, Fatigue, Serenity, and Surprise. Before ANOVA tests were conducted, Levene's test for homogeneity of variances was conducted for scores on each affect scale. All of the affect scales retained the equal variances assumption except for the Surprise scale, which yielded $F = 9.973$ and $p < .001$.The means and standard deviations of each set of scale scores for each level of moral development are reported in Tables 6, 7, and 8.

Table 6.

ANOVA: PANAS-X Affect Scales By Level of Moral Development

Means and Standard Deviations for Fear, Hostility, and Guilt Scales (N = 87)

Affect Scale	*Moral Dev. Level*	*n*	*Mean*	*SD*
Fear	1	11	8.45	2.841
	2	37	7.24	3.419
	3	39	7.87	2.319
	Total	87	7.68	2.895
Hostility	1	11	9.45	7.090
	2	37	9.78	4.888
	3	39	9.85	4.075
	Total	87	9.77	4.817
Guilt	1	11	8.73	4.671
	2	37	7.68	4.117
	3	39	8.33	3.089
	Total	87	8.10	3.742

Table 7.

ANOVA: PANAS-X Affect Scales By Level of Moral Development

Means and Standard Deviations for Sadness, Joviality, Self-Assurance, and Attentiveness Scales (N = 87)

Affect Scale	*Moral Dev. Level*	*n*	*Mean*	*SD*
Sadness	1	11	9.55	4.458
	2	37	7.08	3.692
	3	39	7.15	3.617
	Total	87	7.43	3.802
Joviality	1	11	25.27	9.860
	2	37	21.43	7.801
	3	39	19.54	6.909
	Total	87	21.07	7.826
Self-Assurance	1	11	15.82	5.913
	2	37	14.11	5.441
	3	39	13.54	4.340
	Total	87	14.07	5.030
Attentiveness	1	11	14.18	3.311
	2	37	13.35	3.466
	3	39	13.36	3.265
	Total	87	13.46	3.330

Table 8.

ANOVA: PANAS-X Affect Scales By Level of Moral Development

Means and Standard Deviations for Shyness, Fatigue, Serenity, and Surprise Scales (N = 87)

Affect Scale	*Moral Dev. Level*	*n*	*Mean*	*SD*
Shyness	1	11	6.36	3.776
	2	37	4.89	1.912
	3	39	5.15	1.927
	Total	87	5.20	2.246
Fatigue	1	11	9.64	4.760
	2	37	7.95	4.371
	3	39	8.54	4.273
	Total	87	8.43	4.358
Serenity	1	11	10.73	2.412
	2	37	9.59	2.114
	3	39	8.79	2.667
	Total	87	9.38	2.470
Surprise*	1	11	6.00	3.742
	2	37	4.73	1.866
	3	39	4.67	1.707
	Total	87	4.86	2.136

* Scale did not meet homogeneity of variances assumption according to Levene's Test

ANOVA results are reported in Tables 9, 10, and 11. There was no statistically significant difference found in any of the analyses, so the null hypothesis of no differences in mean scores was retained for each affect scale. No statistically significant differences in mean scores were found for the group means for the Joviality scale and the Serenity scale, but each scale had a p value of less than .10. Also, group means for the Sadness, Shyness, and Surprise scales yielded p values of less than .20; however, the Surprise scale results may be distorted since homogeneity of variances cannot be assumed for that particular scale. A Kruskal-Wallis *H* test was performed on the Surprise scale, and it yielded nonsignificant results, $H(2) = 0.849$.

Table 9.

ANOVA: PANAS-X Affect Scales By Level of Moral Development (N = 87)

Fear, Hostility, and Guilt Scales

Affect Scale	*Source*	*Sum of Squares*	*df*	*Mean Square*	*F*	*p*
Fear	Between Groups	15.091	2	7.546	.898	.411
	Within Groups	705.897	84	8.404		
	Total	720.989	86			
Hostility	Between Groups	1.328	2	.664	.028	.972
	Within Groups	1994.074	84	23.739		
	Total	1995.402	86			
Guilt	Between Groups	13.112	2	6.556	.462	.631
	Within Groups	1190.957	84	14.178		
	Total	1204.069	86			

Table 10.

ANOVA: PANAS-X Affect Scales By Level of Moral Development (N = 87)

Sadness, Joviality, Self-Assurance, and Attentiveness Scales

Affect Scale	*Source*	*Sum of Squares*	*df*	*Mean Square*	*F*	*p*
Sadness	Between Groups	56.703	2	28.352	2.007	.141
	Within Groups	1186.561	84	14.126		
	Total	1243.264	86			
Joviality	Between Groups	290.631	2	145.315	2.453	.092
	Within Groups	4976.955	84	59.249		
	Total	5267.586	86			
Self-Assurance	Between Groups	44.690	2	22.345	.881	.418
	Within Groups	2130.896	84	25.368		
	Total	2175.586	86			
Attentiveness	Between Groups	6.566	2	3.283	.291	.748
	Within Groups	947.043	84	11.274		
	Total	953.609	86			

Table 11.

ANOVA: PANAS-X Affect Scales By Level of Moral Development (N = 87)

Shyness, Fatigue, Serenity, and Surprise Scales

Affect Scale	*Source*	*Sum of Squares*	*df*	*Mean Square*	*F*	*p*
Shyness	Between Groups	18.488	2	9.244	1.870	.160
	Within Groups	415.190	84	4.943		
	Total	433.678	86			
Fatigue	Between Groups	25.135	2	12.567	.656	.521
	Within Groups	1608.130	84	19.144		
	Total	1633.264	86			
Serenity	Between Groups	35.023	2	17.512	3.005	.055
	Within Groups	489.460	84	5.827		
	Total	524.483	86			
Surprise*	Between Groups	16.381	2	8.190	1.830	.167
	Within Groups	375.964	84	4.476		
	Total	392.345	86			

* Scale did not meet homogeneity of variances assumption according to Levene's Test

CHAPTER V. DISCUSSION AND CONCLUSIONS

Introduction

This study investigated whether or not people at different levels of moral development, as defined by Kohlberg and the Neo-Kohlbergians, reported different affective experiences, as defined by Watson, when they engaged in moral decision-making. Since there is a paucity of theory and research that directly addresses the interaction of cognitive and emotional processes during moral decision making, this study was an initial attempt to combine and apply concepts from three well-known theoretical approaches to the phenomena under investigation. The results of this study are presented in this chapter. The limitations of this study will also be discussed, as well as directions for further research, and how the results may be applied to the discipline of counseling psychology.

General Findings

Based on the statistical analysis, no significant differences were found in the various affective experiences of people who scored at different levels of moral development. Despite these results, these data add to the body of information about adult moral development, and they show consistency with previous DIT-2 and PANAS-X research that was presented in the previous chapters.

The following discussion elaborates on the results of this study as a contribution to both DIT-2 research and PANAS-X research, and as an integrated look at the affective experience of moral decision making.

Descriptive Information on DIT-2 Results

The distribution of scores along the three different levels of moral development closely resembles previous DIT research into adult moral development, as do the characteristics of participants at each of those levels. A relatively small percentage (12.64%) of participants scored in the Preconventional/Personal Interests Schema (Level One), as opposed to those who scored at the two higher levels. The smaller number of adults at Level One was expected, since Kohlbergian and Neo-Kohlbergian theories state that most people at this level are children or adolescents, and that people of more advanced educational backgrounds (such as the participants in this study) are less likely to score at this level. A large amount of research corroborates this theoretical position (Colby & Kohlberg, 1987; Kohlberg, 1984; Rest, 1986; Rest, Narvaez, Bebeau, et al., 1999b; Rest, Narvaez, Thoma et al., 1999; Thoma, 1986). Participants at Level One also exhibited a more restricted age range than those at Levels Two and Three, with the oldest respondent at age 30. Respondents who scored at the Conventional/Maintaining Norms Schema Level (Level Two, 42.53%) and the Postconventional Schema Level (Level Three, 44.83%) were closely matched in numbers and age ranges. All of these results appear to be consistent with theory and previous research.

Gender differences found among participants at different moral developmental levels in this study also reflect Neo-Kohlbergian theory and some of Kohlberg's later findings. Several MJI and DIT-based studies have noted no differences in scores between

men and women, or slightly higher (yet not statistically significantly higher) scores by women (Colby & Kohlberg, 1987; Nisan & Kohlberg, 1982; Rest, 1986; Rest, Narvaez, Bebeau et al., 1999b; Snarey, et al., 1985; Walker, 1991). In this study, 47.9% of women scored at Level Three, as opposed to 41% of the men in the sample, and 10.4% of women in the sample scored at Level One, while 15.4 % of men scored at that level. In addition, 43.6% of the men in the study scored at Level Two, and 41.7 % of the women in the sample also scored at that level. The consistency of these results with results from previous DIT research suggests that this current study offers construct validity to the characterization of adults at different levels of moral development, as defined by Kohlberg and the Neo-Kohlbergians. The results of this study seem to fit particularly well with the Neo-Kohlbergian approach.

Positive Affect, Negative Affect, and Level of Moral Development

The trends in Positive Affect (PA) and Negative Affect (NA) scores among all participants in this study closely matched Watson's (2000) theory. He suggested that people tend to report more PA than NA in all available forms of the PANAS-X, and that moderate intensity PA along with low intensity NA represented a stable, continual aspect of everyday life. Indeed, the score profiles of this study show that overall mean PA score was 28.77, which is close to the moderate intensity, mid-range score of 30. Only three out of the 87 participants reported NA scores equal to or higher than their respective PA scores. Furthermore, the mean NA score was 14.51, which indicates a very low level of NA. Only three (3.45%) of the 87 respondents scored 30 (mid-range) or higher on NA, and 83.91% scored at the lowest intensity level of NA, from 10-19.

In comparing the mean PA and NA scores of all participants, the PA score was significantly higher than the NA score. These data suggest that the experience of making moral decisions has a positive affective component that can be described by PANAS-X PA scale items such as "interested," "active," "alert," "enthusiastic," and "strong." Based on these data, it appears that people basically felt good about the moral judgments they made on the DIT-2 and felt invested in the decision making process.

These results, coupled with the statistically insignificant differences in NA and PA found between participants of different moral developmental levels, could reflect that moral decision-making is an inevitable part of daily life. Thus, the emotions involved in moral decision making could be an integral component of mood and the stream of affect, which primarily consist of moderately intense PA. These results appear to lend construct validity to Watson's claims about the nature of PA and NA, and about the daily stream of affect. Furthermore, the fact that participants in this study reported both PA and NA fits well with Watson's idea that PA and NA do not exist as opposite poles on a continuum of affective phenomena. Instead, they seem to function independently of one another.

The PA and NA scores did not appear to vary significantly between moral developmental groups. A potential explanation of the results could be the possibility that the moral reasoning stimulus used in this study did not engage the affect of the participants to a significant degree. Even though affective experience was detected, perhaps PA and NA levels were not intense enough to produce measurable discrepancies between moral developmental groups. This could explain why the results do not appear any different than the stream of affect as Watson has defined and measured it. This issue will be discussed further in a later section of this chapter.

Watson (2000) was committed to the idea that affect is adaptive, so the moderate PA and low NA that occurs alongside moral decision making may have survival value that supercedes developmental differences in other aspects of moral functioning. Watson theorized that a moderate PA level is adaptive because it activates approach behaviors, higher energy levels, and the subsequent acquisition of resources. Maintaining PA could help provide the energy needed to reason through moral dilemmas, and successful reasoning through moral conflicts could contribute to the acquisition of social and material resources needed for survival. As for the adaptive value of low NA in making moral decisions, Watson claimed that negative affect is reactive and unpleasant, for it leads to higher physiological arousal states and to an avoidance response. High levels of NA during moral decision-making could influence avoidance of moral conflicts, but this prospect is not adaptive because people have moral conflicts on a regular basis. Since moral conflict is a part of everyday life and cannot be avoided, it seems reasonable that NA levels are low, not high, across the different levels of moral development. Without the high physiological arousal and emotional pain that accompanies higher NA levels, people may be more apt to actively engage in moral judgment, make decisions, and respond to the consequences. This behavior has more survival value than avoidance of moral conflict.

Even though there were no statistically significant differences in mean PA or NA scores between participants at different levels of moral development, these results are still consistent with portions of Kohlberg's theory. Kohlberg maintained that emotional processes are an inevitable part of the decision-making process; however, they have a negligible impact upon the cognitive operations required to make a judgment. Regardless

of the complexity and sophistication of an individual's justice reasoning, people may have more similar than discrepant emotional experiences as they process moral conflicts.

The low intensity levels of NA reported in these results also may be considered with respect to Kohlberg's stance on the minor role emotions play in moral judgment. Kohlberg (1984) wrote about shame and guilt as moral emotions to the exclusion of more positive emotions. Likewise, the Neo-Kohlbergian literature seems to focus more on negative emotions than on positive ones (Rest, 1986; Rest, Narvaez, Bebeau et al., 1999b). The outcome of this study reflects the opposite, since PA levels were significantly higher than NA levels in the overall sample.

It is logical to assume that moral decision making potentially can be an excruciating process riddled with negative affect because many moral dilemmas arise out of conflict and dissonance, and the judgments that one makes could carry painful consequences. Nevertheless, the finding that moral decision making is associated with positive affective experiences to a greater degree than negative affective experiences like fear, hostility, distress, or nervousness could show that people may be less inclined to allow negative emotions to influence them as they judge a moral issue; maybe NA is a distraction that disrupts concentration. Perhaps people are more apt to focus on the constructive, positive emotions in order to feel more comfortable as they process moral dilemmas and make decisions. On the other hand, perhaps the participants scored lower in NA because the experimental task did not have enough personal relevance to them to elicit NA.

Kohlberg may have underestimated the role that positive emotions could play in increasing a person's level of determination while working through a moral dilemma, or a

person's confidence that she or he made a just decision. However, Neo-Kohlbergian ideas about how affect and cognition interact in the four components of the moral domain do account for the impact of positive affective experiences in moral judgment (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999a, 1999b). Even though the Neo-Kohlbergians do not mention any specific contextual references to the phenomenon, Rest (1986) indicated that positive emotions could inform a person's sense of whether or not a decision was fair. This sense seems critical to moral functioning at any level of development, as people muster all the resources they have in order to distinguish right from wrong, make sound decisions, and possibly prepare for subsequent moral action.

The fact that a moderate level of PA was reported during moral decision making lends credence to the idea that cognition and affect coexist interactively in a broader functional system, as Kohlberg, the Neo-Kohlbergians, and Watson believed. Kohlberg (1984) stated that moral cognition determines affective experience in any given moral dilemma, while Watson and the Neo-Kohlbergians posited that moral cognition and affect have a reciprocal influence upon each other (Rest, 1986; Rest & Narvaez, 1994; Rest, Narvaez, Bebeau, et al., 1999a, 1999b; Watson, 2000). Even though current results indicate a link between cognition and affect in moral decision-making, the idea that specific developmental changes in moral cognition are associated with concomitant changes in affective experience is not supported here.

The lack of difference in PA and NA between moral developmental levels could reflect the Neo-Kohlbergian concept of overlapping moral schemas. If people of all moral developmental levels employ personal interests, maintaining norms, and postconventional moral schemas, and developmental difference is a matter of the proportion of those

corresponding schemas that is used to make a moral decision, then people could be engaging in some of the same cognitive processes, hence some of the same affective experiences. This explanation would fit with the propositions that moral cognition and affect are connected, and that they may reciprocally influence each other. If this extrapolation is accurate, then the results of this study would be more consistent with Neo-Kohlbergian theory and research identifying three overlapping moral schemas, rather than with Kohlberg's theory and research that identified discrete, hierarchical developmental stages and levels.

Level of Moral Development and Other Affective Experiences

For each of the 11 additional affect scales of the PANAS-X, including the Basic Positive Emotions scales, the Basic Negative Emotions scales, and the Other Affective scales, the differences in mean scores of participants at each moral developmental level were not significant. Because the results are similar to the findings for the PA and NA scales, the explanations are essentially the same. Perhaps affect plays a minor role in moral judgment as in Kohlberg's theory. It is possible that affective experiences may be related to the moral decision making process, yet this relationship is highly consistent across developmental levels. The results could be similar across groups because people of all moral developmental levels use all three schema types while making moral judgments, as the Neo-Kohlbergians suggest. Thus, the associated affective experiences would be difficult to differentiate from one another. In general, the results do not fit with the idea that developmental changes in justice reasoning should be connected to changes in affective experience, even though this is a logical and popular viewpoint.

Among all of the results of this study, the mean score differences between groups on the Serenity scale yielded the lowest p value of all the other scales, $F(2,84) = 3.005$, $p = .055$. The Serenity scale is a short, but psychometrically sound scale that consists of the adjectives "calm," "at ease," and "relaxed" (Watson, 2000; Watson & Clark, 1994). Since this outcome is so close to meeting the established level of significance for this study it should be interpreted, albeit with a great degree of caution. Participants at Level One scored the highest in Serenity, followed by Level Two, and then by Level Three participants. All the scores were in the moderate intensity range, regardless of moral developmental level. Kohlbergian and Neo-Kohlbergian theory may provide insight into why people at these different levels may differ in Serenity (Colby & Kohlberg, 1987; Kohlberg, 1984; Rest, 1979; Rest, 1986; Rest, Narvaez, Bebeau, et al, 1999a, 1999b).

According to Kohlberg and the Neo-Kohlbergians, people at Level One (Preconventional/Personal Interests schema level) have little concern or sense of responsibility for upholding the laws and social norms that exist around them (Bebeau & Thoma, 2003; Colby & Kohlberg, 1987; Kohlberg, 1984; Rest, Narvaez, Bebeau, et al., 1999a, 1999b). Their more egoistic perspective centers on getting their needs met and feeling accepted, not attempting to take the perspective of others. If they narrowly consider how the consequences of their moral decisions affect them as opposed to how their decisions may affect others and impact the social climate, then there is little reason for concern. They may feel more calm and relaxed while reasoning through moral dilemmas because they feel less responsible for the outcome.

Those who score at Level Two (conventional/maintaining norms schema level) might have less Serenity than those who score at Level One because, according to

Kohlbergian and Neo-Kohlbergian theory, they want to do good for the good of society, and they strive to make fair decisions (Bebeau & Thoma, 2003; Colby & Kohlberg, 1987; Kohlberg, 1984; Rest, 1979; Rest, 1986; Rest, Narvaez, Bebeau, et al, 1999a, 1999b). They are more aware that their moral decisions have weight, and may affect others. Since they understand their responsibilities in maintaining social order, they may realize that the consequences of poor reasoning may disrupt that order. Thus, there is more at stake, and more risk, even when they follow the rules. They may feel less at ease that their decisions will be good for society and will be upheld by others who share their beliefs. Even so, they may find some solace in believing that their views will prevail, since their approach to moral reasoning is widely espoused by others and generally promoted by society.

People who employ Level Three (Postconventional) moral reasoning incur the most risk when they attempt to solve moral dilemmas because if they fail, they have full knowledge that consequences may be dire for others, and injustices may continue (Bebeau & Thoma, 2003; Colby & Kohlberg, 1987; Kohlberg, 1984; Rest, 1979; Rest, 1986; Rest, Narvaez, Bebeau, et al, 1999a, 1999b). Because they shoulder the most responsibility for evaluating and altering norms, laws, and social systems to reflect justice and equality for all, they must be aware, alert, and willing to explore how their own shortcomings may impede progress. There may be fewer opportunities for feeling calm and relaxed as one's perceived level of moral obligation increases, and one recognizes the daunting challenge of addressing the flaws and biases in overarching social systems. Diving into social problems and attempting to find solutions that better serve the needs of all people is not a relaxing activity; it is often fraught with ambiguity and met with

resistance to change. Empathizing fully with others and taking their perspectives may leave one feeling quite uneasy, especially if those people are the victims of social injustice. For all these reasons, it seems fitting that people who function at the most complex and advanced level of moral reasoning may feel the least serene.

Interpretive Summary

The results of the DIT-2 assessment in this study are generally consistent with Kohlbergian and Neo-Kohlbergian theory, and with previous research using the DIT and DIT-2 on adult populations. These findings reflect Kohlberg's stance on the presence of emotions in moral cognition, and they also fit with the Neo-Kohlbergian idea of moral reasoning as a complex phenomenon involving interconnected emotional and cognitive processes. Likewise, The PANAS-X results are also consistent with Watson's theoretical propositions and research. Participants reported significantly higher PA than NA, so their experiences resembled the stream of affect concept offered by Watson. Thus, the construct validity of each of these theoretical positions has support. The remaining statistically insignificant results of this study do not offer much support for the combination of Watson's ideas with those of Kohlberg and the Neo-Kohlbergians in order to ascertain if people at different levels of moral development have different affective experiences.

Although the two null hypotheses were retained and no significant differences were found in mean scores on the remaining PANAS-X affect scales, there was weak circumstantial support for the idea that the affective experience of serenity varies with different levels of moral development. Participants scoring at the Preconventional/Personal Interests schema level had the highest mean scores on the

Serenity scale followed by participants at the Conventional/Maintaining Norms schema level, and last by participants at the Postconventional schema level. Tentative interpretations of these results were offered from the perspective of Kohlbergian and Neo-Kohlbergian theories, centering on the idea that people of different moral developmental levels have contrasting perspectives on the responsibilities, objectives, and implications of their moral reasoning. Because of these differences, people who function at higher, more complex levels of moral development may experience less serenity as they make moral decisions.

Implications for the Discipline and Practice of Counseling Psychology

This study provided an integrated look at the cognitive and affective functioning of people at different levels of moral development. It was an investigation of potential differences in emotional experiences that may be reflective of the differing cognitive processes involved at each level of moral development. An extensive literature review on moral developmental theory from the Kohlbergian and Neo-Kohlbergian perspectives showed that these cognitively-focused theorists did not fully consider the role of affect in moral functioning, even though they acknowledged the existence and influence of emotions during moral decision-making, as well as the complexity of the moral domain.

In this study, the results of the DIT-2 testing alone resemble previous results from studies that had been performed by Kohlberg and the Neo-Kohlbergians. In addition to adding to the body of research on adult moral development, this study provides further evidence for a Postconventional Schema Level of moral development. In general, these results add to the construct validity of both Kohlbergian and Neo-Kohlbergian moral developmental theories.

Taken independently of the DIT-2 results, the PANAS-X results are highly compatible with Watson's (2000) theory and research on affect. Respondents consistently reported higher levels of PA and lower levels of NA, fitting with Watson's observations on the prevalence of Positive Affect. All forms of affective experience were reported mostly at low to moderate levels, and mixed emotional states prevailed, as Watson has found in his research. These results also correspond with his "stream of affect" concept, meaning that affect is an omnipresent aspect of daily life. For these reasons, the results of this study support the construct validity of Watson's theory of affective experience.

When the results of the DIT-2 and PANAS-X were combined to look at mean score differences in affect among people of different levels of justice reasoning, no statistically significant differences were found. Participants generally reported moderate intensity PA and low intensity NA experiences during moral decision-making. Watson might suggest that these results speak to the adaptive value of moderate PA and low NA in making moral decisions and acting on them. The results may be construed as being consistent with Kohlbergian ideas about the inconsequential role of emotions in moral judgment, and the complexity of moral judgment processes as proposed by Kohlberg and the Neo-Kohlbergians. Also, the role of PA in moral judgment may be underestimated, and probably should be considered further.

The lack of significant results cannot warrant any revision of Kohlbergian and Neo-Kohlbergian theory to include more information about changes in affect that correspond with cognitive developmental changes. It is possible that people at different levels of moral development may experience similar affect even though they exhibit developmental differences in justice reasoning. It is also possible that affect plays a minor

role in moral decision making, as Kohlberg suggested. Alternatively, these results may indicate that the moral reasoning stimulus used in this project did not engage affect to a degree that any developmental differences in affect could be measured. Thus, even if affect is an important factor in moral decision making, as the Neo-Kohlbergians suggest, it may be difficult to elicit and measure in an experimental context.

Another potential explanation for the results could take the Neo-Kohlbergian concept of overlapping moral schemas into account. Because people of different levels of moral development use overlapping moral schemas in their reasoning, their affective experiences may be difficult to differentiate from one another. Finally, the differences in the Serenity scale scores, though not significant, are intriguing enough to raise questions about why people at the Postconventional level may experience less serenity, while people who use less complex moral reasoning seem to have higher serenity levels.

This study was an attempt to view the well-known, time-honored ideas of Kohlberg and the Neo-Kohlbergians from a different perspective, and to consider affective factors that may work alongside moral cognition to influence moral decision-making and development. Ubiquitous and meaningful affective experiences run like a stream through our everyday lives, as Watson put it; sometimes they are intense, sometimes not, but they are always there. The authors of all three theories concurred that affect and cognition impact each other in infinitely complex ways. Using three different theories to develop and answer a research question about relatively unexplored human phenomena exemplifies the integrative, synthetic approach counseling psychologists often use to gain more knowledge and understanding of complicated psychological phenomena.

The results of this study can be applied to the practice of counseling psychology through producing results consistent with the Kohlbergian and Neo-Kohlbergian position that affective and moral functioning exist as interrelated phenomena. Counseling psychologists who are committed to viewing clients holistically and developmentally would benefit from considering both the cognitive and affective experiences involved in moral functioning as they assess, conceptualize, and treat client issues. Of course, this study provides limited information about the interface between affect and the cognitive processes unique to each level of moral development since there were no statistically significant results. For this reason, it is not prudent to offer specific clinical implications based upon the results. Clearly, more research on these variables could provide data that may be valuable to clinical assessment, treatment planning and delivery, client conceptualization, and development of the therapeutic relationship.

Implications and Directions for Further Research

This study represented an initial step in exploring the relationship between Kohlbergian/Neo-Kohlbergian levels of moral development and the affective experience of moral decision-making at each level. Since the results failed to reach statistical significance, perhaps other experimental designs could better investigate the nature of this relationship by overcoming some of the limitations of this current study, and increasing the validity and reliability of results. Watson supported the connection between cognition and affect, and Kohlberg as well as the Neo-Kohlbergians extended that connection to the moral domain. Because this idea has ample support in theory, further research should be conducted to test these propositions.

Watson explained that trait affect is an affective response pattern that remains stable over extended periods of time, and persists despite occasional fluctuations in daily mood states. Even though he did not specify the possible factors that could influence changes in trait affect, it seems feasible that certain developmental processes may bring about shifts in affective functioning. With this idea in mind, perhaps changes in trait affect could correspond with changes in level of moral development. The current study only offered a single observation of the affect of adult participants, but other designs using the same two instruments could be developed to glean more information. In order to test for trait affect in moral development, the DIT-2 could be administered and followed by the PANAS-X, as in this design, but the PANAS-X instructions could be modified to assess longer term mood states. Participants could be tested on the DIT-2, then asked to complete the PANAS-X on several occasions over a predetermined time period. This design would offer multiple observations of affect, which may increase the validity and reliability of results.

The closer a research design comes to creating real-life moral dilemmas within which participants can face the authentic affective experience of moral decision-making and report the experience phenomenologically, as it happens, the more valid and generalizable the results will be. For example, another compelling design for future research could partially replicate Biaggio's 1991 study. Participants could be given the DIT-2, then they could be asked to read about moral dilemmas or engage in a discussion with others about moral dilemmas. After the discussion, the participants could complete the PANAS-X to describe their affective experiences during the exposure to moral dilemmas. This design could increase external validity of results by exerting some control

over the experimental context. One could add a longitudinal element to this design by asking participants to repeat the procedure over a few different occasions to determine if any trait-like affective characteristics emerge, or if they differ depending on level of moral development. In addition to the PANAS-X, other instruments could be used to assess more specific affective experiences in this design. Other existing measures of affective experiences, like the State-Trait Anxiety Inventory (Spielberger, 1983), the Guilt Inventory (Kugler & Jones, 1992), or the State-Trait Anger Expression Inventory (Spielberger, 1988), could be valuable tools for further research.

In addition to investigating how trait affect and moral development interact, Watson's (2000) construct of temperament implies that people have hereditary, dispositional tendencies toward certain affective experiences. These tendencies are associated with dispositional cognitive and behavioral characteristics. Perhaps people of certain temperaments are more likely to use certain types of moral reasoning, or more likely to operate at certain levels of moral development. Using designs like the ones offered above, research in this direction could include the use of the DIT-2, PANAS-X, and personality measures like the NEO-Personality Inventory- Revised (NEO-PI-R) (Costa & McCrae, 1992).

The interaction of moral decision-making and affective experiences is quite complex, and qualitative studies could be conducted to reveal some of this complexity. Comprehensive interviews could address adults' emotional experiences during moral decision-making, whether they were interviewed about a past moral decision, or about one that the researcher asks them to consider. Even though this design may not yield information on level of moral development, it could provide rich, naturalistic descriptions

of the real-life experience and generate hypotheses for even more research. Quantitative and qualitative research designs could be combined by interviewing participants, testing them with the DIT, and investigating common affective experiences among people in the same level of moral development. To improve the external validity of a theory uniting affect and moral development, research utilizing all the aforementioned designs could be performed on people of different educational backgrounds, ages, and cultural backgrounds.

Limitations of This Study

Although this research has value in furthering the study of affect in moral development, certain limitations of this study should be noted. First, the sample used in this study had a restricted range. The sample was drawn from the graduate student population of a large, racially and culturally homogenous university in the southeastern United States. The participants came from predominantly Caucasian, southern, middle-class backgrounds, which limit the applicability of the research to any other culturally diverse population. Furthermore, the pool of potential participants from which the research sample was randomly selected consisted of graduate students who gave the Auburn University Office of Planning and Analysis consent to publish their contact information. Thus, the sample was biased because people who did not give their consent to publish their contact information could not be included in this study. Another aspect of the sample that may limit generalizability to the population is the limited range of educational experience. Since all the participants were graduate students completing masters or doctoral degrees, the results may be less applicable to adults who have not reached that educational level.

Instrumentation in this study was limited to self-report assessment instruments, which can compromise the reliability and validity of the results. Participants who complete self-report measures may respond in biased ways that do not accurately reflect the constructs under investigation. In addition to inherent limitations of using self-report instruments, there were instrumentation and experimental design issues which may dilute these results. The lack of control over contextual factors like when, how, and under what conditions the participants completed the instruments have limited the external validity of the results. Also, the participants might have been confused by the instructions for completing the instruments. Participants were asked on the information sheet to complete the PANAS-X based on the emotions they experienced while finishing the DIT-2. On the PANAS-X sheet, participants were instructed to report the affective experiences they had that day. Since the instructions were not completely consistent, they may have reported their affective experiences for the day instead of for the period of time where they were taking the DIT-2. This problem limits the validity and reliability of results.

Finally, this non-experimental design employed the DIT-2 as both a measure of moral development and an affective stimulus. Completing the DIT-2 alone is a passive task with no actual consequences attached to the moral decisions made by the participants. The affective experience of being isolated from others while making moral decisions that do not necessarily impact one's own life may be far less intense, or even qualitatively different than the affective experience associated with reasoning through a real-life moral dilemma that could involve relating to others, preparing for moral action, and facing immediate consequences. These methodological and design limitations may

have produced artificially low scores on the affect scales results since the context is passive and artificial.

Conclusions

The spirit of this investigation was rooted in combining two theoretically sound and empirically supported theories of moral development with another conceptually and empirically supported approach to understanding affective experience. Evaluated separately from each other, the participants' scoring patterns for each of the instruments were quite consistent with scoring patterns found in past research on these three separate theories. These results support the credibility of this study.

When the scores from the two instruments were analyzed together to look for differences in affective experiences across moral developmental groups, no statistically significant results were found. The overall lack of significant results in this study could lead to a number of conclusions, from the idea that affective experience plays only a minor role in moral decision making, as Kohlberg proposed, to the idea that overlapping developmental schemas, as defined by the Neo-Kohlbergians, may lead to similar affective experiences among people at different moral developmental levels. Also, it is possible that the stimulus did not engage affect to a degree that developmental differences could be detected, or that true differences in affective experience may have been masked by other methodological limitations.

Among the results, differences in scores on the Serenity scale of the PANAS-X approached statistical significance, and could afford a cautious interpretation that people at the Postconventional Schema Level (Level Three) of moral development may have lower serenity than those who score at either of the other moral developmental levels

because they have greater awareness of social problems, more complex and inclusive moral objectives, and they fully recognize their personal responsibilities in creating social systems. Moderate levels of positive affect and significantly lower levels of negative affect appear to coincide with justice reasoning and reflect the stream of affect that people tend to experience in everyday life. Moral decision making seems to be associated with positive affective experiences, and this relationship could have adaptive value in encouraging engagement in moral reasoning to resolve moral conflicts. These outcomes have potential for changing the way the psychologists comprehend and investigate the relationship between cognitive and affective phenomena in the moral domain.

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APPENDICES

APPENDIX A

INFORMATIONAL LETTER

INFORMATION SHEET
FOR
---The Affective Experience of Moral Decision Making---

You are invited to participate in a research study investigating the relationship between emotional experiences and moral development. This study is being conducted by Laura Haley Creel, Ed. S., under the supervision of Holly Stadler, Ph.D., professor and head of the Department of Counseling and Counseling Psychology at Auburn University. I hope to learn the extent to which adults at different stages of moral development have different emotional experiences as they reason through moral dilemmas. I also hope to learn whether or not age and education level impact the relationship between stage of moral development and emotional experiences. You were selected as a possible participant because you are a graduate student at Auburn University who is over the age of 19, and because you gave your permission to have your name and address information published by the Auburn University Office of Planning and Analysis.

If you decide to participate, please complete the three questionnaires included in this packet. Completion of all three questionnaires should take about one hour, and you are asked to complete all of them, one after the other, in one sitting. Do not complete the questionnaires at different times. Please complete the questionnaires in this order: Demographic Questionnaire, Defining Issues Test - Version 2 (DIT-2), and PANAS-X. As you complete the DIT-2, it is important for you to be aware of some of the emotions you are experiencing. Please report those emotions on the PANAS-X. After you have finished the questionnaires, place all three of them in the postage paid envelope I have provided for you. Please mail your completed questionnaires to me on or before Friday, October 15, 2004.
IMPORTANT: In order for your answers to remain anonymous, please DO NOT put your name or any other identifying information on any of the questionnaires.

You may experience some emotional discomfort as you complete the questionnaires. Since moral dilemmas found on the DIT-2 often touch on sensitive issues and/or present problems that may be difficult to solve, thinking about such moral dilemmas could arouse painful emotions. You are asked to recognize those emotions and record them on the PANAS-X. Should uncomfortable emotions arise from your participation in this project, you may discontinue completing the questionnaires and withdraw your participation. If your emotional discomfort persists and you become concerned about your mental health as a result of participating in this study, I urge you to seek professional help. In this packet I have provided a list of mental health providers in the Auburn/Opelika area who may be able to assist you.

Participation in this study is voluntary, and there is no treatment delivered or withheld in this study. Furthermore, participation in this research project delivers no known direct benefits. Your participation will be compensated by offering you the opportunity to win one of three $100 Wal-Mart gift cards. The odds of winning will be approximately 1 in

133, and you do not have to complete the research materials to enter or win a gift card. A postage-paid postcard has been provided in this packet so that you can put your contact information on it and send it to me, Laura Haley Creel. I will randomly draw three winners from the pool of postcards that I receive. The three winners will be notified and sent their gift cards within a week of the drawing.
IMPORTANT: Please DO NOT mail your postcard with your completed research materials. Mail the postcard separately so that your anonymity in this project will be protected.

Any information obtained in connection with this study will remain anonymous. Information collected through your participation will be used to fulfill the requirements of the degree of Doctor of Philosophy for Laura Haley Creel. Also, the information may be published in a professional journal or book, and/or it may be presented at a professional meeting. You may withdraw from participation, without penalty, at any time before mailing your completed questionnaires. However, after you have provided anonymous information you will be unable to withdraw your data after participation, since there will be no way to identify your individual information.

Your decision whether or not to participate will not jeopardize your future relations with Auburn University, the Department of Counseling and Counseling Psychology, or the Auburn University Office of Planning and Analysis.

If you have any questions I invite you to ask them now by contacting me, Laura Haley Creel, at (541) 461-1949, creellh@auburn.edu. If you have questions later, please use the same contact information, or contact my faculty advisor, Holly Stadler, at (334) 844-5160, stadlha@auburn.edu. Dr. Stadler and I will be happy to answer your questions.

For more information regarding your rights as a research participant you may contact the Office of Human Subjects Research by phone or e-mail. The people to contact there are Executive Director E.N. "Chip" Burson (334) 844-5966 (bursoen@auburn.edu) or IRB Chair Dr. Peter Grandjean at (334) 844-1462 (grandpw@auburn.edu) .

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

_____

Investigator's signature Date

APPENDIX B

RECRUITMENT AND FOLLOW-UP E-MAILS

(INITIAL RECRUITMENT E-MAIL)

**There is no need to reply to this e-mail. This is a notice about a research project.

Dear Auburn Graduate Student,

Hello, my name is Laura Haley Creel, and I am a doctoral candidate in the Department of Counseling and Counseling Psychology here at Auburn. I am collecting data for my dissertation on moral development and emotions. You have been selected to participate in this study because your name was randomly selected from a list of graduate students at Auburn. That list was provided by the AU Office of Planning and Analysis, to whom you gave permission to have your name and address added to their database.

In about a week, a packet of questionnaires will arrive at your home address via US Mail. If you decide to participate after reading the informational letter, the questionnaires will take about an hour to complete. I will provide a postage-paid envelope so that you can return the completed questionnaires to me. In addition, you will be invited to enter a drawing for one of three $100 Wal-Mart gift cards. Even if you decide not to participate, you may enter and win the drawing. The chances of winning one of the cards will be approximately 1 in 133.

Please note that all of the information that you give will be kept anonymous. Though you are not required to participate and there is no penalty for not participating, I urge you to consider completing and returning the questionnaires. I would greatly appreciate your help so that I can complete my dissertation and make a meaningful contribution to my discipline. Thank you for your time.

Sincerely,

Laura Haley Creel, Ed. S., NCC
Doctoral Candidate, Department of Counseling and Counseling Psychology
Auburn University

(FOLLOW-UP RECRUITMENT E-MAIL)

**There is no need to reply to this e-mail. This is a notice about a research project.

Dear Auburn Graduate Student,

Hello, this is Laura Haley Creel. I am the Auburn doctoral candidate who recently notified you about participating in my dissertation research project on emotions and moral development. By now you should have received the research packet at your home address. To those of you who have taken time to complete the questionnaires and return them to me, I want to express my genuine appreciation to you.

To those of you who have not yet completed the packet, I would like to urge you again to consider participating. As a graduate student myself, I realize that it is difficult for busy graduate students to find spare time to fill out some questionnaires. At the same time, we graduate students also know the value and importance of conducting research to benefit our respective disciplines. If you can find the time to help me with my dissertation, I would be most grateful. If you do decide to participate and return the questionnaires, please try to have the materials postmarked by October 15, 2004.

This will be the last e-mail that you will receive regarding this research project. As a final note, I would like to remind you that you can enter and win the drawing for one of three $100 Wal-Mart gift cards. Just make sure the postcard you return is postmarked on or before October 15, 2004. The winners will be notified by November 1, 2004. Thank you for your time, and good luck in the drawing.

Sincerely,

Laura Haley Creel, Ed. S., NCC
Doctoral Candidate, Department of Counseling and Counseling Psychology
Auburn University

APPENDIX C

MATERIALS RELATED TO THE PRIZE DRAWING

(POSTCARD TEMPLATE: BACK OF POSTCARD)

PLEASE ENTER ME IN THE WAL-MART GIFT CARD DRAWING!

NAME:_____

ADDRESS:_____

_____

PHONE NUMBER:_____

E-MAIL:_____

(POSTCARD TEMPLATE: FRONT OF POSTCARD)

Creel
3414 Korbel Street
Eugene, OR 97404

{stamp}
{was}
{provided}

Laura Haley Creel
3414 Korbel Street
Eugene, OR 97404

(LETTER TO NOTIFY WINNERS OF THE GIFT CARD DRAWING)

Laura Haley Creel, Ed. S., NCC
3414 Korbel Street
Eugene, OR 97404

Date

Winner of Drawing
Address of Winner

Dear [Name of Winner],

Not long ago you were asked to participate in my dissertation research project about moral development and emotions. You filled out a postcard to enter the drawing for a $100 Wal-Mart gift card. This letter serves to inform you that you have won the drawing. Congratulations!

Enclosed please find the gift card. You may redeem this card at any participating Wal-Mart location. I hope you will enjoy using it.

Sincerely,

Laura Haley Creel, Ed. S., NCC
Doctoral Candidate in Counseling Psychology
Department of Counseling and Counseling Psychology
Auburn University

Enclosure: one Wal-Mart gift card

APPENDIX D

REFERRAL RESOURCES

REFFERRAL LIST OF AUBURN-AREA MENTAL HEALTH PROVIDERS

Individual/Agency	**Services Available**	**Cost/Hour**
East Alabama Mental Health Center (334) 742-2700 (334) 821-0660	Individual and Group Therapy	$8 – 80 Based on income
Student Counseling Services (334) 844-5123	Individual and Group Therapy	No Charge
Auburn Univ. Psychological Services (334) 844-4889	Individual and Group Therapy	$25 – 55 Based on Income
Clinical Psychologists 248 E. Glenn Ave. (334) 821-3350	Individual and Group Therapy	$75 – 100
Anne Harzem 2204 Executive Park Dr., Opelika (334) 745-0923	Marriage, family, and individual therapy	$90
Nana Daranatsy 318 N. College St. (334) 821-9770	Individual and Group Therapy	$30 – 75 Based on income
Crisis Center (334) 821-8600	Phone Counseling	No Charge
Rape Counselors of East Alabama (334) 745-8634	Phone Counseling	No Charge

APPENDIX E

INSTRUMENTS

DEMOGRAPHIC QUESTIONNAIRE

Please circle or write in the response that best describes you.
Please give only one response per item.

1. What is your gender? Male Female

2. What is your age? _____

3. How many years of graduate study have you completed?

Less than 1 1 2 3 4 5 6 7 8 9 or more

4. What is your ethnic origin?

American Indian/Alaska Native

Hispanic

Asian/Pacific Islander

Black (non-Hispanic)

White (non-Hispanic)

Other (please describe) _____

5. What is your marital status?

Never Married Married Separated Divorced Widowed

6. What is your approximate numerical grade point average (GPA) (example: 2.84)?

_____

PANAS-X

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way today.
Use the following scale to record your answers:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____cheerful
_____disgusted
_____attentive
_____bashful
_____sluggish
_____daring
_____surprised
_____strong
_____scornful
_____relaxed
_____irritable
_____delighted
_____inspired
_____fearless
_____disgusted with self
_____sad
_____calm
_____afraid
_____tired
_____amazed
_____shaky
_____happy
_____timid
_____alone
_____alert
_____upset
_____angry
_____bold
_____blue
_____shy

_____active
_____guilty
_____joyful
_____nervous
_____lonely
_____sleepy
_____excited
_____hostile
_____proud
_____jittery
_____lively
_____ashamed
_____at ease
_____scared
_____drowsy
_____angry at self
_____enthusiastic
_____downhearted
_____sheepish
_____distressed
_____blameworthy
_____determined
_____frightened
_____astonished
_____interested
_____loathing
_____confident
_____energetic
_____concentrating
_____dissatisfied with self