

DEVELOPMENT OF AN INTEGRATED MODEL  
AND MEASURE OF THE MORAL DIMENSIONS  
OF JUSTICE AND CARE

By

CHRISTOPHER MICHAEL RAY

Bachelor of Science in Psychology  
University of Missouri - Rolla  
Rolla, Missouri  
2002

Master of Science in Counseling and Student Personnel  
Oklahoma State University  
Stillwater, Oklahoma  
2003

Submitted to the Faculty of the  
Graduate College of the  
Oklahoma State University  
in partial fulfillment of  
the requirements for  
the Degree of  
DOCTOR OF PHILOSOPHY  
July, 2007

© Copyright by Chris Ray 2007

All Rights Reserved

DEVELOPMENT OF AN INTEGRATED MODEL  
AND MEASURE OF THE MORAL DIMENSIONS  
OF JUSTICE AND CARE

Dissertation Approved:

Diane Montgomery

---

Dissertation Adviser  
Kay Bull

---

Al Carlozzi

---

Dale Fuqua

---

R. Steve Harrist

---

A. Gordon Emslie

---

Dean of the Graduate College

## ACKNOWLEDGEMENTS

As with any major undertaking, this dissertation could not have been completed without a tremendous amount of support. First, I would like to express my sincere gratitude to my advisor and chair, Dr. Diane Montgomery. From the time that I decided to pursue doctoral studies full-time, she served as a continuous source of encouragement and support. Through her efforts and example, I have witnessed first-hand what it truly means to be a scholar. I was also fortunate to be supported by a committee of wonderful individuals who had my best interest at heart. My outside committee member, Dr. Dale Fuqua, engaged in countless hours of conversation to help me narrow the direction of this study. I am fortunate to consider him both a mentor and a friend. Drs. Steve Harrist, Kay Bull, and Al Carlozzi provided insightful suggestions and numerous resources to promote my success. Each of these individuals will serve as exemplars throughout my career.

In addition to the support from the faculty in the College of Education, including many who I have not named here, I have been privileged to work with capable fellow graduate students. Jerilyn Thorman has continuously challenged me to do my best, whether by holding me accountable at various stages of my study, or by setting exceptionally high standards as a student. Kevin Fink has aided me immeasurably in the development of my research ideas, both for this study and for future research. I also wish to thank the several other doctoral students who graciously served as subject matter experts for this study – you know who you are. I know that each of you will go far.

Finally, I wish to acknowledge the generous support of my friends and family. My parents, Loran and Cindy, instilled in me the value of hard-work and determination. Without their support, I would have never completed college in the first place. Dr. Carol McBryde, Aaron Berg, Clint Stephens, and my wife, Hope, always provide sounding boards for my thoughts. Hope was particularly generous with her patience and understanding, especially as this dissertation neared its end and the time consumed increased exponentially. While my son, Michael, could not choose how to assist me, he was kind enough to be a calm and cheerful baby, allowing me to relax and enjoy my precious time with him. I cannot thank Hope or Michael enough for the time that was sacrificed to reach this goal, and I eagerly anticipate much more time together in the future.

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
Background of the Problem .....	4
Limitations of One-Dimensional Measures.....	5
Limitations of Bi-Dimensional Measures .....	6
Limitations of Care Measures.....	6
Limitations of Scenario-Based Measures.....	7
Statement of the Problem.....	7
Purpose of the Study.....	8
Research Questions.....	8
Implications of the Study .....	9
Definitions of Terms.....	10
Limitations of the Study.....	12
Chapter Organization.....	12
II. REVIEW OF LITERATURE.....	14
Piaget’s Moral Development of the Child .....	16
Kohlberg’s Theory of Moral Development .....	19
Stages of Moral Development .....	19
Pre-Conventional Level .....	19
Conventional Level .....	20
Post-Conventional Level.....	21
Rest’s Four Component Model .....	22
Moral Sensitivity.....	23
Moral Judgment .....	24
Moral Motivation .....	24

Chapter	Page
Moral Character .....	25
The Ethic of Justice and Moral Philosophy .....	26
Deontological Ethics .....	26
Gilligan’s Different Voice .....	27
Gender Differences .....	28
Dabrowski’s Positive Disintegration .....	29
Hoffman’s Prosocial Moral Development .....	30
The Ethic of Care and Moral Philosophy .....	31
Character/Virtue Ethics .....	31
The Justice-Care Debate .....	32
Current Moral Development Instruments .....	34
One-Dimensional Measures .....	35
Bi-Dimensional Measures .....	36
Definition of Care .....	36
Scenario-Based Research .....	37
The Components of Care .....	37
Empathic Awareness .....	39
Compassionate Ideal .....	40
Interpersonal Relatedness .....	41
Care-Efficacy .....	42
Summary .....	44
 III. METHOD.....	 46
Participants.....	47
Phase I .....	47
Phase II .....	48
Phase III.....	50
Instrumentation.....	51
Development of the <i>Integrated Justice and Care Scales</i> .....	52
<i>Morally Debatable Behaviors Scales</i> .....	53
<i>Prosocial Tendencies Measure</i> .....	54
<i>Marlowe-Crowne Social Desirability Scale</i> .....	55

Chapter	Page
Demographic Survey.....	55
Procedure .....	55
Phase I .....	55
Phase II.....	56
Phase III.....	57
 IV. RESULTS .....	 59
Phase I.....	61
Expert Judges.....	61
Phase II.....	63
Initial Considerations .....	63
Item Analyses .....	65
Structural Analyses .....	66
Moral Sensitivity .....	66
Moral Judgment.....	67
Moral Motivation .....	69
Moral Character.....	70
Empathic Awareness .....	71
Compassionate Ideal.....	72
Interpersonal Relatedness .....	74
Care-Efficacy .....	75
Structure of the 66-item <i>Integrated Justice and Care Scales</i> .....	77
Factor Analysis of the Scale Factor Scores .....	80
Group Effects.....	82
Interaction Effects .....	83
Gender Effects.....	84
Construct Validity.....	87
Discriminant Validity.....	91
Phase III .....	93
Test-Retest Reliability.....	93
 V. DISCUSSION .....	 95
Summary of Findings .....	96
Conclusions .....	98
Components of Care Model.....	98
<i>Integrated Justice and Care Scales</i> .....	100



Chapter	Page
Moral Sensitivity .....	102
Moral Judgment.....	102
Moral Motivation .....	103
Moral Character.....	104
Empathic Awareness .....	105
Compassionate Ideal.....	106
Interpersonal Relatedness .....	107
Care-Efficacy .....	108
Relationship between Dimensions of <i>Justice</i> and <i>Care</i> .....	109
Gender Differences .....	109
Limitations.....	110
Implications.....	112
Implications for Theory.....	113
Implications for Research.....	115
Implications for Practice .....	116
REFERENCES.....	117
APPENDICES .....	132
Appendix A – Human Subject’s Research.....	133
Appendix B – Participant Informed Consent.....	135
Appendix C – Integrated Justice and Care Scales Item Analysis .....	142
Appendix D – Integrated Justice and Care Scales.....	156
Appendix E – Morally Debatable Behaviors Scales .....	161
Appendix F – Prosocial Tendencies Measure.....	163
Appendix G – Marlowe-Crowne Social Desirability Scale.....	166
Appendix H – Demographic Survey .....	169
Appendix I – Assessment of Content Validity for <i>Integrated Justice and Care Scales</i> .....	173
Appendix J – Item Descriptive Statistics for <i>Integrated Justice and Care Scales</i> .....	177

Chapter	Page
Appendix K – Zero-Order Correlation Matrix for the <i>Integrated Justice and Care Scales</i> .....	180
Appendix L – Zero-Order Correlation Matrix for the 66-Item <i>Integrated Justice and Care Scales</i> .....	189
Appendix M – Random Data Parallel Analysis for 66-Item <i>Integrated Justice and Care Scales</i> .....	200
Appendix N – Principal Axis Factor Analysis for 66-Item <i>Integrated Justice and Care Scales</i> .....	203

## LIST OF TABLES

Table	Page
I. Demographic Information for Students Participating in Phase II Data Collection .....	49
II. Demographic Information for Students Participating in Phase III Data Collection .....	50
III. Expert Judges' Rankings for the <i>Integrated Justice and Care Scales</i> .....	62
IV. <i>Integrated Justice and Care Scale</i> Reliabilities .....	65
V. Principal Axis Factor Analysis for <i>Moral Sensitivity Scale</i> .....	67
VI. Principal Axis Factor Analysis for <i>Moral Judgment Scale</i> .....	68
VII. Principal Axis Factor Analysis for <i>Moral Motivation Scale</i> .....	69
VIII. Principal Axis Factor Analysis for <i>Moral Character Scale</i> .....	71
IX. Principal Axis Factor Analysis for <i>Empathic Awareness Scale</i> .....	72
X. Principal Axis Factor Analysis for <i>Compassionate Ideal Scale</i> .....	73
XI. Principal Axis Factor Analysis for <i>Interpersonal Relatedness Scale</i> .....	74
XII. Principal Axis Factor Analysis for <i>Care-Efficacy Scale</i> .....	76
XIII. Means, Standard Deviations, and First-Order Correlations between Scale Factor Scores .....	81
XIV. Principal Axis Factor Analysis for <i>Integrated Justice and Care Scales</i> .....	82
XV. Means, Standard Deviations, and Effect Sizes for the <i>Integrated Justice and Care Scales</i> for Two Groups .....	85
XVI. Summary of Canonical Discriminant Functions for Gender.....	86

Table	Page
XVII. Correlations between the <i>Integrated Justice and Care Scales</i> and the <i>Morally Debatable Behaviors Scales (MDBS)</i> .....	88
XVIII. Correlations between the <i>Integrated Justice and Care Scales</i> and the <i>Prosocial Tendencies Measure (PTM)</i> .....	90
XIX. Correlations between the <i>Integrated Justice and Care Scales</i> and the <i>Marlowe-Crowne Social Desirability Scale (M-CSDS)</i> .....	92
XX. Test-Retest Reliability Estimates for the <i>Integrated Justice and Care Scales</i> .....	94

## LIST OF FIGURES

Figure	Page
I. Integrated Model of the Moral Dimensions of Justice and Care.....	38
II. Scree Plot for 66-item <i>Integrated Justice and Care Scales</i> .....	78
III. Parallel Analysis for 66-item <i>Integrated Justice and Care Scales</i> .....	78

## CHAPTER I

### INTRODUCTION

There is a common perception that our society is in a state of moral decline (Fukuyama, 1999; Romanowski, 2005). Instances of school violence have dominated the news for the past several years, as have reports of teenage gang association. According to Mazzotti and Higgins (2006), the number of minors in the juvenile justice system has grown exponentially in recent years. A report by the Coalition for Juvenile Justice (2003) indicates that the number of minors held in juvenile detention facilities rose 72% during the 1990's, and in 2002, over two million juveniles were arrested, with 31% being under the age of 15 (Office of Juvenile Justice and Delinquency Prevention, 2004). Occurrences of seemingly unethical behaviors among corporate executives, such as misappropriating finances or excessive retirement packages and other concerns such as the recent drug scandals plaguing baseball further demonstrate lapses of moral judgment and behavior. Given these highly visible concerns, it is imperative that scholars continue to research and expand moral theory. Such practices will undoubtedly lead to a greater understanding of how and why a person behaves in a morally appropriate manner, which can lead to enhanced educational efforts and ultimately to a better society.

The field of moral philosophy has examined such ethical concerns for centuries. Various ethical perspectives exist concerning the nature of human behavior. Among these, deontological ethics, championed by philosophers such as Kant and Rawls,

emphasize specific principles that are obligatory regardless of the consequences to the individual in the dilemma or others involved. Additionally, consequential ethics such as Mill's utilitarianism focus upon the consequences involved in behaving in a certain manner. According to this view, actions are moral if the consequences of the action are more favorable than the consequences of inaction. Further, proponents of virtue or character ethics, such as Aristotle and Plato, emphasize the development of strong habits of character upon which the individual acts. Additionally, effort should be made to avoid the development of bad character traits, particularly during childhood.

In *Beyond Good and Evil*, Nietzsche (1866/1966) indicated that moral issues should be considered in the realm of psychology, as psychology is "the path to fundamental problems" (p. 32). The modern moral psychology movement has a history that spans across the past seventy years, beginning with Freud's (1925/1961) involvement. However, Piaget (1932/1965) is commonly considered to have initiated the current focus through his study of the rule-making process among children playing games. Among the current emphases in moral theory, Kohlberg's (1958) stages of moral development have led the way, beginning with his doctoral dissertation, in which he asserted that moral development occurs along a sequence of stages that are based primarily upon notions of duty and justice. Individuals begin with a self-focused perspective concerning what is best for them, and progress sequentially through a series of stages that culminate in an adherence to universal ethical principles. According to Kohlberg (1969), however, not all individuals achieve this final stage, and in fact, most do not exceed the fourth stage.

Following in this line of work, Rest's (1983) Four Component Model further expands upon Kohlberg's ideas. According to this model, a person's ultimate moral behavior is a more complex process involving four componential parts: *Moral Sensitivity*, *Moral Judgment*, *Moral Motivation*, and *Moral Character*. The *Moral Judgment* component encompasses the process of reasoning established by Kohlberg, while the other components influence how the individual acts upon that reasoning (Rest, 1984). Within this model, none of the components precede the others, but instead they are integrated together to result in moral behavior.

Among the major criticisms of the *Justice*-based approaches to moral psychology, Gilligan (1982) asserted that some individuals make decisions based upon justice while others focus instead upon their concern for and interdependence with, other people. Gilligan (1982) believed that Kohlberg's model had a potential bias against women since his research had been conducted only with males and because males were more likely to reason in terms of rules and justice, thus resulting in them being placed in higher stages. Additionally, she asserted that some individuals reasoned according to the moral virtues of duty and justice whereas others reasoned according to the moral virtues of care and connectedness. To supplement Kohlberg's model according to these beliefs, Gilligan introduced a model that included three levels designed to be comparable to Kohlberg's model. According to Gilligan, an individual operating from a *Care* perspective progresses from a sole focus upon survival through self-sacrifice to an integration of his or her own needs with those of others.

Following Rest's (1983) understanding that moral action is much more complex than reasoning alone, a new model was developed to expand Gilligan's *Care* model as



well. According to this model, a person's *Care*-based behavior is a more complex process also involving four componential parts: *Empathic Awareness*, *Compassionate Ideal*, *Interpersonal Relatedness*, and *Care-Efficacy*. The *Compassionate Ideal* component expands upon Gilligan's work, while the other components influence the individual's ultimate action based upon their empathy, connection to the others involved, and their perception of their abilities. Similar to Rest's (1983) model, none of the components precede the others, but instead they are integrated together to result in moral action.

### Background of the Problem

Research concerning moral theory has yet to determine the relationship between the two prominent dimensions of moral psychology, or even if the *Care* dimension truly exists. The *Justice* dimension has been well defined, most notably beginning with Kohlberg's doctoral dissertation (1958). It has been consistently supported using various measures such as the Defining Issues Test (Rest, Cooper, Coder, Masanz, & Anderson, 1974), the Defining Issues Test, Version 2 (Rest, Narvaez, Thoma, & Bebeau, 1999), and the Moral Judgment Test (Lind & Wakenhut, 1985). Research utilizing these measures has supported the role of *Justice*-based moral reasoning as a component of moral action, even if it does not comprise the entirety of said behavior.

Rest and his colleagues (1999), however, indicated that while *Justice* issues may not solely be responsible for moral action, *Justice* and *Care* are not distinct dimensions of moral theory consisting of different paths and endpoints. Evidence that females score as highly as males on measures of moral reasoning indicates that the *Justice* dimension adequately addresses moral action for all individuals (Jorgensen, 2006). Additional

research has further supported Rest's claim that there is not a clear difference in moral reasoning between males and females (Crown & Heatherington, 1989; Friedman, Robinson, & Friedman, 1987; Galotti, 1989; Walker, 1984, 1989). However, this research has been conducted primarily utilizing *Justice*-based measures, including the Defining Issues Test, that assume the *Care* dimension does not exist. As measures emphasizing only the *Justice* dimension are utilized continually, limited research concerning the *Care* dimension or both dimensions together has been conducted.

Research conducted to examine the different dimensions, however, has supported Gilligan's dimension of *Care* (Gibbs, Arnold, & Burkhart, 1984; Gilligan, 1982; Gilligan & Attanucci, 1988; Liddell, 1990; Lyons, 1983; Pratt, Golding, Hunter, & Sampson, 1988; Rothbart, Hanley, & Albert, 1986). While the results of the previous studies do not all support gender differences, the research methods take into account the possibility of the two distinct dimensions. As a result, initial evidence is provided to indicate the existence of the *Care* dimension.

#### *Limitations of Current One-Dimensional Measures*

While a variety of instruments exist as noted above, each of the instruments has various limitations for researchers. Instruments that measure *Justice* or *Care* alone overlook the potential dimensionality of the construct. Measures that address only the *Justice* dimension fail to consider the impact of interpersonal relationships upon moral actions. As a result, such measures may be inherently biased against females or those from non-Western cultures. Further, the existing measures of *Justice* focus solely upon one component within the *Justice* dimension, and thus fail to account for the complexity

of morality. On the other hand, measures that only focus upon the *Care* dimension of moral theory do so without considering the research supporting the role of duty and justice, at least for some individuals.

#### *Limitations of Current Bi-Dimensional Measures*

Research concerning the relationship of the *Justice* and *Care* dimensions has failed to reach a consensus. Some researchers have indicated that they are polar opposites of one another (e.g., Botes, 2000; Liddell, 1990; Lyons, 1983), while yet others indicate that the two dimensions are complementary to one another (e.g., Callan, 1992; Jorgensen, 2006; Reed, 1997). As such, the few instruments that do measure both dimensions simultaneously were designed with an inherent bias. Instrument developers have created their measures based upon the assumption that the two dimensions were either completely independent or at opposite ends of the same moral spectrum. Because of these resulting structures, these instruments have not allowed researchers to address adequately the relationship between the two dimensions.

#### *Limitations of Care Measures*

Instruments measuring the *Care* dimension seem to lack an adequate operational definition and have been unable to provide consistent research findings. While several instruments have been developed to measure the moral dimension of *Care* independently, such as the Interview Assessment (Lyons, 1983), and in conjunction with the *Justice* dimension, such as the Measure of Moral Orientation (Liddell, 1990), they appear to be based upon loose definitions of Gilligan's construct of *Care*. Unlike Kohlberg's *Ethic of*

*Justice*, which is based largely in deontological ethics, the *Ethic of Care* as advanced by Gilligan (1982) and Noddings (1984) lacks a philosophical basis. This characteristic advances additional criticism without the added support provided by well-established philosophical fields.

#### *Limitations of Scenario-Based Measures*

According to Rest (1984), even minor changes in a situation can influence moral action in a considerable way. Research has supported this concern, demonstrating that ethical decision-making varies according to the specifics of the situation (Banerjee, Cronan, & Jones, 1998; Benham & Wagner, 1995; Jones, 1991). As such, measures of morality that are based upon scenarios, especially ones that include descriptive details of the individuals involved, may not be appropriate for considering moral action outside the specific situations described. One solution to this limitation is to classify moral factors into the psychological components they represent, allowing enhanced generalizability (Rest, 1984). Even doing so, however, a wide range of scenarios must be employed to aid generalizability. While the Defining Issues Test, Version 2 (Rest, et al., 1999) has attempted to correct for this limitation, other research methods that are not based upon scenarios warrant further consideration.

#### Statement of the Problem

Research has failed to support consistently *Justice* and *Care* as two distinct dimensions of moral theory. The frequent utilization of measures designed solely to assess one component of the *Justice* dimension has served to compound this issue, as has

the use of measures of the *Care* dimension that lack a meaningful operational definition. Further, due in part to these measurement limitations, research has been unable to determine adequately the relationship between the *Justice* and *Care* dimensions. The few instruments that do measure both *Justice* and *Care* do so with an inherent bias based upon the developer's assumption regarding the relation of the dimensions.

### Purpose of the Study

The purpose of this study was to develop an operational definition of the *Care* dimension of moral theory and to develop an objective instrument to measure this definition and the dimension of *Justice* as represented by Rest's (1983, 1984) Four Component Model. Further, this study examined the psychometric properties of the newly developed instrument as well as the relationship between *Justice* and *Care*, including an examination of demographic differences such as gender.

### Research Questions

The three primary research questions underlying this study were as follows:

1. Can the dimension of *Care* be operationally defined in relation to moral theory, and can this definition be measured in conjunction with the dimension of *Justice*, as defined by Rest's Four Component Model, through the development of a new psychometric instrument?

2. What is the relationship between *Justice* and *Care* as measured through this new instrument, and will this relationship be related to gender and other demographic differences?
3. How does this new instrument relate to preexisting measures of moral judgment and/or orientation (e.g., the *Morally Debatable Behaviors Scales* and the *Prosocial Tendencies Measure*) and social desirability (e.g., the *Marlowe-Crowne Social Desirability Scale*)?

### Implications of the Study

This study attempted to make several advancements in the area of moral theory research. First, an operational definition of the dimension of *Care* was developed, thus allowing for closer examination through the development of additional measurement instruments. This process served to integrate Gilligan's *Justice* and *Care* dimensions of moral theory with traditional models. Next, a new psychometric instrument was developed that allows the examination of the relationship between the *Justice* dimension, as represented by Rest's (1983, 1984) Four Component Model, and the *Care* dimension, as represented by this new operational definition. Additionally, the nature of this instrument allows researchers to consider whether the two dimensions are related or independent. The results of this study indicate a direct, positive relationship that warrants further examination. Further, as the new instrument does not rely upon moral dilemmas, it is hoped that the results are more generalizable as well.

## Definition of Terms

The following terms and constructs are defined for the purposes of this study:

*Moral Theory* – The area of philosophical and psychological theory that concerns ethical values. This broad area includes the ethical decision-making process, moral reasoning, as well as the implementation of ethical values, the moral action, and the underlying characteristics of the person involved in the moral situation, the moral agent.

*Moral Development* – The portion of an individual's growth that focuses upon the identification and clarification of personal ethical values. This growth process is generally measured by the individual's ability to reason about moral situations based upon these values.

*Ethic of Justice (Justice)* – The dimension of moral theory that emphasizes duty, justice, and individual rights. It is characterized by objectivity, rationality, and separation from the moral situation or those involved (Liddell, 1990). Moral dilemmas within this context are often considered conflicts over the rights of those involved. A person operating within a *Justice* framework treats others fairly with an emphasis upon equality. The four components of the *Justice* dimension are *Moral Sensitivity*, *Moral Judgment*, *Moral Motivation*, and *Moral Character*.

*Moral Sensitivity* – An awareness of how an individual's actions influence the rights of other people (Rest, 1984). This sensitivity assumes a particular awareness of and concern for the just treatment of all people.

*Moral Judgment* – A process of ethical reasoning in which the merit of an individual's actions is considered based upon principles of justice, duty, and

responsibility (Rest, 1984). Kohlberg's stages of moral development and Rest's Defining Issues Test emphasize this moral component.

*Moral Motivation* – An individual's prioritization of certain values and actions above other values and actions (Rest, 1984). As with other *Justice*-based components, this prioritization is based upon principles of justice, duty, and responsibility.

*Moral Character* – An individual's inherent personal traits that advance their actions (Rest, 1984). Strong moral character is considered necessary for the individual to act in a just and morally appropriate manner toward other people.

*Ethic of Care (Care)* – The dimension of moral theory that emphasizes relationships and concern for other people. It is characterized by subjectiveness, intuition, and responsiveness (Liddell, 1990). Moral dilemmas within this context are often based upon connections and attachment with other people, as well as avoiding harm to anyone involved. A person operating within a *Care* framework treats others in manner that considers their needs and acts accordingly. The four components of the *Care* dimension are *Empathic Awareness*, *Compassionate Ideal*, *Interpersonal Relatedness*, and *Care-Efficacy*.

*Empathic Awareness* – An individual's awareness of and connection to another individual's situation, which results in a sense of identification with that person's situation and a desire to assist that person.

*Compassionate Ideal* – An individual's desired response to a moral situation that is based upon their concern for another person or people, regardless of relationships with those involved or their ability to assist. Gilligan's *Care*-based stages of moral development emphasize this component.



*Interpersonal Relatedness* – An individual’s awareness and acceptance of both the similarities and differences that exist between them self and another person or people involved in a situation.

*Care-Efficacy* – An individual’s beliefs about his or her own capabilities to help another person in need of assistance (Ray & Fink, 2007).

### Limitations of the Study

The sample for this study was limited as participants were college students who volunteered for the study, typically in order to obtain some form of academic credit. Additionally, most students were studying psychology, which may have inherently biased the sample. These limitations may result in findings that are not highly generalizable, leading to different results from other samples.

Further, the resulting instrument was developed in a manner to represent adequately the dimensions of *Justice* and *Care*. However, due to length limitations of this current study combined with sample size restrictions, the complete structure of eight components did not fully emerge through the analyses. As such, this study was an attempt to develop the *Justice* and *Care* dimensions only, with future research aimed at further developing the four components within each dimension. Replication with larger sample sizes will aid in the process.

### Chapter Organization

In pursuing the purpose of this study, the organization of the remainder of the dissertation is as follows:

Chapter II – The primary purpose of the second chapter is to provide an overview of major moral theories, including those presented by Piaget, Kohlberg, Rest, Gilligan, Dabrowski, and Hoffman. Additionally, a new Components of Care model is presented as a way to conceptualize the dimension of *Care* as it relates to moral development. A review of several existing measures of moral development, judgment, and orientation are also provided.

Chapter III – The third chapter provides specific details regarding study’s design and methodology. As this study involved the development and evaluation of an objective instrument to measure the *Justice* and *Care* dimensions of moral theory, information is provided concerning the reliability and validity analyses in addition to the development of the initial instrument.

Chapter IV – The fourth chapter presents the results of the instrument development and empirical findings, including the results of the principal axis factor analyses. Several forms of the instrument’s reliability and validity are assessed and described.

Chapter V – The fifth and final chapter provides a discussion of the study as well as provides initial conclusions. The implications of the statistical analyses are discussed in relation to the research questions, and suggestions for future research are provided.

## CHAPTER II

### REVIEW OF LITERATURE

Moral development research has been at the forefront of psychology for more than fifty years. Throughout that time, various theories have emerged, some expanding upon existing theories while others take moral theory in new directions. While Freud (1925/1961) focused considerable attention upon the moral concerns of his clients, Jean Piaget (1932/1965) is commonly considered to have initiated the current emphasis upon moral theory through his examination of the adherence to rules among children playing games. Expanding upon Piaget's work, Kohlberg (1958) developed his well-known stages of moral development, which indicated a progression of moral reasoning. Rest and his colleagues (1974) further expanded Kohlberg's work by introducing four components that together shape moral action from a *Justice*-based perspective. Kohlberg's theory constitutes *Moral Judgment* and is but one of those components, with *Moral Sensitivity*, *Moral Motivation*, and *Moral Character* serving as the other three. While research regarding any of the components other than *Moral Judgment* is currently limited, the influence of these four components upon moral action is widely accepted (Walker, 2002).

Other scholars, however, have indicated that *Justice* is but one dimension of moral theory, and it may be inherently biased against those who view virtues other than duty and justice as primary in determining moral actions (Blum, 1980). Among the most influential theorists, Gilligan (1982) indicated that some individuals prefer relationships

and concern for others to be an important moral virtue, and they are perhaps more important than duty and justice for some individuals. While Gilligan's work has faced much criticism over the past 25 years, her *Ethic of Care* has commonly been accepted within moral theory (Jorgensen, 2006). Further support for relationship-based morality is provided by Dabrowski's (1964) Theory of Positive Disintegration, which views moral growth as the establishment of emotional qualities. Additionally, Hoffman (1984) indicated that sensitivity to others is central to moral theory, and therefore emphasizes the role of empathy in moral theory.

Current measures within moral psychology face a variety of limitations. Among the most popular measures, the Defining Issues Tests (Rest, et al., 1974; Rest, et al., 1999) and the Moral Judgment Test (Lind & Wakenhut, 1985) have an inherent bias against the *Care* dimension. Specifically, Rest and his colleagues (1999) have argued against two dimensions of morality, but asserted instead that *Justice* must be part of any theory (Jorgensen, 2006). This bias seems to ignore the potential influence of *Care* upon moral behavior. On the other hand, measures that incorporate both *Justice* and *Care* do so with an assumption that the two dimensions are either unrelated or polar opposites. They also are based upon a limited definition of *Care*. Additionally, most measurements currently in use utilize scenarios to determine an individual's level of moral development. As indicated by Rest (1984), the use of scenarios limits the generalizability of the results as each situation is different.

With those limitations in mind, it becomes necessary to expand the definition of *Care* in order to integrate it with *Justice*-based models. Upon reviewing the literature, four components of the *Care* dimension become apparent: *Empathic Awareness*,

*Compassionate Ideal, Interpersonal Relatedness, and Care-Efficacy.* The *Compassionate Ideal* component expands upon Gilligan's work, while the other components influence the individual's ultimate action based upon his or her empathy, connection to the others involved, and perception of his or her own abilities. These components are consistent with Rest's notion that moral behavior is more complex than reasoning, whether that is based upon virtues of *Justice* or *Care*. Also similar to Rest's (1983) model, none of the components precede the others, but instead they are integrated together to result in moral action.

This new Components of Care model includes Hoffman's emphasis upon empathy, particularly through the first component, as well as Slote's (1998) requirement that models of morality include an understanding of relationships. Additionally, the model incorporates the person's perception of his or her ability to assist another person, which may be a necessary component to moral action as it is in other areas of behavior (Bandura, 1977).

### Piaget's Moral Judgment of the Child

Piaget (1932/1965) is one of the first moral development theorists whose work is still relevant today. His research began by studying stages of rule following in children, followed by his "Consciousness of Rules" stages. These later developed into his preliminary theory of moral development. Stemming from Piaget's work, Kohlberg offered further insight, which was then expanded and revised by Gilligan, among others. More recently, Rest and his colleagues (Rest, 1983; Rest, Narvaez, Bebeau, & Thoma, 1999; Rest, Narvaez, Thoma, & Bebeau, 1999; Thoma, 2002) have developed the Four

Component Model to expand further the ideas put forward by Piaget, Kohlberg, Gilligan, and others.

According to Piaget (1932/1965), all development emerges from action. Individuals construct and reconstruct their knowledge of the world because of interactions with their environment. Based on his observations of children's application of rules when playing, Piaget determined that morality, too, could be considered a developmental process.

In addition to examining children's understanding of rules about games, Piaget interviewed children regarding acts such as stealing and lying. When asked what a lie is, younger children consistently answered that they are "naughty words." When asked why they should not lie, younger children could rarely explain beyond the forbidden nature of the act: "because it is a naughty word." However, older children were able to explain, "because it isn't right," and "it wasn't true." Children who were even older indicated an awareness of intention as relevant to the meaning of an act. For example, "a lie is when you deceive someone else." From his observations, Piaget concluded that children begin in a "heteronomous" stage of moral reasoning. This stage is characterized by a strict adherence to rules and responsibilities and complete obedience to any authority.

This heteronomy results from two factors. The first factor is the young child's cognitive structure. According to Piaget, the thinking of young children is characterized by egocentrism. Specifically, young children are unable to take into account simultaneously their own view and the perspective of someone else. This egocentrism leads children to project their own thoughts and wishes onto others. It is also associated with the unidirectional view of rules and power associated with heteronomous moral

thought, and various forms of “moral realism.” Moral realism is associated with “objective responsibility,” which is valuing the letter of the law above the purpose of the law. As a result, young children are more concerned about the outcomes of actions rather than the intentions of the person acting. Moral realism is also associated with the young child’s belief in “immanent justice.” This is the expectation that punishment automatically follows acts of wrongdoing.

The second major contributor to heteronomous moral thinking in young children is their relative social relationship with adults. In the natural authority relationship between adults and children, power is handed down from the adult to the child. The relative powerlessness of young children, coupled with childhood egocentrism feeds into a heteronomous moral orientation. However, through interactions with other children in which the group seeks to play together in a way all find fair, children often find this strict heteronomous adherence to rules sometimes problematic. As children consider these situations, they develop towards an “autonomous” stage of moral reasoning. This second stage is characterized by the ability to consider rules critically and selectively apply these rules based on a goal of mutual respect and cooperation. The ability to act from a sense of reciprocity and mutual respect is associated with a shift in the child’s cognitive structure from egocentrism to perspective taking. Coordinating one’s own perspective with that of others means that what is right needs to be based on solutions that meet the requirements of fair reciprocity. Thus, Piaget viewed moral development as the result of interpersonal interactions through which individuals work out resolutions that all deem fair. Ironically, this autonomous view of morality as fairness is more compelling and leads to more consistent behavior than the heteronomous orientation held by younger children.

## Kohlberg's Theory of Moral Development

Kohlberg (1958, 1969, 1971, 1984) modified and expanded Piaget's work, and laid the groundwork for the current debate within psychology concerning moral psychology. Consistent with Piaget, he proposed that children form ways of thinking through their experiences that include understandings of moral concepts such as justice, rights, equality, and human welfare. Kohlberg followed the development of moral judgment beyond the ages studied by Piaget, and determined that the process of attaining moral maturity took longer and was more gradual than Piaget had proposed (Kavathatzopoulos, 1991).

### *Stages of Moral Development*

Based on his research, Kohlberg identified six stages of moral reasoning grouped into three major levels. Each level represents a fundamental shift in the social-moral perspective of the individual as he or she advances from selfishness to adhering to universal principles. Within each level, two stages represent smaller shifts in moral judgment. The first three stages of Kohlberg's theory share common features with Piaget's theory, while the final three stages serve as an expansion of Piaget's work (Crain, 2000).

#### *Pre-Conventional Level*

At the first level, the pre-conventional level, a concrete, individual perspective characterizes a person's moral judgments. Within this level, a stage one heteronomous orientation focuses on avoiding breaking rules that are backed by punishment, obedience



for its own sake and avoiding the physical consequences of an action to persons and property. As in Piaget's framework, the reasoning of stage one is characterized by egocentrism and the inability to consider the perspectives of others. At stage two, there is the early emergence of moral reciprocity. The stage two orientation focuses on the practical value of an action. Reciprocity is of the form, "you scratch my back, and I'll scratch yours." The Golden Rule essentially becomes, "If someone hits you, you hit them back." What is right is what is fair in the sense of an equal exchange. At stage two, there is an understanding that everyone has their own interests to pursue and these interests conflict, making right relative to the context.

### *Conventional Level*

Individuals at the conventional level of reasoning, however, have a basic understanding of conventional morality, and reason with an understanding that norms and conventions are necessary to uphold society. They tend to be self-identified with these rules, and uphold them consistently. They view morality as acting in accordance with what society defines as right. Within this level, individuals at stage three are aware of shared feelings, agreements, and expectations that take primacy over individual interests. People at stage three define what is right in terms of what is expected by people close to one's self, and in terms of the stereotypic roles that define being good, such as a good brother, mother, or teacher. Being good means keeping mutual relationships, such as trust, loyalty, respect, and gratitude. The perspective is that of the local community or family. There is not yet a consideration of the generalized social system. Stage four marks the shift from defining what is right in terms of local norms and role expectations

to defining right in terms of the laws and norms established by the larger social system. This is the “member of society” perspective in which one is moral by fulfilling the actual duties defining one’s social responsibilities. One must obey the law except in extreme cases in which the law comes into conflict with other prescribed social duties. Obeying the law is seen as necessary in order to maintain the system of laws that protect everyone.

### *Post-Conventional Level*

The post-conventional level is characterized by reasoning based on principles, using a “prior to society” perspective. These individuals reason based on the principles that underlie rules and norms, but reject a uniform application of a rule or norm. While two stages have been presented within the theory, only one, stage five, has received substantial empirical support. Stage six remains a theoretical endpoint that rationally follows from the preceding five stages. Essentially, this last level of moral judgment entails reasoning rooted in the ethical fairness principles from which moral laws would be devised. Laws are evaluated in terms of their coherence with basic principles of fairness rather than upheld simply based on their place within an existing social order. Thus, there is an understanding that elements of morality, such as regard for life and human welfare, transcend particular cultures and societies and are to be upheld irrespective of other conventions or normal obligations. The first five stages have all been empirically supported by findings from longitudinal and cross-cultural research (Power, Higgins, & Kohlberg, 1989).

## Rest's Four Component Model

According to Rest (1983), moral psychology is far more complex than merely consisting of a person's reasoning and judgment regarding a moral dilemma. The individual's resulting moral behavior must be included in any definition of morality (Rest, 1984). Behavior is considered moral only through knowing the observable behavior and the underlying psychological processes. Further, traditional models that break morality according to cognitive, affective, and behavioral domains serve to promote different lines of research while failing to represent adequately the processes involved in morality (Rest, 1984). Instead, Rest and his colleagues argue that morality is divided into at least four components: moral sensitivity, moral judgment, moral motivation, and moral character. These four components represent the internal psychological processes necessary to behave in a morally acceptable manner (Narvaez & Rest, 1995). According to this model, moral behavior cannot be predicted from a single variable or process, but instead requires the interaction of the entire set of processes.

This *Four Component Model* further serves to expand Kohlberg's theory of moral development into four psychological processes, both cognitive and affective in nature, which result in observable moral behavior when taken together. Unlike other theories and theorists, this model indicates that moral cognitions require moral affects, just as moral affects require moral cognitions (Narvaez & Rest, 1995). The four components that comprise this model are not expected to be a linear model that leads to moral action. An individual does not proceed from the first component through the fourth, ultimately resulting in moral behavior. Instead, Rest (1983) emphasizes the interaction of the four components.

Additionally, unlike the traditional tripartite models involving cognitive, affective, and behavioral domains, this model asserts that cognition and affect occur together in each of the components. Moral action therefore is not merely cognitive and affective processes interacting, but instead it consists of cognitive and affective processes that contribute jointly to each of the four interactive components. Because of this, Bebeau and her colleagues (1999) recommend that researchers further examine the processes contributing to moral action without assuming the tripartite approach.

### *Moral Sensitivity*

Before a person can respond to a situation in a moral way, he or she must be able to perceive and interpret the situation appropriately. With this understanding, the *moral sensitivity* component involved the use of the sensory system to interpret a given situation in terms of possible actions and consequences. According to Bebeau and her colleagues (1999), the component of moral sensitivity, or the ability to recognizing a situation as being moral, represents an “awareness of how our actions affect other people” (p. 22). It involves the individual’s overall awareness of his or her situation, including an understanding of the moral factors and potential implications. Scenarios are mentally constructed based upon the cues and information available. Further, it involves an understanding of how possible actions would affect the individual rights of those involved in the situation, including the individual.

This initial component of sensitivity is necessary for one to realize that they are involved in a moral situation (Bebeau, Rest, & Narvaez, 1999). Research regarding moral sensitivity indicates that most people have difficulty identifying even relatively simple

situations (Rest, 1984). Further, Rest indicates that the ability to infer consequences to others appears to be a developmental process that increases with age and experience.

### *Moral Judgment*

The *moral judgment* component is the one primarily emphasized by Kohlberg's stages of moral development (Bebeau & Thoma, 1999), as well as notable moral psychology scholars including Piaget, Rest, and others (Rest, 1984). When a person identifies a situation as being moral in nature, they must contemplate the possible behaviors and outcomes in order to determine which one is the most justifiable from an ethical standpoint (Rest, 1984). That is, they are determining what ought to be done. This can be based upon an intuition of fairness, even in the earliest stages of life, and even in the most complex of situations (Bebeau, et al., 1999). The resulting moral ideal is determined in large part based upon shared cultural norms as well as individual moral values, and is based largely upon virtues such as duty, justice, fairness, and responsibility.

### *Moral Motivation*

*Moral motivation* requires the individual to select among competing values, placing a priority upon the values that are considered the most moral, and thus emphasizing them over personal desires (Walker, 2002). Often, the person will have identified numerous possible outcomes to the moral dilemma, each with competing values and motives. It is also likely that non-moral values will become sufficiently strong to be weighed into the decision-making process (Rest, 1984). This process requires

making a commitment to the determined moral values and behaviors, while making a commitment to take responsibility for the results (Bebeau, et al., 1999).

Historically, researchers have identified numerous motivators for moral behavior, both internal and external. Wilson (1975), for example, asserts that altruism is inherited, and causes individuals to behave morally. Bandura (1977) and Goldiamond (1968), however, believe that people learn to behave in certain manners due to social modeling. Further, Durkheim (1925/1961) and Erikson (1958) state that moral action results from an association with something greater than the self, such as a country or a cause, while Hoffman (1977) asserts that empathy is the basis for moral action. Regardless of the reasons why individuals behave morally, it is important to recognize that merely being able to make moral judgments does not always result in moral behavior.

### *Moral Character*

*Moral character* involves the implementation of the desired behavior (Rest, 1984). It encompasses the personality attributes and cognitive processes necessary to implement the moral choice (Walker, 2002). This necessitates the presence of strong character traits required to perform such actions, such as self-regulation, persistence, and courage. While an individual may be strong in relation to their moral sensitivity, judgment, and motivation, moral character is critical to follow through with moral actions. Unfortunately, little work has been conducted regarding moral character (Walker, 2002). Bebeau (1993) has developed a checklist of traits for use in clinical settings, and Walker and Pitts (1998) have begun to expand necessary personality traits for appropriate moral functioning.

## The Ethic of Justice and Moral Philosophy

Rooted in moral philosophy, and thus tied to religious theory which was beyond the scope of the current study, moral psychology stems from the study of various ethical perspectives. Kohlberg's work combined Piaget's developmental psychology with the philosophy of John Rawls (1971), which is based largely upon Kantian ethics (Campbell & Christopher, 1996). Consistent with these philosophical beliefs, Kohlberg asserted that an ideal, universal morality exists that is not bound by history. He asserts that morality is what is right for any one in any situation (1971), and his highest level of morality, stage six, represents this universal reasoning.

### *Deontological Ethics*

According to Kantian ethics, the principle of duty is the primary emphasis. Acts of duty must be performed, regardless of their circumstances, because they are inherently required. Moral judgment is traditionally viewed as the product of intentional reasoning and logic. When faced with a moral dilemma, the individual considers the issues in order to reach a sound judgment. Kant asserted that we have moral obligations to one's self and others, though there is a foundational responsibility of duty that includes these specific responsibilities. Kant considers this a categorical imperative because our actions are mandated out of our duty regardless of our desires. The most fundamental duty is to treat people with dignity and respect, thus treating all people justly. He refers to this as treating people as ends, not as means. Kohlberg (1971) adheres to this notion through the identification of three human rights: civil rights, which meet the fundamental need to be

respected; equality of opportunity and treating all people as equals; and contractual agreements are the fundamental form of community itself.

### Gilligan's Different Voice

A major critique of Kohlberg's work was initiated by Gilligan (1982, 1988). Through her work, Gilligan suggested that Kohlberg's theories were potentially biased against women, as only young and affluent boys were used in his research. Gilligan sought to expand Kohlberg's theory by adding a *Care* orientation to his *Justice* orientation. In her view, the ethic of caring and responsibility is premised in nonviolence, whereas the *Ethic of Justice* and rights is based on equality and fairness. Gilligan initially presented these ethics as independent, although potentially connected.

Similar to Kohlberg's six stages within three primary levels, Gilligan also outlines three levels of *Care*-based moral development. At the first level of Gilligan's theory, an individual's focus is upon his or her own survival (Belknap, 2000). At this pre-conventional level of morality, the self is the sole object of concern. Within this level, a transition occurs to move the individual from selfishness to responsibility. The second level, conventional morality indicates that moral goodness is equated with self-sacrifice (Belknap, 2000). At this level, an individual emphasizes societal values and their concern for the well-being of others. They have learned that caring only for them self is morally inappropriate, and have shifted to the opposite extreme of caring only for others. During this level, the second transition occurs as the individual moves from goodness to truth (Belknap, 2000). At the third level, the post-conventional level, the individual has integrated his or her own needs with those of others, including considerations of the



consequences particular action may have upon themselves and others (Belknap, 2000). They have connected with others, and are attempting to avoid harming either themselves or others as they recognize that harm to either serves to harm the relationship.

### *Gender Differences*

Prior to Gilligan's initial research concerning moral development, theorists such as Freud and Piaget were only interested in the development of women insofar as they were similar to males (Brown, Tappan, & Gilligan, 1995). Additionally, initial research regarding moral development indicated that women did not progress beyond the third stage, whereas men were able to progress to the fourth, fifth, or even sixth stage (Tong & Williams, 2006). Through her work, Gilligan began to emphasize the potential gender differences thought to be associated with these two orientations (Gilligan & Attanucci, 1988). The morality of *Care* emphasizes interconnectedness and presumably emerges more in girls because of their early connection with their mothers. The morality of *Justice*, on the other hand, is said to emerge within the context of coordinating the interactions of autonomous individuals. A moral orientation based on *Justice* was proposed as more prevalent among boys because their attachment relations with the mother and following masculine identity formation required that boys separate from that relationship and individuate from the mother. For boys, this separation also heightens their awareness of the difference in power relations between themselves and the adult, and it creates an intense set of concerns over inequalities. According to this view, however, girls are not believed to be as keenly aware of such inequalities and may be less concerned with fairness because of their continued attachment to their mothers.

In addition to Gilligan's research, other research has supported a gender bias (Liddell, Halpin, & Halpin, 1992; Lyons, 1983). Other research on gender issues related to moral development has suggested, however, that moral reasoning does not follow the distinct gender lines that Gilligan originally reported (Ford & Lowery, 1986; Johnston, 1988; Walker, 1989; Walker, deVries, & Trevethan, 1987). The apparent reality is that both males and females reason based on both *Justice* and *Care*. While this gender debate remains unsettled, Gilligan's work has contributed to an increased awareness that *Care* is an integral component of moral reasoning.

#### Dabrowski's Positive Disintegration

Dabrowski's (1964) Theory of Positive Disintegration, also referred to as his Theory of Emotional Development, provides additional support for relationship-based morality. Within this theory, Dabrowski views moral growth as the establishment of emotional qualities, and identifies five levels of emotional development and integration (Ammirato, 1987). Consistent with Hoffman's (1984) argument that empathy is at the core of moral development, individuals achieving the highest level of integration are likely to possess empathic qualities helping them to behave in a morally appropriate manner.

The first level, primary integration, results in individuals possessing a self-focused, egocentric view based upon their impulsive needs and desires. Individuals at this level have no group awareness, but instead focus entirely upon themselves with a lack of inner conflict, and no awareness of that which may be hurtful to others. Next, identification with others and a decreased focus on the self characterizes unilevel

disintegration. These individuals have typically experienced an externally caused mental disturbance and have reached a state of moral relativity, but they have not yet internalized core values. Spontaneous multilevel disintegration occurs upon an inner conflict of personal values. Once behavior is determined based upon these newly realized values and beliefs, organized multilevel disintegration occurs. A person displaying multilevel disintegration possesses self-awareness and is able to control his or her actions. Fourth, organized multilevel disintegration involves the individual adapting to his or her own personal values, and living his or her life accordingly. These individuals have a strong sense of responsibility and are committed to serving other people. Finally, secondary integration results in a completely integrated, harmonious personality that is similar to Maslow's self-actualization. Characteristics of an individual at this level include responsibility, autonomy, and empathy. According to Dabrowski's (1964) theory, those individuals with strong emotional, intellectual, or imaginal overexcitabilities have the greatest potential for achieving higher levels of morality (Ackerman, 1997).

#### Hoffman's Prosocial Moral Development

Hoffman (1991) has primarily focused upon the role of empathy in moral behavior. He considers empathy to be the way that external or societal norms and values become an internal motivator of behavior. This internalization occurs when a person feels obligated to act according to the societal norm even when they are unconcerned with being caught acting contrary to the norm (Willard, 1997). According to Hoffman (1991), humans are born with empathic arousal. Empathy itself is developmental, and individuals increase their ability to perceive another's perspectives with age and experience. This

developmental process also enhances the individual's empathic response to others who they perceive to be in distress.

### The Ethic of Care and Moral Philosophy

Of the limitations to Gilligan's ideas, one of the most notable is its lack of a philosophical background. Kohlberg's model is firmly based in the deontological ethics of philosophers such as Immanuel Kant and John Rawls, which has provided considerable support against criticism. Since Kohlberg's initial studies, however, there have been numerous advances and paradigmatic shifts in moral philosophy (e.g., Beauchamp & Childress, 1994; Rest, Narvaez, Bebeau, & Thoma, 1999). A modern emphasis on virtue ethics, an ethical approach emphasizing virtues or character traits, provides a substantial support for Gilligan's ethic of caring (Slote, 1998).

### *Character / Virtue Ethics*

Although Gilligan and Noddings have traditionally refuted the basis of the *Ethic of Care* in character or virtue ethics, it has a firm place within said realm of philosophical thought (Slote, 1998). Accordingly, caring is virtue-based as it focuses upon moral agents rather than their actions, and because of the emphasis on character traits instead of adherence to guidelines or rules. An approach is classified as virtue-ethics only if greater emphasis is placed upon the moral agent than the moral action. Character or virtue ethics takes the stance that obligatory actions are less important than the cultivation of desired character traits. Character ethics draw on Aristotle's understanding of the primary virtues: prudence, justice, courage, and temperance (Aristotle, 2002).

According to Slote (1998), the *Ethic of Care* is easily understood as a form of virtue ethics with the understanding that caring for others is a morally good or virtuous behavior that leads to appropriate moral judgments. This assumes that caring is a virtuous action because it is intentionally directed toward another's well-being.

### The *Justice – Care* Debate

A longitudinal study by Holstein (1976) resulted in the implication that traditional *Justice*-based moral research was biased against women, thus setting off a gender debate that continues today. According to Holstein, female participants typically scored on Kohlberg's third stage while male participants more commonly scored on the fourth stage, indicating the theory's preference toward males. With the publishing of Gilligan's (1982) controversial book, *In a Different Voice*, the debate regarding the moral dimensions of *Justice* and *Care* has raged on. Her work, based upon the work of Chodorow (1978), argued that morality is created by childhood and adolescent experiences. As girls interact with their mothers, and thus with the same sex, they receive modeling in connectedness. Boys, however, are believed to develop a sense of separateness due to lack of contact with their fathers.

Since publishing her work concerning the different moral voices, there has been wide criticism of Gilligan's work. Much of said criticism has indicated that Gilligan has failed to produce the data for her research (Sommers, 2001). Additionally, just as Kohlberg found the *Justice*-based perspectives for which he was looking, Gilligan's interview process allowed her to identify an inherently female perspective. Critics have indicated that Gilligan used anecdotal evidence and biased interview techniques to do so,

and therefore researchers have not been able to duplicate her work. Further, samples utilized in Gilligan's initial studies were too small, and thus were not overly generalizable. Hare-Mustin and Marecek (1988) also indicated that Gilligan's results might have been altered to exaggerate the differences in dispositions.

To further limit Gilligan's work, Mednick (1989) indicated that Gilligan underestimated the role of the situations upon a person's behavior, thus limiting the usefulness of her results. Gilligan's interviews were based upon the participant's response to only one scenario designed for the particular participant, which may have introduced an inherent bias into her results. Mednick (1989) indicated the need for a wide range of uniform scenarios upon which to base the interviews in order to provide the maximum generalizability.

While critics have indicated Gilligan's work is unable to be reproduced, additional research has supported her findings. Specifically, when Gilligan's suggested research method is followed, her results are generally replicated (Clopton & Sorrell, 1993). However, deviation from her method by utilizing a standardized dilemma has typically resulted in differing results. In some cases, women score higher than do the men, and in other case the women score lower (Bruess & Pearson, 2002). Because standardized dilemmas do not typically result in gender differences while they are found in dilemmas based upon the person's own experience, it is possible that the differences are due to those actual experiences (Walker, deVries, & Trevethan, 1987). Further, evidence indicates that personally relevant dilemmas result in higher caring responses (Walker, deVries, & Trevethan, 1987).

Jorgensen (2006) has further expanded the discussion regarding the *Justice* and *Care* debate. Specifically, the assertion is made that Kohlberg's *Justice*-based approach and Gilligan's *Care*-based approach are both compatible with one another. More so, Jorgensen asserts that Kohlberg supported Gilligan's model while Gilligan continues to support the Kohlbergian model as well. Both theorists accepted Gilligan's work as merely an expansion of Kohlberg's initial theory, with Gilligan accepting the developmental view of Kohlberg that culminated in universality.

While this debate occurs primarily in the psychological realm, it can be understood how easily it translates into the philosophical realm as well. Kohlberg, for example, argued for the superiority of his deontological, duty and *Justice*-based perspective. Gilligan, on the other hand, argued against her theory falling within the domain of character or virtue ethics, thus further enhancing the criticisms of her theory, especially as it can be considered to fall within said domain. Yet other philosophers advocate utilitarian or consequential approaches, and as such would find significant limitations with either psychological approach.

### Current Moral Development Instruments

Numerous instruments currently exist to measure the various constructs within moral theory. Several instruments (e.g., the Defining Issues Test, Version 2, and the Moral Judgment Test) are designed to measure specifically moral judgment, while others (e.g., the Measure of Moral Orientation and the Moral Justification Scale) attempt to measure *Justice* and *Care* as two independent dimensions. The limitations of the first type are relatively obvious. While the construct being measured is well defined for Rest

and his associate's (1999) Defining Issues Test-2 as well as Lind's (1985) Moral Judgment Test, they do not directly consider the possibility of *Care*-based reasoning. Further, while instruments such as Liddell's (1990) Measure of Moral Orientation and Gump, Baker, and Roll's (2000) Moral Justification Scale do take both dimensions into account, they do so with a very limited definition of the *Care* dimension, thus failing to appropriately address the complexity of morality.

### *One-Dimensional Measures*

Rest's research has been important in reinforcing theoretical understanding that moral development is highly complex and moral action is likely comprised of multiple constructs. However, an examination of research from the Minnesota tradition does not effectively convey this understanding, as most research has focused solely upon the moral judgment component even though moral judgment has been questioned as the lone contributor to moral action (Blasi, 1980; Kurtines & Greif, 1974). This emphasis upon judgmental research has seemingly de-emphasized the importance of the other three components. Research regarding these other components has only occurred in limited settings and contexts, and it has not yet been demonstrated how these components may together influence moral action in more general populations. Additionally, Rest and his colleagues dispute Gilligan's claims of an *Ethic of Care*, thus indicating that the Four Component Model itself is a *Justice*-based model (Jorgensen, 2006). As such, the model fails to consider the potential influence of the *Care* dimension upon moral agents and moral actions.



### *Bi-Dimensional Measures*

Research concerning the relationship of the *Justice* and *Care* dimensions has failed to reach a consensus. Some researchers have indicated that they are polar opposites of one another (e.g., Botes, 2000; Liddell, 1990; Lyons, 1983; Rest, Narvaez, Bebeau, & Thoma, 1999), while yet others indicate that the two dimensions are complementary to one another (e.g., Callan, 1992; Jorgensen, 2006; Reed, 1997). As such, the few instruments that do measure both dimensions simultaneously were designed with an inherent bias regarding the relationship. Instrument developers have created their measures based upon the assumption that the two dimensions were either completely independent or at opposite ends of the same moral spectrum. Because of these resulting structures, these instruments have not allowed researchers to address adequately the relationship between the two dimensions.

### *Care-Based Measures*

Instruments measuring the *Care* dimension seem to lack an adequate operational definition and have been unable to provide consistent research findings. While several instruments have been developed to measure the moral dimension of *Care* independently, such as the Interview Assessment (Lyons, 1983), and in conjunction with the *Justice* dimension, such as the Measure of Moral Orientation (Liddell, 1990), they appear to be based upon loose definitions of Gilligan's construct of *Care*. Unlike Kohlberg's *Ethic of Justice*, which is based largely in deontological ethics, the *Ethic of Care* as advanced by Gilligan (1982) and Noddings (1984) lacks a philosophical basis. This characteristic

advances additional criticism without the added support provided by well-established philosophical fields.

### *Scenario-Based Measures*

According to Rest (1984), even minor changes in a situation can affect moral action in a considerable way. Research has supported this concern, demonstrating that ethical decision-making varies according to the specifics of the situation (Banerjee, Cronan, & Jones, 1998; Benham & Wagner, 1995; Jones, 1991). As such, measures of morality that are based upon scenarios, especially ones that include descriptive details of the individuals involved, may not be appropriate for considering moral action outside the specific situations described. One solution to this limitation is to classify moral factors into the psychological components they represent, allowing enhanced generalizability (Rest, 1984). Even doing so, however, a wide range of scenarios must be employed to aid generalizability. While the Defining Issues Test, Version 2 (Rest, et al., 1999) has attempted to correct for this limitation, other research methods that are not based upon scenarios warrant further consideration.

### The Components of Care

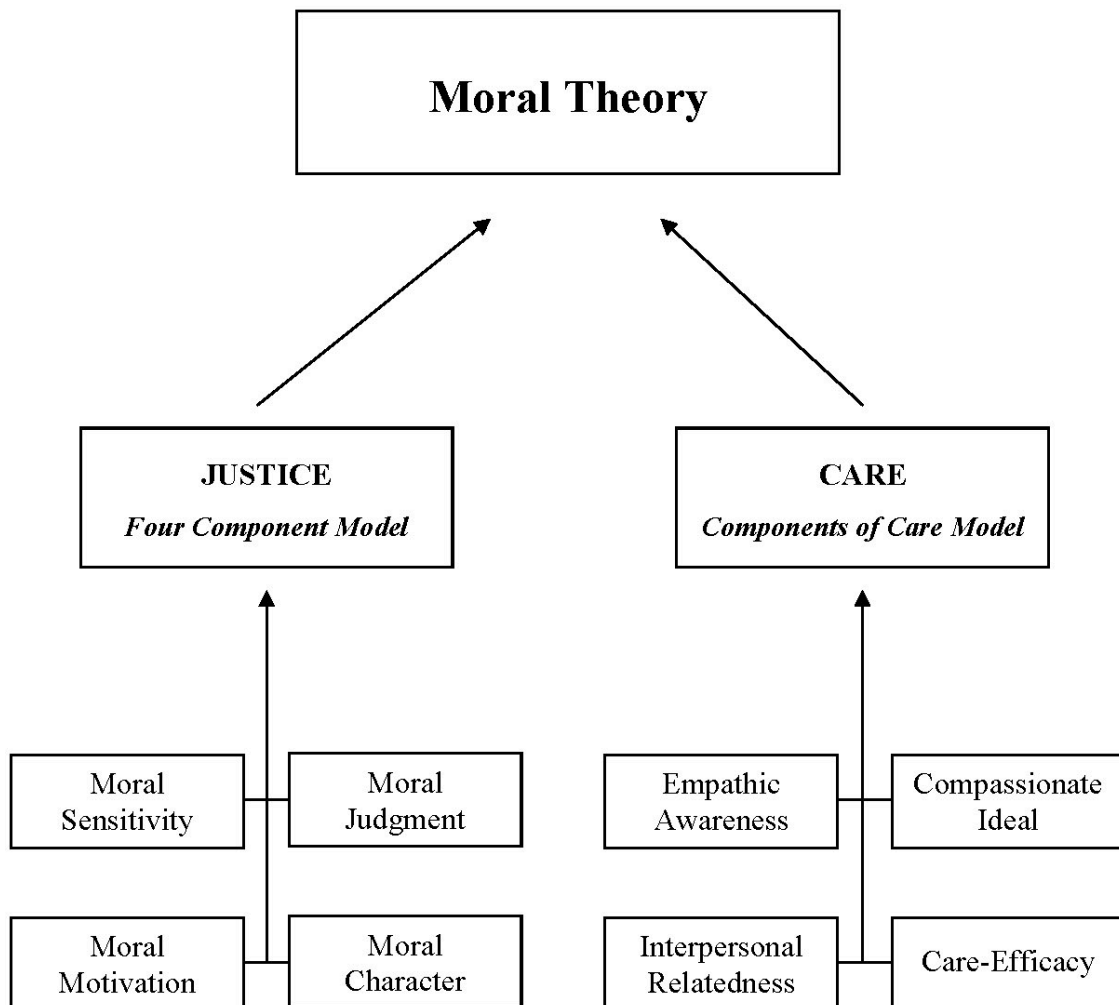
The following components expand Gilligan's (1982) theory to integrate it more fully with traditional models while upholding the idea that moral theory consists of at least two dimensions, namely *Justice* and *Care*. This view is a deviation from the conventional Kohlbergian model, which emphasizes *Justice* as the primary focus of moral reasoning and development. As previously indicated, however, the *Justice*

dimension is likely insufficient to represent the moral process of all individuals across all cultures. The *Care* dimension has found support across the literature, and warrants additional consideration. Just as the *Justice* dimension is complex and consists of at least four componential processes that interact to create just behavior (Rest, 1984), several initial components of the *Care* dimension have been located in the literature: *Empathic Awareness*, *Compassionate Ideal*, *Interpersonal-Relatedness*, and *Care-Efficacy*. The proposed integrated model can be seen in Figure 1.

Figure 1

*Integrated Model of the Moral Dimensions of Justice and Care*

---



### *Empathic Awareness*

Consistent with Bandura's (1985) notion of attentional processes, this component of the *Care* dimension involves being sufficiently aware of a given situation in order to be able to connect empathically with another person involved in the situation. According to Bandura (1985), the attentional process is more complex than simply taking in information, but instead involves an exploration of the environment and constructing meaning based upon it. As a result, cognitive processes are very much involved, and those with increased cognitive skills and prior knowledge regarding the situation are expected to be more aware (Bandura, 1985).

The attentional process inherent within this component concerns empathy for another individual. Within this context, empathy can be viewed as a care and concern for others that invokes an emotional response (Allport, 1961). According to Rogers (1959), one must assume the internal frame of reference of another person as if he or she were that other person in order to empathize with them. In doing so, they experience the feelings of the other person as that person experiences them while recognizing that the feelings belong to the other person. Due to prior experience and cognitive skills, an individual may feel empathy for a given situation even before they have been able to assess the complexity of the situation at hand (Narvaez & Rest, 1995).

Empathic awareness is considered critical to moral action. According to Turiel (2006), the distress that occurs after perceiving another person's suffering is an automatic and essential condition of caring about the other individual. Without empathy, it would not be possible to care about another person's current situation, or to act accordingly. Further, the greater the level of empathy a person has, the more likely they will respond

in a morally appropriate manner (Eisenberg-berg & Mussen, 1978). Hoffman (1984, 1991), in particular, indicates the necessity of empathy within moral theory as he defines a moral act to be one on behalf of another person. According to Hoffman, empathy motivates action in various types of situations. Beyond those that would be obvious, such as those involving pain and stress, empathy also motivates moral actions in situations where pain and suffering are not immediately perceivable.

While somewhat similar to Rest's (1983) concept of *Moral Sensitivity, Empathic Awareness* is not based upon the just treatment of the other person, but is instead focused upon a concern for the individual's well being. This requires an awareness of the other person's situation as well as an ability to understand their resulting feelings. Once this occurs, the person is able to act on the other's behalf, and thus behaves morally (Hoffman, 1984).

### *Compassionate Ideal*

The *Compassionate Ideal* component is consistent with Gilligan's (1982) notion that some individuals make decisions based upon interpersonal relationships and their concern for other people. This ideal is not impersonal like decisions made within the *Justice* framework, which involve removing oneself from the situation in order to reach a fair and just conclusion. Instead, it is tied to the actual situation and the relationships involved. When faced with a moral dilemma, the individual considers the situation and all possible outcomes, choosing the solution that avoids, or at least minimizes, harm to any of the individuals involved in the situation, including the moral agent themselves.

The individual understands that they must address the needs of the other person or other people involved in the situation as well as their own needs or concerns.

While this component is somewhat comparable to Rest's (1983) *Moral Judgment* component, which is based upon rational thought concerning justice and individual rights, *Compassionate Ideal* is largely based upon concern for others, and is more related to the welfare of those individuals involved. Instead of a decision to act based upon the principles of justice, fairness, or duty, the individual makes a decision that will result in the least harm occurring, with everyone's benefit in mind. As such, this component focuses upon the ability to determine the most compassionate response based upon said concern for the other person.

#### *Interpersonal Relatedness*

One of the primary concerns regarding an *Ethic of Care* is whether such a model can truly stand alone without relying on *Justice*-based models to account for obligations to people with whom an individual is unacquainted (Slote, 1998). Without this relational basis, *Care*-based models are unable to explain why an individual may choose to act morally toward people they do not know. As such, *Interpersonal Relatedness*, an individual's awareness and acceptance of both the similarities and differences that exist among the people whom they interact, is the component of *Care* that emphasizes such relationships and connections among people. This component considers the similarities and differences that exist among people since both are required to account for those who the moral agent does not know. These connections are ultimately necessary to contribute to the performance of moral actions within a *Care* framework.

According to Vontress (1979, 1988, 1996), individuals are both alike and different from other people at the same time. An awareness of these similarities and differences is necessary to interact effectively with others (Miville, Gelso, Pannu, Liu, Touradji, Holloway, & Fuertes, 1999), which also applies to moral encounters. A complete integration of interpersonal relationships becomes difficult as similarities and differences occur on numerous levels, such as age, gender, race, and ability (Miville, Gelso, Pannu, Liu, Touradji, Holloway, & Fuertes, 1999). Further, Vontress (1986) indicated that each person is a product of five interactive cultures: universal, ecological, national, regional, and racio-ethnic. While two individuals may be the same on the universal level as human beings, they may be from different nations or even different regions within the same country. It is because of these interactive similarities and differences that individuals are simultaneously similar and unique.

An understanding of the similarities between yourself and another person would allow you to better relate to them, while an awareness of differences would allow you to appreciate them as a unique individual and also aid in your understanding of them. The resulting connection with an individual based upon these similarities and differences allows an individual to care about someone with whom they are unacquainted, thus meeting Slote's (1998) relational requirement regarding any *Care*-based approaches to morality.

### *Care-Efficacy*

Initially developed by Bandura (1977a, 1994, 1997), perceived self-efficacy is one's belief in their own ability to perform a certain task or role. This formation of a

person's belief is hypothesized to involve two basic steps: task appraisal and ability assessment (Kaley & Cloutier, 1984). An individual is believed to first appraise the task to determine what would be involved, including estimating its difficulty, complexity, and the resulting consequences. Once the task has been evaluated, the individual assesses his or her ability to respond accordingly. This includes an assessment of their relevant abilities, prior experience with similar tasks, and even consideration of their current physiological state.

Self-efficacy has been shown to be a good predictor of personal behavior and decision-making (Betz & Hackett, 1997; Fouad & Smith, 1996; Hackett, 1995; Lapan, Adams, Turner, & Hinkelman, 2000; Lapan, Boggs, & Morrill, 1989; Lent & Hackett, 1987). The higher a person's efficacy, the more likely they are to perform a task due, in part, to their confidence level. Because of this predictive value, efficacy has become increasingly prominent in educational and psychological literature, and effective measurement has become increasingly important (Pajares, Hartley, & Vahante, 2001).

According to Bandura (2006), a person's perceived self-efficacy is not one universal belief, but is instead a set of beliefs that relate to specific realms of behavior. Unlike other more traditional psychological constructs, self-efficacy beliefs are considered to vary depending on the specific behavioral domain and its surrounding circumstances. As such, researchers must design efficacy scales specifically for the domain being studied. Self-efficacy has been considered in areas such as general academic performance (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Pajares, 1996), teaching (Collier, 2005; and Ellett, Hill, Liu, Loup, & Lakshmanan, 1997), and



even specific academic tasks such as success in statistics courses (Finney & Schraw, 2003).

With this understanding in mind, it stands to reason that efficacy can translate to nearly every area of human functioning, including a person's concern for other individuals. According to Gilligan (1982), some individuals make moral decisions based upon their concern for others rather than based upon issues of *Justice*, and in doing so place a particular emphasis upon their relationships with other people involved in the situation. If this is true, and if efficacy concerning a situation predicts a person's ultimate behavior, it also becomes important to examine a person's efficacy with regard to helping other individuals as the higher one's efficacy is, the more likely they are to respond in a *Care*-based manner.

### Summary

Understanding the underlying factors that influence moral action has tremendous implications for educational practice and society as a whole. Much research regarding moral psychology has been conducted over the past 50 years, stemming most notably from the work of Kohlberg. While Kohlberg's stages of moral development provide a firm basis for future work, numerous limitations to his model persist and warrant further exploration. The ideas expressed by Gilligan provide substantial insight regarding two different dimensions of moral psychology. Consistent with Rest's (1983, 1984) belief that moral functioning is comprised of a variety of interdependent constructs, it becomes necessary to examine such potential components that represent the *Justice* dimension of moral theory as well as those that may represent the *Care* dimension. Rest's Four

Component Model of moral sensitivity, moral judgment, moral motivation, and moral character seems to represent appropriately the *Justice* dimension, though its emphasis on fairness and equity seems to overlook many of Gilligan's contributions. As such, four additional components, namely *Empathic Awareness*, *Compassionate Ideal*, *Interpersonal Relatedness*, and *Care-Efficacy*, will provide a basis to explore further the *Care* dimension, particularly in relation to its *Justice* counterpart.

## CHAPTER III

### METHOD

This study involved the development and evaluation of an objective instrument to measure the *Justice* and *Care* dimensions of moral development in order to address the three research questions addressed previously. According to Schwab (1980), instrument development occurs according to three basic steps. First, individual items must be generated to represent the construct being measured. Next, those items are combined according to some theoretical reason to form scales. Third, the new measure is examined psychometrically, which primarily includes the assessment of the instrument's reliability and validity.

Given these instrument development considerations, content validity of the items to be included in the *Integrated Justice and Care Scales* was assessed with the assistance of experts knowledgeable about the content area. The amount of measurement error within the instrument was estimated using item and scale reliabilities. A second sample of participants was asked to participate two times in order to provide information concerning test-retest reliability. Inter-correlations within the instrument and between the scales were also assessed to provide convergent and discriminant validity. Construct validity was investigated through a principal component analysis. Criterion-related validity was examined through the comparison of the *Integrated Justice and Care Scales*

to the *Morally Debatable Behaviors Scale* (Harding & Phillips, 1986) and the *Prosocial Tendencies Measure* (Carlo & Randall, 2002).

### Participants

Data collection occurred in three phases, which resulted in three distinct participant samples. The first sample consisted of graduate students and faculty who served as subject matter experts for item development purposes. The second consisted of college students who completed the *Integrated Justice and Care Scales* instrument electronically as well as several additional measures to assess the reliability and validity of the new instrument. The third and final sample consisted of students who completed the *Integrated Justice and Care Scales* in a classroom setting two times each in order to assess the instrument's test-retest reliability.

All participants were treated according to the ethical guidelines as stated by the American Psychological Association (2002) and Oklahoma State University's Institutional Review Board for the Protection of Human Subjects (2005; Appendix A). According to these guidelines, participants were asked to provide informed consent (see Appendix B), were assured of the confidentiality of their responses, and were given the opportunity to withdraw from the research at any time without consequence.

#### *Phase I*

The first sample consisted of eight individuals, all of whom are familiar with the field of moral psychology. The participants included one male master's student, six female doctoral students, and one male faculty member at a large comprehensive

university in the central United States. Participants were recruited by the researcher due to his familiarity with them as well as their base knowledge of the field of moral psychology due to numerous courses including the topic. Additionally, as sorting the items into pre-identified dimensions is a cognitive task rather than requiring specific experience, the use of students was appropriate for this stage of scale development (Schriesheim & Hinkin, 1990). The average age of the participants for this phase was 33.75 years.

### *Phase II*

The participants for this second phase of the study consisted of college students between the ages of 18 and 25 enrolled in undergraduate psychology courses at a large comprehensive university in the central United States. Students were recruited for participation in the study through an online research pool. Participating students were given course credit in partial fulfillment of a research requirement or extra credit in their course in exchange for their participation. This sample initially consisted of 464 participants. However, 55 students did not complete all of the instruments resulting in 409 participants who had complete data that were retained for the analyses. The resulting sample consisted of 60% ( $n = 245$ ) females and 40% ( $n = 164$ ) males with an average age of 20.20 years old ( $SD = 1.64$ ). Additional descriptive information for this sample can be found in Table 1.

Table 1

*Demographic Information for Students Participating in Phase II Data Collection*

Demographic	Gender		Total
	Female	Male	
	Age		
18 – 19	107	72	179
20 – 21	84	52	136
22 – 23	47	31	78
24 – 25	7	9	16
	Race / Ethnicity		
White, Non-Hispanic	201	130	331
African American	8	10	18
Hispanic	7	8	15
American Indian	23	13	36
Asian / Pacific Islander	1	2	3
Other / Non-Disclosed	5	1	6
	Academic Standing		
Freshman	90	65	155
Sophomore	44	31	75
Junior	61	39	100
Senior	50	29	79

*Note.* n = 409

### *Phase III*

The participants for the third phase of the study consisted of college students enrolled in four educational psychology courses at a large comprehensive university in the central United States. The researcher selected these classes as a convenience sample due to his familiarity with the course instructors. Students were recruited for the study by the researcher during a regular class session, and participation occurred during the same class period. Participating students were given extra credit in their respective course in exchange for their participation.

This third sample initially consisted of 81 participants. Due in a large part to absenteeism, however, only 55 participants completed the instrument a second time and only their data were retained for the test-retest analyses. The resulting sample consisted of 58% ( $n = 32$ ) females and 42% ( $n = 23$ ) males with an average age of 21.22 years ( $SD = 1.41$ ). Additional descriptive information for this sample can be found in Table 2.

Table 2

*Demographic Information for Students Participating in Phase III Data Collection*

---

Demographic	Gender		Total
	Female	Male	
	Age		
18 – 19	6	2	8
20 – 21	12	9	21
22 – 23	14	9	23
24 – 25	0	3	3

---

Table 2 (continued)

*Demographic Information for Students Participating in Phase III Data Collection*

Race / Ethnicity			
White, Non-Hispanic	23	18	41
African American	1	0	1
Hispanic	2	1	3
American Indian	5	4	9
Other / Non-Disclosed	1	0	1
Academic Standing			
Freshman	2	1	3
Sophomore	7	3	10
Junior	13	11	24
Senior	10	8	18

Note.  $n = 55$ .

## Instrumentation

For the purposes of this study, content validity of potential items for inclusion in the *Integrated Justice and Care Scales* was assessed by eight content experts during the first phase (see Appendix C for item pool). The criterion-related validity of the newly developed *Integrated Justice and Care Scales* (see Appendix D) was assessed during the second phase using the *Morally Debatable Behaviors Scales (MDBS)*; Harding & Phillips, 1986; see Appendix E) and the *Prosocial Tendencies Measure (PTM)*; Carlo & Randall, 2002; see Appendix F). Additionally, the *Marlowe-Crowne Social Desirability Scale (MCSDS)*; Crowne & Marlowe, 1960; see Appendix G) was used to assess respondents'



propensity toward responding in an overtly positive or negative manner. Estimates of the instrument's consistency over time were assessed in the third phase. Participants in all three phases also completed a brief demographic survey to allow a more thorough analysis of the results. Descriptions of these instruments follow.

#### *Development of the Integrated Justice and Care Scales*

The *Integrated Justice and Care Scales (IJCS)* instrument consists of two dimensions, *Justice* and *Care*, each comprised of four scales. Each scale initially consisted of 20 items, resulting in 160 initial items for the *Integrated Justice and Care Scales* (see Appendix C for initial items). The *Justice* scale utilizes Rest's (1983) Four Component Model to represent the more traditional view of morality that emphasizes duty, justice, and individual rights. Items for the *Moral Sensitivity* scale were adapted from the *Ethical Climate Index* (Arnaud & Schminke, 2006) and additional items were developed by the author. Items comprising the *Moral Judgment* scale were adapted from the *Measure of Moral Orientation* (Liddell, 1990) and the Thinking-Feeling scale of the *Myers-Briggs Type Indicator* (Myers, McCaulley, Quenk, & Hammer, 1998). *Moral Motivation* scale items were adapted from Miller and Kean's (1997) *Moral Motivation Scale* as well as Genia's (1997) *Spiritual Experiences Index*. Items for the *Moral Character* scale were primarily adapted from Walker and Pitt's (1998) *Naturalistic Conceptions of Moral Maturity*.

The *Care* scale utilizes a new model developed by the author to expand Gilligan's view of morality that emphasizes relationships and concern for others. Empathic Awareness scale items were primarily adapted from Davis' (1980) *Empathic Concern*

*Scale* and the *Welburn Empathic Concern Scale* (Welburn & Fraser, 2002). Items comprising the *Compassionate Ideal* scale were adapted from the *Measure of Moral Orientation* (Liddell, 1990) and the Thinking-Feeling scale of the *Myers-Briggs Type Indicator* (Myers, McCaulley, Quenk, & Hammer, 1998). *Interpersonal Relatedness* scale items were adapted from the *Miville-Gutzman Universality-Diversity Scale* (Miville, et al., 1999). Items for the *Care-Efficacy* scale were adapted from the *Care-Efficacy Scale* (Ray & Fink, 2007). The specific procedures utilized as well as the results obtained by this process are included in the appropriate sections.

#### *Morally Debatable Behaviors Scale*

Harding and Phillips' (1986) *Morally Debatable Behaviors Scales (MDBS)* consists of 22 items designed to assess attitudes regarding the moral justifiability of engaging in specific behaviors. The measure assesses three different components of moral behavior: personal-sexual morality, which focuses upon life concerns and sexual relationships; self-interest morality, which focuses upon issues of honesty and personal integrity; and legal-illegal morality, which focuses upon behaviors that are legally prohibited.

The authors did not report internal consistency for the scale, though evidence of convergent and discriminant validity were provided through comparison with political and religiosity scales and factor analyses which were replicated across multiple samples from differing countries. Internal consistency reliability was determined to be high for the *MDBS* based on the scores of the current sample ( $\alpha = .90$ ).

### *Prosocial Tendencies Measure*

Carlo and Randall's (2002) *Prosocial Tendencies Measure (PTM)* consists of 23 items designed to measure situation-specific prosocial behaviors, with prosocial behaviors being defined as those "behaviors intended to benefit others" (p. 31). According to Carlo and Randall, six types of prosocial behaviors exist: public, anonymous, dire, emotional, compliant, and altruism. Public prosocial behaviors are those that occur in front of an audience, presumably to gain the approval or respect of others. Anonymous prosocial behaviors are those in which helping occurs without the knowledge of the one who is actually helped. Dire prosocial behaviors involve helping in crisis or emergency situations, whereas emotional prosocial behaviors involve helping others in other emotional situations that are not based upon an emergency. Compliant prosocial behaviors are those resulting in helping others in response to a verbal or non-verbal request. Altruism is voluntary helping motivated primarily by the concern for the needs and welfare of another. As a high score on the altruism scale initially represented a low level of altruism, scores for this scale were reverse coded to be consistent with the other scales.

The six subscales were each reported to possess moderate to high internal consistency reliability: public ( $\alpha = .78$ ), anonymous ( $\alpha = .85$ ), dire ( $\alpha = .63$ ), emotional ( $\alpha = .75$ ), compliant ( $\alpha = .80$ ), and altruism ( $\alpha = .74$ ). Reliability was also calculated for the *PTM* subscales based on the scores of the current sample as follows: public ( $\alpha = .83$ ), anonymous ( $\alpha = .82$ ), dire ( $\alpha = .68$ ), emotional ( $\alpha = .75$ ), compliant ( $\alpha = .81$ ), and altruism ( $\alpha = .82$ ).

### *Marlowe-Crowne Social Desirability Scale*

Crowne and Marlowe's (1960) *Marlowe-Crowne Social Desirability Scale (M-CSDS)* consists of 33 true-false items as an objective measure of a respondent's tendency to present him or her self in a way they perceive others expect them to respond. This may include, but is not limited to, significant others, peers, and authority figures, including researchers. According to Crowne and Marlowe, social desirability is the respondent's tendency "to obtain approval by responding in a culturally appropriate and acceptable manner" (p. 353). The authors report a sufficient internal consistency for the scale ranging from moderate ( $\alpha = .73$ ) to high ( $\alpha = .88$ ), and reliability was calculated to be moderate for the *M-CSDS* based upon the scores of the current sample ( $\alpha = .74$ ).

### *Demographic Survey*

Each participant in this study completed a short demographic survey (see Appendix G). Information requested included age, gender, academic classification (i.e., freshman, sophomore, junior, senior, or graduate), and race/ethnicity. Students participating in the test-retest phase of data collection were also asked to provide a confidential identification code to allow the matching of their responses across the two test administrations.

## Procedure

### *Phase I*

Colleagues of the researcher familiar with the field of moral psychology were recruited to participate in the initial item analyses of the *Integrated Justice and Care*

*Scales.* Those who chose to participate in the study were provided two copies of an informed consent form (see Appendix B) that ensured them of the confidentiality of their responses and informed them of their right to withdraw without consequence. One copy of the consent form was returned to the researcher and the other was retained by the participant. Upon providing consent, participants were provided an instrument containing definitions of the *Justice* and *Care* dimensions as well as definitions of the four components of each dimension (see Appendix C). The researcher was also available to the participants to ask clarification questions as needed.

Upon reviewing the definitions, the participants categorized the randomly ordered items as representing the *Justice* dimension, the *Care* dimension, both dimensions, or neither dimension. Items categorized as representing the *Justice* dimension were further sorted into *Moral Sensitivity*, *Moral Judgment*, *Moral Motivation*, or *Moral Character*. Items categorized as representing the *Care* dimension were further sorted into *Empathic Awareness*, *Compassionate Ideal*, *Interpersonal Relatedness*, or *Care-Efficacy*.

## *Phase II*

Students participating in research through an online pool were recruited to participate in this study, conducted entirely on-line, that examines their decision-making processes. Students who chose to participate in the study were directed to a website containing the study through the research pool. Students were provided an electronic Informed Consent Form (see Appendix B) that ensured them of the confidentiality of their responses and informed them of their right to withdraw without consequence. A printable version of the consent form was available at this time, and students were

recommended to print a copy for their records. Proceeding beyond the informed consent form indicated willingness to participate in the study and certification that they were at least 18 years of age at the time of participation.

Once participants provided informed consent, they received instructions on completing each of the instruments. Participants were asked to complete a demographic information form. After providing demographic details about themselves, participants completed the *Integrated Justice and Care Scales*, the *Morally Debatable Behaviors Scales*, the *Prosocial Tendencies Measure*, and the *Marlowe-Crowne Social Desirability Scale*. Responses were submitted to a password-protected file located on a secure server that was available only to the researcher and server administrators. All participant response data was removed from the server immediately upon completion of the study, and all additional files are stored in a secure location in the researcher's office.

### *Phase III*

Students participating in this phase of the research were recruited from four undergraduate education classes with which the researcher was familiar with the course instructor. Students who chose to participate in the study were provided two copies of an informed consent form (see Appendix B) that ensured them of the confidentiality of their responses and informed them of their right to withdraw without consequence. The consent form also indicated that students would be participating in two administrations of the instrument, approximately one week apart. One copy was signed and returned to the researcher and the other copy was retained by the student.

Once participants provided informed consent, they received an instrument packet containing the *Integrated Justice and Care Scales* (see Appendix D) and the demographic survey (see Appendix H). The demographic survey requested that the participants provide an identification code that would allow the researcher to match their responses between the first and second administration without providing sufficient information to identify their responses. Approximately one week after the initial administration, the researcher returned to the four classes and administered the second instrument. As the initial consent form had authorized two administrations, the second instrument packet provided a reminder of their consent as well as the *Integrated Justice and Care Scales* and the demographic survey.

## CHAPTER IV

### RESULTS

As a psychometric study, the data analyses focused upon the issues of reliability and validity of the *Integrated Justice and Care Scales*. Specifically, three phases of research were conducted to answer the research questions posed. For convenience, those questions are as follows:

1. Can the dimension of *Care* be operationally defined in relation to moral theory, and can this definition be measured in conjunction with the dimension of *Justice*, as defined by Rest's Four Component Model, through the development of a new psychometric instrument?
2. What is the relationship between *Justice* and *Care* as measured through this new instrument, and will this relationship be related to gender and other demographic differences?
3. How does this new instrument relate to preexisting measures of moral judgment and/or orientation (e.g., the *Morally Debatable Behaviors Scales* and the *Prosocial Tendencies Measure*) and social desirability (e.g., the *Marlowe-Crowne Social Desirability Scale*)?



The results of the three phases of research address the three research questions stated previously, though the phases are not tied sequentially to the research questions. The first question was addressed through an examination of the content analyses of the 80-item *Integrated Justice and Care Scales*, as well as through an examination of the phase II results. The structure of the instrument was examined during the second phase of research using principal axis factor analyses with oblimin rotation. Cronbach's Alpha was used to assess the internal consistency reliability, and serves as an indicator of the instrument's error of measurement. The test-retest reliability of the instrument was assessed over a one-week period. These results provide preliminary evidence regarding the operational definition of *Care*, as well as its components, and provide evidence that it can be measured psychometrically.

The second research question is addressed through the second phase of research. Specifically, the correlations between the components of *Justice* and *Care* as measured through this instrument are examined. Further, a factorial multivariate analysis of variance was conducted to assess the main and interaction effects of the categorical independent (e.g., demographic) variables upon the dependent variables and a discriminant analysis was conducted to better understand the multivariate results.

The third and final research question is also addressed during the second phase. The correlation between participants' composite scores for each scale of the new measure and scale scores on the *Morally Debatable Behaviors Scales* and the *Prosocial Tendencies Measure* are examined. Additionally, the relationship between each scale and social desirability as measured by the *Marlowe-Crowne Social Desirability Scale* is

assessed. Results from the three phases of research follow, and a summary of the results according to the research questions is presented in the next chapter.

### Phase I

The content validity plan was organized into two sections. First, a conceptual map was developed to identify and distinguish the components of both dimensions, *Justice* and *Care*, and was described in Chapter III. Second, an item analysis by subject matter experts provided further evidence of content validity for the *Integrated Justice and Care Scales*.

#### *Expert Judges*

The initial 160 items (see Appendix C) were evaluated by the eight expert judges and placed into the appropriate scale as described in Chapter 3. The placement of each item into the eight scales was tallied for all eight judges, resulting in a possible rating on each scale for each item from zero, meaning none of the expert judges sorted it into the scale, to eight, in which case all of the judges sorted the item into the scale. Items that had a rating of three or more on any scale other than that for which they were developed were determined to fit multiple categories and were subsequently discarded. Additionally, items that did not have a rating of at least six were determined not to adequately represent any scale and were discarded. Through this process, items were retained only if at least six of the eight expert judges correctly identified the correct scale and fewer than three judges placed them in another scale. Redundant items were removed to leave ten items representing each component of *Justice* and ten items representing each component of

*Care*. The judges' rankings for the final ten items for each scale are included in Appendix I and a summary for each scale is provided in Table 3.

Table 3

*Expert Judges' Rankings for the Integrated Justice and Care Scales*

Scale	Range		Mean
	Fewest	Most	
Moral Sensitivity	6	8	6.90
Moral Judgment	6	8	6.60
Moral Motivation	6	6	6.00
Moral Character	6	8	6.50
Empathic Awareness	7	8	7.60
Compassionate Ideal	6	7	6.30
Interpersonal Relatedness	7	8	7.40
Care-Efficacy	6	8	7.10

The item ratings for the four *Justice* scales ( $M = 6.50$ ) were somewhat lower than the item ratings for the *Care* scales ( $M = 6.80$ ), though both were sufficiently high. The *Moral Motivation* scale items had the lowest ratings ( $M = 6.00$ ) while the ratings for the *Interpersonal Relatedness* scale items were the highest overall ( $M = 7.40$ ). The final 80 items for the *Integrated Justice and Care Scales* ranged from six to eight judges rating the items as representative ( $M = 6.80$ ).

## Phase II

### *Initial Considerations*

During the second phase of research, the resulting 80-item *Integrated Justice and Care Scales* instrument was administered to a sample of college students in an attempt to assess validity. Prior to conducting other statistical analyses, the data were assessed for potential outliers for each of the 80 items. According to Stevens (2002), outliers consist of those responses with absolute values greater than 4.00 when converted to *z*-scores for sample sizes greater than 100. At least one item with an absolute value greater than 4.00 was found for 23 participants, and their data were therefore removed from consideration. After removing participants' data who were determined to be outliers, data from 386 participants was used for all subsequent analyses.

Next, the assumption of normality of item scores was assessed due to the statistical techniques employed. While normality is not generally a necessary assumption of factor analytic techniques, it is a typical assumption of tests of significance utilized during factor analysis as well as for other techniques such as reliability analysis (Kim & Mueller, 1978). An analysis of the means and standard deviations, skewness and kurtosis statistics, as well as an examination of histograms for each of the 80 items indicated that the items were all negatively skewed, as indicated in Appendix J. However, according to de Vaus (2002) skewness values between -1.00 and 1.00 are within the acceptable range and indicate a symmetrical distribution. Only five of the 80 items had scores below -1.00 (MS01, MJ02, MJ07, MC06, and EA02). Further, research using Monte Carlo simulations has indicated that significant problems only tended to arise when skewness is greater than  $|2.00|$  and kurtosis exceeds  $|7.00|$  (Curran, West, & Finch, 1996).

To verify the minimal effect of non-normality for this data, the five most skewed items were transformed, and both the transformed and non-transformed values were correlated with the least skewed item on the respective scale. The least skewed item for *Moral Sensitivity* scale, MS03, was similarly correlated with both MS01 ( $r = .17$ ) and its transformation, MS01t ( $r = .14$ ). The least skewed *Moral Judgment* item, MJ03, was similarly correlated to MJ02 ( $r = .16$ ) and its transformation, MJ02t ( $r = .17$ ), as well as MJ07 ( $r = .20$ ) and its transformation, MJ07t ( $r = .18$ ). The least skewed item for *Moral Character* scale, MC01, was similarly correlated with both MC06 ( $r = .19$ ) and its transformation, MC06t ( $r = .17$ ). Finally, the least skewed *Empathic Awareness* item, EA01, was similarly correlated to EA02 ( $r = .45$ ) and its transformation, EA02t ( $r = .44$ ).

As factor analysis is a linear technique, it is also necessary to assess the linearity of the items for each scale. Linearity is the condition in which the relationship between two variables approximates a straight line (Stevens, 2002). It is typically assessed through the examination of a scatter plot in which scores on each variable in a set are plotted against each other variable in the set to see the extent to which they covary. For this study, each variable was plotted with each other variable in the same scale to provide initial support for linearity. Through these graphical analyses, each of the initial 80 items was found to possess linear relationships with the other items in the corresponding scale.

As the assumption of linearity primarily held, and the possible violation of normality has been determined to only have a minor impact upon power and Type I error, *a priori* adjustments to alpha were not deemed necessary. As such, the criterion for statistical significance for all future analyses was set at .05.

### *Item Analyses*

Two initial analyses were performed on each scale to ensure it measures the intended construct consistently: item analysis was conducted through the calculation of the scale's internal consistency reliability and structural analysis occurred through the examination of each scale's structure through factor analytic techniques. For this study, internal consistency reliability was assessed using Cronbach's alpha for each scale. However, reliability is a necessary, but not sufficient, condition of demonstrating a measurement's validity. Results of the reliability analyses are presented in Table 4.

Table 4

#### *Integrated Justice and Care Scales Reliabilities*

Scale	Initial $\alpha^a$	Terminal $\alpha^b$	Items Retained <sup>b</sup>
Moral Sensitivity	.79	.79	10
Moral Judgment	.63	.71	8
Moral Motivation	.73	.83	7
Moral Character	.79	.79	10
Empathic Awareness	.80	.81	8
Compassionate Ideal	.80	.82	8
Interpersonal Relatedness	.79	.76	6
Care-Efficacy	.83	.82	9
Total	.95	.95	66

Notes: <sup>a</sup> Initial reliabilities are based upon the original 10 items per scale. <sup>b</sup> Terminal alpha and items retained are after five items were removed during structural analysis.

The item analysis process resulted in 71 items being retained. An additional five items were removed through the structural analyses discussed below, resulting in 66 items comprising the *Integrated Justice and Care Scales*. These 66 items are used for the calculation of terminal alpha for each scale and for the overall instrument. The resulting scale reliabilities ranged from moderate ( $\alpha = .71$ ) to good ( $\alpha = .83$ ). The final reliability coefficient for the 66-item *Integrated Justice and Care Scales* instrument was very high ( $\alpha = .95$ ).

### *Structural Analyses*

The eight scales were individually subjected to principal axis factor analysis in order to assess their underlying structure. As each scale was pre-determined to be uni-dimensional, no rotation was possible. Results of the analyses for each scale follow.

*Moral Sensitivity*. Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large ( $KMO = .85$ ) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Moral Sensitivity* scale and confirm its uni-dimensionality. Initial analysis yielded three factors with eigenvalues surpassing one, though analysis of the scree plot and parallel analysis

both indicated one factor, which accounted for 28.22% of the variance. Results of the factor analysis are presented in Table 5. The resulting factor has been interpreted to represent *Moral Sensitivity* as it has been previously defined.

Table 5

*Principal Axis Factor Analysis for Moral Sensitivity*

Item	Factor 1	$h^2$
MS01 I attempt to notice when others are being treated unfairly.	0.50	0.25
MS02 It is a moral concern when someone is being treated unfairly.	0.58	0.33
MS03 I make an effort to be aware of inequities between people.	0.46	0.21
MS04 I make an effort to be aware of issues of justice.	0.53	0.28
MS05 I try to identify injustices occurring around me.	0.54	0.29
MS06 I am aware when I am being treated unfairly.	0.35	0.12
MS07 I am familiar with the consequences of injustice.	0.43	0.19
MS08 I can recognize unjust actions when they occur.	0.61	0.37
MS09 The mistreatment of others usually disturbs me a great deal.	0.55	0.30
MS10 I pay attention to issues of fairness.	0.69	0.48
Extraction Sums of Squared Loadings		2.82

*Moral Judgment.* Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy



was sufficiently large (KMO = .79) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Moral Judgment* scale and confirm its uni-dimensionality. Initial analysis yielded one factor with an eigenvalue surpassing one, as did analysis of the scree plot and parallel analysis. The resulting factor accounted for 24.44% of the variance. Results of the factor analysis are presented in Table 6. The resulting factor has been interpreted to represent *Moral Judgment* as it has been previously defined.

Table 6

*Principal Axis Factor Analysis for Moral Judgment*

Item	Factor 1	$h^2$
MJ01 I try to base my actions upon the fair treatment of others.	0.62	0.38
MJ02 I tend to be concerned with whether I am doing the “right” thing.	0.46	0.21
MJ03 I know what I should do when others are being treated unfairly.	0.39	0.16
MJ04 I try to make decisions based upon applicable principles and rules.	0.52	0.28
MJ05 I believe I am responsible to uphold universal ethical principles.	0.46	0.21
MJ06 I know how to resolve problems without violating the rights of any of the people involved.	0.41	0.16
MJ07 Others’ rights are very important when solving problems.	0.57	0.32
MJ08 I try to be rational in solving conflicts.	0.48	0.23
Extraction Sums of Squared Loadings		1.96

*Moral Motivation.* Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large (KMO = .87) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Moral Motivation* scale and confirm its uni-dimensionality. Initial analysis yielded one factor with an eigenvalue surpassing one, as did analysis of the scree plot and parallel analysis. This resulting factor accounted for 41.88% of the variance. Results of the factor analysis are presented in Table 7. The resulting factor has been interpreted to represent *Moral Motivation* as it has been previously defined.

Table 7

*Principal Axis Factor Analysis for Moral Motivation*

Item	Factor 1	$h^2$
MM01 My values guide my whole approach to life.	0.68	0.47
MM02 I make a conscious effort to live in accordance with my values.	0.74	0.54
MM03 My beliefs help me to confront tragedy and suffering.	0.54	0.29
MM04 My beliefs are an important part of my individual identity.	0.78	0.61
MM05 My values give my life meaning and purpose.	0.75	0.56
MM06 I am motivated by my true inner feelings, attitudes, and beliefs.	0.50	0.25

Table 7 (continued)

*Principal Axis Factor Analysis for Moral Motivation*

Item	Factor 1	$h^2$
MM10 I feel a moral obligation to help when I can.	0.47	0.22
Extraction Sums of Squared Loadings		2.93

*Moral Character.* Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large (KMO = .87) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Moral Character* scale and confirm its uni-dimensionality. Initial analysis yielded two factors with eigenvalues surpassing one, though analysis of the scree plot and parallel analysis both indicated one factor, which accounted for 28.26% of the variance. Results of the factor analysis are presented in Table 8. The resulting factor has been interpreted to represent *Moral Character* as it has been previously defined.

Table 8

*Principal Axis Factor Analysis for Moral Character*

Item	Factor 1	$h^2$
MC01 Being logical is an important character trait.	0.35	0.13
MC02 I maintain high standards in all that I do.	0.47	0.22
MC03 I am truthful with others.	0.54	0.30
MC04 Integrity of character is essential.	0.67	0.45
MC05 It is important to be a just person.	0.52	0.27
MC06 I am obligated to be faithful to my partner/spouse.	0.55	0.30
MC07 It is important to possess clearly defined personal values.	0.56	0.32
MC08 Honesty is the best policy.	0.49	0.24
MC09 It is important to be rational.	0.52	0.27
MC10 People are responsible for upholding their word.	0.58	0.34
Extraction Sums of Squared Loadings		2.83

*Empathic Awareness.* Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large ( $KMO = .85$ ) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Empathic Awareness* scale and confirm its uni-dimensionality. Initial analysis yielded two factors

with eigenvalues surpassing one, though analysis of the scree plot and parallel analysis both indicated one factor, which accounted for 34.81% of the variance. Results of the factor analysis are presented in Table 9. The resulting factor has been interpreted to represent *Empathic Awareness* as it has been previously defined.

Table 9

*Principal Axis Factor Analysis for Empathic Awareness*

Item	Factor 1	$h^2$
EA01 I feel very emotional when I see people treated unfairly.	0.60	0.36
EA02 It upsets me to see people suffer.	0.68	0.38
EA03 I'm very sensitive to the feelings of others.	0.64	0.35
EA04 I can strongly feel what other people feel.	0.64	0.40
EA06 When I see someone in distress, I understand how they feel.	0.49	0.26
EA07 I can usually tell what my friends are feeling.	0.54	0.30
EA08 I care about what happens to people around me.	0.54	0.27
EA10 I have seen things so sad that I almost felt like crying.	0.57	0.29
Extraction Sums of Squared Loadings		2.78

*Compassionate Ideal.* Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling

Adequacy was sufficiently large (KMO = .90) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Compassionate Ideal* scale and confirm its uni-dimensionality. Initial analysis yielded one factor with an eigenvalue surpassing one, as did analysis of the scree plot and parallel analysis. This resulting factor accounted for 38.50% of the variance. Results of the factor analysis are presented in Table 10. The resulting factor has been interpreted to represent *Compassionate Ideal* as it has been previously defined.

Table 10

*Principal Axis Factor Analysis for Compassionate Ideal*

Item	Factor 1	$h^2$
CI01 I try to resolve problems in a way that does not cause harm to any of the people involved.	0.53	0.28
CI02 I would not do anything to jeopardize my relationship with someone.	0.49	0.24
CI03 It is important to be a warm-hearted person.	0.73	0.52
CI04 I base my decisions upon helping other people.	0.51	0.26
CI05 When making decisions, I consider my relationships with those involved.	0.57	0.33
CI07 I usually try to do what I think is kind.	0.72	0.52
CI08 I want to be known as someone who is always sensitive to others' feelings.	0.75	0.57
CI09 It is important to be a forgiving person.	0.60	0.36
Extraction Sums of Squared Loadings		3.08

*Interpersonal Relatedness*. Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant using factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large ( $KMO = .85$ ) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factor analysis was performed to test the structure of the *Interpersonal Relatedness* scale and confirm its uni-dimensionality. Initial analysis yielded two factors with eigenvalues surpassing one, as did analysis of the scree plot and parallel analysis. Upon review of the items, however, only one interpretable factor was found. Four items were removed (IR01, IR04, IR05, & IR06) based upon structure coefficients. After removing those items, confirmation of a one-factor solution was provided by an additional principal axis factor analysis and examination of the resulting scree plot and parallel analysis. The resulting factor accounted for 35.77% of the variance. Results of the factor analysis are presented in Table 11. The resulting factor has been interpreted to represent *Interpersonal Relatedness* as it has been previously defined.

Table 11

*Principal Axis Factor Analysis for Interpersonal Relatedness*

Item	Factor 1	$h^2$
IR02 I am able to relate to others based upon our similarities.	0.65	0.43
IR03 I appreciate the similarities between others and myself.	0.62	0.39

Table 11 (continued)

*Principal Axis Factor Analysis for Interpersonal Relatedness*

Item		Factor 1	$h^2$
IR07	I can identify things I have in common with people I meet.	0.60	0.35
IR08	Knowing about the experience of people from differing backgrounds increases my self-understanding.	0.60	0.36
IR09	I can best understand someone after I get to know how he/she is <i>both</i> similar and different from me.	0.57	0.32
IR10	I can find things in common with people from other generations.	0.55	0.30
Extracted Sums of Squared Loadings			2.15

*Care-Efficacy*. Examination of the correlation matrix (Appendix K) indicated that most variables had sufficient correlations to warrant performing factor analytic techniques. Additionally, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix was not an identity matrix and at least some of the variables were significantly correlated. Further, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large ( $KMO = .88$ ) to predict that the data were likely to factor well based on correlation and partial correlation.

Principal axis factoring with was performed to test the structure of the *Care-Efficacy* scale and confirm its uni-dimensionality. Initial analysis yielded two factors with eigenvalues surpassing one, as did analysis of the scree plot and parallel analysis. Upon review of the items, only one interpretable factor was found. One item was removed (CE01) based upon its structure coefficient. After removing that item, confirmation of a one-factor solution was provided by an additional principal axis factor analysis and



examination of the resulting scree plot and parallel analysis. The resulting factor accounted for 34.32% of the variance. Results of the factor analysis are presented in Table 12. The resulting factor has been interpreted to represent *Care-Efficacy* as it has been previously defined.

Table 12

*Principal Axis Factor Analysis for Care-Efficacy*

Item	Factor 1	$h^2$
CE02 I can help others even when I do not have access to necessary resources.	0.54	0.30
CE03 I can help others when I am experiencing social difficulties.	0.58	0.33
CE04 I can assist others when I have never before performed the task.	0.51	0.26
CE05 I am able to help others when drastic consequences are involved.	0.58	0.33
CE06 I am able to provide assistance when the task will require me to be flexible.	0.49	0.24
CE07 I am able to help others when I have seen someone fail at the task.	0.51	0.26
CE08 I can help others when I am required to act quickly.	0.65	0.42
CE09 I am able to provide assistance when feeling tired or fatigued.	0.61	0.38
CE10 I am able to help others when the task seems overwhelming.	0.76	0.57
Extraction Sums of Squared Loadings		3.09

### *Structure of the 66-Item Integrated Justice and Care Scales*

An additional principal axis factor analysis using the same extraction and interpretation criteria as for the individual scales (e.g., eigenvalues greater than 1.00, scree plot, and parallel analysis) was performed. An examination of the inter-item correlation matrix between all remaining items (Appendix L) provides support for the appropriateness of utilizing factor analysis to reduce the data. Further, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix is not an identity matrix and at least some of the variables are significantly correlated. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large ( $KMO = .93$ ) to predict that the data are likely to factor well based on correlation and partial correlation.

Principal axis factoring with direct oblimin rotation ( $\delta = 0$ ) was performed to test the structure of the 66-item *Integrated Justice and Care Scales*. Analysis yielded fifteen factors with eigenvalues surpassing one (Kaiser, 1960), and the scree plot (Cattell, 1966) was ambiguous (Figure 2). The results of the parallel analysis (Horn, 1965) were also ambiguous, indicating somewhere between six and ten factors (Figure 3). See Appendix M for the random data table for the parallel analysis. Review of the structure matrices for nine and ten extracted factors revealed several uninterruptible factors, whereas the structure matrices for six, seven, and eight extracted factors were moderately interpretable. As it is often more ideal in exploratory research to extract too many factors than too few and the theory supported eight factors, the decision was made to extract eight factors. The eight extracted factors accounted for 40.96% of the variance. See Appendix N for the resulting pattern and structure matrices.

Figure 2

*Scree Plot for 66-item Integrated Justice and Care Scales*

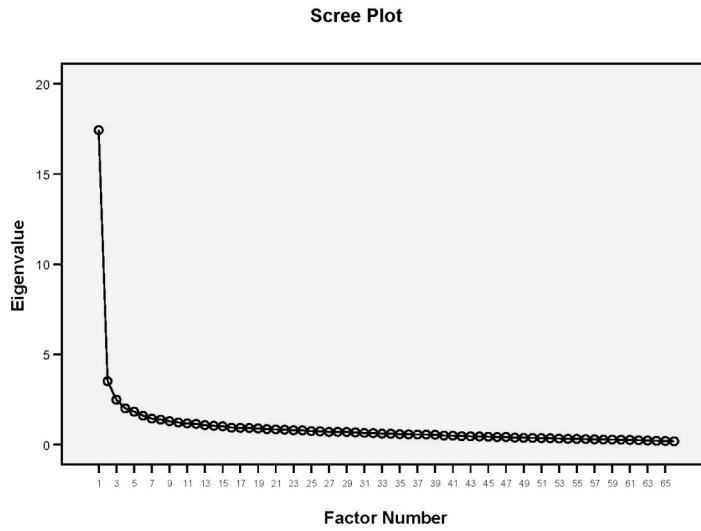
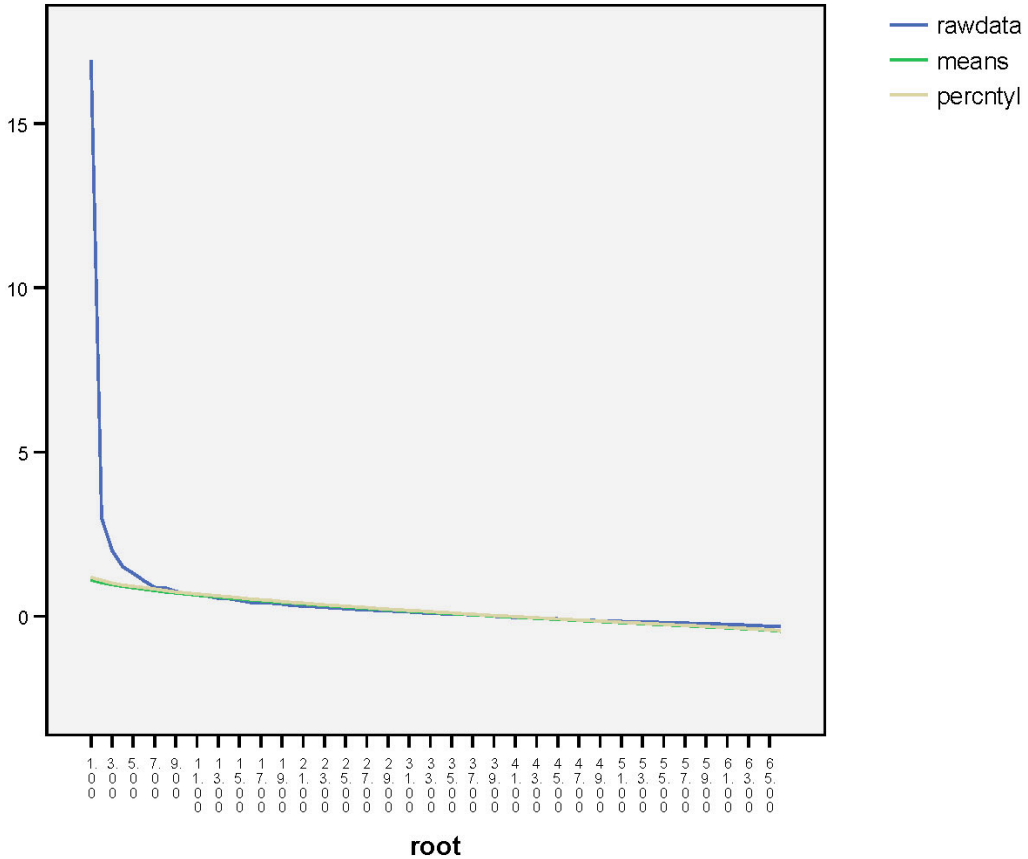


Figure 3

*Parallel Analysis for 66-item Integrated Justice and Care Scales*



As a structure coefficient indicates the relationship of the observed variable to its underlying factor, the structure matrix is necessary for interpreting factors (Gorsuch, 1983). For this study, an examination of the structure matrix revealed that five of the 66 items (MS07, MJ05, MC01, MC05, and MC08) did not load above .40 on any of the resulting factors. The remaining 61 items loaded on at least one factor above the .40 level, 22 of which were confounded on at least two factors.

The highest loading items on the first factor are primarily from the *Empathic Awareness* and *Compassionate Ideal* scales, providing initial evidence for the existence of these related constructs. All of the items from the *Care-Efficacy* scale loaded on the second factor, with no other items loading above .40, showing further support for its viability as well. The third factor consists of items from each scale except *Empathic Awareness* and *Care-Efficacy* loading above .40, though most of the items from the *Moral Motivation* and *Moral Character* scales loaded on this factor and the highest loadings were from these scales. As such, the third factor provides evidence to support these constructs. The fourth factor had loadings above .40 for all of the *Justice* scales other than *Moral Motivation*, and only two additional items loaded on this factor. The fifth factor primarily consists of items from the *Interpersonal Relatedness* scale, with one item each from the *Moral Character* and *Empathic Awareness* scales. Factor six consisted of four items from the *Moral Sensitivity* scale, with one item each from the *Moral Judgment*, *Moral Motivation*, *Empathic Awareness*, and *Care-Efficacy* scales. Similar to the first factor, factor seven is comprised almost entirely of items from the *Empathic Awareness* and *Compassionate Ideal* scales. The eighth factor consists of a

variety of items from the *Moral Sensitivity*, *Moral Judgment*, *Moral Motivation*, *Empathic Awareness*, *Compassionate Ideal* scales

The resulting factor structure shows initial support for components of both *Justice* and *Care*, whether the eight components are each independent or whether they should be reduced in some fashion. According to Guadagnoli and Velicer (1988), however, reliable factors are those that possess four or more loadings with absolute values above .60 or at least ten loadings if the values are nearer .40. Factors with only a few loadings should not be interpreted unless there is a very high sample size, and one with a high participant to item ratio in particular. Additionally, the low communalities among the items within each scale warrants further concern. With these considerations in mind, the factor structure for this study may be relatively unstable, particularly for the later factors. As such, there is insufficient evidence to abandon the theoretical structure of the eight scales in favor of the obtained factors without similar results from a much larger sample. Therefore, the theoretical structure with eight factors was retained for all future analyses.

#### *Factor Analysis of the Scale Factor Scores*

A final principal axis factor analysis of scale factor scores was performed to assess the first-order structure based upon the eight scales. An examination of the inter-item correlation matrix between all remaining items provided support for the appropriateness of utilizing factor analysis to reduce the data. Scale factor scores for participants across the eight scales were all highly inter-correlated, and all were all significant at the .01 level (see Table 13). The relatively high factors between all variables provided initial evidence that a one-factor solution may result.

Table 13

*Means, Standard Deviations, and First-Order Correlations between Scale Factor Scores*

Construct	MS	MJ	MM	MC	EA	CI	IR	CE
Moral Sensitivity	1.00							
Moral Judgment	.76	1.00						
Moral Motivation	.53	.62	1.00					
Moral Character	.59	.65	.70	1.00				
Empathic Awareness	.62	.64	.53	.60	1.00			
Compassionate Ideal	.55	.66	.57	.64	.77	1.00		
Interpersonal Relatedness	.60	.62	.59	.67	.65	.67	1.00	
Care-Efficacy	.56	.54	.41	.43	.39	.36	.52	1.00

Further, Bartlett's Test of Sphericity was significant ( $p < .01$ ), indicating that the correlation matrix is not an identity matrix and at least some of the variables are significantly correlated. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was sufficiently large ( $KMO = .90$ ) to predict that the data are likely to factor well based on correlation and partial correlation. One factor resulted from the analysis, accounting for 59.16% of the variance. Results of this analysis can be found in Table 14.

Table 14

*Principal Axis Factor Analysis for Integrated Justice and Care Scales*

Construct	$h^2$	Factor 1
Moral Sensitivity	0.60	0.77
Moral Judgment	0.69	0.83
Moral Motivation	0.59	0.77
Moral Character	0.61	0.78
Empathic Awareness	0.61	0.78
Compassionate Ideal	0.61	0.78
Interpersonal Relatedness	0.65	0.81
Care-Efficacy	0.36	0.61
Extraction Sums of Squared Loadings		4.80

As the eight theoretical factors were all highly correlated with one another, only one first-order factor emerged. The zero-order factor scores for all of the scales loaded substantially (between .61 and .83) on the resulting factor, which has been determined to represent the overall construct of moral theory. This resulting analysis indicates that while both *Justice* and *Care* exist as independent constructs within moral psychology, they appear to be positively related to one another.

*Group Effects*

To assess the effects of participant demographics upon the results, a factorial multivariate analysis of variance (MANOVA) was considered to examine the effects of gender, race/ethnicity, and age upon scale scores. This factorial design would allow

examination of the interaction effects of gender, race/ethnicity, and age, which would not be possible utilizing three one-way analyses (Stevens, 2002).

A review of participants' race/ethnicity revealed that there was insufficient variation to allow its inclusion in a factorial design. Specifically, there were not sufficient participants in most of the resulting cells, and a 2 x 6 x 8 analysis (gender x race/ethnicity x age) resulted in 46 of 96 cells being completely empty.

The age demographic variable also resulted in cell sizes that were too small to provide the necessary power as described above. Specifically, a 2 x 8 factorial design resulted in seven cells with fewer than 20 participants, five of which had fewer than eight participants as required. However, as there was greater variation among participants' age, participants were in combined into two groups, those from 18 to 21 and those from 22 to 25, allowing for a 2 x 2 factorial design assessing group effects of age in conjunction with gender. While this resulting design still has relatively few participants per cell, particularly for two groups of older participants, it allows large or very large effect sizes to be identified (Stevens, 2002).

*Interaction Effects.* Prior to interpreting the results, the homogeneity of the covariance matrices was assessed to ensure the groups were considered to come from the same population (Sherry, 2006). The results indicated that the groups were initially similar and that differences in the discriminant analysis are attributable to the variables of interest (Box's  $M = 154.67$ ,  $F = 1.35$ ,  $p < .01$ ). After evaluating the homogeneity of covariance, the multivariate statistical significance is assessed. The interaction for gender and age was non-significant [ $T^2 = 4.80$ ;  $\Lambda = .99$  ( $F = 0.57$ ,  $p = .80$ )]. As such, results for



participants by gender were not moderated by their age. Additionally, the main effect for age was not found to be significant at the multivariate level [ $T^2 = 14.01$ ;  $\Lambda = .96$  ( $F = 1.71, p = .09$ )]. However, a significant main effect for gender was found at the multivariate level. The results based upon participant gender follow.

*Gender.* Gender with two levels, female and male, was used as the independent variable for this analysis, and the eight dependent variables were the composite scores for each of the *Integrated Justice and Care Scales*. The main effect of gender upon the eight scales of the new instrument was found to be significant at the multivariate level [ $T^2 = 61.28$ ;  $\Lambda = .86$  ( $F = 7.64, p < .01$ )]. Therefore, differences do exist based upon participant gender, and account for approximately 14% of the variance.

As multivariate significance was found, the eight dependent variables may combine to differentiate the two groups. Therefore, a descriptive discriminant analysis was conducted to investigate whether linear combinations of the eight dimensions to define the differences between female and male students. Descriptive discriminant analysis assumes that the dependent variables are highly correlated, which has generally been met for this study. However, several of the dependent variables were only moderately correlated, suggesting possible limitations. The means, standard deviations, and effect sizes for each group are presented in Table 15.

Table 15

*Means, Standard Deviations, and Effect Sizes for the Integrated Justice and Care Scales for Two Groups*

Variable	Females		Males		Cohen's <i>d</i>
	M	SD	M	SD	
Moral Sensitivity	38.53	3.93	38.96	4.65	-.10
Moral Judgment	31.02	3.24	31.06	3.56	-.01
Moral Motivation	28.81	3.51	28.66	3.71	.04
Moral Character	41.74	4.05	41.58	4.17	.04
Empathic Awareness	32.75	3.71	30.52	4.37	.54
Compassionate Ideal	32.41	4.00	30.75	4.28	.40
Interpersonal Relatedness	24.33	2.64	23.69	2.80	.24
Care-Efficacy	32.53	4.27	33.86	4.39	-.30
Total	262.13	23.44	259.08	25.81	.13

Since two levels of the independent variable were considered with eight dependent variables, only one discriminant function was possible. The resulting function was statistically significant [ $T^2 = 61.28$ ;  $\Lambda = .86$  ( $F = 7.48$ ,  $p = .01$ )]. The canonical correlation ( $R_c = .37$ ) indicate a function that discriminates sufficiently with a moderate relationship between the grouping variable, gender, and the set of dependent variables. These results indicate that females and males differ on at least one of the eight dependent variables.

To interpret the discriminant function, both the structure matrix and the standardized matrix were considered. Both matrices must be considered since highly

correlated variables share their contributions to the discriminant function. An evaluation of the univariate analyses provided additional information regarding these differences. The resulting structure and standardized coefficients are provided in Table 16 along with the univariate *F* ratios and significance levels, which provide further support for the gender differences.

Table 16

*Summary of Canonical Discriminant Functions for Gender*

Variable	Structure	Standardized	<i>F</i>	<i>p</i>
Moral Sensitivity	.09	.36	0.49	.49
Moral Judgment	.05	.36	0.16	.69
Moral Motivation	-.03	.12	0.07	.80
Moral Character	-.06	.25	0.20	.66
Empathic Awareness	-.58	-.97	20.78	.00
Compassionate Ideal	-.46	-.37	13.30	.00
Interpersonal Relatedness	-.28	-.36	5.01	.03
Care-Efficacy	.27	.50	4.64	.03

The results above suggest that females and males differed significantly for each of the four *Care* scales: *Empathic Awareness*, *Compassionate Ideal*, *Interpersonal Relatedness*, and *Care-Efficacy*. Further, females and males did not differ significantly on the four *Justice* scales: *Moral Sensitivity*, *Moral Judgment*, *Moral Motivation*, and *Moral Character*. *Empathic Awareness* and *Compassionate Ideal* were primarily responsible for differences between female and male participants, both with medium effect sizes ( $d = .54$

and  $d = .40$ , respectively). *Interpersonal Relatedness* and *Care-Efficacy* were responsible to a lesser extent, both with small effect sizes ( $d = .24$  and  $d = -.30$ , respectively).

However, *Care-Efficacy* was negatively related to the other three *Care* variables.

These results indicate that the differences between the two groups are due almost entirely to differences in scores on the four *Care* scales. While there appears to be little difference between scores for females and males on the four *Justice* scales, there are significant differences for all four *Care* scales. Specifically, females tend to score much higher on three of the four *Care* scales, and for the *Empathic Awareness* scale in particular. However, males tend to score much higher on the *Care-Efficacy* scale.

### *Construct Validity*

For the purposes of this study, the relationship between participants' scores on the *IJCS* and the *Morally Debatable Behaviors Scale* and the *Prosocial Tendencies Measure* were examined to evaluate the scales' convergent validity.

An examination of the relationship between the *Integrated Justice and Care Scales* and the *Morally Debatable Behavior Scales* (MDBS; Harding & Phillips, 1986) was conducted to examine relationships between participant response patterns across the *IJCS* scales with responses across the dimensions of the *MDBS*. The *Personal-Sexual Morality Scale* focuses upon life concerns and sexual relationships. The *Self-Interest Morality Scale* focuses upon issues of honesty and personal integrity. The *Legal-Illegal Morality Scale* focuses upon behaviors that are legally prohibited. Results of this analysis are presented in Table 17.

Table 17

*Correlations between the Integrated Justice and Care Scales and the Morally Debatable Behaviors Scales (MDBS)*

Scale	MDBS		
	Personal-Sexual	Self-Interest	Legal-Illegal
Moral Sensitivity	.10	.33	.25
Moral Judgment	.21	.40	.36
Moral Motivation	.38	.44	.44
Moral Character	.32	.48	.44
Empathic Awareness	.21	.42	.35
Compassionate Ideal	.31	.45	.40
Interpersonal Relatedness	.17	.37	.32
Care-Efficacy	.12	.20	.17
Total	.29	.48	.43

*Note.* Correlations greater than .10 are significant at the .05 level. Correlations greater than .14 are significant at the .01 level.

The results of this comparison indicate low to moderate correlations between the *IJCS* and the *MDBS*, even though they are all significant. The *Personal-Sexual Morality Scale* resulted in the lowest overall correlations with the *IJCS* ( $r = .10$  to  $r = .38$ ), indicating that the *IJCS* does not specifically address specific behaviors related to sexual relationships. The *IJCS* are more highly related to the *Legal-Illegal Morality Scale*, indicating a moderate relationship between scores on the *IJCS* and perceptions of illegal behavior. Lastly, the *IJCS* are most highly related ( $r = .20$  to  $r = .48$ ) to the *Self-Interest*

*Morality Scale*, indicating a more direct relationship with honesty and integrity of character.

The *Care-Efficacy* scale consistently had small correlations with the other scales, indicating a person's perception of their ability to help another person is relatively unrelated to their opinions regarding the appropriateness of sexual, self-focused, or illegal behaviors. Additionally, the *Moral Motivation* and *Moral Character* scales consistently had the highest correlations with the *MDBS*, indicating a stronger relationship between these variables and perceptions of morally appropriate or inappropriate behaviors.

An examination of the relationship between the *Integrated Justice and Care Scales* and the *Prosocial Tendencies Measure* was also conducted to examine relationships between participant response patterns across the *IJCS* scales with the six dimensions of prosocial behaviors: public, anonymous, dire, emotional, compliant, and altruism. Public prosocial behaviors are those occurring in front of an audience. Anonymous prosocial behaviors, on the other hand, are those that occur without the knowledge of the one who is actually helped. Dire prosocial behaviors involve helping in crisis or emergency situations, whereas emotional prosocial behaviors involve helping others in other emotional situations that are not based upon an emergency. Compliant prosocial behaviors involve helping others in response to a verbal or non-verbal request. Altruism involves voluntary helping that is motivated primarily by the concern for the needs and welfare of another. Results of this analysis are presented in Table 18.

Table 18

*Correlations between the Integrated Justice and Care Scales and Prosocial Tendencies Measure (PTM)*

Scale	PTM					
	Public	Anon <sup>a</sup>	Dire	Emot <sup>b</sup>	Comp <sup>c</sup>	Altruis <sup>d</sup>
Moral Sensitivity	-.10	.30	.46	.48	.38	.19
Moral Judgment	-.16	.30	.39	.43	.39	.22
Moral Motivation	-.18	.27	.36	.39	.38	.27
Moral Character	-.22	.25	.33	.35	.41	.30
Empathic Awareness	-.23	.23	.34	.55	.43	.31
Compassionate Ideal	-.25	.23	.31	.54	.50	.32
Interpersonal Relatedness	-.18	.21	.34	.46	.38	.23
Care-Efficacy	-.06	.28	.43	.35	.36	.09
Total	-.21	.33	.46	.56	.51	.30

*Note.* Correlations greater than .10 are significant at the .05 level. Correlations greater than .14 are significant at the .01 level. <sup>a</sup> Anonymous. <sup>b</sup> Emotional. <sup>c</sup> Compliant. <sup>d</sup> Altruism.

Similar to the relationships between the *IJCS* and the *MDBS*, the *IJCS* and the *PTM* scales have low to moderate relationships, though once again they are all statistically significant. Most of the strongest relationships exist between the *PTM* and the *Care* scales with the exception of the *Moral Sensitivity* scale, which is the closest in operationalization to the *Care* scales. As might be expected, the public prosocial behavior scale is negatively correlated with the *IJCS*, even if with low correlations, as seeking public displays of assisting other would seem to occur contrary to moral rationales. Additionally, emotional prosocial behaviors, those involved in assisting others during

emotional situations, are related most highly to the majority of the *Integrated Justice and Care Scales*, with their highest relationship being with *Empathic Awareness* and *Compassionate Ideal* scales.

*Discriminant Validity.* Discriminant, or divergent, validity concerns the relationship between a proposed measure and theoretically dissimilar measures (Shultz & Whitney, 2005). The measures of two theoretically different constructs should not be so highly correlated to indicate that they measure the same construct. Such a correlation would imply that a definitional overlap exists between the two different constructs.

For the purpose of this study, discriminant validity was assessed through an examination of the relationship between scores on the *IJCS* and the *Marlowe-Crowne Social Desirability Scale*. An examination of the relationship between the *Integrated Justice and Care Scales* and socially desirable response patterns was conducted to identify the impact of external influences upon participant responses. Socially desirable responding is the tendency to respond in an extreme manner, whether good or bad. Such responses are an attempt by the participant to respond in a manner that is expected of them or that is exceptionally deviant. As social desirability is a different construct from any being measured by the current instrument, the goal was for the establishment of a small relationship. Results of this analysis are presented in Table 19.



Table 19

*Correlations between the Integrated Justice and Care Scales and the Marlowe-Crowne Social Desirability Scale (M-CSDS)*

Scale	M-CSDS
Moral Sensitivity	.07
Moral Judgment	.14
Moral Motivation	.14
Moral Character	.17
Empathic Awareness	.05
Compassionate Ideal	.23
Interpersonal Relatedness	-.01
Care-Efficacy	.13
Total	.14

*Note.* Correlations greater than .09 are significant at the .05 level. Correlations greater than .13 are significant at the .01 level.

Results from this analysis indicate that five of the eight scales are significantly correlated with socially desirable response patterns, four of which at the .01 level. Scale scores for *Compassionate Ideal* are the most highly correlated with social desirability ( $r = .23$ ), indicating that higher scores on this scale are the most related to participants desiring to respond in a socially expected or unexpected manner. Further, scores on the *Moral Judgment* ( $r = .14$ ), *Moral Motivation* ( $r = .14$ ), *Care-Efficacy* ( $r = .13$ ), and *Moral Character* ( $r = .17$ ) scales were also significantly related to social desirability. The lowest correlation was for scores on the *Interpersonal Relatedness* scale ( $r = -.01$ ), indicating

that participants' view of their connection with others are not impacted by a desire to respond in a socially acceptable manner.

However, as social desirability is common with constructs such as these, an examination of the specific correlations was warranted. As previously mentioned, the highest correlation was for the *Compassionate Ideal* scale ( $r = .23$ ), which is still relatively low. According to Kline (1998), a correlation of .80 or greater would be necessary to indicate the constructs overlap. As such, the results suggest that each of the scales measure separate constructs from social desirability, providing initial evidence of discriminant validity.

### Phase III

#### *Test-Retest Reliability*

Test-retest reliability is an estimation of the stability of a participant's scores on an instrument over time, and represents the correlation between two or more administrations of the same measure (Crocker & Algina, 1986). It assumes that the two administrations of the instrument do not differ in any way, and is calculated as a correlation between a participant's score on the first administration and each subsequent administration. Test-retest reliability is considered a variation of split-half reliability and is symbolically represented by the Spearman-Brown coefficient ( $r_{12}$ ).

Due to concerns such as the effect of learning and memory upon a participant's performance, it is desirable to provide a lengthy gap between the administrations provided the construct assessed is expected to be stable during that time. Administrations that are too close together will likely result in test-retest reliability scores that are too

high. For the purposes of this study, participants completed the *Integrated Justice and Care Scales* two times each with one week between administrations. The test-retest reliabilities for the final scales are presented in Table 20.

Table 20

*Test-Retest Reliability Estimates for the Integrated Justice and Care Scales*

Scale	Final	
	Items	$r_{12}$
Moral Sensitivity	10	.78
Moral Judgment	8	.78
Moral Motivation	7	.86
Moral Character	10	.77
Empathic Awareness	8	.74
Compassionate Ideal	8	.82
Interpersonal Relatedness	6	.81
Care-Efficacy	9	.82
Total	66	.91

*Note.* All correlations are significant at the .01 level.

The resulting reliabilities were moderate to good ( $r_{12} = .74$  to  $r_{12} = .86$ ) for the individual scales, and very good for the overall instrument ( $r_{12} = .91$ ). These test-retest reliability estimates indicate that the instrument, and its eight scales, may be stable over time.

## CHAPTER V

### DISCUSSION

Understanding the factors that jointly influence a person's moral action has tremendous implications for educational practice and society as a whole. Kohlberg's promotion of *Justice*-based morality substantially contributed to the understanding of moral behavior, as did Rest and his colleagues' expansion of Kohlbergian ideas. Kohlberg's (1958) stages of moral development provided a starting point to examine how individuals consider moral dilemmas, at least in a controlled setting. Rest (1983) proposed that morality was more complex than reasoning alone, with moral judgment serving as only one of four integrative components. He contended that moral decision-making interacts with awareness of moral issues, motivation to act in a moral way, and the person's inherent character to determine moral behavior. While he extended Kohlberg's work in an important way, he did so within the bounds of the traditional *Justice*-based approach to morality.

Gilligan's assertion that some individuals approach moral decision making from a *Care*-based perspective has received much criticism, and has been frequently dismissed for various reasons (Jorgensen, 2006). Like Kohlberg, her focus was upon the cognitive processes associated with moral decision-making. However, just as Rest argued that *Justice*-based morality was more complex than judgment, so too would be *Care*-based morality. As such, this study sought to expand the understanding of *Care*-based morality,

including an understanding of its relationship to *Justice* and potential demographic differences.

The results presented in the previous chapter provide considerable insight for those interested in the field of moral psychology. This research provides preliminary empirical support for the *Care* dimension, including its four theoretical components, as well as for the eight-component measure of the factors contributing to moral behavior. Additionally, evidence is provided concerning gender differences between the dimensions of *Justice* and *Care*. A summary of the major research findings follows.

#### Summary of Findings

The results of the three phases of this research study address the three research questions stated previously. A summary of the results is listed below according to the research question they address.

The first question concerns the development of an operational definition of the *Care* dimension as well as a measure of this dimension in relation to the *Justice* dimension, which has been operationalize using Rest's (1983) Four Component Model. This question is addressed in some form by all three of the research phases. Phase I provides initial evidence supporting the operational definition of *Care* through the examination of content validity using subject matter experts. Further, the high reliabilities of the eight scales as well as the evidence of convergent and divergent validity provide additional support through Phase II, as does an examination of test-retest reliability during Phase III.

The second research question concerns the relationship between the *Justice* and *Care* dimensions, as well as their respective relationships with demographic differences. This question is addressed through the second phase of the research, with the following overall results. An examination of the correlations between the 66 retained items, the correlations between the eight scales, and the single first-order factor indicates that there is a strong positive correlation between the dimensions of *Justice* and *Care* as measured through this instrument. However, gender does serve to discriminate the two dimensions. Specifically, females and males tend to score similarly on the four *Justice* scales while females tend to score higher on three of the four *Care* scales: *Empathic Awareness*, *Compassionate Ideal*, and *Interpersonal Relatedness*. Males, on the other hand, tend to score significantly higher on the *Care-Efficacy* scale.

The third and final research question concerns the relationship between the *Justice* and *Care* dimensions and other related measures, namely the *Morally Debatable Behaviors Scales*, the *Prosocial Tendencies Measure*, and the *Marlowe-Crowne Social Desirability Scale*. This question is addressed through the second phase of the research, with the following overall results. There are generally moderate correlations between the *MDBS* and the *IJCS*, though the personal-sexual scale tended to have small correlations with the *IJCS*. Additionally, there are moderate correlations between the *IJCS* and *PTM* scales, though the correlations for the public scale of the *PTM* and the *IJCS* are all negative as expected. Lastly, there were only small correlations between the *IJCS* and the *M-CSDS*, indicating that scores on the *IJCS* were not generally influenced by a desire to respond in a socially acceptable manner.

The overall results support the expansion of the *Care* dimension as well as its integration with the *Justice* dimension as promoted by Rest (1983). While all of the scales are strongly correlated, there is evidence that each scale can be accurately measured independently, and there is evidence that *Justice* and *Care* are distinct dimensions, differentiated in part by gender. Thus, evidence exists to justify and support the expanded model. Further research is necessary to replicate and extend these findings as discussed in the implications section below.

### Conclusions

Based upon these results, several conclusions can be drawn. Those conclusions are in relation to the research questions asked, namely concerning the existence and nature of the *Care* dimension, as well as its relation to the *Justice* dimension, the feasibility of measuring *Justice* and *Care* in conjunction with one another, and the influence of gender upon moral thought and action. The results indicate that the *Care* dimension does exist and it is strongly related to the *Justice* dimension. Further, it can be measured in conjunction with *Justice*, and the results of this do indicate gender differences for *Care*, though not for *Justice*. Explanations of these conclusions follow.

### *Components of Care Model*

Gilligan's *Care*-based model of moral reasoning provided a substantial contribution to moral theory, and resulted in an examination of differing perspectives as well as the possible influence of gender. Several methods exist to research such

*Care*-based perspectives, though the current theory focuses primarily upon *Care*-based reasoning, and therefore lacks the breadth of the *Justice*-based approaches as expanded by Rest (1983) and his colleagues. As such, a major argument of this study was that *Care*-based morality does exist, but it needed to be broadened beyond reasoning and then fully operationalized so it could be measured with similar success of the *Justice*-based approaches. Therefore, a Components of Care model with four interactive components was developed for the purposes of this study. The theoretical support of the construct in the literature combined with the content validity of the items using subject matter experts and the results of the instrument development, provide supporting evidence of this expanded model of *Care*.

To provide initial support for this model, each of the four components of *Care* was developed using relevant literature from the fields of psychology and education. *Empathic Awareness* is based upon Bandura's construct of attentional processes as it is integrated with empathy, which is thought to be a major contributor to a caring moral perspective (Hoffman, 1984). *Compassionate Ideal* is based primarily upon Gilligan's (1982) view of the existence of a caring orientation in moral decision-making that is independent of the traditional *Justice*-based perspective. *Interpersonal Relatedness* takes into account the role of relationships within the caring perspective with an integration and adaptation of Miville and her colleagues' (1999) concept of Universal-Diverse Orientation to examine individual relationships with those similar to and dissimilar from the moral agent. Lastly, *Care-Efficacy* is based upon Bandura's notion of perceived self-efficacy and the understanding that efficacy is specific to individual domains of functioning (Bandura, 1997).



The assessment of content validity of the items comprising the *Integrated Justice and Care Scales* provided additional evidence to support this new model. Specifically, at least six of the eight expert judges were able to identify the underlying construct upon which the 80 administered items were developed, providing evidence of discrimination between the components. Additionally, the high scale reliabilities provided further evidence that items were all measuring a similar underlying construct, and the high test-retest reliabilities indicate the relative stability of the constructs over time.

The assessment of construct validity using the *Morally Debatable Behaviors Scale* and the *Prosocial Tendencies Measure* provided slight evidence of convergent validity due to the relationships between the various scales of each instrument, though further examination in this area is warranted with better-related instruments for each construct. Additionally, discriminant validity was supported through the *Marlowe-Crowne Social Desirability Scale*, indicating a very small relationship between the construct and a propensity to respond in a socially desired manner, as well as through examination of gender differences, which provide support for the *Care* dimension being truly distinct from the *Justice* dimension due to differing response patterns for females and males.

#### *Integrated Justice and Care Scales*

In addition to the development of an expanded model of *Care*, this purpose of this study was to develop an instrument to measure the new model as it was integrated with the *Justice*-based approach of Rest's (1983) Four Component Model.

The overall results provide some empirical evidence for the reliable and valid measurement of each of the eight components on an individual basis. However, the low communalities among the items within each scale and the relatively small sample size to item ratio indicate that the factor structure may be unstable. According to Gorsuch (1983), prior to pursuing factorial invariance, or replication of the factor structure, additional scale development should be attempted in such cases. Based upon the current results, several of the components seemingly overlap, and further research is necessary to determine if those components should be combined to represent more adequately the underlying causes of moral action. Specifically, simple structure, or each item loading on its own theoretical scale and no others, was not obtained through the principal axis factor analysis of the 66 retained items. Additionally, the eight resulting scales had high correlations with one another, requiring further research to support the independence of each construct.

It is important to note that the purpose of the resulting scale is primarily to measure the theoretical model, not to measure participant levels on each of the eight constructs. Specifically, the *Moral Judgment* scale measures participants' self-report preference toward *Justice*-based factors in moral decision making, and is not aimed at measuring how adept they are in making those decisions. Similarly, the *Empathic Awareness* scale assesses the role of an empathic awareness of those around a person, not how attuned a person is to the circumstances of another person on a daily basis. As a self-report measure, it is hoped that there would exist a significant relationship between espoused preferences and resulting action, though that assertion is beyond the scope of the current study. Further conclusions resulting from the instrument

development are described below according to each scale.

*Moral Sensitivity Scale.* According to Rest (1984), *Moral Sensitivity* is an awareness of how one's actions influence others in a just manner. Participants who score high on the *Moral Sensitivity* scale are aware of their own actions and those of other people that affect the just treatment of others. The results of the content validity of *Moral Sensitivity* scale items and the correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for a ten-item measure of *Moral Sensitivity*.

The 66-item principal axis factor analysis provides additional evidence that the construct of *Moral Sensitivity* exists and it is measured through the resulting scale. Specifically, numerous items from this scale loaded on the sixth factor and comprised the highest loadings on the factor. Other items from this scale loaded on a more general *Justice*-based factor as well as a factor composed of both *Justice* and *Care* items, indicating the scale may need refinement.

*Moral Judgment Scale.* *Moral Judgment* is a process of ethical reasoning in which the merit of an individual's actions is considered based upon principles of justice, duty, and responsibility (Rest, 1984). Participants who score high on the

*Moral Judgment* scale make moral decisions based upon the fair and equitable treatment of others. The results of the content validity of *Moral Judgment* scale items and the correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for an eight-item measure of *Moral Judgment*.

The 66-item principal axis factor analysis provides limited evidence concerning the construct of *Moral Judgment*. Specifically, the large item loadings from the resulting scale did not form a factor with simple structure, and instead the items loaded on two factors. The first factor was comprised primarily of *Justice*-based items other than those from the *Moral Motivation* scale, and the second factor is more general with items from both *Justice*- and *Care*-based scales. These findings indicate that the scale may need refinement or the construct may warrant revision or even being dropped in favor of its inclusion into other constructs.

*Moral Motivation Scale.* *Moral Motivation* is an individual's prioritization of certain values and actions above other values and actions (Rest, 1984). Participants who score high on the *Moral Motivation* scale prioritize principles of justice, duty, and responsibility above others when making moral decisions. The results of the content validity of *Moral Sensitivity* scale items and the correlation between the items

provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for a seven-item measure of *Moral Motivation*.

The 66-item principal axis factor analysis provides additional evidence that the construct of *Moral Motivation* may exist and it is measured through the resulting scale. Specifically, numerous items from this scale loaded on the third factor, which was primarily comprised of items from this scale and the *Moral Character* scale. This factor may indicate the need to merge the *Moral Motivation* and *Moral Character* constructs as moral motivational forces may be a part of a more encompassing construct of moral character traits. Specifically, the construct of *Moral Motivation* is related to personal values, which may form the basis for *Moral Character*.

Interestingly, however, none of the items from the *Moral Motivation* scale loads substantially on the fourth factor, which is comprised of numerous items from all three of the other *Justice*-based scales. This finding may serve to differentiate *Moral Motivation* sufficiently to warrant its retention upon refinement of the items.

*Moral Character Scale.* *Moral Character* refers to an individual's inherent personal traits that advance their actions (Rest, 1984). Participants who score high on the *Moral Character* scale act in a just and morally appropriate manner toward other people. The results of the content validity of *Moral Character* scale items and the

correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for a ten-item measure of *Moral Character*.

The 66-item principal axis factor analysis provides additional evidence that the construct of *Moral Character* exists and it is measured through the resulting scale. As noted previously, numerous items from this scale loaded on the third factor and comprised in conjunction with large loadings from the *Moral Motivation* scale. This combination of items may indicate the need for merging the two constructs into one more encompassing construct within the *Justice* dimension. Additionally, items from this scale loaded on a more general *Justice*-based factor as well, which provides additional support for its inclusion in the *Justice* dimension.

*Empathic Awareness Scale.* *Empathic Awareness* is an individual's awareness of and connection to another individual's situation. Participants who score high on the *Empathic Awareness* scale seem to identify with the personal circumstances of other people, which results in a moral desire to assist that person. The results of the content validity of *Empathic Awareness* scale items and the correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker &

Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for an eight-item measure of *Empathic Awareness*.

The 66-item principal axis factor analysis provides additional evidence that the construct of *Empathic Awareness* exists, though it indicates that the construct may most appropriately be combined with the construct of *Compassionate Ideal*.

Specifically, items from the *Empathic Awareness* scale combined with items from the *Compassionate Ideal* scale to load substantially on both the first and seventh factors, for both of which the items were the primary loadings. Additionally, items from both scales loaded substantially on the more general eighth factor. However, none of the resulting factors was defined by items from only one of the scales.

*Compassionate Ideal Scale.* *Compassionate Ideal* is an individual's desired response to a moral situation that is based upon their concern for another person or people. Participants who score high on the *Compassionate Ideal* scale are concerned for the welfare of others, desiring to respond in a caring manner. The results of the content validity of *Compassionate Ideal* scale items and the correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for an eight-item measure of *Compassionate Ideal*.

The 66-item principal axis factor analysis provides additional evidence that the construct of *Compassionate Ideal* exists, though it indicates that the construct may most appropriately be combined with the construct of *Empathic Awareness* as discussed previously. Specifically, items from the *Compassionate Ideal* scale combined with items from the *Empathic Awareness* scale to load substantially on both the first and seventh factors, for both of which the items were the primary loadings. Additionally, items from both scales loaded substantially on the more general eighth factor. However, none of the resulting factors was defined by items from only one of the scales.

*Interpersonal Relatedness Scale.* *Interpersonal Relatedness* is an individual's awareness and acceptance of both the similarities and differences that exist between them self and another person or people involved in a moral situation. Participants who score high on the *Interpersonal Relatedness* scale seem to connect emotionally with others, both like and unlike themselves, based upon their similarities and differences. The results of the content validity of *Interpersonal Relatedness* scale items and the correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for a six-item measure of *Interpersonal Relatedness*.

The 66-item principal axis factor analysis provides additional evidence that



the construct of *Interpersonal Relatedness* exists and it is measured through the resulting scale. Specifically, numerous items from this scale loaded substantially on the fifth factor and comprised the highest loadings on the factor. Additionally, items from this factor did not substantially help define any of the other factors, providing relatively simple structure for this construct.

*Care-Efficacy Scale.* *Care-Efficacy* is an individual's beliefs about his or her own capabilities to help another person in need of assistance (Ray & Fink, 2007). Participants who score high on the *Care-Efficacy* scale feel confident in their own abilities to assist others when needed. The results of the content validity of *Care-Efficacy* scale items and the correlation between the items provide evidence that the items measure a similar construct. The resulting scale reliability coefficient indicates a high level of internal consistency and suggests that poor domain sampling and item difficulty do not affect response bias (Crocker & Algina, 1986). While additional psychometric analysis of this scale is necessary, and an expansion of the scale may be helpful, the initial results provide empirical support for a nine-item measure of *Care-Efficacy*.

The 66-item principal axis factor analysis provides additional evidence that the construct of *Care-Efficacy* exists and it is measured through the resulting scale. Specifically, numerous items from this scale loaded substantially on the second factor and comprised the highest loadings on the factor. Additionally, items from this factor did not substantially help define any of the other factors, providing relatively simple structure for this construct.

### *Relationship between Justice and Care*

The results of several analyses were integrated to determine the relationship between the *Justice* and *Care* dimensions. First, an examination of the inter-item correlations for the 66 items comprising the final *Integrated Justice and Care Scales* reveals that all of the items are strongly correlated with one another, and thus suggests a strong relationship between the two dimensions. The first-order correlation matrix for the eight scales extends this understanding. Further, the first-order principal axis factor analysis of the factor scores revealed that all eight scales loaded positively on the single resulting factor, and all do so in a substantial manner.

The results of these analyses provide important empirical evidence supporting the strong, positive relationship between the dimensions of *Justice* and *Care*. While individuals may differ in precisely how the eight components integrate to influence their ultimate moral behavior, it is apparent that those who base their actions upon notions of duty and justice will also act according to their concerns for other people.

### *Gender Differences*

Gender differences within moral psychology have been explored with great interest over the past few decades. Considerable debate regarding such differences persists, and current research has failed to provide a clear resolution. Researchers utilizing *Justice*-based approaches to studying moral development have tended to find no significant differences between females and males (e.g., Rest, 1983; Rest, Narvaez, Thoma, & Bebeau, 1999). Researchers using approaches designed to

identify differences between females and males using both *Justice*- and *Care*-based approaches, on the other hand, tend to find such differences (e.g., Gilligan, 1982; Gilligan & Attanucci, 1988; Liddell, 1990).

The results of the discriminant analysis support that no gender differences exist concerning the *Justice*-based constructs as measured by this instrument. Specifically, females and males tended to provide similar response patterns, resulting in similar composite scores for each scale. This finding tends to support research conducted using the Defining Issues Test 2 (Rest, Narvaez, Thoma, & Bebeau, 1999) as well as the Moral Judgment Test (Lind & Wakenhut, 1985).

However, significant differences were found between female and male participants for all four of the *Care*-based constructs. Females tended to have higher scores on the first three *Care* scales than did males, and males tended to have higher scores on the *Care-Efficacy* scale, indicating that composite scores on the overall instrument were differentiated by gender. These findings support the existence of a *Care* perspective within moral theory that is distinct from the *Justice* perspective.

#### *Limitations to Conclusions*

Numerous limitations exist that limit the generalizability of the results of this study. Many of these limitations concern the specific sample utilized as well as time considerations concerning the overall length of the research project. Future research should address these limitations to determine the extent to which they were a factor in the current study.

The limitation regarding the sample concerns the specific sample utilized, namely college students ranging in age from 18 to 25. This sample does not allow for an examination of age differences beyond that small range, and replication with a wider age group may lead to significant differences, at least among some of the scales. As the vast majority of participants were in the lower half of the age range (77%), greater variation within the 18-25 age range would also allow an examination of age differences within the traditional college student population. While significant results were not found by age group in the current study, the non-significant results potentially came from a lack of power due to too few participants in the older groups.

Further, while numerous scholars support the use of sample sizes that are approximately five participants per item (e.g., Kline, 1998; MacCallum, 1999; Mundfrom, 2005; Thompson, 2004), small communalities and a low number of items per scale combine to necessitate a larger sample size (Cliff & Pennell, 1967; Pennell, 1968) to ensure the stability of the results. Additionally, the sample was not sufficiently diverse to allow the comparison of race/ethnicity, as the predominant majority of participants were Caucasian.

Among the limitations related to the time considerations, the number of items in the resulting instrument was of primary concern. Specifically, a thorough examination of the eight scales would require each scale to have approximately 20 items (Sherry, 2006). The initial instrument would therefore have required approximately 30 items per scale to allow for the removal of ineffective items, thus resulting in the initial administration of 240 items (Shultz & Whitney, 2005). Considering the necessary sample size, and the

necessity of adding additional instruments for validity purposes as well as demographic information, such a large number of items seemed unreasonable.

A second concern related to the length of the study concerned the specific measures being utilized to assess construct validity. Specifically, relatively few instruments exist to examine both *Justice* and *Care* simultaneously. One such instrument is the *Measure of Moral Orientation* (MMO; Liddell, 1990), though its administration would have been very time consuming in addition to the new instrument and additional validation measures. Further, as each of the eight constructs are independent of one another, it would be ideal to determine the relationship of each scale with one or two measures specifically selected to be closely related to that scale, resulting in a large number of instruments being administered.

A third limitation regarding the length of the study concerns the administration of the test-retest reliability research phase. When conducting test-retest reliability analyses it is important not to provide too much time that cognitive skills cannot be practiced, or too little time that participants can remember their previous results (Shultz & Whitney, 2005). For this study, only one week was allowed between administrations of the instrument due to time constraints, which could result in participants recalling their previous responses. While this is somewhat less likely with such a large number of items, it still poses a concern as it could artificially inflate the correlation between test administrations.

### Implications

The results of this study pose numerous implications for those interested in the

field of moral psychology, whether as moral theorists, researchers, or practitioners. The existence of two dimensions of moral theory has been clarified, and new research directions emerge. Additionally, the impact of the findings upon moral education programs warrants further exploration. Specific implications for each area are described below.

### *Implications for Theory*

The current study sought to identify whether or not the *Care* dimension of moral theory existed, as if so, to develop a psychometric measure of said dimension in conjunction with the *Justice* dimension. Considerable debate has ensued regarding this question over the past few decades, and its ultimate resolution would reshape the field of moral psychology. This study provided empirical support for the existence of the construct of *Care* as being distinct from, yet complimentary to, the construct of *Justice*. The two constructs are highly correlated with one another, indicating that an individual possessing a strong justice orientation will also typically have a strong focus upon their concern for others. However, while both *Justice* and *Care* constructs seemingly exist, the present study was unable to divide them as two clearly distinct dimensions. Instead, it seems plausible that the two constructs merge, possibly with other constructs that were outside the scope of this study, to form a larger hierarchical dimension of morality. The results indicate that the *Care* dimension remains worth pursuing, and the possibility of this hierarchical structure warrants closer examination.

In addition to examining the dimensions of *Justice* and *Care*, a Components of Care Model was developed for the purpose of this study. Empirical evidence

supports the newly proposed model and indicates that the four components of *Empathic Awareness, Compassionate Ideal, Interpersonal Relatedness, and Care-Efficacy* may combine to affect an individual's caring behavior toward another person or persons. While the evidence supports each component of *Care*, it is unknown based upon the current study whether these components each exist individually or combine into a smaller number of components to influence behavior. In either case, it is hoped that this model will shed light onto human behavior based upon our concern for others just as Rest's (1983) Four Component Model has expanded the understanding of how *Justice*-based morality influences moral action.

The empirical evidence regarding Rest's (1983) Four Component Model shows similar results to that of the Components of Care Model. Specifically, the current study did not demonstrate adequately whether the four components of *Justice, Moral Sensitivity, Moral Judgment, Moral Motivation, and Moral Character*, are each independent components or whether they may be reduced into a smaller number of components which integrate to influence moral action based upon notions of duty and justice.

Lastly, this study also provided empirical support for gender differences within moral theory, namely within the *Care* dimension. While females and males tended to respond in a similar manner for each of the four *Justice* scales, females tended to respond more favorably to each of the four *Care* scales. This indicates that while both females and males may be influenced by concerns of justice, females are more influenced by their concerns for others, and thus may respond to the same moral dilemma in different ways. As such, it may be inappropriate to compare the scores of

female and male participants on dilemma-based measures such as the Defining Issues Test 2 (Rest, Narvaez, Thoma, & Bebeau, 1999) or the Moral Judgment Test (Lind & Wakenhut, 1985).

### *Implications for Research*

Future research should attempt to address the limitations discussed previously. First, the study should be replicated utilizing a much larger sample of college students. According to Cliff and Pennell (1967), the replication sample should potentially be as much as four times the size of the current sample. An increased sample, and particularly one with a wider age range and greater racial and ethnic diversity, would result in greater power when conducting analyses for group differences, thus potentially identifying differences that have yet to be found. This replication would also allow a more accurate determination of the number of factors to extract from the final scale, potentially allowing the researcher to decide which scales, if any, would be best suited to being collapsed.

Additional research should be conducted regarding each individual scale to increase its number of items and further enhance its reliability and validity. If each scale is developed individually, the length of administration will be of less concern, and all of the scales can be combined once they are better supported. Such research should also be conducted to support the validity of the resulting scales using specifically targeted measures, and test-retest reliability coefficients can be determined for each scale at this time. Once the scales are recombined, additional research should examine the relationship of the overall *IJCS* with the *MMO* and other



similar measures.

Upon gaining a better understanding of each component of the *Justice* and *Care dimensions*, research could be conducted using path analytic and structural equation model techniques to determine the relationships between the components. Specifically, this line of research would allow scholars to identify if any of the components predictor the other components and which components are independent. Such research could also explore the relationships of these variables to specific moral outcomes, thereby generating substantial implications for practice.

#### *Implications for Practice*

This study supports the existence of at least two distinct dimensions of moral theory, namely *Justice* and *Care*, each composed of four interactive components that combine to influence moral action. The recognition of these two dimensions provides implications for practitioners concerning the implementation of moral theory through educational objectives. Moral education programs can be adapted to address and enhance both of these dimensions rather than merely targeting the *Justice* dimension. Additionally, since the components of the *Care* dimension are all significantly influenced by participant gender, it becomes necessary to incorporate caring elements into such educational programs to ensure the maximum possible benefit for female students.

## REFERENCES

- Ackerman, C. (1997). A secondary analysis of research using the Overexcitability Questionnaire. UMI Digital Dissertation #9800678. *Document retrieved 11/06/05.*
- Allport, G. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart, & Winston.
- American Psychological Association. (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, 57, 1060-1073.
- Ammirato, S. (1987). Comparison study of instruments used to measure developmental potential according to Dabrowski's theory of emotional development. UMI Digital Dissertation #8717198. *Document retrieved 11/06/05.*
- Aristotle. (2002). The ethics of virtue. In L. P. Pojman. *Ethical Theory: Classic and Contemporary Readings*, 4<sup>th</sup> ed. (333-346). Belmont, CA: Wadsworth.
- Arnaud, A., & Schminke, M. (2006). Ethical work climate: A weather report and forecast. In S.W. Gilliland, D.D. Steiner, and D.P. Skarlicki (eds.), *Research in Social Issues in Management: Managing Social and Ethical Issues in Organizations*, 5. (245-276). Greenwich, CT: IAP.
- Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1977b). *Social learning theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A. (1985). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura A. (2006). Guide for constructing self-efficacy scales. In Pajares, F. & Urdan, T. (Eds.), *Self-efficacy beliefs of adolescents* (pp. 307-337). Greenwich, CT: Information Age Publishing.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development, 67*, 1206-1222.
- Banerjee, D., Cronan, T. P., & Jones, T. W. (1998). Modeling IT ethics: A study of situational ethics. *MIS Quarterly, 22(1)*, 31-60.
- Beauchamp, T. L., & Childress, J. F. (1994). *Principles of biomedical ethics*. 4<sup>th</sup> Ed. New York: Oxford University Press.
- Bebeau, M. J. (1993). Designing an outcome-based ethics curriculum for professional education: strategies and evidence of effectiveness. *Journal of Moral Education, 22*, 313-326.
- Bebeau, M. J., Rest, J. R., & Narvaez, D. (1999). Beyond the promise: A perspective on research in moral education. *Educational Researcher, 28(4)*, 18-26.
- Bebeau, M. J., & Thoma, S. J. (1999). "Intermediate" concepts and the connection to moral education. *Educational Psychology Review, 11*, 343-360.
- Belknap, R. A. (2000). One woman's life viewed through the interpretive lens of Gilligan's theory. *Violence Against Women, 6*, 586-605.

- Benham, H. C., & Wagner, J. L. (1995). A comparative study of ethical attitudes among MIS students and professionals. *Computer Personnel, 16*, 3-10.
- Betz, N. E., & Hackett, G. (1997). Applications of self-efficacy theory to the career assessment of women. *Journal of Career Assessment, 5*, 383-482.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin, 88*, 1-45.
- Blum, L. (1980). *Friendship, altruism, and morality*. Boston: Routledge Kegan-Paul.
- Botes, A. (2000). A comparison between the ethics of justice and the ethics of care. *Journal of Advanced Nursing, 32*, 1071-1075.
- Brown, L. M., Tappan, M. B., & Gilligan, C. (1995). Listening to different voices. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Moral development: An introduction*. (311-336). Needham Heights, MA: Allyn & Bacon.
- Bruess, B. J., & Pearson, F. C. (2002). The debate continues: Are there gender differences in moral reasoning as defined by Kohlberg? *College Student Affairs Journal, 21*(2), 38-52.
- Callan, M. J. (1992). Predicting ethical values and training needs in ethics. *Journal of Business Ethics, 11*, 761-769.
- Campbell, R. L., & Christopher, J. C. (1996). Moral development theory: a critique of its Kantian presuppositions. *Developmental Review, 16*, 1-47.
- Carlo, G. & Randall, B. A. (2002). The development of a measure of prosocial behavior for late adolescents. *Journal of Youth and Adolescence, 33*, 31-44.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research, 1*, 245-276.

- Chodorow, N. (1978). *The reproduction of mothering*. Berkeley: University of California Press.
- Cliff, N., & Pennell, R. (1967). The influence of communality, factor strength, and loading size on the sampling characteristics of factor loadings. *Psychometrika*, *32*, 309-326.
- Clopton, N. A., & Sorrell, G. T. (1993). Gender differences in moral reasoning: Stable or situational? *Psychology of Women Quarterly*, *17*, 85-101.
- Coalition for Juvenile Justice. (2003). *Unlocking the future: Detention reform in the juvenile justice system*. Washington, DC: Author.
- Collier, M. D. (2005). The ethic of caring: The fuel for high teacher efficacy. *The Urban Review*, *37*, 351-359.
- Crain, W. C. (2000). *Theories of development, 4<sup>th</sup> ed.* Upper Saddle River, NJ: Prentice Hall.
- Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. Belmont, CA: Wadsworth Group.
- Crown, J., & Heatherington, L. (1989). The cost of winning? The role of gender in moral reasoning and judgments about competitive athletic encounters. *Journal of Sport and Exercise Psychology*, *11*, 281-289.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability, independent of psychopathology. *Journal of Consulting Psychology*, *24*, 349-354.
- Curran, P.J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*, 16-29.

- Dabrowski (1964). *Positive disintegration*. Boston, MA: Little, Brown.
- Davis, M. (1980). A multidimensional approach to individual differences in empathy. *Catalog of Selected Documents in Psychology, 10(4)*, 1-17.
- De Vaus, D. A. (2002). *Analyzing social science data: 50 key problems in data analysis*. London: Sage Publications.
- Durkheim, E. (1925/1961). *Moral education: A study in the theory and application in the sociology of education*. New York: Free Press.
- Eisenberg-berg, N., & Mussen, P. (1978). Empathy and moral development in adolescence. *Developmental Psychology, 14*, 185-186.
- Ellett, C. D., Hill, F. H., Liu, X., Loup, K.S., & Lakshmanan, A. (1997, April). Professional learning environment and human caring correlates of teacher efficacy. Paper presented at the annual meeting of the American Educational Research Association.
- Erikson, E. (1958). *Young man Luther*. New York: Norton.
- Finney, S. J., & Schraw, G. (2003). Self-efficacy beliefs in college statistics courses. *Contemporary Educational Psychology, 28*, 161-186.
- Ford, M. R., & Lowery, C. R. (1986). Gender differences in moral reasoning: A comparison of the use of justice and care orientations. *Journal of Personality and Social Psychology, 50*, 777-783.
- Fouad, N. A., & Smith, P. L. (1996). Reliability and validity evidence for the Middle School Self-Efficacy Scale. *Measurement and Evaluation in Counseling and Development, 30*, 17-31.

- Freud, S. (1925/1953). Some physical consequences of the anatomical distinction between the sexes. In J. Strachey (Ed.) *The standard edition of the complete psychological works of Sigmund Freud: Vol. 19.* (243-247). London: Hogarth.
- Friedman, W. J., Robinson, A. B., & Friedman, B. L. (1987). Sex differences in moral judgments? A test of Gilligan's theory. *Psychology of Women Quarterly, 11*, 37-46.
- Fukuyama, F. (1999). How to re-moralize America. *Wilson Quarterly, 23*, 32-44.
- Galotti, K. M. (1989). Gender differences in self-reported moral reasoning: A review and new evidence. *Journal of Youth and Adolescence, 18*, 475-487.
- Genia, V. (1997). The Spiritual Experience Index: Revision and reformulation. *Review of Religious Research, 38*, 344-361.
- Gibbs, J. C., Arnold, K. D., & Burkhart, J. E. (1984). Sex differences in the expression of moral judgment. *Child Development, 55*, 1040-1043.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge: Harvard University Press.
- Gilligan, C., & Attanucci, J. (1988). Two moral orientations: Gender differences and similarities. *Merrill-Palmer Quarterly, 34*, 223-237.
- Goldiamond, I. (1968). Moral development: A functional analysis. *Psychology Today, 2*(4), 31.
- Gorsuch, R. L. (1983). *Factor analysis* (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Guadagnoli, E., & Velicer, W. M. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin 103*, 265-275.

- Gump, L. S., Baker, R. C., & Roll, S. (2000). The Moral Justification Scale: Reliability and validity of a new measure of care and justice orientations. *Adolescence*, 35, 67-76.
- Hackett, G. (1995). Self-efficacy in career choice and development. In A. Bandura (Ed.), *Self-efficacy in changing societies*, (232-258). New York: Cambridge University Press.
- Harding, B., & Phillips, D. (1986). *Contrasting values in Western Europe: Unity, diversity and change*. London: Macmillan.
- Hare-Mustin, R. T., & Marecek, J. (1988). The meaning of difference: Gender theory, postmodernism, and psychology. *American Psychologist*, 43, 455-464.
- Hoffman, M. L. (1977). Empathy, its development and prosocial implications. In C. B. Keasey (Ed.), *Nebraska symposium on motivation: Vol. 25*. (169-217). Lincoln: University of Nebraska Press.
- Hoffman, M. L. (1984). Empathy, its limitations, and its role in a comprehensive moral theory. In W. M. Kurtines & J. L. Gewirtz (Eds.) *Morality, moral behavior, and moral development*. (283-302). New York: John Wiley & Sons.
- Hoffman, M. L. (1991). Empathy, social cognition, and moral action. In W. M. Kurtines & J. L. Gerwitz (Eds.) *Handbook of moral behavior and development: Vol. 1. Theory*. (275-299). Hillsdale, NJ: Erlbaum.
- Holstein, C. S. (1976). Irreversible, stepwise sequence in the development of moral judgment: A longitudinal study of males and females. *Child Development*, 47, 51-61.



- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 32, 179-185.
- Johnston, D. K. (1988). Adolescents' solutions to dilemmas in fables: Two moral orientations—Two problem solving strategies. In C. Gilligan, J. Ward, & J. Taylor (Eds.), *Mapping the moral domain*. (49-72). Cambridge, MA: Harvard University Press.
- Jones, T. M. (1991) Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16, 366-395.
- Jorgensen, G. (2006). Kohlberg and Gilligan: Duet or dual? *Journal of Moral Education*, 35, 179-196.
- Kaiser, J. L. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20, 141-151.
- Kaley, R., & Cloutier, R. (1984). Developmental determinants of self-efficacy predictiveness. *Cognitive Therapy and Research*, 8, 643-656.
- Kavathatzopoulos, I. (1991). Kohlberg and Piaget: Differences and similarities. *Journal of Moral Education*, 20, 47-54.
- Kim, J., & Mueller, C. W. (1978). *Factor Analysis: Statistical methods and practical issues*. Thousand Oaks, CA: Sage Publications, Quantitative Applications in the Social Sciences Series, No. 14.
- Kline, P. (1998). *The new psychometrics: Science, psychology, and measurement*. New York: Routledge.
- Kohlberg, L. (1958). The development of modes of thinking and choices in years 10 to 16. Unpublished Doctoral Dissertation. University of Chicago.

- Kohlberg, L. (1969). Stage and sequence. The cognitive-developmental approach to socialization. In J. Goslin (Ed.) *Handbook of socialization theory and research*. (347-480). Chicago: Rand McNally.
- Kohlberg, L. (1971) From is to ought: How to commit the naturalistic fallacy and get away with it in the study of moral development. In T. Mischel (Ed.) *Cognitive Development and Epistemology*. (269-288). New York: Academic Press.
- Kohlberg, L. (1984). *Essays on moral development, Volume 2. The psychology of moral development - The nature and validity of moral stages*. San Francisco: Harper & Row.
- Kurtines, W., & Grief, E. B. (1974). The development of moral thought: Review and evaluation of Kohlberg's approach. *Psychological Bulletin*, *81*, 453-470.
- Lapan, R. T., Adams, A., Turner, S., & Hinkelman, J. M. (2000). Seventh graders' vocational interest and efficacy expectation patterns. *Journal of Career Development*, *26*, 215-229.
- Lapan, R. T., Boggs, K. R., & Morrill, W. H. (1989). Self-efficacy as a mediator of investigative and realistic general occupational themes on the Strong-Campbell Interest Inventory. *Journal of Counseling Psychology*, *36*, 176-182.
- Lent, R. W., & Hackett, J. E. (1987). Career self-efficacy: Empirical status and future directions. *Journal of Vocational Behavior*, *30*, 347-382.
- Liddell, D. L. (1990). Measure of moral orientation: Construction of an objective instrument measuring care and justice, with an investigation of gender differences (Doctoral dissertation, Auburn University, 1990). *Dissertation Abstracts International*, *51*, 5626.

- Liddell, D. L., Halpin, G., & Halpin, W. G. (1992). The measure of moral orientation: Measuring the ethics of care and justice. *Journal of College Student Development, 33*, 325-330.
- Lind, G., & Wakenhut, R. (1985). Testing for moral judgment competence. In G. Lind, H. A. Hartman, & R. Wakenhut (Eds.) *Moral development and the social environment: Studies in the philosophy and psychology of moral judgment and education*. (79-105). Chicago: Precedent Publishing, Inc.
- Lyons, N. P. (1983). Two perspectives: On self, relationships, and morality. *Harvard Educational Review, 53*, 125-145.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods, 4*, 84-99.
- Mazzotti, V. L., & Higgins, K. (2006). Public schools and the juvenile justice system: Facilitating relationships. *Intervention in School & Clinic, 41*, 295-301.
- Mednick, M. T. (1989). On the politics of psychological constructs: Stop the bandwagon, I want to get off. *American Psychologist, 44*, 1118-1123.
- Miller, N., & Kean, R. (1997). Reciprocal exchange in rural communities: Consumers' inducements to inshop. *Psychology and Marketing, 14*, 637-661.
- Miville, M. L., Gelso, C. J., Pannu, R., Liu, W., Touradji, P., Holloway, P., & Fuertes, J. (1999). Appreciating similarities and valuing differences: The Miville-Guzman Universality-Diversity Scale. *Journal of Counseling Psychology, 46*, 291-307.
- Moreland, C. & Leach, M. M. (2001). The relationship between black racial identity and moral development. *Journal of Black Psychology, 27*, 255-271.

- Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum sample size recommendations for conducting factor analyses. *International Journal of Testing, 5*, 159-168.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). MBTI Manual: A guide to the development and use of the Myers Briggs Type Indicator, 3<sup>rd</sup> ed. Mountain View, CA: Consulting Psychologists Press.
- Narvaez, D., & Rest, J. (1995). The four components of acting morally. In W. M. Kurtines & J. L. Gewirtz (Eds.) *Moral development: An introduction*. Needham Heights, MA: Allyn and Bacon.
- Nietzsche, F. (1866/1966). *Beyond good and evil*. (W. Kaufmann, Trans.). New York: Vintage Books.
- Noddings, N. (1984). *Caring, a feminine approach to ethics & moral education*. Berkeley: University of California Press.
- Office of Juvenile Justice and Delinquency Prevention. (2004). *Census of juveniles in residential placement databook*. Retrieved August 18, 2006, from [http://www.ojjdp.ncjrs.org/ojstatbb/cjrp/asp/Offense\\_Adj.asp](http://www.ojjdp.ncjrs.org/ojstatbb/cjrp/asp/Offense_Adj.asp).
- Oklahoma State University. (2005). *Handbook for the protection of human subjects in research*. Stillwater, OK: Oklahoma State University.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research, 66*, 543-578.
- Pajares, F., Hartley, J., & Vahante, G. (2001). Response format in writing self-efficacy assessment: Greater discrimination increases prediction. *Measurement and Evaluation in Counseling and Development, 33*, 214-221.

- Pennell, R. (1968). The influence of communality and N on the sampling distributions of factor loadings. *Psychometrika*, *33*, 423-439.
- Piaget, J. (1932/1965). *The moral judgment of the child*. New York: The Free Press.
- Power, F., Higgins, A., & Kohlberg, L. (1989). *Lawrence Kohlberg's approach to moral education*. New York: Columbia University Press.
- Pratt, M. W., Golding, G., Hunter, W., & Sampson, R. (1988). Sex differences in adult moral orientations. *Journal of Personality*, *56*, 373-391.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Ray, C. M., & Fink, K. J. (2007, February). Developing a measure of Care-Efficacy. Poster presented at the OSU Research Symposium. Stillwater, OK.
- Reed, D. C. (1997). *Following Kohlberg: Liberalism and the practice of democratic community*. Notre Dame, IN, University of Notre Dame Press.
- Rest, J. R., Cooper, D., Coder, R., Masanz, J., & Anderson, D. (1974). Judging the important issues in moral dilemmas: An objective test of development. *Developmental Psychology*, *10*, 491-501.
- Rest, J. R. (1983). Morality. In P. H. Mussen (Series Ed.) J. H. Flavell & E. M. Markman (Vol. Eds.) *Handbook of child psychology, vol. 3, Cognitive development*, 4<sup>th</sup> ed. (556-629). New York: John Wiley.
- Rest, J. R. (1984). The major components of morality. In W. M. Kurtines & J. L. Gewirtz (Eds.) *Morality, moral behavior, and moral development*. (24-38). New York: John Wiley.
- Rest, J. R., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach*. Mahwah, NJ: Lawrence Erlbaum.

- Rest, J. R., Narvaez, D., Thoma, S. J., & Bebeau, M. J. (1999). DIT2: Devising and testing a revised instrument of moral judgment. *Journal of Educational Psychology, 91*, 644-659.
- Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of science, Vol. 3.* (184-256). New York: McGraw Hill.
- Romanowski, M. H. (2005). Through the eyes of teachers: High school teachers' experiences with character education. *American Secondary Education, 34*, 6-23.
- Rothbart, M. K., Hanley, D., & Albert, M. (1986). Gender differences in moral reasoning. *Sex Roles, 15*, 645-653.
- Schriesheim, C. A., & Hinkin, T. R. (1990). Influence tactics used by subordinates: A theoretical and empirical analysis and refinement of the Kipnis, Schmidt, and Wilkinson subscales. *Journal of Applied Psychology, 75*, 246-257.
- Schwab, D. P. (1980). Construct validity in organizational behavior. In B. M. Staw and L. L. Cummings (Eds.) *Research in organizational behavior, Vol. 2.* (3-43). Greenwich, CT: JAI Press.
- Sherry, A. (2006). Discriminant analysis in counseling psychology research. *The Counseling Psychologist, 34*, 661-683.
- Shultz, K. S., & Whitney, D. J. (2005). *Measurement theory in action: Case studies and exercises.* Thousand Oaks, CA: Sage Publications, Inc.
- Slote, M. (1998). The justice of caring. *Social Philosophy & Policy, 15*, 171-195.
- Sommers, C. H. (2001). *The war against boys: How misguided feminism is harming our young men.* New York: Simon and Schuster.

- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4<sup>th</sup> ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Thoma, S. J. (2002). An overview of the Minnesota approach to research in moral development. *Journal of Moral Education, 31*, 225-245.
- Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. Washington, D.C.: American Psychological Association.
- Tong, R., & Williams, N. (2006). Feminist ethics. In E. N. Zalta (Ed.) *The Stanford encyclopedia of philosophy*. Retrieved January 10, 2007, from <http://plato.stanford.edu/archives/win2006/entries/feminism-ethics/>.
- Turiel, E. (2006). The development of morality. In W. Damon & N. Eisenberg (Eds.) *Handbook of child psychology, Vol. 3: Social, emotional, and personality development*. (863-962). New York: John Wiley & Sons, Inc.
- Vontress, C. E. (1979). Cross-cultural counseling: An existential approach. *Personnel and Guidance Journal, 58*, 117-122.
- Vontress, C. E. (1986). Social and cultural foundations. In M. D. Lewis, R. Hayes, & J. A. Lewis (Eds.), *An introduction to the counseling profession*. (215-250). Itasca, IL: Peacock.
- Vontress, C. E. (1988). An existential approach to cross-cultural counseling. *Journal of Multicultural Counseling and Development, 16*, 78-83.
- Vontress, C. E. (1996). A personal retrospective on cross-cultural counseling. *Journal of Multicultural Counseling and Development, 24*, 156-166.

- Walker, L. J. (1984). Sex differences in the development of moral reasoning: A critical review. *Child Development, 55*, 677-691.
- Walker, L. J. (1989). A longitudinal study of moral reasoning. *Child Development, 60*, 157-166.
- Walker, L. J. (2002). The model and the measure: An appraisal of the Minnesota approach to moral development. *Journal of Moral Education, 31*, 353-367.
- Walker, L. J., deVries, B., & Trevethan, S. D. (1987). Moral stages and moral orientations in real-life and hypothetical dilemmas. *Child Development, 58*, 842-858.
- Walker, L. J., & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. *Developmental Psychology, 34*, 403-419.
- Welburn, K. R., & Fraser, G. A. (November, 2002). Imagery and empathy as risk factors for posttraumatic stress disorder. Presented at the Annual Conference of the International Society for the Study of Dissociation, Baltimore, MD.
- Willard, N. (1997). Moral development in the information age. *Clearinghouse on Early Education and Parenting, #222*, 215-222.
- Wilson, E. O. (1975). *Sociobiology: The new synthesis*. Cambridge, MA: Belknap Press of Harvard University Press.



## APPENDICES

Appendix A  
Human Subject's Research

Research approval from OSU's Institutional Review Board for the Protection of Human Subjects is included on the following page.

## Oklahoma State University Institutional Review Board

Date: Thursday, March 29, 2007

IRB Application No ED0746

Proposal Title: Development of an Integrated Model and Measure of the Moral Dimensions of Justice and Care

Reviewed and  
Processed as: Expedited

Status Recommended by Reviewer(s): Approved

Protocol Expires: 3/28/2008

Principal  
Investigator(s):

Chris Ray  
402 Willard  
Stillwater, OK 74078

Diane Montgomery  
424 Willard  
Stillwater, OK 74078

---

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Please notify the IRB Office when you register with Experimetrix.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North(phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sue C. Jacobs, Chair  
Institutional Review Board

## Appendix B

### Participant Informed Consent Forms

The Informed Consent Forms for research participants can be found on the following pages.

## **Subject Matter Expert Informed Consent Form**

I, \_\_\_\_\_, agree to participate in the research study “Development of an Integrated Model and Measure of the Moral Dimensions of Justice and Care.” I have been selected to participate in this study based upon my status as a graduate student or faculty member in Educational Psychology at Oklahoma State University.

By participating in this research, I will interact with Chris Ray, the principal investigator. Mr. Ray has a Master of Science degree in Counseling and Student Personnel and is currently pursuing a Ph.D. in Educational Psychology at Oklahoma State University. Dr. Diane Montgomery, Professor of Educational Psychology will be supervising this research.

I understand that this research is intended to assist the researcher in the development of an integrated model and measure of the justice and care dimensions of moral theory. There are no known risks associated with this project that are greater than those encountered in daily life.

As a participant in this study, I will sort a variety of statements concerning factors influencing moral behavior, ability to perform certain tasks, personal attitudes, as well as provide demographic details about myself. This entire procedure is expected to last approximately 30 - 60 minutes.

I understand that the university community and society as a whole may benefit from my participation through a greater understanding of the roles of justice and care within moral theory.

I understand that every effort will be made to protect my identity. As my responses will be collected separately from my consent form, it will not be possible for my identifying information to be used in any report to Oklahoma State University or any other public reports. Additionally, the data from this project will be stored in a locked file in the researcher’s office for a period of five years from the conclusion of this study. Only he and Dr. Montgomery will have access to the original materials.

All information I provide will be confidential and generally will not be shared with others unless I provide written consent. However, the Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures.

I understand that all participation is voluntary and that refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I may discontinue participation at any time without penalty or loss of such benefits mentioned above.

For any questions regarding this research, I may contact:

Chris Ray, M.S. Doctoral Candidate 402 Willard Hall Oklahoma State University Stillwater, OK 74078 (405) 744-4839 chris.ray@okstate.edu	Diane Montgomery, Ph.D. Professor of Educational Psychology 424 Willard Hall Oklahoma State University Stillwater, OK 74078 (405) 744-9441 diane.montgomery@okstate.edu
---	---

For information on subjects' rights, I may contact:

Sue Jacobs, Ph.D.  
IRB Chair  
219 Cordell North  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-1676

I understand that all necessary individuals at Oklahoma State University have provided the required approvals for this project. Any questions regarding said approvals should be directed to any of the individuals listed above.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has also been offered to me.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I verify that I have ensured that this document has been explained before requesting that the participant sign it and have offered a copy for the participant to keep.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## **Electronic Informed Consent Form**

I agree to participate in the research study “Development of an Integrated Model and Measure of the Moral Dimensions of Justice and Care.” I have been selected to participate in this study based upon my enrollment as a student at Oklahoma State University and my participation in the Experimetrix research pool.

By participating in this research I may interact with Chris Ray, the principal investigator. Mr. Ray has a Master of Science degree in Counseling and Student Personnel and is currently pursuing a Ph.D. in Educational Psychology at Oklahoma State University. Dr. Diane Montgomery, Professor of Educational Psychology will be supervising this research.

I understand that this research is intended to assist the researcher in the development of an integrated model and measure of the justice and care dimensions of moral theory. There are no known risks associated with this project that are greater than those encountered in daily life.

As a participant in this study, I will respond to a variety of statements concerning factors influencing my moral behavior, my ability to perform certain tasks, my personal attitudes, as well as provide demographic details about myself. This entire procedure is expected to last approximately 30 – 60 minutes.

I understand that the university community and society as a whole may benefit from my participation through a greater understanding of the roles of justice and care within moral theory.

I understand that every effort will be made to protect my identity. As my responses will be collected separately from my consent form, it will not be possible for my identifying information to be used in any report to Oklahoma State University or any other public reports. The data from this project will be stored electronically on a secure server, and any additional documents from this research will be held in a locked file in the researcher’s office for a period of five years from the conclusion of this study. Only he and Dr. Montgomery will have access to the original materials.

All information I provide will be confidential and generally will not be shared with others unless I provide written consent. However, the Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures.

I understand that all participation is voluntary and that refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I may discontinue participation at any time without penalty or loss of such benefits mentioned above.

For any questions regarding this research, I may contact:

Chris Ray, M.S.  
Doctoral Candidate  
402 Willard Hall  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-4839  
chris.ray@okstate.edu

Diane Montgomery, Ph.D.  
Professor of Educational Psychology  
424 Willard Hall  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-9441  
diane.montgomery@okstate.edu

For information on subjects' rights, I may contact:

Sue Jacobs, Ph.D.  
IRB Chair  
219 Cordell North  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-1676

I understand that all necessary individuals at Oklahoma State University have provided the required approvals for this project. Any questions regarding said approvals should be directed to any of the individuals listed above.

I have read and fully understand the consent form. It is recommended that I print a copy of this page for my records and future reference. By clicking below, I am indicating that I freely and voluntarily agree to participate in this study and I also acknowledge that am at least 18 years of age.



### **Test- Retest Informed Consent Form**

I, \_\_\_\_\_, agree to participate in the research study “Development of an Integrated Model and Measure of the Moral Dimensions of Justice and Care.” I have been selected to participate in this study based upon my enrollment in an Educational Psychology course at Oklahoma State University.

By participating in this research, I will interact with Chris Ray, the principal investigator. Mr. Ray has a Master of Science degree in Counseling and Student Personnel and is currently pursuing a Ph.D. in Educational Psychology at Oklahoma State University. Dr. Diane Montgomery, Professor of Educational Psychology will be supervising this research.

I understand that this research is intended to assist the researcher in the development of an integrated model and measure of the justice and care dimensions of moral theory. There are no known risks associated with this project that are greater than those encountered in daily life.

As a participant in this study, I will respond to a variety of statements concerning factors influencing my moral behavior, my ability to perform certain tasks, my personal attitudes, as well as provide demographic details about myself. This entire procedure is expected to last approximately 10 – 20 minutes, and will be repeated approximately one week after my initial participation.

I understand that the university community and society as a whole may benefit from my participation through a greater understanding of the roles of justice and care within moral theory.

I understand that every effort will be made to protect my identity. As my responses will be collected separately from my consent form, it will not be possible for my identifying information to be used in any report to Oklahoma State University or any other public reports. While I will be asked to provide a code to match my responses over two administrations of this survey, I have been instructed to select a code that will not allow me to be identified. Additionally, the data from this project will be stored in a locked file in the researcher’s office for a period of five years from the conclusion of this study. Only he and Dr. Montgomery will have access to the original materials.

All information I provide will be confidential and generally will not be shared with others unless I provide written consent. However, the Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures.

I understand that all participation is voluntary and that refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I may discontinue participation at any time without penalty or loss of such benefits mentioned above.

For any questions regarding this research, I may contact:

Chris Ray, M.S.  
Doctoral Candidate  
402 Willard Hall  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-4839  
chris.ray@okstate.edu

Diane Montgomery, Ph.D.  
Professor of Educational Psychology  
424 Willard Hall  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-9441  
diane.montgomery@okstate.edu

For information on subjects' rights, I may contact:

Sue Jacobs, Ph.D.  
IRB Chair  
219 Cordell North  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-1676

I understand that all necessary individuals at Oklahoma State University have provided the required approvals for this project. Any questions regarding said approvals should be directed to any of the individuals listed above.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has also been offered to me.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I verify that I have ensured that this document has been explained before requesting that the participant sign it and have offered a copy for the participant to keep.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## Appendix C

### Integrated Justice and Care Scales Item Analysis

## **Integrated Justice and Care Scales**

### ***Item Analysis***

Please read each of the items related to moral theory on the following pages. For each item, please indicate with an 'X' whether it should be categorized as representing *Justice*, *Care*, neither, or both (by marking both *Justice* and *Care*) given the definitions of each dimension below.

For those items that you categorize as representing *Justice*, please sort them as representing Moral Sensitivity (SN), Moral Judgment (JD), Moral Motivation (MO), Moral Character (CH), or Does Not Adequately Represent Any Component (NA) given the definitions of each component below. You may select more than one component if appropriate.

For those items that you categorize as representing *Care*, please sort them as representing Empathic Awareness (AW), Compassionate Ideal (ID), Interpersonal Relatedness (RL), Care-Efficacy (EF), or Does Not Adequately Represent Any Component (NA) given the definitions of each component below. You may select more than one component if appropriate.

### ***Definitions***

*Justice* – Justice is the dimension of moral theory that emphasizes duty, justice, and individual rights. It is characterized by objectivity, rationality, and separation from the moral situation or those involved (Liddell, 1990). Moral dilemmas within this context are often considered to be conflicts over the rights of those involved. A person operating within a *Justice* framework seeks to treat others fairly with an emphasis upon equality. The components of *Justice* include moral sensitivity, moral judgment, moral motivation, and moral character (Rest, 1984).

*Moral Sensitivity* (SN) – Moral sensitivity begins with simple awareness that a dilemma or moral problem exists between people; it then involves interpretation of the situation in terms of possible actions (Morton, 2006). Inherent within this definition is the idea that a moral dilemma is one in which individuals are being treated unjustly or unfairly.

*Moral Judgment* (JD) – Moral judgment involves determining what course of action is the most morally justifiable; these actions are traditionally ordered hierarchically according to their degree of principled or post-conventional reasoning (Morton, 2006). Such justifications are primarily based upon deontological notions of duty and justice.

*Moral Motivation* (MO) – Moral motivation is defined as prioritizing moral values above other values and taking responsibility for moral outcomes. Inherent within this definition is the idea that moral values are those that emphasize duty or justice. This component is described by Bebeau (2002) as how deeply moral values penetrate identity formation; this is often assessed as professionalism or professional identity with regard to a specific code of ethics (Morton, 2006).

*Moral Character (CH)* – According to Morton (2006) moral character is defined as the ability to persist in a moral task in the face of obstacles. This persistence is due to the individual's inherent personal traits that advance their actions in a fair and just manner (Rest, 1984). Strong moral character is considered necessary for the individual to act in a just and morally appropriate manner toward other people.

*Care* – Care is the dimension of moral theory that emphasizes relationships and concern for other people. It is characterized by subjectiveness, intuition, and responsiveness (Liddell, 1990). Moral dilemmas within this context are often based upon connections and attachment with other people, as well as avoiding harm to anyone involved. A person operating within a *Care* framework seeks to treat others in manner that considers their needs and places a priority upon the relationship. The components of Care include empathic awareness, compassionate ideal, interpersonal relatedness, and care-efficacy (Ray & Fink, 2007).

*Empathic Awareness (AW)* – Empathic awareness is defined as an individual's awareness of and connection to another individual's situation, which results in a sense of identification with that person's situation and a moral desire to provide assistance to that person.

*Compassionate Ideal (ID)* – Some individuals make decisions based upon analyzing the impact their action will have upon others, particularly those with whom they have a relationship (Gilligan, 1982). Consistent with that idea, compassionate ideal is an individual's desired response to a moral situation that is based upon their concern for another person or people, regardless of relationships with those involved or their ability to assist.

*Interpersonal Relatedness (RL)* – Interpersonal relatedness involves the relationship between people involved in a moral dilemma, emphasizing their similarities and differences. It is an individual's acceptance of both the similarities and differences that exist between them self and another person or people.

*Care-Efficacy (EF)* – According to Bandura (1997), a person's perception of their abilities has a direct impact upon their behaviors. As such, care-efficacy is an individual's beliefs about his or her own capabilities to help another person in need of assistance (Ray & Fink, 2007).

When I see someone in distress, I can determine a good way to help them.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
It is a moral concern when someone is being treated unfairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I would like to travel to other countries to see what the cultures are like.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I maintain high standards in all that I do.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I know what I should do when others are being treated unfairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I feel very emotional when I see people treated unfairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I feel a strong bond with all of humankind.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I am able to provide assistance when the task has competing demands.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
It upsets me to see people suffer.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I try to base my actions upon the fair treatment of others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I do not like when someone is being taken advantage of.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I can place myself in the shoes of someone from a different background than mine.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I can assist others when I have failed with a similar task in the past.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I believe that the world is basically good.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I base my decisions upon helping other people.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither

I am truthful with others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
The mistreatment of others usually disturbs me a great deal.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Persons with disabilities can teach me things I could not learn elsewhere.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
My values guide my whole approach to life.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Integrity of character is essential.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I'm very sensitive to the feelings of others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I make an effort not to harm other people in any way.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I believe I am responsible to uphold universal ethical principles.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to help others when the task involves an ability that I do not possess.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
When I make decisions, I choose the outcome that minimizes harm to those involved.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
People are responsible for upholding their word.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is my duty as a citizen to obey applicable laws.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It does not upset me if someone is unlike me.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I react negatively when I see someone being treated unfairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I make a conscious effort to live in accordance with my values.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

I care a great deal about what happens to people.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can help others when I perceive the task to be difficult.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
My beliefs help me to confront tragedy and suffering.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I try to resolve problems in a way that does not cause harm to any of the people involved.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I place a high value on being tolerant of other people's views.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I make an effort to be aware of inequities between people.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I know how to resolve problems without violating the rights of any of the people involved.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can usually tell what my friends are feeling.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am expected to be faithful to my friends and family.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to provide assistance when I am required to think quickly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
When making decisions, I consider my relationships with those involved.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Others' rights are very important when solving problems.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
My beliefs are an important part of my individual identity.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I pay attention to issues of fairness.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I feel a sense of connection with people who are different from me.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither



I care about what happens to people around me.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can assist others when I have never before performed the task.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Children should be taught to be respectful of others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
People should adhere to their convictions.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
My decisions would favor those who I care about more than those I do not know.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I try to make decisions based upon applicable principles and rules.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I often think about issues concerning my beliefs.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I know quite a few people from different generations.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can strongly feel what other people feel.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am very sensitive to ethical problems.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to help others when I am unfamiliar with the task.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
When I make a decision, I tend to be more subjective than objective.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
We should be fair to everyone with whom we interact.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
My values give my life meaning and purpose.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is easy for me to feel close to a person from another culture.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

I tend to be more objective than subjective when I make a decision.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I pay attention if a rule or law is broken.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can strongly feel what other people feel.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can help others when the task becomes more difficult than anticipated.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is important to be rational.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
In solving conflicts, I try to focus upon the feelings of those involved.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I try to be rational in solving conflicts.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I think it is important to do something for others without expecting any rewards.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I tend to recognize a moral dilemma right away.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am often quite touched by things that I see happen.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am comfortable getting to know people from different countries.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to provide assistance when the task will take a long time to complete.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I would not do anything to jeopardize my relationship with someone.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I would not do anything to jeopardize my personal integrity.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I would describe myself as a pretty soft-hearted person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

I make an effort to be aware of issues of justice.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can assist others when the task will involve many smaller tasks.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am motivated by my true inner feelings, attitudes, and beliefs.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am interested in participating in activities involving people with disabilities.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Being logical is an important character trait.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
People should be treated fairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is important to be a just person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I usually try to do what I think is kind.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I try to do what I think is fair regardless of the consequences.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I prioritize my actions based upon just treatment of others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I often have tender, concerned feelings for people less fortunate than me.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to relate to others based upon our similarities.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to help others when drastic consequences are involved.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
When I see people being taken advantage of, I feel protective towards them.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Injustices among people are a moral concern.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

Individuals should treat other people fairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I prioritize my actions based upon just treatment of myself.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I do not try to be impartial and unattached when making decisions.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can help others even when I do not have access to necessary resources.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I appreciate the differences between others and myself.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am typically impartial and unattached when making a decision.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I want to be known as someone who is always sensitive to others' feelings.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I try to identify injustices occurring around me.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I strive to be known as someone who is always just.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I have a responsibility to uphold my promises.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can identify things I have in common with people I meet.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I believe that there are two sides to every question and try to look at them both.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to provide assistance when the task will require me to be flexible.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I act according to my social responsibilities.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
When I make decisions, I tend to be concerned with how my decisions will affect others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

I understand how my actions impact my rights.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I tend to be concerned with whether I am doing the “right” thing.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I sometimes try to understand my friends better by imagining how things look from their perspective.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I place issues of fairness above my concern for others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I care about other people, even if I do not know them.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I can assist others when the task requires multiple strategies.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I base my personal ethics upon my responsibilities to others and myself.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
People should be concerned about doing what is right.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
My own rights are very important when solving problems.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
Knowing about the experience of people from differing backgrounds increases my self-understanding.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
It is important to be a warm-hearted person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I place issues of justice above my relationships with others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I am aware when I am being treated unfairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither
I am able to help others when I have seen someone fail at the task.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA Care: ___ AW ___ ID ___ RL ___ EF ___ NA Neither

Before criticizing somebody, I try to imagine how I would feel if I were in their place.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
When I see someone in distress, I understand how they feel.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I try to be gentle with other people.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I place societal values above my own personal interests.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can help others when I am required to act quickly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can best understand someone after I get to know how he/she is <i>both</i> similar and different from me.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am usually firm with other people.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am obligated to be faithful to my partner/spouse.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am familiar with the consequences of injustice.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
My behavior is determined by my obligations to others, including the greater society.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is important to possess clearly defined personal values.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is important to be a forgiving person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I have seen things so sad that I almost felt like crying.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can identify possible consequences of unjust actions.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can find things in common with people from other generations.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

I am comfortable making critical judgments.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am able to provide assistance when feeling tired or fatigued.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
It is important to be a level-headed person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Individuals should abide by the law.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I do not act upon my personal desires and/or interests.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can recognize unjust actions when they occur.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can assist others when other people are around to witness my help.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am interested to know people who speak more than one language.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am generally lenient with others with whom I interact.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am generally aware of the needs of other people.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I understand how my actions impact the rights of others.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I strive to be perceived as logical.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I feel a moral obligation to help when I can.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I appreciate the similarities between others and myself.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am generally aware of other people's concerns.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither

I am able to help others when the task seems overwhelming.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am a tender-hearted person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Honesty is the best policy.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
Moral people have highly developed consciences.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I have little difficulty putting myself in “other people’s shoes.”	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I can help others when I am experiencing social difficulties.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I attend events where I might get to know people from different racial backgrounds.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I attempt to notice when others are being treated unfairly.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am guided by my conscience.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am devoted to those I know.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither
I am a tough-minded person.	Justice: ___ SN ___ JD ___ MO ___ CH ___ NA
	Care: ___ AW ___ ID ___ RL ___ EF ___ NA
	Neither



## Appendix D

### Integrated Justice and Care Scales

## Integrated Justice and Care Scales

**Instructions:** A number of situations are described below concerning your personal attitudes and abilities regarding moral reasoning and behavior. Please rate your level of agreement with each statement according to the following scale.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. I attempt to notice when others are being treated unfairly.                                | 1 | 2 | 3 | 4 | 5 |
| 2. I try to base my actions upon the fair treatment of others.                                | 1 | 2 | 3 | 4 | 5 |
| 3. My values guide my whole approach to life.   | 1 | 2 | 3 | 4 | 5 |
| 4. Being logical is an important character trait.   | 1 | 2 | 3 | 4 | 5 |
| 5. I feel very emotional when I see people treated unfairly.                                  | 1 | 2 | 3 | 4 | 5 |
| 6. I try to resolve problems in a way that does not cause harm to any of the people involved. | 1 | 2 | 3 | 4 | 5 |
| 7. It is easy for me to feel close to a person from another culture.                          | 1 | 2 | 3 | 4 | 5 |
| 8. I am able to help others when I am unfamiliar with the task.                               | 1 | 2 | 3 | 4 | 5 |
| 9. It is a moral concern when someone is being treated unfairly.                              | 1 | 2 | 3 | 4 | 5 |
| 10. I tend to be concerned with whether I am doing the “right” thing.                         | 1 | 2 | 3 | 4 | 5 |
| 11. I make a conscious effort to live in accordance with my values.                           | 1 | 2 | 3 | 4 | 5 |
| 12. I maintain high standards in all that I do.   | 1 | 2 | 3 | 4 | 5 |
| 13. It upsets me to see people suffer.  | 1 | 2 | 3 | 4 | 5 |
| 14. I would not do anything to jeopardize my relationship with someone.                       | 1 | 2 | 3 | 4 | 5 |
| 15. I am able to relate to others based upon our similarities.                                | 1 | 2 | 3 | 4 | 5 |
| 16. I can help others even when I do not have access to necessary resources.                  | 1 | 2 | 3 | 4 | 5 |
| 17. I make an effort to be aware of inequities between people.                                | 1 | 2 | 3 | 4 | 5 |
| 18. I know what I should do when others are being treated unfairly.                           | 1 | 2 | 3 | 4 | 5 |
| 19. My beliefs help me to confront tragedy and suffering.                                     | 1 | 2 | 3 | 4 | 5 |
| 20. I am truthful with others.  | 1 | 2 | 3 | 4 | 5 |

21. I'm very sensitive to the feelings of others.	1	2	3	4	5
22. It is important to be a warm-hearted person.	1	2	3	4	5
23. I appreciate the similarities between others and myself.	1	2	3	4	5
24. I can help others when I am experiencing social difficulties.	1	2	3	4	5
25. I make an effort to be aware of issues of justice.	1	2	3	4	5
26. I try to make decisions based upon applicable principles and rules.	1	2	3	4	5
27. My beliefs are an important part of my individual identity.	1	2	3	4	5
28. Integrity of character is essential.	1	2	3	4	5
29. I can strongly feel what other people feel.	1	2	3	4	5
30. I base my decisions upon helping other people.	1	2	3	4	5
31. I attend events where I might get to know people from different racial backgrounds.	1	2	3	4	5
32. I can assist others when I have never before performed the task.	1	2	3	4	5
33. I try to identify injustices occurring around me.	1	2	3	4	5
34. I believe I am responsible to uphold universal ethical principles.	1	2	3	4	5
35. My values give my life meaning and purpose.	1	2	3	4	5
36. It is important to be a just person.	1	2	3	4	5
37. I can strongly feel what other people feel.	1	2	3	4	5
38. When making decisions, I consider my relationships with those involved.	1	2	3	4	5
39. I feel a sense of connection with people who are different from me.	1	2	3	4	5
40. I am able to help others when drastic consequences are involved.	1	2	3	4	5
41. I am aware when I am being treated unfairly.	1	2	3	4	5
42. I know how to resolve problems without violating the rights of any of the people involved.	1	2	3	4	5
43. I am motivated by my true inner feelings, attitudes, and beliefs.	1	2	3	4	5
44. I am obligated to be faithful to my partner/spouse.	1	2	3	4	5
45. When I see someone in distress, I understand how they feel.	1	2	3	4	5

46. My decisions would favor those who I care about more than those I do not know.	1	2	3	4	5
47. I am comfortable getting to know people from different beliefs.	1	2	3	4	5
48. I am able to provide assistance when the task will require me to be flexible.	1	2	3	4	5
49. I am familiar with the consequences of injustice.	1	2	3	4	5
50. Others' rights are very important when solving problems.	1	2	3	4	5
51. I place societal values above my own personal interests.	1	2	3	4	5
52. It is important to possess clearly defined personal values.	1	2	3	4	5
53. I can usually tell what my friends are feeling.	1	2	3	4	5
54. I usually try to do what I think is kind.	1	2	3	4	5
55. I can identify things I have in common with people I meet.	1	2	3	4	5
56. I am able to help others when I have seen someone fail at the task.	1	2	3	4	5
57. I can recognize unjust actions when they occur.	1	2	3	4	5
58. I try to be rational in solving conflicts.	1	2	3	4	5
59. My behavior is determined by my obligations to others, including the greater society.	1	2	3	4	5
60. Honesty is the best policy.	1	2	3	4	5
61. I care about what happens to people around me.	1	2	3	4	5
62. I want to be known as someone who is always sensitive to others' feelings.	1	2	3	4	5
63. Knowing about the experience of people from differing backgrounds increases my self-understanding.	1	2	3	4	5
64. I can help others when I am required to act quickly.	1	2	3	4	5
65. The mistreatment of others usually disturbs me a great deal.	1	2	3	4	5
66. I am typically impartial and unattached when making a decision.	1	2	3	4	5
67. I do not act upon my personal desires and/or interests.	1	2	3	4	5
68. It is important to be rational.	1	2	3	4	5
69. Before criticizing somebody, I try to imagine how I would feel if I were in their place.	1	2	3	4	5
70. It is important to be a forgiving person.	1	2	3	4	5

71. I can best understand someone after I get to know how he/she is <i>both</i> similar and different from me.	1	2	3	4	5
72. I am able to provide assistance when feeling tired or fatigued.	1	2	3	4	5
73. I pay attention to issues of fairness.	1	2	3	4	5
74. I am comfortable making critical judgments.	1	2	3	4	5
75. I feel a moral obligation to help when I can.	1	2	3	4	5
76. People are responsible for upholding their word.	1	2	3	4	5
77. I have seen things so sad that I almost felt like crying.	1	2	3	4	5
78. I am generally lenient with others with whom I interact.	1	2	3	4	5
79. I can find things in common with people from other generations.	1	2	3	4	5
80. I am able to help others when the task seems overwhelming.	1	2	3	4	5

## Appendix E

### Morally Debatable Behaviors Scales

**Morally Debatable Behaviors Scales**  
(Harding & Phillips, 1986)

**Instructions:** Please indicate how justifiable you feel each of the following items to be according to the following scale.

1	2	3	4	5
Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

1. Claiming state benefits that you are not entitled to	1	2	3	4	5
2. Avoiding a fare on a public transport	1	2	3	4	5
3. Cheating on tax if you have the chance	1	2	3	4	5
4. Buying something that you knew was stolen	1	2	3	4	5
5. Taking and driving away a car belonging to someone else (Joyriding)	1	2	3	4	5
6. Taking the drug marijuana or hashish	1	2	3	4	5
7. Keeping money that you have found	1	2	3	4	5
8. Lying in your own interest	1	2	3	4	5
9. Married men or women having an affair	1	2	3	4	5
10. Sex under the legal age of consent	1	2	3	4	5
11. Someone accepting a bribe in the course of their duties	1	2	3	4	5
12. Homosexuality	1	2	3	4	5
13. Prostitution	1	2	3	4	5
14. Abortion	1	2	3	4	5
15. Divorce	1	2	3	4	5
16. Fighting with the police	1	2	3	4	5
17. Euthanasia (terminating the life of the incurably sick)	1	2	3	4	5
18. Suicide	1	2	3	4	5
19. Failing to report damage you've done accidentally to a parked vehicle	1	2	3	4	5
20. Threatening workers who refuse to join a strike	1	2	3	4	5
21. Killing in self-defense	1	2	3	4	5
22. Political assassination	1	2	3	4	5

Appendix F  
Prosocial Tendencies Measure



**Prosocial Tendencies Measure**  
(Carlo & Randall, 2002)

**Instructions:** Below are a number of statements that may or may not describe you. Please indicate how much each statement describes you by using the following scale:

1	2	3	4	5
Not At All	A Little	Somewhat	Well	Greatly

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. I can help others best when people are watching me.   | 1 | 2 | 3 | 4 | 5 |
| 2. It is most fulfilling to me when I can comfort someone who is very distressed.                | 1 | 2 | 3 | 4 | 5 |
| 3. When other people are around, it is easier for me to help needy others.                       | 1 | 2 | 3 | 4 | 5 |
| 4. I think that one of the best things about helping others is that it makes me look good.       | 1 | 2 | 3 | 4 | 5 |
| 5. I get the most out of helping others when it is done in front of others.                      | 1 | 2 | 3 | 4 | 5 |
| 6. I tend to help people who are in real crisis or need.   | 1 | 2 | 3 | 4 | 5 |
| 7. When people ask me to help them, I don't hesitate.  | 1 | 2 | 3 | 4 | 5 |
| 8. I prefer to donate money anonymously.   | 1 | 2 | 3 | 4 | 5 |
| 9. I tend to help people who hurt themselves badly.  | 1 | 2 | 3 | 4 | 5 |
| 10. I believe that donating goods or money works best when it is tax-deductible.                 | 1 | 2 | 3 | 4 | 5 |
| 11. I tend to help needy others most when they do not know who helped them.                      | 1 | 2 | 3 | 4 | 5 |
| 12. I tend to help others particularly when they are emotionally distressed.                     | 1 | 2 | 3 | 4 | 5 |
| 13. Helping others when I am in the spotlight is when I work best.                               | 1 | 2 | 3 | 4 | 5 |
| 14. It is easy for me to help others when they are in a dire situation.                          | 1 | 2 | 3 | 4 | 5 |
| 15. Most of the time, I help others when they do not know who helped them.                       | 1 | 2 | 3 | 4 | 5 |
| 16. I believe I should receive more recognition for the time and energy I spend on charity work. | 1 | 2 | 3 | 4 | 5 |
| 17. I respond to helping others best when the situation is highly                                | 1 | 2 | 3 | 4 | 5 |

emotional.

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 18. I never hesitate to help others when they ask for it.                               | 1 | 2 | 3 | 4 | 5 |
| 19. I think that helping others without them knowing is the best type of situation.     | 1 | 2 | 3 | 4 | 5 |
| 20. One of the best things about doing charity work is that it looks good on my resume. | 1 | 2 | 3 | 4 | 5 |
| 21. Emotional situations make me want to help needy others.                             | 1 | 2 | 3 | 4 | 5 |
| 22. I often make anonymous donations because they make me feel good.                    | 1 | 2 | 3 | 4 | 5 |
| 23. I feel that if I help someone, they should help me in the future.                   | 1 | 2 | 3 | 4 | 5 |

## Appendix G

### Marlowe-Crowne Social Desirability Scale

**Marlowe-Crowne Social Desirability Scale**  
(Crowne & Marlowe, 1960)

**Instructions:** Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

*Please Circle One*

- |  |      |       |
|--|------|-------|
| 1. Before voting, I thoroughly investigate the qualifications of all candidates.                                     | True | False |
| 2. I never hesitate to go out of my way to help someone in trouble.  | True | False |
| 3. It is sometimes hard for me to go on with my work if I am not encouraged.   | True | False |
| 4. I have never intensely disliked anyone.   | True | False |
| 5. On occasion I have had doubts about my ability to succeed in life.  | True | False |
| 6. I sometimes feel resentful when I don't get my way.   | True | False |
| 7. I am always Careful about my manner of dress.   | True | False |
| 8. My table manners at home are as good as when I eat out in a restaurant.   | True | False |
| 9. If I could get into a movie without paying and be sure I wasn't seen, I would probably do it.                     | True | False |
| 10. On a few occasions, I have given up doing something because I thought too little of my ability.                  | True | False |
| 11. I like to gossip at times.   | True | False |
| 12. There have been times when I felt like rebelling against people in authority even though I knew they were right. | True | False |
| 13. No matter who I'm talking to, I'm always a good listener.  | True | False |
| 14. I can remember "playing sick" to get out of something.   | True | False |
| 15. There have been occasions when I took advantage of someone.  | True | False |
| 16. I'm always willing to admit when I make a mistake.   | True | False |
| 17. I always try to practice what I preach.  | True | False |
| 18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.                         | True | False |
| 19. I sometimes try to get even, rather than forgive and forget.   | True | False |
| 20. When I don't know something I don't at all mind admitting it.  | True | False |
| 21. I am always courteous, even to people who are disagreeable.  | True | False |

- |   |      |       |
|---|------|-------|
| 22. At times I have really insisted on having things my own way.                      | True | False |
| 23. There have been occasions when I have felt like smashing things.                  | True | False |
| 24. I would never think of letting someone else be punished for my wrongdoings.       | True | False |
| 25. I never resent being asked to return a favor.                                     | True | False |
| 26. I have never been irked when people express ideas very different from my own.     | True | False |
| 27. I never make a long trip without checking the safety of my car.                   | True | False |
| 28. There have been times when I was quite jealous of the good fortune of others.     | True | False |
| 29. I have almost never felt the urge to tell someone off.                            | True | False |
| 30. I am sometimes irritated by people who ask favors of me.                          | True | False |
| 31. I have never felt I was punished without cause.                                   | True | False |
| 32. I sometimes think when people have a misfortune they only got what They deserved. | True | False |
| 33. I have never deliberately said something that hurt someone's feelings.            | True | False |

Appendix H  
Demographic Surveys

## Subject Matter Expert Demographic Information

**Instructions:** *To allow us to better analyze your results, please provide the following demographic information.*

Please indicate the following:

\_\_\_\_\_ Age (*in years*)

Gender (*select one*):

\_\_\_\_\_ Male          \_\_\_\_\_ Female

Classification (*select one*):

Graduate Student/Candidate:

\_\_\_\_\_ Master's

\_\_\_\_\_ Doctoral

Faculty Member:

\_\_\_\_\_ Adjunct

\_\_\_\_\_ Assistant

\_\_\_\_\_ Associate

\_\_\_\_\_ Full

## Participant Demographic Information

**Instructions:** To allow us to better analyze your results, please provide us with the following demographic information.

Please indicate the following:

\_\_\_\_\_ Age (in yrs)

Gender (*check one*):

\_\_\_\_\_ Male          \_\_\_\_\_ Female

Class standing (*check one*):

\_\_\_\_\_ Freshman      \_\_\_\_\_ Sophomore      \_\_\_\_\_ Junior  
\_\_\_\_\_ Senior          \_\_\_\_\_ Graduate Student

Race / Ethnicity (*check one*):

\_\_\_ White, non-Hispanic      \_\_\_\_\_ African American      \_\_\_\_\_ Hispanic  
\_\_\_ American Indian      \_\_\_\_\_ Asian/Pacific Islander      \_\_\_\_\_ Other



**Participant Demographic Information**  
*(Test-Retest Data Collection)*

**Instructions:** *To allow us to better analyze your results, please provide the following demographic information.*

Please indicate the following:

\_\_\_\_\_ Age (*in years*)

Gender (*select one*):

\_\_\_\_\_ Male    \_\_\_\_\_ Female

Class standing (*select one*):

\_\_\_\_\_ Freshman    \_\_\_\_\_ Sophomore    \_\_\_\_\_ Junior  
\_\_\_\_\_ Senior    \_\_\_\_\_ Graduate Student

Race / Ethnicity (*select one*):

\_\_\_\_\_ White, non-Hispanic    \_\_\_\_\_ African American    \_\_\_\_\_ Hispanic  
\_\_\_\_\_ American Indian    \_\_\_\_\_ Asian/Pacific Islander  
\_\_\_\_\_ Other (please identify): \_\_\_\_\_

In order to allow the researcher to match your response between two administrations of this instrument, please provide a six letter/digit code below. Note: Please select a code that you will remember but that will not allow you or your results to be identified!

*(e.g., The last two letters of your middle name followed by the last four digits of your parents home telephone number.)*

Personal Code: \_\_\_\_\_

Appendix I

Assessment of Content Validity for the

*Integrated Justice and Care Scales*

*Assessment of Content Validity for Integrated Justice and Care Scales*

---

Item	<i>n</i>	%
Moral Sensitivity		
01. I attempt to notice when others are being treated unfairly.	8	1.00
02. It is a moral concern when someone is being treated unfairly.	7	0.88
03. I make an effort to be aware of inequities between people.	7	0.88
04. I make an effort to be aware of issues of justice.	7	0.88
05. I try to identify injustices occurring around me.	7	0.88
06. I am aware when I am being treated unfairly.	7	0.88
07. I am familiar with the consequences of injustice.	7	0.88
08. I can recognize unjust actions when they occur.	7	0.88
09. The mistreatment of others usually disturbs me a great deal.	6	0.75
10. I pay attention to issues of fairness.	6	0.75

---

Moral Judgment		
01. I try to base my actions upon the fair treatment of others.	8	1.00
02. I tend to be concerned with whether I am doing the “right” thing.	8	1.00
03. I know what I should do when others are being treated unfairly.	7	0.88
04. I try to make decisions based upon applicable principles and rules.	7	0.88
05. I believe I am responsible to uphold universal ethical principles.	6	0.75
06. I know how to resolve problems without violating the rights of any of the people involved.	6	0.75
07. Others’ rights are very important when solving problems.	6	0.75
08. I try to be rational in solving conflicts.	6	0.75
09. I am typically impartial and unattached when making a decision.	6	0.75
10. I am comfortable making critical judgments.	6	0.75

---

Moral Motivation		
01. My values guide my whole approach to life.	6	0.75
02. I make a conscious effort to live in accordance with my values.	6	0.75
03. My beliefs help me to confront tragedy and suffering.	6	0.75
04. My beliefs are an important part of my individual identity.	6	0.75
05. My values give my life meaning and purpose.	6	0.75
06. I am motivated by my true inner feelings, attitudes, and beliefs.	6	0.75
07. I place societal values above my own personal interests.	6	0.75
08. My behavior is determined by my obligations to others, including the greater society.	6	0.75
09. I do not act upon my personal desires and/or interests.	6	0.75
10. I feel a moral obligation to help when I can.	6	0.75

---

*Assessment of Content Validity for Integrated Justice and Care Scales (continued)*

Item	<i>n</i>	%
Moral Character		
01. Being logical is an important character trait.	8	1.00
02. I maintain high standards in all that I do.	7	0.88
03. I am truthful with others.	7	0.88
04. Integrity of character is essential.	7	0.88
05. It is important to be a just person.	6	0.75
06. I am obligated to be faithful to my partner/spouse.	6	0.75
07. It is important to possess clearly defined personal values.	6	0.75
08. Honesty is the best policy.	6	0.75
09. It is important to be rational.	6	0.75
10. People are responsible for upholding their word.	6	0.75

Empathic Awareness		
01. I feel very emotional when I see people treated unfairly.	8	1.00
02. It upsets me to see people suffer.	8	1.00
03. I'm very sensitive to the feelings of others.	8	1.00
04. I can strongly feel what other people feel.	8	1.00
05. I can strongly feel what other people feel.	8	1.00
06. When I see someone in distress, I understand how they feel.	8	1.00
07. I can usually tell what my friends are feeling.	7	0.88
08. I care about what happens to people around me.	7	0.88
09. Before criticizing somebody, I try to imagine how I would feel if I were in their place.	7	0.88
10. I have seen things so sad that I almost felt like crying.	7	0.88

Compassionate Ideal		
01. I try to resolve problems in a way that does not cause harm to any of the people involved.	7	0.88
02. I would not do anything to jeopardize my relationship with someone.	7	0.88
03. It is important to be a warm-hearted person.	7	0.88
04. I base my decisions upon helping other people.	6	0.75
05. When making decisions, I consider my relationships with those involved.	6	0.75
06. My decisions would favor those who I care about more than those I do not know.	6	0.75
07. I usually try to do what I think is kind.	6	0.75
08. I want to be known as someone who is always sensitive to others' feelings.	6	0.75
09. It is important to be a forgiving person.	6	0.75
10. I am generally lenient with others with whom I interact.	6	0.75

*Assessment of Content Validity for Integrated Justice and Care Scales (continued)*

Item	<i>n</i>	%
Interpersonal Relatedness		
01. It is easy for me to feel close to a person from another culture.	8	1.00
02. I am able to relate to others based upon our similarities.	8	1.00
03. I appreciate the similarities between others and myself.	8	1.00
04. I attend events where I might get to know people from different racial backgrounds.	8	1.00
05. I feel a sense of connection with people who are different from me.	7	0.88
06. I am comfortable getting to know people from different countries.	7	0.88
07. I can identify things I have in common with people I meet.	7	0.88
08. Knowing about the experience of people from differing backgrounds increases my self-understanding.	7	0.88
09. I can best understand someone after I get to know how he/she is <i>both</i> similar and different from me.	7	0.88
10. I can find things in common with people from other generations.	7	0.88
Care-Efficacy		
01. I am able to help others when I am unfamiliar with the task.	8	1.00
02. I can help others even when I do not have access to necessary resources.	6	0.75
03. I can help others when I am experiencing social difficulties.	8	1.00
04. I can assist others when I have never before performed the task.	7	0.88
05. I am able to help others when drastic consequences are involved.	7	0.88
06. I am able to provide assistance when the task will require me to be flexible.	7	0.88
07. I am able to help others when I have seen someone fail at the task.	7	0.88
08. I can help others when I am required to act quickly.	7	0.88
09. I am able to provide assistance when feeling tired or fatigued.	7	0.88
10. I am able to help others when the task seems overwhelming.	7	0.88

*Note.* *n* = number of raters (out of 8) who appropriately identified the item's dimension and component

Appendix J  
Descriptive Statistics for the  
*Integrated Justice and Care Scales*

*Descriptive Statistics for Integrated Justice and Care Scales Items*

Item	M	SD	Skewness		Kurtosis	
			Value	Std. Error	Value	Std. Error
MS01	4.11	0.70	-1.33	0.12	4.45	0.24
MS02	4.02	0.76	-0.76	0.12	0.94	0.24
MS03	3.59	0.79	-0.27	0.12	-0.01	0.24
MS04	3.78	0.77	-0.51	0.12	0.14	0.24
MS05	3.56	0.79	-0.38	0.12	-0.15	0.24
MS06	4.08	0.71	-0.73	0.12	1.12	0.24
MS07	3.68	0.75	-0.64	0.12	0.43	0.24
MS08	3.95	0.60	-0.53	0.12	1.43	0.24
MS09	4.03	0.72	-0.58	0.12	0.51	0.24
MS10	3.94	0.63	-0.73	0.12	2.07	0.24
MJ01	4.11	0.67	-0.78	0.12	1.65	0.24
MJ02	3.95	0.82	-1.04	0.12	1.56	0.24
MJ03	3.65	0.79	-0.44	0.12	0.00	0.24
MJ04	3.89	0.71	-0.83	0.12	1.41	0.24
MJ05	3.68	0.85	-0.69	0.12	0.32	0.24
MJ06	3.73	0.72	-0.74	0.12	1.06	0.24
MJ07	3.96	0.68	-1.13	0.12	3.17	0.24
MJ08	4.12	0.60	-0.54	0.12	1.68	0.24
MJ09	2.81	1.07	0.34	0.12	-0.82	0.24
MJ10	3.52	0.93	-0.52	0.12	-0.24	0.24
MM01	4.15	0.80	-0.87	0.12	0.56	0.24
MM02	4.20	0.70	-0.73	0.12	0.79	0.24
MM03	3.98	0.79	-0.58	0.12	0.13	0.24
MM04	4.20	0.72	-0.65	0.12	0.25	0.24
MM05	4.12	0.73	-0.92	0.12	1.81	0.24
MM06	4.13	0.69	-0.64	0.12	0.74	0.24
MM07	3.12	0.94	-0.07	0.12	-0.70	0.24
MM08	3.56	0.87	-0.58	0.12	0.013	0.24
MM09	2.56	1.01	0.59	0.12	-0.44	0.24
MM10	3.97	0.69	-0.79	0.12	1.65	0.24
MC01	4.13	0.68	-0.61	0.12	0.85	0.24
MC02	3.89	0.88	-0.75	0.12	0.18	0.24
MC03	4.16	0.61	-0.70	0.12	2.58	0.24
MC04	4.28	0.66	-0.69	0.12	0.73	0.24
MC05	4.12	0.65	-0.62	0.12	1.35	0.24
MC06	4.49	0.72	-1.37	0.12	1.51	0.24
MC07	4.06	0.73	-0.69	0.12	0.72	0.24
MC08	4.22	0.75	-0.78	0.12	0.43	0.24
MC09	4.09	0.64	-0.72	0.12	1.83	0.24
MC10	4.24	0.64	-0.67	0.12	1.66	0.24

*Descriptive Statistics for Integrated Justice and Care Scales Items (continued)*

Item	M	SD	Skewness		Kurtosis	
			Value	Std. Error	Value	Std. Error
EA01	3.88	0.83	-0.46	0.12	-0.21	0.24
EA02	4.30	0.74	-1.06	0.12	1.24	0.24
EA03	3.88	0.87	-0.65	0.12	0.03	0.24
EA04	3.62	0.91	-0.48	0.12	-0.15	0.24
EA05	3.62	0.90	-0.40	0.12	-0.30	0.24
EA06	3.75	0.75	-0.62	0.12	0.51	0.24
EA07	4.06	0.73	-0.87	0.12	1.54	0.24
EA08	4.24	0.69	-0.96	0.12	2.08	0.24
EA09	3.70	0.84	-0.71	0.12	0.42	0.24
EA10	4.17	0.81	-0.98	0.12	1.24	0.24
CI01	4.08	0.75	-0.93	0.12	1.50	0.24
CI02	3.74	0.95	-0.52	0.12	-0.44	0.24
CI03	4.13	0.80	-0.76	0.12	0.27	0.24
CI04	3.54	0.85	-0.40	0.12	-0.32	0.24
CI05	4.07	0.65	-0.62	0.12	1.32	0.24
CI06	3.87	0.81	-0.70	0.12	0.58	0.24
CI07	4.08	0.70	-0.81	0.12	1.35	0.24
CI08	3.95	0.88	-0.73	0.12	0.14	0.24
CI09	4.19	0.66	-0.59	0.12	0.88	0.24
CI10	3.84	0.72	-0.56	0.12	0.71	0.24
IR01	3.47	0.95	-0.26	0.12	-0.40	0.24
IR02	4.08	0.61	-0.72	0.12	2.36	0.24
IR03	4.07	0.61	-0.51	0.12	1.50	0.24
IR04	3.33	1.01	-0.28	0.12	-0.65	0.24
IR05	3.36	0.87	-0.16	0.12	-0.52	0.24
IR06	3.89	0.77	-0.67	0.12	0.66	0.24
IR07	4.02	0.65	-0.83	0.12	1.97	0.24
IR08	3.91	0.80	-0.53	0.12	0.01	0.24
IR09	4.01	0.65	-0.44	0.12	0.71	0.24
IR10	4.00	0.68	-0.67	0.12	1.18	0.24
CE01	3.36	0.84	-0.36	0.12	-0.64	0.24
CE02	3.61	0.77	-0.44	0.12	0.03	0.24
CE03	3.67	0.78	-0.51	0.12	0.11	0.24
CE04	3.38	0.81	-0.38	0.12	-0.17	0.24
CE05	3.55	0.74	-0.19	0.12	-0.25	0.24
CE06	3.89	0.62	-0.86	0.12	1.91	0.24
CE07	3.84	0.67	-0.75	0.12	1.46	0.24
CE08	3.79	0.77	-0.75	0.12	0.85	0.24
CE09	3.53	0.89	-0.52	0.12	-0.50	0.24
CE10	3.80	0.71	-0.55	0.12	0.47	0.24



Appendix K

Zero-Order Correlation Matrices for the

*Integrated Justice and Care Scales*

*Zero-Order Correlation Matrix for Moral Sensitivity Scale*

---

Item	MS01	MS02	MS03	MS04	MS05	MS06	MS07	MS08	MS09	MS10
MS01	1.00									
MS02	0.36	1.00								
MS03	0.17	0.27	1.00							
MS04	0.22	0.23	0.30	1.00						
MS05	0.19	0.26	0.35	0.42	1.00					
MS06	0.17	0.20	0.11	0.22	0.11	1.00				
MS07	0.17	0.18	0.19	0.31	0.30	0.17	1.00			
MS08	0.30	0.38	0.22	0.30	0.30	0.38	0.32	1.00		
MS09	0.29	0.41	0.23	0.24	0.27	0.16	0.20	0.28	1.00	
MS10	0.45	0.40	0.34	0.31	0.34	0.20	0.25	0.40	0.45	1.00

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix for Moral Judgment Scale*

---

Item	MJ01	MJ02	MJ03	MJ04	MJ05	MJ06	MJ07	MJ08	MJ09	MJ10
MJ01	1.00									
MJ02	0.33	1.00								
MJ03	0.31	0.16	1.00							
MJ04	0.29	0.22	0.17	1.00						
MJ05	0.22	0.27	0.23	0.33	1.00					
MJ06	0.23	0.15	0.26	0.27	0.11	1.00				
MJ07	0.36	0.26	0.20	0.25	0.25	0.22	1.00			
MJ08	0.30	0.20	0.07	0.29	0.19	0.21	0.37	1.00		
MJ09	-0.18	-0.19	0.02	0.06	-0.01	0.02	-0.12	-0.01	1.00	
MJ10	0.03	0.06	0.18	0.19	0.20	0.19	0.07	0.10	0.17	1.00

---

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix for Moral Motivation Scale*

---

Item	MM01	MM02	MM03	MM04	MM05	MM06	MM07	MM08	MM09	MM10
MM01	1.00									
MM02	0.61	1.00								
MM03	0.35	0.39	1.00							
MM04	0.50	0.56	0.42	1.00						
MM05	0.49	0.51	0.44	0.62	1.00					
MM06	0.33	0.36	0.22	0.41	0.35	1.00				
MM07	0.08	0.04	0.12	0.01	0.05	0.05	1.00			
MM08	0.14	0.15	0.19	0.12	0.16	0.18	0.43	1.00		
MM09	-0.06	-0.08	0.04	-0.10	-0.06	-0.18	0.31	0.13	1.00	
MM10	0.27	0.30	0.30	0.35	0.36	0.32	0.20	0.38	0.00	1.00

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix for Moral Character Scale*

---

Item	MC01	MC02	MC03	MC04	MC05	MC06	MC07	MC08	MC09	MC10
MC01	1.00									
MC02	0.21	1.00								
MC03	0.13	0.30	1.00							
MC04	0.23	0.35	0.33	1.00						
MC05	0.15	0.17	0.29	0.37	1.00					
MC06	0.19	0.24	0.28	0.38	0.30	1.00				
MC07	0.12	0.30	0.32	0.42	0.34	0.27	1.00			
MC08	0.12	0.23	0.39	0.28	0.24	0.25	0.26	1.00		
MC09	0.37	0.23	0.25	0.31	0.29	0.29	0.24	0.29	1.00	
MC10	0.23	0.22	0.29	0.41	0.30	0.37	0.34	0.28	0.28	1.00

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix for Empathic Awareness Scale*

---

Item	EA01	EA02	EA03	EA04	EA05	EA06	EA07	EA08	EA09	EA10
EA01	1.00									
EA02	0.45	1.00								
EA03	0.44	0.43	1.00							
EA04	0.33	0.37	0.45	1.00						
EA05	0.31	0.30	0.42	0.75	1.00					
EA06	0.26	0.30	0.28	0.47	0.46	1.00				
EA07	0.23	0.41	0.27	0.43	0.44	0.35	1.00			
EA08	0.35	0.36	0.35	0.25	0.25	0.19	0.32	1.00		
EA09	0.26	0.13	0.25	0.22	0.24	0.23	0.16	0.20	1.00	
EA10	0.36	0.41	0.38	0.33	0.27	0.19	0.26	0.40	0.13	1.00

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix for Compassionate Ideal Scale*

---

Item	CI01	CI02	CI03	CI04	CI05	CI06	CI07	CI08	CI09	CI10
CI01	1.00									
CI02	0.24	1.00								
CI03	0.44	0.38	1.00							
CI04	0.30	0.21	0.34	1.00						
CI05	0.26	0.34	0.42	0.27	1.00					
CI06	0.07	0.04	0.10	-0.04	0.20	1.00				
CI07	0.32	0.38	0.48	0.38	0.45	0.16	1.00			
CI08	0.40	0.35	0.57	0.42	0.39	0.11	0.55	1.00		
CI09	0.33	0.28	0.41	0.30	0.36	0.12	0.46	0.44	1.00	
CI10	0.18	0.12	0.16	0.30	0.17	0.04	0.28	0.30	0.30	1.00

---

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix for Interpersonal Relatedness Scale*

---

Item	IR01	IR02	IR03	IR04	IR05	IR06	IR07	IR08	IR09	IR10
IR01	1.00									
IR02	0.15	1.00								
IR03	0.16	0.50	1.00							
IR04	0.41	0.06	0.07	1.00						
IR05	0.50	0.08	0.15	0.37	1.00					
IR06	0.54	0.23	0.20	0.38	0.44	1.00				
IR07	0.20	0.41	0.32	0.12	0.18	0.26	1.00			
IR08	0.31	0.35	0.35	0.27	0.25	0.35	0.36	1.00		
IR09	0.25	0.33	0.37	0.20	0.26	0.30	0.31	0.41	1.00	
IR10	0.22	0.33	0.30	0.15	0.28	0.27	0.38	0.35	0.30	1.00

---

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$



*Zero-Order Correlation Matrix for Care-Efficacy Scale*

---

Item	CE01	CE02	CE03	CE04	CE05	CE06	CE07	CE08	CE09	CE10
CE01	1.00									
CE02	0.41	1.00								
CE03	0.34	0.37	1.00							
CE04	0.53	0.37	0.34	1.00						
CE05	0.24	0.29	0.31	0.33	1.00					
CE06	0.14	0.22	0.27	0.14	0.24	1.00				
CE07	0.18	0.29	0.28	0.24	0.28	0.29	1.00			
CE08	0.32	0.35	0.33	0.29	0.39	0.39	0.35	1.00		
CE09	0.30	0.31	0.39	0.33	0.38	0.32	0.22	0.39	1.00	
CE10	0.27	0.36	0.39	0.37	0.45	0.40	0.43	0.50	0.48	1.00

---

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

Appendix L

Zero-Order Correlation Matrix for 66-Item

*Integrated Justice and Care Scales*

*Zero-Order Correlation Matrix of 66-Item Integrated Justice and Care Scales*

Item	MS01	MS02	MS03	MS04	MS05	MS06	MS07	MS08	MS09	MS10
MS01	1.00									
MS02	0.36	1.00								
MS03	0.17	0.27	1.00							
MS04	0.22	0.22	0.30	1.00						
MS05	0.19	0.26	0.35	0.42	1.00					
MS06	0.17	0.20	0.11	0.22	0.10	1.00				
MS07	0.17	0.18	0.19	0.31	0.30	0.17	1.00			
MS08	0.30	0.38	0.22	0.30	0.30	0.38	0.32	1.00		
MS09	0.29	0.41	0.23	0.24	0.27	0.16	0.20	0.28	1.00	
MS10	0.45	0.40	0.34	0.31	0.34	0.20	0.25	0.40	0.45	1.00
MJ01	0.56	0.37	0.21	0.22	0.25	0.07	0.21	0.27	0.32	0.43
MJ02	0.37	0.29	0.19	0.16	0.25	0.03	0.11	0.15	0.26	0.29
MJ03	0.27	0.17	0.34	0.19	0.22	0.14	0.12	0.20	0.24	0.25
MJ04	0.20	0.29	0.18	0.36	0.32	0.18	0.27	0.31	0.25	0.38
MJ05	0.18	0.22	0.19	0.24	0.38	0.04	0.20	0.24	0.24	0.26
MJ06	0.18	0.22	0.11	0.20	0.22	0.29	0.22	0.30	0.24	0.27
MJ07	0.40	0.36	0.27	0.21	0.27	0.25	0.28	0.34	0.39	0.47
MJ08	0.25	0.29	0.19	0.20	0.21	0.19	0.27	0.46	0.24	0.36
MM01	0.38	0.27	0.14	0.12	0.10	0.14	0.13	0.27	0.20	0.32
MM02	0.38	0.35	0.19	0.20	0.17	0.14	0.11	0.29	0.26	0.38
MM03	0.30	0.30	0.19	0.17	0.20	0.13	0.14	0.21	0.20	0.27
MM04	0.32	0.30	0.16	0.23	0.23	0.14	0.10	0.27	0.25	0.31
MM05	0.20	0.20	0.17	0.18	0.14	0.10	0.08	0.22	0.22	0.27
MM06	0.25	0.34	0.16	0.25	0.19	0.35	0.15	0.38	0.26	0.32
MM10	0.32	0.35	0.19	0.26	0.28	0.12	0.21	0.25	0.32	0.43
MC01	0.20	0.22	0.15	0.14	0.07	0.20	0.15	0.18	0.06	0.15
MC02	0.26	0.14	0.17	0.11	0.14	0.10	0.07	0.25	0.19	0.21
MC03	0.21	0.25	0.20	0.13	0.15	0.17	0.10	0.23	0.17	0.24
MC04	0.35	0.35	0.17	0.19	0.17	0.18	0.14	0.28	0.25	0.31
MC05	0.25	0.33	0.20	0.24	0.22	0.21	0.18	0.32	0.27	0.31
MC06	0.27	0.24	0.14	0.07	0.09	0.21	0.10	0.24	0.17	0.23
MC07	0.29	0.28	0.21	0.23	0.20	0.22	0.23	0.32	0.28	0.33
MC08	0.18	0.16	0.06	0.03	0.06	0.19	0.11	0.23	0.12	0.28
MC09	0.23	0.22	0.14	0.15	0.14	0.15	0.16	0.33	0.28	0.32
MC10	0.30	0.40	0.11	0.15	0.14	0.21	0.11	0.29	0.26	0.32
EA01	0.38	0.45	0.25	0.16	0.25	0.06	0.11	0.19	0.45	0.38
EA02	0.43	0.45	0.22	0.11	0.16	0.18	0.16	0.27	0.41	0.35
EA03	0.27	0.40	0.20	0.15	0.17	0.03	0.05	0.19	0.38	0.34
EA04	0.21	0.28	0.24	0.21	0.25	0.14	0.10	0.26	0.37	0.37
EA06	0.22	0.29	0.23	0.27	0.20	0.20	0.16	0.28	0.28	0.35
EA07	0.29	0.22	0.21	0.12	0.11	0.15	0.07	0.25	0.20	0.35
EA08	0.28	0.33	0.12	0.11	0.11	0.12	0.13	0.23	0.35	0.35
EA10	0.30	0.37	0.12	0.13	0.07	0.14	0.05	0.17	0.35	0.23

CI01	0.32	0.30	0.23	0.10	0.16	0.11	0.08	0.17	0.24	0.24
CI02	0.25	0.20	0.15	0.08	0.10	0.06	0.06	0.15	0.21	0.25
CI03	0.27	0.37	0.07	0.11	0.09	0.12	0.00	0.18	0.33	0.27
CI04	0.22	0.26	0.27	0.22	0.33	0.03	0.11	0.21	0.30	0.30
CI05	0.33	0.36	0.21	0.22	0.18	0.14	0.08	0.26	0.28	0.42
CI07	0.31	0.35	0.19	0.14	0.23	0.13	0.16	0.30	0.41	0.42
CI08	0.24	0.38	0.08	0.11	0.12	0.14	0.08	0.25	0.38	0.39
CI09	0.30	0.29	0.14	0.18	0.18	0.14	0.17	0.27	0.31	0.36
IR02	0.32	0.27	0.23	0.15	0.14	0.15	0.15	0.29	0.17	0.31
IR03	0.24	0.28	0.23	0.14	0.18	0.12	0.11	0.19	0.25	0.30
IR07	0.31	0.24	0.26	0.21	0.21	0.12	0.18	0.30	0.31	0.37
IR08	0.29	0.41	0.25	0.22	0.29	0.11	0.14	0.19	0.33	0.38
IR09	0.26	0.34	0.26	0.21	0.24	0.12	0.26	0.22	0.36	0.43
IR10	0.24	0.29	0.19	0.15	0.17	0.20	0.11	0.31	0.24	0.28
CE02	0.24	0.22	0.35	0.31	0.30	0.09	0.17	0.21	0.19	0.28
CE03	0.18	0.19	0.24	0.33	0.25	0.13	0.15	0.23	0.19	0.19
CE04	0.03	0.09	0.20	0.18	0.29	0.04	0.11	0.07	0.08	0.08
CE05	0.21	0.17	0.20	0.33	0.34	0.29	0.23	0.30	0.23	0.27
CE06	0.27	0.31	0.31	0.24	0.31	0.12	0.27	0.40	0.27	0.36
CE07	0.24	0.18	0.31	0.25	0.26	0.19	0.20	0.33	0.23	0.30
CE08	0.22	0.22	0.24	0.29	0.31	0.14	0.24	0.23	0.24	0.27
CE09	0.11	0.12	0.22	0.26	0.31	0.11	0.16	0.23	0.06	0.26
CE10	0.24	0.23	0.19	0.27	0.27	0.15	0.16	0.25	0.23	0.25

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix of 66-Item Integrated Justice and Care Scales  
(continued)*

Item	MJ01	MJ02	MJ03	MJ04	MJ05	MJ06	MJ07	MJ08	MM01	MM02
MJ01	1.00									
MJ02	0.33	1.00								
MJ03	0.31	0.16	1.00							
MJ04	0.29	0.22	0.17	1.00						
MJ05	0.22	0.27	0.23	0.33	1.00					
MJ06	0.23	0.15	0.25	0.27	0.11	1.00				
MJ07	0.36	0.26	0.20	0.25	0.25	0.22	1.00			
MJ08	0.30	0.20	0.07	0.29	0.19	0.21	0.37	1.00		
MM01	0.36	0.19	0.24	0.31	0.21	0.25	0.24	0.20	1.00	
MM02	0.35	0.31	0.22	0.35	0.23	0.21	0.35	0.35	0.61	1.00
MM03	0.25	0.24	0.34	0.26	0.24	0.25	0.24	0.16	0.35	0.39
MM04	0.32	0.24	0.21	0.42	0.22	0.17	0.29	0.25	0.50	0.56
MM05	0.26	0.20	0.24	0.33	0.33	0.18	0.22	0.20	0.49	0.51
MM06	0.21	0.19	0.15	0.30	0.26	0.35	0.20	0.25	0.33	0.36
MM10	0.41	0.29	0.22	0.29	0.31	0.25	0.37	0.26	0.27	0.30
MC01	0.20	0.04	0.04	0.20	0.07	0.08	0.20	0.26	0.31	0.28
MC02	0.27	0.22	0.18	0.30	0.26	0.08	0.21	0.16	0.40	0.45
MC03	0.21	0.11	0.16	0.21	0.18	0.16	0.25	0.34	0.24	0.36
MC04	0.38	0.29	0.14	0.32	0.27	0.17	0.35	0.38	0.39	0.45
MC05	0.24	0.22	0.14	0.23	0.30	0.12	0.30	0.36	0.20	0.26
MC06	0.19	0.14	0.11	0.14	0.15	0.09	0.17	0.25	0.26	0.24
MC07	0.25	0.22	0.19	0.35	0.29	0.21	0.37	0.22	0.39	0.51
MC08	0.24	0.13	0.11	0.21	0.14	0.19	0.24	0.30	0.24	0.26
MC09	0.34	0.16	0.08	0.22	0.15	0.12	0.33	0.43	0.27	0.29
MC10	0.24	0.26	0.10	0.20	0.24	0.19	0.31	0.24	0.28	0.29
EA01	0.42	0.33	0.29	0.24	0.28	0.11	0.27	0.19	0.23	0.26
EA02	0.42	0.30	0.20	0.24	0.21	0.26	0.46	0.30	0.24	0.36
EA03	0.36	0.26	0.19	0.20	0.16	0.17	0.28	0.20	0.23	0.25
EA04	0.28	0.27	0.24	0.23	0.22	0.20	0.25	0.17	0.14	0.18
EA06	0.24	0.14	0.20	0.21	0.18	0.21	0.22	0.19	0.19	0.18
EA07	0.31	0.23	0.22	0.21	0.21	0.19	0.34	0.29	0.24	0.33
EA08	0.34	0.19	0.19	0.13	0.18	0.19	0.37	0.32	0.24	0.36
EA10	0.28	0.18	0.13	0.13	0.18	0.15	0.33	0.15	0.19	0.26
CI01	0.39	0.29	0.14	0.20	0.12	0.19	0.33	0.36	0.18	0.25
CI02	0.25	0.08	0.13	0.13	0.08	0.22	0.23	0.18	0.21	0.13
CI03	0.35	0.26	0.12	0.20	0.18	0.27	0.32	0.29	0.28	0.36
CI04	0.37	0.31	0.26	0.25	0.32	0.20	0.30	0.26	0.19	0.24
CI05	0.29	0.19	0.22	0.25	0.24	0.19	0.45	0.31	0.29	0.31
CI07	0.42	0.27	0.22	0.29	0.21	0.28	0.40	0.37	0.24	0.35
CI08	0.36	0.25	0.19	0.25	0.21	0.21	0.40	0.30	0.22	0.31
CI09	0.37	0.22	0.19	0.18	0.18	0.25	0.33	0.27	0.33	0.37
IR02	0.34	0.20	0.11	0.22	0.18	0.20	0.32	0.38	0.26	0.33

IR03	0.31	0.20	0.17	0.21	0.18	0.22	0.33	0.31	0.29	0.31
IR07	0.25	0.25	0.17	0.22	0.18	0.16	0.34	0.33	0.21	0.30
IR08	0.30	0.23	0.18	0.28	0.29	0.17	0.39	0.28	0.26	0.35
IR09	0.28	0.18	0.20	0.29	0.27	0.21	0.32	0.23	0.24	0.28
IR10	0.20	0.23	0.19	0.20	0.16	0.20	0.28	0.28	0.29	0.39
CE02	0.22	0.21	0.32	0.21	0.25	0.20	0.18	0.19	0.16	0.26
CE03	0.19	0.20	0.21	0.20	0.21	0.31	0.22	0.18	0.13	0.18
CE04	0.08	0.14	0.15	0.13	0.21	0.17	0.05	-0.04	0.06	0.10
CE05	0.14	0.16	0.21	0.19	0.20	0.22	0.24	0.15	0.11	0.15
CE06	0.30	0.28	0.18	0.23	0.25	0.21	0.40	0.45	0.29	0.35
CE07	0.17	0.21	0.25	0.19	0.15	0.18	0.30	0.28	0.16	0.26
CE08	0.28	0.26	0.22	0.28	0.25	0.25	0.25	0.27	0.12	0.23
CE09	0.17	0.20	0.13	0.18	0.19	0.16	0.15	0.17	0.11	0.15
CE10	0.25	0.22	0.24	0.22	0.27	0.24	0.19	0.22	0.14	0.21

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix of 66-Item Integrated Justice and Care Scales  
(continued)*

Item	MM03	MM04	MM05	MM06	MM10	MC01	MC02	MC03	MC04	MC05
MM03	1.00									
MM04	0.42	1.00								
MM05	0.44	0.62	1.00							
MM06	0.21	0.41	0.35	1.00						
MM10	0.30	0.35	0.36	0.32	1.00					
MC01	0.16	0.24	0.23	0.13	0.14	1.00				
MC02	0.20	0.37	0.38	0.23	0.24	0.21	1.00			
MC03	0.21	0.26	0.19	0.27	0.21	0.13	0.30	1.00		
MC04	0.30	0.48	0.43	0.39	0.29	0.23	0.35	0.33	1.00	
MC05	0.23	0.27	0.36	0.34	0.27	0.15	0.17	0.28	0.37	1.00
MC06	0.17	0.29	0.26	0.37	0.14	0.18	0.24	0.28	0.38	0.30
MC07	0.34	0.45	0.42	0.45	0.34	0.12	0.30	0.32	0.42	0.34
MC08	0.21	0.31	0.25	0.29	0.24	0.12	0.22	0.39	0.28	0.24
MC09	0.14	0.25	0.21	0.21	0.24	0.37	0.23	0.24	0.31	0.29
MC10	0.16	0.35	0.30	0.40	0.40	0.23	0.22	0.29	0.41	0.30
EA01	0.22	0.26	0.25	0.27	0.37	0.12	0.19	0.15	0.30	0.20
EA02	0.24	0.31	0.27	0.30	0.37	0.17	0.26	0.16	0.45	0.26
EA03	0.21	0.29	0.26	0.29	0.37	0.10	0.19	0.24	0.29	0.17
EA04	0.23	0.17	0.16	0.28	0.23	0.07	0.17	0.18	0.34	0.19
EA06	0.18	0.19	0.16	0.24	0.25	0.10	0.13	0.12	0.23	0.22
EA07	0.18	0.28	0.33	0.31	0.28	0.13	0.26	0.23	0.43	0.19
EA08	0.21	0.37	0.28	0.37	0.36	0.09	0.18	0.39	0.38	0.32
EA10	0.24	0.29	0.26	0.29	0.29	0.08	0.13	0.13	0.28	0.23
CI01	0.24	0.23	0.27	0.15	0.26	0.16	0.17	0.24	0.35	0.26
CI02	0.19	0.20	0.15	0.12	0.20	0.07	0.26	0.28	0.23	0.09
CI03	0.26	0.37	0.35	0.34	0.34	0.14	0.26	0.31	0.44	0.29
CI04	0.18	0.21	0.21	0.25	0.39	0.06	0.27	0.19	0.23	0.19
CI05	0.25	0.36	0.30	0.26	0.28	0.17	0.20	0.25	0.39	0.29
CI07	0.23	0.36	0.32	0.33	0.43	0.10	0.25	0.31	0.42	0.28
CI08	0.30	0.34	0.32	0.28	0.43	0.09	0.25	0.28	0.33	0.29
CI09	0.34	0.33	0.34	0.29	0.36	0.15	0.22	0.23	0.37	0.23
IR02	0.22	0.36	0.30	0.28	0.31	0.22	0.27	0.29	0.45	0.33
IR03	0.25	0.37	0.29	0.21	0.25	0.19	0.25	0.32	0.34	0.24
IR07	0.21	0.34	0.28	0.33	0.27	0.18	0.22	0.24	0.32	0.33
IR08	0.29	0.29	0.30	0.30	0.32	0.10	0.16	0.18	0.32	0.32
IR09	0.25	0.30	0.29	0.33	0.35	0.15	0.19	0.16	0.34	0.29
IR10	0.21	0.34	0.34	0.31	0.25	0.22	0.24	0.21	0.30	0.24
CE02	0.37	0.24	0.27	0.19	0.22	0.08	0.26	0.20	0.24	0.24
CE03	0.30	0.19	0.24	0.23	0.27	0.11	0.24	0.21	0.22	0.14
CE04	0.20	0.07	0.10	0.12	0.10	0.10	0.12	0.02	0.03	0.10
CE05	0.28	0.16	0.13	0.25	0.26	0.07	0.12	0.07	0.13	0.19
CE06	0.15	0.24	0.21	0.27	0.27	0.17	0.21	0.18	0.29	0.21

CE07	0.24	0.30	0.20	0.27	0.23	0.15	0.26	0.16	0.23	0.25
CE08	0.33	0.23	0.19	0.23	0.41	0.20	0.15	0.16	0.27	0.20
CE09	0.22	0.12	0.11	0.16	0.23	0.14	0.19	0.15	0.13	0.20
CE10	0.28	0.23	0.18	0.28	0.27	0.15	0.20	0.16	0.18	0.20

---

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$



*Zero-Order Correlation Matrix of 66-Item Integrated Justice and Care Scales  
(continued)*

Item	MC06	MC07	MC08	MC09	MC10	EA01	EA02	EA03	EA04	EA06
MC06	1.00									
MC07	0.27	1.00								
MC08	0.25	0.26	1.00							
MC09	0.29	0.24	0.29	1.00						
MC10	0.37	0.34	0.28	0.28	1.00					
EA01	0.12	0.22	0.11	0.13	0.17	1.00				
EA02	0.29	0.33	0.21	0.23	0.33	0.45	1.00			
EA03	0.21	0.23	0.23	0.19	0.29	0.44	0.43	1.00		
EA04	0.19	0.23	0.18	0.18	0.26	0.33	0.37	0.45	1.00	
EA06	0.28	0.22	0.16	0.10	0.21	0.26	0.30	0.28	0.47	1.00
EA07	0.34	0.37	0.32	0.25	0.25	0.23	0.40	0.27	0.43	0.35
EA08	0.33	0.32	0.33	0.30	0.35	0.35	0.36	0.35	0.25	0.19
EA10	0.21	0.30	0.24	0.23	0.28	0.36	0.41	0.38	0.33	0.19
CI01	0.17	0.13	0.22	0.21	0.23	0.34	0.36	0.37	0.25	0.23
CI02	0.27	0.12	0.25	0.11	0.17	0.16	0.34	0.36	0.21	0.26
CI03	0.26	0.35	0.27	0.29	0.33	0.33	0.48	0.54	0.36	0.26
CI04	0.09	0.19	0.13	0.15	0.21	0.32	0.26	0.40	0.38	0.29
CI05	0.29	0.29	0.23	0.28	0.32	0.26	0.36	0.34	0.29	0.27
CI07	0.34	0.34	0.26	0.31	0.35	0.37	0.52	0.45	0.30	0.32
CI08	0.23	0.27	0.33	0.26	0.35	0.37	0.41	0.56	0.40	0.32
CI09	0.18	0.33	0.30	0.32	0.30	0.24	0.33	0.34	0.23	0.28
IR02	0.29	0.36	0.26	0.28	0.34	0.23	0.37	0.22	0.27	0.19
IR03	0.25	0.33	0.26	0.31	0.21	0.22	0.31	0.32	0.22	0.18
IR07	0.30	0.29	0.32	0.23	0.27	0.21	0.33	0.18	0.35	0.27
IR08	0.24	0.30	0.28	0.23	0.27	0.28	0.34	0.31	0.34	0.23
IR09	0.28	0.34	0.20	0.27	0.25	0.33	0.35	0.29	0.31	0.31
IR10	0.30	0.28	0.19	0.25	0.30	0.19	0.28	0.21	0.32	0.32
CE01	0.17	0.20	0.12	0.13	0.15	0.24	0.17	0.22	0.24	0.24
CE02	0.07	0.27	0.04	0.14	0.16	0.15	0.20	0.18	0.21	0.15
CE03	0.00	0.08	-0.05	0.04	0.02	0.03	0.07	0.09	0.23	0.18
CE04	0.11	0.25	0.05	0.13	0.10	0.13	0.15	0.11	0.19	0.32
CE05	0.23	0.28	0.18	0.31	0.28	0.21	0.24	0.23	0.19	0.23
CE06	0.27	0.25	0.18	0.21	0.25	0.17	0.23	0.08	0.23	0.29
CE07	0.26	0.26	0.15	0.29	0.26	0.16	0.19	0.15	0.31	0.25
CE08	0.12	0.17	0.07	0.17	0.12	0.05	0.05	0.06	0.18	0.22
CE09	0.18	0.23	0.12	0.17	0.18	0.15	0.18	0.13	0.25	0.27

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix of 64-Item Integrated Justice and Care Scales  
(continued)*

Item	EA07	EA08	EA10	CI01	CI02	CI03	CI04	CI05	CI07	CI08
EA07	1.00									
EA08	0.32	1.00								
EA10	0.26	0.40	1.00							
CI01	0.25	0.29	0.26	1.00						
CI02	0.23	0.23	0.16	0.24	1.00					
CI03	0.36	0.41	0.37	0.44	0.38	1.00				
CI04	0.23	0.27	0.26	0.30	0.21	0.34	1.00			
CI05	0.38	0.37	0.33	0.25	0.34	0.42	0.27	1.00		
CI07	0.44	0.43	0.32	0.32	0.38	0.48	0.38	0.45	1.00	
CI08	0.37	0.48	0.41	0.40	0.35	0.57	0.42	0.39	0.55	1.00
CI09	0.34	0.41	0.33	0.33	0.28	0.41	0.30	0.36	0.46	0.44
IR02	0.39	0.34	0.26	0.38	0.32	0.40	0.17	0.33	0.33	0.30
IR03	0.28	0.38	0.25	0.32	0.31	0.48	0.25	0.34	0.30	0.38
IR07	0.38	0.33	0.22	0.26	0.23	0.34	0.25	0.32	0.40	0.33
IR08	0.34	0.30	0.35	0.33	0.18	0.37	0.28	0.36	0.35	0.48
IR09	0.32	0.31	0.40	0.25	0.14	0.30	0.24	0.33	0.30	0.34
IR10	0.38	0.30	0.29	0.23	0.15	0.26	0.20	0.32	0.28	0.30
CE02	0.13	0.18	0.08	0.21	0.23	0.16	0.31	0.29	0.20	0.12
CE03	0.20	0.18	0.16	0.16	0.18	0.21	0.26	0.25	0.26	0.20
CE04	0.08	-0.03	0.06	0.05	0.06	0.03	0.19	0.07	-0.01	0.00
CE05	0.15	0.08	0.08	0.06	0.09	0.10	0.22	0.11	0.13	0.11
CE06	0.26	0.31	0.15	0.24	0.17	0.26	0.28	0.31	0.30	0.25
CE07	0.28	0.26	0.09	0.16	0.13	0.16	0.20	0.22	0.21	0.18
CE08	0.26	0.25	0.17	0.10	0.13	0.15	0.26	0.20	0.26	0.24
CE09	0.11	0.08	0.04	0.04	0.08	0.04	0.22	0.18	0.14	0.11
CE10	0.22	0.19	0.16	0.14	0.07	0.13	0.28	0.20	0.24	0.18

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix of 66-Item Integrated Justice and Care Scales  
(continued)*

Item	CI09	IR02	IR03	IR07	IR08	IR09	IR10	CE02	CE03	CE04
CI09	1.00									
IR02	0.39	1.00								
IR03	0.28	0.50	1.00							
IR07	0.29	0.41	0.32	1.00						
IR08	0.34	0.35	0.35	0.36	1.00					
IR09	0.40	0.33	0.37	0.31	0.41	1.00				
IR10	0.26	0.33	0.30	0.38	0.35	0.30	1.00			
CE02	0.22	0.28	0.22	0.21	0.24	0.25	0.15	1.00		
CE03	0.20	0.29	0.27	0.19	0.19	0.20	0.25	0.37	1.00	
CE04	0.06	0.06	0.10	0.14	0.11	0.17	0.14	0.37	0.34	1.00
CE05	0.07	0.14	0.13	0.25	0.18	0.17	0.22	0.29	0.31	0.33
CE06	0.28	0.30	0.25	0.31	0.31	0.29	0.39	0.22	0.27	0.14
CE07	0.16	0.27	0.26	0.43	0.21	0.26	0.37	0.29	0.28	0.24
CE08	0.22	0.29	0.24	0.29	0.37	0.30	0.31	0.35	0.33	0.29
CE09	0.11	0.10	0.20	0.14	0.15	0.20	0.18	0.31	0.39	0.33
CE10	0.18	0.22	0.26	0.34	0.21	0.25	0.41	0.36	0.39	0.37

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

*Zero-Order Correlation Matrix of 66-Item Integrated Justice and Care Scales  
(continued)*

---

Item	CE05	CE06	CE07	CE08	CE09	CE10
CE05	1.00					
CE06	0.24	1.00				
CE07	0.28	0.29	1.00			
CE08	0.39	0.39	0.35	1.00		
CE09	0.38	0.32	0.22	0.39	1.00	
CE10	0.45	0.40	0.43	0.50	0.48	1.00

---

*Note.* Correlations greater than 0.08 are significant at  $p \leq 0.05$  and those greater than 0.10 are significant at  $p \leq 0.01$

Appendix M

Random Data Parallel Analysis for 66-Item

*Integrated Justice and Care Scales*

*Random Data Parallel Analysis of 66-Item Integrated Justice and Care Scales*

---

Root	Raw Data	Means	Percentile
1.00	16.94	1.10	1.18
2.00	2.99	1.02	1.10
3.00	2.00	0.96	1.01
4.00	1.50	0.91	0.95
5.00	1.31	0.86	0.91
6.00	1.08	0.82	0.87
7.00	0.88	0.78	0.83
8.00	0.86	0.74	0.78
9.00	0.76	0.71	0.74
10.00	0.70	0.68	0.71
11.00	0.64	0.64	0.68
12.00	0.61	0.61	0.65
13.00	0.55	0.59	0.62
14.00	0.53	0.55	0.59
15.00	0.48	0.53	0.56
16.00	0.42	0.50	0.53
17.00	0.41	0.47	0.50
18.00	0.40	0.45	0.48
19.00	0.37	0.42	0.45
20.00	0.32	0.40	0.42
21.00	0.31	0.37	0.40
22.00	0.29	0.35	0.38
23.00	0.27	0.33	0.35
24.00	0.26	0.31	0.33
25.00	0.22	0.28	0.31
26.00	0.21	0.26	0.29
27.00	0.20	0.24	0.27
28.00	0.17	0.22	0.24
29.00	0.17	0.20	0.22
30.00	0.15	0.18	0.20
31.00	0.13	0.16	0.18
32.00	0.11	0.14	0.16
33.00	0.09	0.12	0.14
34.00	0.07	0.10	0.12
35.00	0.07	0.08	0.10
36.00	0.05	0.06	0.08
37.00	0.04	0.04	0.06
38.00	0.03	0.02	0.05
39.00	0.00	0.01	0.02
40.00	-0.02	-0.01	0.01
41.00	-0.03	-0.03	-0.01

---

*Random Data Parallel Analysis of 66-Item Integrated Justice and Care Scales  
(continued)*

---

Root	Raw Data	Means	Percentile
42.00	-0.04	-0.05	-0.03
43.00	-0.04	-0.06	-0.04
44.00	-0.06	-0.08	-0.06
45.00	-0.08	-0.10	-0.08
46.00	-0.10	-0.11	-0.10
47.00	-0.11	-0.13	-0.12
48.00	-0.12	-0.15	-0.13
49.00	-0.13	-0.16	-0.15
50.00	-0.14	-0.18	-0.16
51.00	-0.15	-0.19	-0.18
52.00	-0.16	-0.21	-0.20
53.00	-0.16	-0.23	-0.21
54.00	-0.17	-0.24	-0.23
55.00	-0.19	-0.26	-0.24
56.00	-0.19	-0.27	-0.26
57.00	-0.21	-0.29	-0.28
58.00	-0.22	-0.31	-0.29
59.00	-0.22	-0.32	-0.31
60.00	-0.23	-0.34	-0.32
61.00	-0.24	-0.36	-0.34
62.00	-0.25	-0.37	-0.35
63.00	-0.28	-0.39	-0.38
64.00	-0.28	-0.41	-0.39
65.00	-0.31	-0.43	-0.41
66.00	-0.31	-0.46	-0.44

---

Appendix N

Principal Axis Factor Analysis for 66-Item

*Integrated Justice and Care Scales*



*Pattern Matrix for 66-Item Integrated Justice and Care Scales*

Item	Factor								$h^2$
	1	2	3	4	5	6	7	8	
MS01	-0.14	-0.07	0.17	0.08	0.13	-0.07	0.02	0.59	0.50
MS02	0.27	-0.07	0.07	0.10	0.03	-0.18	0.04	0.32	0.41
MS03	-0.03	0.30	-0.01	0.09	0.00	-0.04	0.01	0.28	0.26
MS04	0.09	0.29	0.05	0.10	-0.20	-0.29	-0.07	0.10	0.35
MS05	0.16	0.37	0.00	0.18	-0.27	-0.13	-0.07	0.18	0.44
MS06	-0.08	-0.06	0.01	0.00	0.11	-0.62	0.01	-0.04	0.38
MS07	0.02	0.10	-0.04	0.29	-0.17	-0.30	-0.10	0.12	0.29
MS08	-0.03	0.03	0.03	0.27	0.01	-0.50	0.01	0.10	0.48
MS09	0.35	-0.01	-0.03	0.04	0.01	-0.17	0.05	0.33	0.41
MS10	0.14	0.05	0.04	0.20	0.00	-0.22	0.05	0.36	0.49
MJ01	-0.01	-0.01	0.13	0.18	-0.05	0.06	0.19	0.52	0.50
MJ02	0.15	0.16	0.13	0.08	0.02	0.14	-0.02	0.30	0.27
MJ03	-0.05	0.22	0.16	-0.18	-0.03	-0.10	0.07	0.30	0.27
MJ04	0.12	0.09	0.34	0.13	-0.20	-0.21	-0.02	0.06	0.35
MJ05	0.29	0.23	0.26	0.10	-0.16	0.01	-0.09	0.04	0.32
MJ06	-0.01	0.13	0.06	-0.06	-0.08	-0.39	0.25	0.01	0.30
MJ07	0.13	-0.01	-0.01	0.33	0.05	-0.12	0.10	0.29	0.43
MJ08	-0.02	0.01	-0.05	0.64	0.02	-0.11	0.17	0.03	0.55
MM01	-0.16	-0.12	0.69	-0.02	0.02	-0.08	0.01	0.19	0.54
MM02	-0.03	-0.03	0.67	0.11	0.07	0.02	-0.03	0.16	0.60
MM03	0.02	0.23	0.43	-0.13	-0.04	-0.04	0.11	0.07	0.36
MM04	0.07	-0.01	0.70	0.00	0.07	-0.03	0.02	0.00	0.58
MM05	0.15	0.05	0.75	-0.07	0.02	0.05	0.01	-0.09	0.58
MM06	0.26	0.01	0.31	-0.05	0.16	-0.42	-0.03	-0.13	0.50
MM10	0.32	0.12	0.18	0.12	-0.09	-0.05	0.11	0.13	0.40
MC01	-0.18	0.01	0.21	0.24	0.10	-0.05	-0.04	0.10	0.19
MC02	-0.12	0.12	0.46	0.03	0.03	0.05	0.14	0.06	0.32
MC03	-0.03	0.02	0.19	0.23	0.00	-0.11	0.34	-0.14	0.31
MC04	0.09	-0.04	0.38	0.17	0.18	-0.03	0.11	0.07	0.47
MC05	0.22	0.05	0.17	0.26	0.07	-0.13	-0.02	-0.03	0.30
MC06	0.00	-0.01	0.14	0.10	0.39	-0.15	0.07	-0.02	0.34
MC07	0.17	0.03	0.47	0.04	0.08	-0.20	-0.04	-0.05	0.44
MC08	0.06	-0.09	0.17	0.20	0.12	-0.14	0.25	-0.14	0.29
MC09	0.03	-0.01	0.08	0.47	0.10	-0.03	0.06	0.04	0.35
MC10	0.22	-0.07	0.20	0.16	0.19	-0.16	0.04	-0.01	0.34
EA01	0.31	-0.07	0.09	-0.08	-0.03	0.03	0.04	0.53	0.50
EA02	0.18	-0.12	0.05	-0.01	0.21	-0.11	0.20	0.40	0.51
EA03	0.36	-0.04	0.02	-0.10	-0.03	0.00	0.44	0.20	0.53
EA04	0.31	0.22	-0.13	-0.15	0.24	-0.11	0.17	0.19	0.44
EA06	0.13	0.21	-0.11	-0.14	0.22	-0.27	0.13	0.18	0.36

*Pattern Matrix for 66-Item Integrated Justice and Care Scales (continued)*

Item	Factor								$h^2$
	1	2	3	4	5	6	7	8	
EA07	0.11	0.08	0.09	0.03	0.39	-0.05	0.15	0.10	0.40
EA08	0.28	-0.07	0.11	0.21	0.18	-0.02	0.22	0.02	0.41
EA10	0.42	-0.10	0.10	-0.06	0.19	-0.02	0.07	0.15	0.37
CI01	0.08	-0.01	0.02	0.18	0.04	0.11	0.35	0.24	0.35
CI02	-0.14	0.04	-0.04	-0.03	0.05	-0.08	0.62	0.09	0.42
CI03	0.28	-0.08	0.15	0.03	0.12	0.03	0.52	-0.01	0.59
CI04	0.27	0.27	0.00	0.04	-0.14	0.06	0.27	0.16	0.40
CI05	0.13	0.04	0.11	0.13	0.13	-0.05	0.25	0.12	0.35
CI07	0.25	-0.03	0.05	0.14	0.08	-0.09	0.37	0.14	0.50
CI08	0.46	-0.05	0.02	0.07	0.06	-0.01	0.45	0.00	0.62
CI09	0.17	-0.02	0.19	0.13	0.04	-0.04	0.27	0.08	0.36
IR02	-0.03	0.10	0.15	0.27	0.25	0.04	0.25	0.04	0.42
IR03	0.04	0.16	0.15	0.21	0.13	0.10	0.34	-0.01	0.38
IR07	0.09	0.20	0.03	0.19	0.35	-0.04	0.06	0.07	0.39
IR08	0.36	0.12	0.10	0.16	0.12	0.05	0.06	0.10	0.39
IR09	0.32	0.13	0.11	0.09	0.15	-0.05	-0.02	0.13	0.35
IR10	0.08	0.22	0.14	0.08	0.44	-0.04	-0.06	0.04	0.41
CE02	-0.08	0.50	0.15	-0.04	-0.08	0.00	0.18	0.11	0.41
CE03	-0.01	0.51	0.09	0.01	-0.05	-0.05	0.22	-0.07	0.37
CE04	0.00	0.62	0.04	-0.17	0.01	0.03	-0.02	-0.02	0.37
CE05	0.02	0.48	-0.03	-0.05	0.03	-0.30	-0.08	0.05	0.40
CE06	0.04	0.26	0.00	0.41	0.09	-0.02	-0.01	0.14	0.40
CE07	-0.07	0.38	0.03	0.11	0.32	-0.13	-0.07	0.08	0.39
CE08	0.13	0.53	0.00	0.19	0.14	-0.01	-0.05	-0.01	0.44
CE09	-0.03	0.59	0.00	0.15	-0.04	-0.03	0.02	-0.08	0.38
CE10	0.03	0.65	0.01	0.06	0.23	-0.01	-0.06	0.00	0.52
<i>ESSL</i> <sup>a</sup>	16.86	2.93	1.93	1.44	1.24	1.01	0.82	0.80	

Note: <sup>a</sup> Extraction Sums of Squared Loadings

*Structure Matrix for 66-Item Integrated Justice and Care Scales*

Item	Factor								$h^2$
	1	2	3	4	5	6	7	8	
MS01	0.17	0.18	0.41	0.31	0.27	-0.28	0.29	0.65	0.50
MS02	0.46	0.19	0.35	0.32	0.21	-0.36	0.30	0.51	0.41
MS03	0.16	0.42	0.21	0.23	0.08	-0.23	0.15	0.40	0.26
MS04	0.22	0.45	0.24	0.25	-0.08	-0.43	0.06	0.29	0.35
MS05	0.29	0.52	0.21	0.30	-0.15	-0.32	0.07	0.37	0.44
MS06	0.06	0.13	0.18	0.19	0.20	-0.60	0.11	0.10	0.38
MS07	0.13	0.27	0.15	0.36	-0.06	-0.39	0.01	0.25	0.29
MS08	0.19	0.28	0.32	0.46	0.19	-0.62	0.20	0.31	0.48
MS09	0.51	0.23	0.25	0.24	0.16	-0.34	0.28	0.51	0.41
MS10	0.39	0.32	0.37	0.43	0.20	-0.44	0.31	0.56	0.49
MJ01	0.28	0.23	0.40	0.37	0.14	-0.19	0.41	0.64	0.50
MJ02	0.31	0.29	0.31	0.23	0.13	-0.09	0.19	0.43	0.27
MJ03	0.15	0.35	0.29	0.03	0.06	-0.24	0.21	0.41	0.27
MJ04	0.28	0.30	0.46	0.32	-0.01	-0.38	0.17	0.30	0.35
MJ05	0.38	0.37	0.37	0.25	-0.01	-0.20	0.10	0.27	0.32
MJ06	0.17	0.29	0.25	0.14	0.07	-0.46	0.32	0.22	0.30
MJ07	0.36	0.22	0.33	0.49	0.24	-0.35	0.34	0.48	0.43
MJ08	0.19	0.19	0.30	0.71	0.23	-0.33	0.33	0.27	0.55
MM01	0.09	0.12	0.70	0.26	0.21	-0.26	0.27	0.35	0.54
MM02	0.22	0.21	0.75	0.39	0.28	-0.24	0.28	0.38	0.60
MM03	0.22	0.38	0.52	0.13	0.11	-0.24	0.29	0.31	0.36
MM04	0.29	0.21	0.75	0.30	0.29	-0.27	0.31	0.28	0.58
MM05	0.32	0.23	0.74	0.22	0.23	-0.18	0.28	0.20	0.58
MM06	0.41	0.23	0.48	0.24	0.33	-0.55	0.23	0.18	0.50
MM10	0.49	0.32	0.42	0.32	0.11	-0.28	0.34	0.40	0.40
MC01	-0.01	0.12	0.32	0.34	0.19	-0.19	0.10	0.19	0.19
MC02	0.09	0.25	0.53	0.24	0.18	-0.15	0.31	0.25	0.32
MC03	0.15	0.15	0.38	0.37	0.20	-0.26	0.43	0.12	0.31
MC04	0.33	0.17	0.58	0.42	0.39	-0.27	0.39	0.34	0.47
MC05	0.35	0.22	0.38	0.42	0.23	-0.33	0.20	0.22	0.30
MC06	0.18	0.12	0.35	0.30	0.50	-0.30	0.27	0.16	0.34
MC07	0.35	0.25	0.60	0.32	0.28	-0.40	0.23	0.24	0.44
MC08	0.21	0.05	0.35	0.35	0.30	-0.26	0.37	0.10	0.29
MC09	0.20	0.15	0.33	0.56	0.27	-0.24	0.24	0.23	0.35
MC10	0.37	0.13	0.41	0.36	0.36	-0.33	0.28	0.23	0.34
EA01	0.49	0.16	0.31	0.13	0.11	-0.16	0.30	0.63	0.50
EA02	0.43	0.13	0.36	0.25	0.38	-0.30	0.46	0.56	0.51
EA03	0.54	0.14	0.29	0.11	0.17	-0.17	0.59	0.44	0.53
EA04	0.47	0.35	0.19	0.09	0.33	-0.29	0.36	0.40	0.44
EA06	0.31	0.35	0.18	0.10	0.31	-0.40	0.29	0.36	0.36

*Structure Matrix for 66-Item Integrated Justice and Care Scales (continued)*

Item	Factor								$h^2$
	1	2	3	4	5	6	7	8	
EA07	0.32	0.22	0.37	0.27	0.51	-0.26	0.39	0.31	0.40
EA08	0.45	0.11	0.38	0.39	0.37	-0.23	0.44	0.29	0.41
EA10	0.53	0.08	0.31	0.15	0.33	-0.18	0.32	0.34	0.37
CI01	0.29	0.13	0.29	0.32	0.21	-0.09	0.48	0.40	0.35
CI02	0.10	0.14	0.21	0.13	0.21	-0.19	0.62	0.26	0.42
CI03	0.49	0.09	0.43	0.26	0.36	-0.17	0.68	0.30	0.59
CI04	0.44	0.40	0.26	0.20	0.03	-0.16	0.40	0.41	0.40
CI05	0.35	0.22	0.39	0.34	0.32	-0.26	0.45	0.37	0.35
CI07	0.48	0.19	0.38	0.36	0.31	-0.31	0.57	0.42	0.50
CI08	0.62	0.14	0.35	0.28	0.30	-0.21	0.63	0.33	0.62
CI09	0.38	0.17	0.43	0.33	0.25	-0.25	0.46	0.34	0.36
IR02	0.22	0.24	0.43	0.45	0.43	-0.21	0.44	0.28	0.42
IR03	0.26	0.27	0.40	0.38	0.32	-0.15	0.49	0.26	0.38
IR07	0.30	0.33	0.34	0.39	0.47	-0.29	0.30	0.30	0.39
IR08	0.51	0.29	0.36	0.35	0.28	-0.20	0.31	0.36	0.39
IR09	0.47	0.30	0.36	0.30	0.29	-0.28	0.24	0.37	0.35
IR10	0.27	0.34	0.38	0.31	0.52	-0.28	0.21	0.26	0.41
CE02	0.13	0.57	0.33	0.15	0.04	-0.22	0.28	0.33	0.41
CE03	0.16	0.56	0.29	0.18	0.07	-0.26	0.29	0.20	0.37
CE04	0.08	0.58	0.13	-0.05	0.00	-0.13	0.03	0.13	0.37
CE05	0.16	0.57	0.17	0.14	0.08	-0.44	0.04	0.24	0.40
CE06	0.25	0.40	0.31	0.53	0.23	-0.29	0.20	0.35	0.40
CE07	0.13	0.47	0.29	0.31	0.37	-0.34	0.13	0.27	0.39
CE08	0.29	0.59	0.27	0.35	0.23	-0.28	0.14	0.26	0.44
CE09	0.09	0.60	0.19	0.24	0.02	-0.23	0.09	0.14	0.38
CE10	0.20	0.68	0.26	0.24	0.27	-0.28	0.12	0.25	0.52
<i>ESSL</i> <sup>a</sup>	16.86	2.93	1.93	1.44	1.24	1.01	0.82	0.80	

Note: <sup>a</sup> Extraction Sums of Squared Loadings

*Factor Correlation Matrix*

---

Factor	1	2	3	4	5	6	7	8
1	1.00							
2	0.20	1.00						
3	0.28	0.27	1.00					
4	0.20	0.20	0.37	1.00				
5	0.19	0.06	0.28	0.24	1.00			
6	-0.22	-0.32	-0.30	-0.31	-0.18	1.00		
7	0.31	0.13	0.36	0.22	0.29	-0.17	1.00	
8	0.35	0.31	0.34	0.26	0.14	-0.26	0.32	1.00

---

## VITA

Christopher Michael Ray

Candidate for the Degree of

Doctor of Philosophy

Thesis: DEVELOPMENT OF AN INTEGRATED MODEL AND MEASURE OF THE MORAL DIMENSIONS OF JUSTICE AND CARE

Major Field: EDUCATIONAL PSYCHOLOGY

### Biographical:

Personal Data: Born in Cincinnati, Ohio on September 3, 1975, the son of Loran and Cindy Ray. Married to Hope Ray on June 7, 2003. Michael Aaron Ray born on March 24, 2007.

Education: Graduated from Clopton High School, Clarksville, Missouri, in May 1993; received Bachelor of Science degree in Psychology from University of Missouri – Rolla, Rolla, Missouri in July 2002; received Master of Science degree in Counseling and Student Personnel from Oklahoma State University, Stillwater, Oklahoma, in May 2003. Completed the requirements for the Doctor of Philosophy degree with a major in Educational Psychology at Oklahoma State University, Department of Applied Health and Educational Psychology in July 2007.

Experience: Employed by Oklahoma State University, Department of Residential Life as a Hall Director, 1999-2000, and as a Residence Director, 2000-2003; employed by the University of Tulsa, Department of Residence Life as a Residence Director, 2003-2005; employed by Oklahoma State University, Department of Applied Health and Educational Psychology as a Graduate Teaching Associate and Graduate Research Associate, 2005-2007.

Professional Memberships: American Educational Research Association, Association for Moral Education, American Psychological Association, and International Society for the Scientific Study of Subjectivity.

Name: Christopher Michael Ray

Date of Degree: July, 2007

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: DEVELOPMENT OF AN INTEGRATED MODEL AND MEASURE  
OF THE MORAL DIMENSIONS OF JUSTICE AND CARE

Pages in Study: 208

Candidate for the Degree of Doctor of Philosophy

Major Field: EDUCATIONAL PSYCHOLOGY

Scope and Method of Study: The purpose of this study was to develop an operational definition of the *Care* dimension of moral theory and to develop an objective instrument to measure this definition and the dimension of *Justice* as represented by Rest's (1983) Four Component Model. The integration of the two dimensions was aimed at examining the relationship between them as well as to identify any demographic differences. Three phases of research were conducted to examine the content validity of the items using subject matter experts, to conduct item and structural analyses, and to examine the test-retest reliability of the instrument.

Findings and Conclusions: The overall results support the expansion of the *Care* dimension as well as its integration with the *Justice* dimension as promoted by Rest (1983). Initial evidence supporting the operational definition of *Care* was provided through the examination of content validity using subject matter experts. The high internal consistency reliabilities of the eight scales and the evidence of convergent and divergent validity provide additional support. An examination of the inter-correlations between the items and between the scales as well as the large resulting canonical correlation indicates that there is a strong positive relationship between the dimensions of *Justice* and *Care* as measured through this instrument. However, while females and males tend to score similarly on all four *Justice* scales, females tend to score higher on three of the four *Care* scales: *Empathic Awareness*, *Compassionate Ideal*, and *Interpersonal Relatedness*. Males, on the other hand, tend to score significantly higher on the fourth *Care* scale, *Care-Efficacy*. Further, there are generally moderate correlations between the *Integrated Justice and Care Scales*, the *Morally Debatable Behaviors Scales*, and the *Prosocial Tendencies Measure* scales. There were only small correlations between the *IJCS* and *Marlow-Crowne Social Desirability Scale*, indicating that scores on the *IJCS* were not generally influenced by a desire to respond in a socially acceptable manner. Thus, evidence exists to justify and support the expanded model. Further research is necessary to replicate and extend these findings.

ADVISER'S APPROVAL: Dr. Diane Montgomery

---