VALUES AND ORGANIZATIONAL CULTURE PERCEPTIONS: A STUDY OF RELATIONSHIPS AND ANTECEDENTS TO MANAGERIAL MORAL JUDGMENT

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ABSTRACT

Rachel Vannatta Reinhart, Advisor

“At this moment, America’s highest economic need is higher ethical standards….“
(Former U.S. President George W. Bush, 2002). That statement was made in the aftermath of the Enron and WorldCom fiascos in the early 2000s. Seven years later, newly elected U.S. President Obama (2009) said in his inauguration speech “Our economy is badly weakened, a consequence of greed and irresponsibility on the part of some, but also our collective failure to make hard choices and prepare the nation for a new age.” There is a repeated calling to increase the understanding of how to make “hard choices.” It is the leadership of an organization that is one of the most important components of an organization’s ethical culture (Brown & Treviño, 2006; Treviño, 1990) and researchers have called for additional studies “to identify the factors that influence the levels of moral judgment used in the workplace” (Loviscky, Treviño, & Jacobs, 2007, p.276).

The purpose of this study was to explore the relationships between values, organization culture perceptions, and managerial moral reasoning. Data for this study were collected from 100 managers from a variety of industries and organizations through an online survey. Using a Likert-scale, the Schwartz Values Survey (SVS) (Schwartz, 1992) measured four meta-values and ten value types. A 12 item version of the Likert-scale Competing Values Framework (CVF) (Quinn and Rohrbaugh, 1983) was used to measure four different organization culture perceptions. Cognitive moral development was assessed by the Managerial Moral Judgment Test (MMJT) (Loviscky, Treviño, & Jacobs, 2007) which determined levels of moral reasoning using
six workplace scenarios asking respondents to make a decision and then both rate and rank the decision criteria. Respondents also provided demographic data (industry, organization size, managerial level, gender, and year of birth).

This study provides a contribution to the understanding of the variables that impact the level of moral reasoning in the workplace. Statistically significant results were found, however, the magnitude of importance for the results when interpreting effect size was generally low. Significant correlations were found between cognitive moral development and two meta-values (conservation and self-transcendence), two value types (tradition and benevolence), and one organization culture perception (hierarchy). In addition, several regression models were developed that included meta-value, value type and organization culture perception variables predicting cognitive moral development. The result with the greatest practical significance for organizations was the regression model where hierarchy culture, achievement and power were combined ($R^2=.192$). In this condition, organizations with hierarchy cultures and managers who value achievement and power, organizations are predicted to see lower levels of managerial moral reasoning at play.

Finally, distinct group differences emerged from studying gender, industry, and organization size. There were 17 group differences found in the study. Only one gender difference was found and only one group difference was found between age groups. However, eight group differences were found when industry was analyzed and seven group differences were found when organization size was considered. No group differences were found in the analysis of managerial level. This study raises additional questions about the antecedents to managerial moral reasoning in the workplace as well as group differences. Further research is
needed to explore if and how additional variables beyond values and organization culture impact moral reasoning at work as we strive to better understand managerial moral judgment.
For my family:

This work would not have been possible without the steadfast understanding, patience, and encouragement of my family, including John Hoover IV, John Hoover V, Alec Hoover, Rew Hoover, and my parents, Judy Kathary and William and Caroline Feeman, Jr. This work is also in remembrance of my in-laws and grandparents, Kathryn and John Hoover, III, Elizabeth and Charles Whitney, William and Jane Feeman, Sr., and Eiryn and Barbara Evans, all of whom have played a critical role in the development of my own values and moral reasoning.
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CHAPTER I. INTRODUCTION

Background of the Problem and Rationale

“At this moment, America’s highest economic need is higher ethical standards….”
(Former U.S. President George W. Bush, 2002). That statement was made in the aftermath of the Enron and WorldCom fiascos in the early 2000s. Seven years later, newly elected U.S. President Obama said in his inauguration speech “Our economy is badly weakened, a consequence of greed and irresponsibility on the part of some, but also our collective failure to make hard choices and prepare the nation for a new age.” There is a repeated calling to increase the understanding of how to make “hard choices.” In the workplace, it may be that the values of our leaders and managers are the foundation for their own moral compass. Should we care if corporate CEOs and presidents are driven by priorities such as universalism and benevolence or power and hedonism? The question this study attempted to address was “What impact do the values of leaders and managers have on their ethical decision making at work?”

During the economic downturn of 2009, headlines such as the leaders of Merrill Lynch & Co. spending $1.22 million for redecorating an office while facing losses of some $27 billion (Fitzgerald, 2009) were not uncommon. Beyond the many accounting scandals that occurred around 2002, headlines covered stories of disgraced financier Bernard Madoff’s Ponzi scheme, resume misstatements by former CEO of Radio Shack David Edmondson, and spying on Hewlett-Packard board members while former CEO Patricia Dunn was still in place. Employees must decide if it is ok to lie to a customer to gain business or if bribes should be paid to “grease the wheels of commerce.” Individuals at every level of an organization face these decisions or others like them. What fosters their ability to make ethical judgments at work? In large part, it is the ethical decision making that leaders and managers themselves model for their employees.
In the for-profit sector, decisions are trusted to be overseen either by laws or guided by the economy’s invisible hand – supply and demand having the final say in determining what actions are best. The ethics of compensation levels of CEOs in the for-profit financial services industry were the focus of concern when the Obama administration proposed capping CEO salaries for organizations that received government subsidy (ABC News, 2009). In 2005, the average CEO was paid 832 times the amount of a minimum wage earner at $5.15 per hour and 262 times the pay of an average worker, according to Mishel (2006) of the Economic Policy Institute. According to an article in Forbes magazine (DeCarlo and Zajac, 2009), Jeffrey Immelt, CEO of General Electric, was reported to have a six-year average annual compensation of $14.4 million while the annualized six-year total return for the company was -11%. From the same source, Kenneth Lewis, CEO of Bank of America, had a six-year average annual compensation of $29.7 million while the company had an annualized six-year total return of -16%. John Donahoe, CEO of eBay, was reported to have earned $22.5 million in 2008 and CEO Robert Iger of Disney made $51 million while their companies lost money (Toscan, 2009). Insurance company AIG paid $218 million in bonuses in March, 2009 after receiving $170 billion of taxpayer bailout funds at the end of 2008. Over a fifty-two week period ending July 7, 2009, NASDAQ reported the AIG stock price ranged from a high of $621.80 to a low of $6.60. As demonstrated by AIG, the impact of unethical conduct for businesses can include a loss of reputation, loss of market share, and loss of market value.

The Ethics Resource Center (ERC) National Business Ethics Survey (NBES) gathers data from employees on issues such as misconduct, ethics and violations in the workplace. In 2005, the majority of surveyed employees reported having observed misconduct in the past year. Types of ethical misconduct included fraud, misrepresentation, misappropriation of assets, conflicts of
interest, inadequate accountability, and bullying (abusive or intimidating behavior towards employees). It is interesting to note that even though 2005 NBES data indicated there had been an increase in formal ethics programs (codes of ethics, ethics training, ethics hotlines, etc.), there had not been a corresponding decrease in misconduct. ERC President, Patricia Harned, stated that “organizations need to evaluate what will work most effectively, including a closer look at the role workplace culture plays… This data shows, for example, that management needs to lead by example to set the tone throughout the whole organization” (Verschoor, 2005, p. 19).

Popular press has not escaped conversations about the relationship between the economic downturn and a degradation of morality. Kidder (2009), author of the book “The Ethics Recession: Reflections on the Moral Underpinnings of the Current Economic Crisis,” suggested that in 2008, the economic crisis was initially framed through lenses of economics (“What's the bottom line?”) and politics (“Where's the power?”); however, the conversation has since transitioned to include the lens of ethics, asking “What is right?” Leadership and management play a large role in determining “what is right” through decisions to use fair hiring practices rather than preferential treatment, to provide full disclosure of information, to encourage open dialogue and respect for differing opinions, and to pursue decisions in the best interest of the stakeholders over her- or himself. Including decision making criteria such as “Is the decision fair and honest?” or “How would the decision stand the test of public scrutiny?” is generally considered fundamental to taking higher moral ground or checking the moral compass of a decision.

In 2003, Bill George, the former chief executive of Medtronic, stated that boards need to select and evaluate CEOs for their character and values, not their image and power. Exemplary CEOs, according to George, do exist: Samuel Palmisano at IBM, Hank McKinnell at Pfizer, Jim
McNerney at Boeing, and A. G. Lafley at Procter & Gamble (Pinkerton, 2003). George’s list is homogeneous, however; all of these leaders are white males even though women make up more than half of the U.S. labor force. Nevertheless, in May of 2009, Ursula Burns was named the first black female CEO of a Fortune 500 company when she accepted the baton at Xerox. She joined the ranks with 12 other female Fortune 500 CEOs at that time (Gettings, Johnson, Brunner, & Frantz, 2007). There are dramatic demographic changes occurring in the U.S. workforce in general. Between 1980 and 2020, the white working-age population is projected to decline from 82% to 63% while the minority portion of the workforce is projected to double from 18% to 37% during the same time period, and the Hispanic/Latino portion is projected to almost triple from 6% to 17% (National Center for Policy and Education, 2005). The impact of these demographic changes may eventually result in greater diversity in leadership, but will more immediately place pressures on deciding who the right person to hire or promote is.

Ethical decision making involves making choices between alternatives to determine the right action to take. Regardless of the health of the economy, as organizations become more diverse, as suppliers increasingly come from the local as well as the global community, as employees and volunteers come from a multitude of cultures, and as there are tensions between the large number of Baby Boomer employees reaching retirement age when the jobless Millenial generation is reaching employment age, pressures on ethical decision making may become more intense due to conflicting value sets of each of these stakeholders.

Ethical decisions involve value conflicts; in situations where several values contradict one another, the decision maker weighs these values and decides which values are more important or have priority. Values are the core of a person’s identity; the principles and goals towards which a person aspires. It is in awareness of those values that an individual can make
ethical judgments. Ethical decisions define intended behaviors that lead to ethical action. In June, 2009, a new statue of former United States President Ronald Reagan was unveiled in the U.S. Capitol. Commemorative remarks by former Secretary James Baker reminded the audience of the core values of the late president. In a world where more communication and commerce barriers continue to disappear long after “the wall” has been taken down, we need to support our leaders and managers with a better understanding of ethical decision making at work.

As organizations face increased competitive pressures in a global economy, specific organization culture dimensions have been demonstrated to predict organizational effectiveness (Cameron & Quinn, 1999). Highly successful organizations, large and small, have distinctive cultures (e.g., Coca-Cola, General Electric, and Walt Disney). Beyond having an impact on organizational effectiveness, organization culture has an impact on the members of the organization. Organization culture effects employee morale, commitment, productivity, physical health, and emotional well-being (Kozlowski, Chao, Smith, & Hedlund, 1993). Given that culture pervasively defines the expectations, norms or “the right way to do things” within an organization, it is logical to study the potential for linkages between organization culture and individual’s moral reasoning. The results would be parsimonious if the link can be found using a culture instrument that is already demonstrated to impact organizational effectiveness.

The present study focused on ethical decision making as defined by cognitive moral development and expanded the existing literature in several explicit ways. Past research has found a relationship between values and cognitive moral development (Lan, Gowing, McMahon, Rieger, & King, 2007). However, knowing that ethical decision making is influenced by context (Weber, 1991), it is important that the relationship between values and cognitive moral development specifically in managerial settings be tested. As the culture in organizations
provides guidance as to what is considered the “way things are done,” this study also explores the potential impact of different organization cultures perceptions on moral reasoning. In addition to looking at values and organizational culture perceptions individually, the author of the current study also analyzed various combinations of the meta-values, values and organization culture perception variables. This study expanded existing research by sampling actual managers rather than business students, using a specific instrument designed to measure managerial cognitive moral development, measuring values using an internationally validated cross-cultural values instrument appropriate for individuals with diverse demographics, and collecting data on organization culture perceptions using culture instrument validated as a tool to predict organizational effectiveness.

Purpose of the Study

The purpose of this study was to study the relationships between values, organization culture perceptions, and managerial moral reasoning. Data for this study were collected from 100 managers from a variety of industries and organizations. A market research firm was employed to sample male and female managers in retail/service, government, and not-for-profit organizations. The sample included large, medium and small organizations and managers at the executive, mid-level, and entry level of their careers. The Schwartz Values Survey (SVS) (Schwartz, 1992) measured four meta-values: openness to change, self-transcendence, self-enhancement and conservation. It also measured ten value types: self-direction, universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, and stimulation. Organization culture was measured using the Competing Values Framework (CVF) (Quinn and Rohrbaugh, 1983) which identifies organizations as having hierarchy, developmental, group, and
rational cultures. Cognitive moral development was assessed by the Managerial Moral Judgment Test (MMJT) (Loviscky, Treviño, & Jacobs, 2007) which determines level of moral reasoning.

Research Questions

1. Is there a relationship between meta-values (SVS) and levels of cognitive moral development (MMJT) for managers?

2. Which meta-values (SVS) best predict levels of cognitive moral development (MMJT) for managers?

3. Is there a relationship between value types (SVS) and levels of cognitive moral development (MMJT) for managers?

4. Which value types (SVS) best predict levels of cognitive moral development (MMJT) for managers?

5. Is there a relationship between organization culture perceptions (CVF) and levels of cognitive moral development (MMJT) for managers?

6. Which organization culture perceptions (CVF) best predict levels of cognitive moral development (MMJT) for managers?

7. Which meta-values (SVS), value types (SVS), and organization culture perceptions (CVF) best predict levels of cognitive moral development (MMJT) for managers?

8. Are there significant group differences (gender, age, level within the organization (executive, mid-level, and entry level management), organization size, and industry (government, not-for-profit, and retail/service)) among meta-values, value types, organization culture perception and cognitive moral development?
Theoretical Frameworks

This study is grounded in three conceptual frameworks. First, Human Values Theory (Schwartz, 1992) has identified a systemic set of values, or desired ways of behaving for individuals, that can be consistently understood across cultures and situations. Second, organizational culture perceptions are conceptualized by Quinn (1988) in the Competing Values Framework. And third, cognitive moral development (Kohlberg, 1969) is a means to understand how individuals make moral decisions. Of note, it recognizes justice as central to higher levels of moral development.

Values

Values are enduring beliefs that refer to a way of behaving or an end-state of existence. They are both a conceived preference and an actual preference for something that is personally or socially preferable (Rokeach, 1973). Of particular note, the Schwartz (1992) Human Values Theory identified 10 motivationally distinct and comprehensive basic values that are recognized across societies.

The Schwartz Human Values Theory is notable not only for its ability to provide a comprehensive list of universal values, it also provides a relational analysis of the values such that values opposing each other on the circumplex may be in conflict with each other (i.e. conformity and self-direction) while values adjacent to each other on the circumplex are more consistent with each other such as benevolence and universalism. See Figure 1. Schwartz (1992) Circumplex: Meta Values and Value Types. The 10 motivationally distinct value types are:

1. Power: Social status and prestige, control or dominance over people and resources.
2. Achievement: Personal success through demonstrating competence according to social standards.
3. Hedonism: Pleasure and sensuous gratification for oneself.
5. Self-direction: Independent thought and action-choosing, creating, exploring.
6. Universalism: Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature.
7. Benevolence: Preservation and enhancement of the welfare of people with whom one is in frequent personal contact.
8. Tradition: Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self.
9. Conformity: Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.

The 10 value types create four meta-values: self-enhancement, self-transcendence, openness and conservation. The self-enhancement values are power and achievement, and indicate a preference to pursue one’s own interests. The self-transcendence values are universalism and benevolence, and they focus on a concern for the welfare of others. In the second pairing, openness values of self-direction and stimulation welcome change and encourage pursuit of new ideas and experiences. Opposing openness values are the conservation values of security, tradition, and conformity. These values emphasize maintaining the status quo and avoiding threat. The tenth basic human value, hedonism, falls into both the of openness and self-enhancement categories. These meta-values are polar continuums with self-enhancement meta-values opposing self-transcendence meta-values and openness meta-values opposing conservation meta-values.
Figure 1. Schwartz (1992) Circumplex: Meta Values and Value Types.

Organizational Culture Perception

Organizational culture is composed of underlying values, assumptions, and unwritten expectations that provide guidance to members about acceptable behaviors within the organization. Organizational culture is a measure at the organizational level and is determined by the collective perceptions of the members of the organization (Brief et al., 1996). For purposes of this study, managers from multiple organizations were sampled and the data from each respondent is the perception of his/her organization’s culture. The measure used in this study is at the individual level of analysis and it would not be appropriate to aggregate individual ratings to the organizational level. As such, it cannot be strictly interpreted as organizational culture, but rather is referred to as organizational culture perceptions. Organizational culture perceptions are
“based upon the conditions people experience in their organizations — the events, practices, procedures, and rewarded, supported, and expected behaviors that characterize the organization” (Douglas, 2001, p. 194).

The Competing Values Framework (CVF) (Quinn & Rohrbaugh, 1983) is a model that does not attempt to capture every dimension of organization culture, but rather has empirical support for specific dimensions that drive organizational effectiveness. The framework identifies two major dimensions. The first dimension is a measure of flexibility and dynamism versus stability, order and control. The second dimension is a continuum between internal orientation, integration, and unity versus external orientation, differentiation, and rivalry. When these two continuums are combined, they form four quadrants, each with a different set of characteristics that define for organizational members what is right and acceptable. Because the culture in each quadrant opposes the culture in the diagonal quadrant, the model is named the “Competing Values Framework.”

![Figure 2. Competing Values Framework (Quinn & Rohrbaugh, 1983).](image)
The nomenclature of the theory has evolved over time, however, the underlying construct has remained the same. The initial terminology and the most recent terminology for each quadrant follows: human resources/collaborate quadrant, open systems/create quadrant, internal processes/control quadrant, and rational/compete quadrant. Several variations on the naming of the quadrants has occurred during the interim time period, and for purposes of consistency, the terminology used in this study relative to the original nomenclature are human resources/group culture, open systems/development quadrant, internal processes/hierarchy quadrant, and rational/rational quadrant. In this study, the terminology and instrument used are based on the research of Yeung, Brockbank, and Ulrich (1991). The nomenclature of the four quadrants used consistently in the current study are hierarchy, group, development, and rational. They can be described as follows:

**Group Culture.** Organizations with a group culture are family-like. Participative management and teamwork are characteristic of this culture. The theoretical basis for group cultures comes from study of Japanese firms in the 1960s and 1970s when employee empowerment and commitment became important variables in the workplace. These cultures are flexible and trust employees with decision making knowing that the guiding principles are doing what is best for the organization, relying on a sense of tradition and loyalty. According to Cameron and Quinn (1999), group cultures measure effectiveness by cohesion, morale, and development of human resources.

**Development Culture.** Like a group culture, a development culture is flexible and provides discretion. However, instead of relying on an internal focus of teamwork, a development culture is entrepreneurial and externally focused on innovation. Development cultures are best suited for environments that are changing constantly where there is little
stability (i.e., aerospace, software development, or filmmaking). These organizations tend to be temporary; organizing to accomplish a unique task or project. There is no centralized power structure, but rather power shifts from person to person depending on the immediate situation or task being addressed. Development cultures can be characterized by temporary physical spaces, temporary organization charts (if an organization chart is appropriate at all), and (temporary) project orientation. Cameron and Quinn (1999) indicate that measures of effectiveness for development cultures are cutting-edge output, creativity, and growth.

*Hierarchy Culture.* This culture values consistency and efficiency. Rules rule and standardized procedures create uniformity in products or services. It is based on Max Weber’s study of bureaucracies. These organizations have clear policies and procedures to guide people’s behaviors at work. Organizations that have dominant hierarchy cultures include the fast food chain McDonalds where a hamburger is served quickly and with the same quality from any location, as well as government agencies like the Bureau of Motor Vehicles, where the policy that determines what prerequisites are needed to get a driver’s license are consistent, regardless of what office a person applies to. Efficiency, timeliness, and smooth functioning are measures of effectiveness for these organizations (Cameron & Quinn, 1999).

*Rational Culture.* Like the hierarchy culture, this culture is characterized by stability and control, however, a rational culture has an external rather than an internal focus. Instead of policies and procedures to integrate practices, a rational culture relies on “transaction costs” for guidance. The theoretical foundation for this culture is based on the work of Williamson (1975) and Ouchi (1981). Focused on interactions with customers, suppliers, unions, regulators, and other stakeholders, a rational or market culture is guided by profit and the bottom line where market leadership and productivity are highly valued. Gains in market share, goal achievement,
and beating competitors are valued as measures of organizational effectiveness (Cameron & Quinn, 1999).

**Cognitive Moral Development**

In this study, the author uses the terms moral and ethical synonymously. As a dominant theory of understanding moral reasoning, cognitive moral development was first presented by Lawrence Kohlberg in his 1958 dissertation at the University of Chicago. It is a stage theory of moral thinking based on the work of Piaget and consistent with philosophies of Immanuel Kant, John Rawls, and a deontological approach, emphasizing individual rights, contractarian rules of society, and fair treatment. The work of Piaget focused on two hierarchical stages of development in children, while Kohlberg advanced the stage theory to a three stage theory, where growth continues beyond childhood and into adulthood. As described by Kohlberg and Hersh (1977), the three levels and their corresponding stages are:

**Preconventional Level**

At this level, the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels either in terms of the physical or the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. The level is divided into the following stages:

- **Stage 1.** The punishment-and-obedience orientation.
  The physical consequences of action determine its goodness or badness, regardless of human meaning or value of these consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being stage 4).

- **Stage 2.** The instrumental-relativist orientation. Right action consists of that which instrumentally satisfies one’s own needs and occasionally the needs of others. Human relations are viewed in terms like those of the marketplace. Elements of fairness, of reciprocity, and of equal sharing are present, but they are always interpreted in a physical, pragmatic way. Reciprocity is a matter of “you scratch my back and I’ll scratch yours,” not of loyalty, gratitude, or justice.

**Conventional Level**

At this level, maintaining the expectations of the individual’s family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious
consequences. The attitude is not only one of conformity, to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order, and of identifying with the persons or group involve in it. At this level, there are the following two stages:

Stage 3. The personal concordance or “good boy –nice girl” orientation. Good behavior is that which pleases or helps others and is approved by them. There is much conformity to stereotypical images of what is majority or “natural” behavior. Behavior is frequently judged by intention – “he means well” become important for the first time. One earns approval by being nice.

Stage 4. The “law and order” orientation. There is orientation toward authority, fixed rules, and maintenance of the social order. Right behavior consists of doing one’s duty, showing respect for authority, and maintaining the given social order for its own sake.

Postconventional, Autonomous, or Principled Level
At this level, there is a clear effort to define moral values and principles that have validity and application apart for the authority of the groups or persons holding these principles and apart from the individual’s own identification with these groups. This level also has two stages:

Stage 5. The social-contract, legalistic orientation, generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights and standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal “values” and “opinion.” The result is an emphasis upon the “legal point of view,” but with an emphasis upon the possibility of changing law in terms of rational considerations so social utility (rather than freezing it in terms of stage 4 “law and order”). Outside the legal realm, free agreement and contract is the binding element of obligation. This is the “official” morality of the American government and constitution.

Stage 6: The universal-ethical-principle orientation. Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative); they are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons. (p. 54-55).

Level 1 is sometimes also referred to as the personal interest level. At stage 1, authority determines what is right. A person is in the right when she or he is obedient and avoids punishment. At stage 2, individuals recognize that there are different sides to every argument. People are free to pursue their own judgments because what is right is relative and exchanging
favors for self-benefit can be easily justified at this level. It is a concrete individual perspective. Young children are most frequently found at level 1.

Level 2 is sometimes referred to as the maintaining norms level. At stages 3 and 4, norms and expectations of society are emphasized. At stage 3, doing the right thing means being a good person by helping others that are significant in one’s own life. At stage 4, the focus shifts to a larger scale and maintaining the society. It is a focus on what it takes to be a member of society. Adolescents and most adults are most frequently found at level 2.

Level 3 is sometimes referred to as the principled level. At stages 5 and 6 people are concerned with the principles and values that make for a good society. The democratic process and basic rights are emphasized at stage 5. And at stage 6, justice is the determining factor in identifying what principles are right. In level 3, people do right due to concern for universal moral principles. Fewer than 20% of American adults attain level 3 (Rest, Thoma, Moon, & Getz, 1986). Those who do generally do not mature to this level until after the age of 20.

Significance of the Study

In a 2007 presentation to the Academy of Management, Gephart, Harrison and Treviño called for research “to consider how organizations can increase managers’ level of moral reasoning.” This study contributes to the literature by sampling managers, not children or students, and allows for analysis of gender, age, level within the organization (executive, mid-level, and entry level management), organization size, and industry (government, not-for-profit, and retail/service) variables specifically in the workplace.

Although earlier studies have looked at the relationship between values and moral reasoning in the workplace, as the literature review demonstrates, there have been many mixed results. Results of studies measuring organization culture with ethical culture instruments, have
actually indicated a weak relationship with ethical behaviors. This study continued to refine the understanding of values and moral reasoning in the workplace by utilizing an internationally validated values instrument, measuring organization culture with an instrument validated to predict organizational effectiveness, and a workplace moral reasoning instrument that provided explicit insight into managerial moral decision making in today’s diverse and global business environment.

Results of this study may be used as part of training and development for leadership and managerial positions within organizations. The results may also be used to indirectly drive down costs of unethical behaviors such as discrimination, absenteeism and theft. Opportunity costs should also be considered. A leader who utilizes their moral judgment is more likely to be able to influence the ethical climate in an organization (Schminke, Ambrose, & Neubaum, 2005) and when a leader’s and the employees’ moral development are more congruent, employee attitudes are more positive – a critical factor in retaining talent. In the work place, leaders’ and managers’ (un-) ethical decisions influence hiring, performance appraisal, compensation and benefits, sourcing, training and development, client relations, marketing, accounting, and other areas of business. Much research has focused on cognitive moral development as an antecedent where this study considers values and organization culture perceptions as an antecedent to cognitive moral development.

Definition of Terms

Values

Values are generally defined as standards of desirability invoked in social interaction to evaluate the preferability of behavioral goals or modes of action (Williams, 1968). Human Values Theory (Schwartz, 1992) defines 4 meta-values (openness to change, conservation, self-
transcendence and self-enhancement) that are comprised of 10 motivationally distinct value types (power, achievement, hedonism, stimulation, self-direction, universalism, benevolece, tradition, conformity, and security).

**Organizational Culture Perception**

Although commonly understood as shared meaning that makes it possible for organization members to interpret their environment, organizational culture has been formally defined as:

a pattern of assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 1984, p.3).

The Competing Values Framework (Quinn & Rohrbaugh, 1983) defines 4 organizational cultures: group, development, hierarchy, and rational.

**Cognitive Moral Development**

Cognitive moral development describes how people make ethical decisions; it is the thinking process people use when facing ethical dilemmas. There are 3 levels of cognitive moral development (pre-conventional, conventional, and post-conventional) and each level has 2 stages (stages 1, 2, 3, 4, 5, and 6). The first level is defined by a concern about avoiding danger for oneself. The second level is a focus on complying with conventional standards to do what is right. At the third level, a person determines what is right based on universal principles of justice.

**Delimitations**

Using the Managerial Moral Judgment Test, this study did not attempt to address relevant research questions including factors that enhance our understanding of moral awareness, moral intensity, or the relationship between moral judgment, moral intention, and moral action.
Relative to the analysis of the values and organizational culture perception variables, the interaction of the values and culture variables were not studied at this time. The current study furthered the existing literature by considering the individual relationships and regressions of each variable with Managerial Moral Judgment, as well as the combined regression of both values and organizational culture perceptions together.

The Schwartz value construct does not include work-related values, such as order and punctuality. As such, this study only assessed the four meta-values and ten value types identified by Swartz’s research, and not other values.

In addition, many dimensions of organizational culture have been studied in the literature. For parsimony, the Competing Values Framework (Quinn and Rohrbaugh, 1983) was used in this study, recognizing that the model measures only 2 dimensions: 1) flexibility and discretion versus stability and control, and 2) internal focus and integration versus external focus and differentiation. Other organization culture dimensions such as culture strength and congruence (Sathe, 1983; Schein, 1984; and Kotter & Heskett, 1992), or holographic versus idiographic cultures (Alpert & Whetten, 1985) were not included.

Limitations

As has been pointed out in previous studies, there are limitations with the scenario design of the Defining Issues Test version 2 (DIT2) that parallel concerns with the MMJT instrument. Concerns include the potential for social desirability by the respondents, an orientation favoring Western philosophical traditions, and controversy over possible gender bias.

Another limitation of the study is that participants came from multiple organizations and as such are only qualified to give their perceptions of their organization’s culture, and as such are not specifically measures of organization culture.
Also, the completion of the survey in its entirety (Schwartz Value Survey, Managerial Moral Judgment Test, the Competing Values Framework, and demographic information) required a minimum of 20 minutes. At the introduction to the survey, participants were informed that the survey would take approximately 25 minutes to complete. Responses to the questions may have been influenced by survey fatigue and time constraints; any survey completed in less than 20 minutes was excluded from the study.

In addition, the study was administered electronically and although the sample was managers who were presumed to be technically literate, a limitation of the study is that the sample was requested through an electronic email invitation from a market research company and sent to pre-qualified managers in their sample pool. Some managers might not have been included in the sampling process due to a disinterest in participating in studies with a market research firm.

Finally, although the current study had a sample size of 100 managers, the findings from the analysis of group differences should be viewed with caution. With the exception of two groups (companies with 1,001-2,500 employees and entry level managers), all groups (male, female, baby boomers, post-baby boomers, retail/sales, government, not-for-profit, etc.) had more than 30 participants. The smallest group was composed of responses from 9 managers who were employed at companies with 1,001 – 2,500 employees. The largest group was made up of responses from 52 female managers.

Organization of the Remaining Chapters

The remainder of this paper is organized as follows: Chapter II Literature review, Chapter III Methodology, Chapter IV Results, and Chapter V Discussion. The literature review contains individual sections on values, organizational culture perceptions, and cognitive moral
development. It is followed by a combined section reviewing the literature on values, organizational culture, and cognitive moral development and then the chapter concludes with a summary. The methodology chapter, Chapter III, discusses the research design, participants and instrumentation. Chapter IV Results confer the data analysis of the study. The final chapter, Chapter V Discussion, is composed of the findings, implications, and suggestions for future research.
CHAPTER II. LITERATURE REVIEW

Rest’s (1986) four component model (moral awareness, moral judgment, moral intent, and moral behavior) has provided a seminal foundation for understanding ethical decision making and much research has been done particularly on the second component, moral judgment (O’Fallon & Butterfield, 2005). Weber (1991) pointed out that context or personal versus organizational settings has an impact on level of moral reasoning. However, “researchers still do not have an authoritative, cumulative understanding of what causes (un)ethical decisions and behavior in organizational settings” (Gephart, Harrison, & Treviño, 2007, p. 1). Studies of cognitive moral development as a dependent variable have been categorized into two distinct research streams: individual factors and organizational factors (see O’Fallon & Butterfield, 2005).

Among the individual factors, O’Fallon and Butterfield (2005) found 42 studies between the years of 1996 and 2003 that analyzed a philosophy/value orientation and moral judgment. A broad range of measures were used to capture individual philosophy/values, however overall, there was a general trend for idealism and deontology to be positively related to ethical decision making, with relativism, teleology, and economic orientation to be negatively related. The authors of the 2005 study called for future research to examine other philosophies or value frameworks.

Values that are held collectively by members of an organization are known as organizational culture. In 2003, Treviño and Weaver defined ethical culture as the parts of a context that discourage unethical behavior and encourage ethical behavior. Multiple measures of ethical culture have been developed (Treviño et al., 1998; Kaptein, 1998, 2008). The Kaptein (2008) multi-dimensional measure of ethical culture involved eight factors: clarity, congruence
of management, congruence of supervisors, feasibility, supportability, transparency, discussability, and sanctionability. Still other researchers have defined the elements of an ethical business culture as mission and values driven, stakeholder balance, leadership effectiveness, process integrity, and long-term perspective (Ardichvili, Mitchell, & Jondle, 2009). By definition, the construct of ethical culture is intended to guide organization members’ behaviors in ethical ways. For practicing managers, a dominate construct of ethical culture has yet to emerge. This adds to the difficulty for managers of being responsible for yet another facet of an organization’s culture. Strong practical benefits would be gained if a well established measure of organizational culture that is already documented to support organizational effectiveness could also be linked to encouraging cognitive moral development.

Building on calls for additional research on the relationship of values and organizational culture to moral reasoning, the author of this study proposes that when combined, values and organizational culture may be related to and antecedents of managerial moral reasoning. This chapter presents a summary of the literature related to values, organizational culture, and cognitive moral development. Discussion of the relevant research in each area is followed by reviews of literature addressing cross-cultural settings, workplace environments, gender, age, and organizational position. This section concludes with a review of literature that has addressed the interactions of the combined variables.

Values

Many different values constructs have been developed (e.g., Boudon, 2001; Inglehart, 1997; Kohn, 1969; Parsons, 1951; Rokeach 1973). Values are standards that create a framework to aid in resolving conflict and making decisions; they function as standards that guide thought and action (Feather, 2002; Rohan, 2000). Basic tenants of value theory are that people have a
relatively small number of values, all people possess the same values to different degrees, values are linked to affect, values can be organized into a value system, and the source of values are culture, society, and personality. Values have been a topic of research in philosophy, psychology, and sociology literature and there is an increasing interest in values in business. However, values affect behavior only if they are activated (Verplanken & Holland, 2002). Because more important values are more accessible (Bardi, 2000), they relate more to behavior. The probability of a behavior depends on the relative priority a person gives to the relevant, competing values.

Some writers will use values synonymously with concepts such as attitudes. Values are unique from attitudes and needs, although attitudes are commonly studied individual differences that influence human behavior. Attitudes, such as job satisfaction, are fluid evaluations of objects or situations (Rokeach, 1973) while needs are fundamental human drives that influence behaviors (Mindell & Gorden, 1981; Parsons & Shils, 1951; Pitts & Woodside, 1991; Schmidt & Posner, 1982). While individuals may have thousands of attitudes, there are only a limited number of values. In contrast to attitudes, values are guiding principles that are not situation specific. Activated values drive attitudes and behaviors to the degree that the value is relevant in the context. However, the use of values to drive decisions is not generally a conscious choice. We become aware of our values when the actions or judgments we are considering conflict with values we find important.

The relationship between values and a wide range of behaviors such as use of alcohol, delinquency, shoplifting, voting, delinquency, cooperation, competition, consumer purchasing, environmentalism, religiosity have been studied (Bardi & Schwartz, 2003; Roccas, Sagiv, Schwartz, & Knafo, 2002; Schwartz, 2005a; Schwartz & Bardi, 2001). Relationships between values and attitudes such as political involvement and environmentalism (Duriez, Luyten,
Snauwaert, & Hutsebaut, 2002; Grunert & Juhl, 1995; Helkama, Uutela, & Schwartz, 1992; Schwartz, 1996) and personality (social desirability, social dominance, and the Big 5 personality traits) have also been considered. The following sections of this study focus on literature involving values and cross-cultural research, workplace research, gender, age, and employee level.

In the workplace, values have been shown to influence both corporate strategy decisions (Guth & Tagiuri, 1965) and managerial decisions (England, 1975). Research has been done on how values influence career choices (Hansen, 1984; Lipman-Bluman, 1972), which suggested that people with different career orientations (career versus homemaker) have different values (management, autonomy, achievement, and recognition) (Tinsley & Faunce, 1980). Much research on work-life balance or work-family conflict has focused on value conflicts such as the trade-offs between valuing family (consistent with benevolence) and careers (consistent with achievement and power). Similarly, person-organization fit has been studied in terms of positive work outcomes (Blau, 1987; O’Reilly, Chatman, & Cladwell, 1991).

Cross-Cultural Research

The Human Values Theory and the Swartz Values Survey (SVS) (Schwartz, 1992, 2005a), have been translated into 47 languages and validated in more than 70 countries (Schwartz, 1992, 2005a, 2005b; Schwartz & Boehnke, 2004). Data was gathered between 1998 and 2002 from a total of 64,271 participants. The data from these studies demonstrated that people from around the world respond to the 10 types of values (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security) presented in the theory. The findings indicate that there is a universal organization of human
values, and this framework provides a common ground from which individuals and groups can differ in the importance placed on each value.

*Workplace Research*

England and Lee (1974) developed a “Personal Values Questionnaire” to measure values and determined managerial success by calculating managerial pay relative to age. Their sample was made up of more than 1,900 managers from the United States, Australia, India, and Japan. Results indicated that values predicted managerial success and further research should be conducted to consider using values as part of a managerial selection process. Managers with pragmatic, dynamic, achievement-oriented values were more successful. Managers with more static and passive values were less successful.

Myyry and Helkama (2001) hypothesized a relationship between values and professional orientation of college students. Values of 138 business, social science, and technology students were assessed using the Swartz Values Survey. It was found that business students placed higher importance on power and achievement values, social science students on universalism values, and technology students on security values. Social science students had the highest level of importance for empathy, while technology student had the lowest level, with business students in the middle level of importance.

*Gender Research*

Overall, although there have been mixed results, there appears to be a pattern in the empirical research on the relationship between gender and values. This trend indicates that women tend to emphasize benevolence values more than men; consistent with the ethic of care research by Gilligan (1977). In a recent study by Schwartz and Ruble (2005), the authors found that men tended to emphasize self-enhancement meta-values more than women and women
tended to emphasize self-transcendence meta-values more than men. It is interesting to note that these meta-values are at opposing ends of a single continuum. Similarly, men attributed more importance to openness while women attributed more importance to conservation meta-values. (These, too, are polar opposites on the Schwartz (1992) circumplex model.)

Using the Rokeach Value Survey, other studies that have supported a relationship between gender and values include work by Di Dio, Saragovi, Koestner, and Aube (1996), Rokeach (1973), and Ryker (1992). Men ranked social recognition, freedom, a comfortable life, and an exciting life (i.e. values consistent with Schwartz’s achievement, self-direction, hedonism, and stimulation values) higher in importance than women did. Women ranked true friendship, equality, salvation items (ie values consistent with Schwartz’s benevolence, universalism, and tradition) higher than men did. Men in the study by Feather (1984, 1987) found pleasure, an exciting life (Schwartz’s self-enhancement) more important while women found loving and forgiving (Schwartz’s self-transcendence) more important.

Different relationships were identified in an Australian student sample where women rated achievement and benevolence values higher and power values lower than men did (Feather, 2004). American and British women assigned greater importance than men to achievement, self-transcendence, and conservation values in a study by Ryckman and Houston (2003).

Some studies have not found a relationship between gender and values. In Israel and Turkey, adults exhibited no gender differences on any of the 10 values of Schwartz’s construct (Aygun, & Imamoglu, 2002; Prince-Gibson & Schwartz, 1998).

Relative to gender and the workplace, several studies have revealed no gender differences among people with similar jobs (Major, 1987; Major, McFarlin, & Gagnon, 1984; McCarrey et al., 1989). However, Bridges (1989), Fiorentine (1988) and Johnson (2001) reported women
placed more importance on helping and friendship work values while men placed greater importance on advancement and status work values.

*Age Research*

Studies by Schwartz (1992) have supported the positive correlation between age and 1) conservation values (tradition, conformity, security) and 2) self-transcendence values (benevolence, universalism). Correspondingly, age is negatively correlated with 1) openness to change values (self-direction, stimulation, hedonism) and 2) self-enhancement values (power, achievement). Theory suggests that as people age, they become more involved in groups and develop more routines supporting the increase in conservation values. In addition, as people age they may become more stabilized professionally allowing them to be become more concerned with the well being of others, consistent with benevolence values.

*Employee Level*

Job level is a measure of career success, along with salary level and promotions. When managerial success is measured by salary, U.S. managerial salaries for men were related to valuing profits, having influence over others, and taking risks while lower salaries were related to low achievement orientation and valuing security (England & Lee, 1974). Ryan, Watson, and Williams (1981) found that higher salaries for male non-college educated managers were related to valuing power and aggressiveness.

Thomas (1997) defined career success as a combined variable including income, job level, and expectations for advancement. In Thomas’ study, managers valuing ambition and capability were more successful while valuing love relationships was related to being less successful. Studies have also considered the associations between achievement and power motivation (McClelland, 1987) in which career success for male managers is positively related to each.
Frieze, Olson, Murrell, and Selvan (2006) did not find significant results between valuing wanting to do a good job (an achievement motivation) and promotion or valuing recognition (a power motivation) and promotion for managers. However, in the same study, valuing recognition and making more money (power motivations) were related to promotions. Both of these latter studies recognized that power motivation was related to managerial success. In addition, female managers were found to have a small but statistically significantly higher level of wanting to do an excellent job (an achievement value) than male managers in the study. The specific relationship between personal values and managerial level within an organization using the SVS has not been studied at this time.

Organizational Culture Perception

Organizational culture can begin to be understood in terms of visible artifacts, including physical structure, dress, technology, visible and audible behavior patterns, and public documents such as promotional and orientation materials (Schein, 1984). When questioning why the visible artifacts exist, values, the second level of culture, surface. Values are difficult to observe and responses to questions about values generally results in overt or “espoused” values. These espoused values have a greater level of awareness, however, do not address the deeper level of underlying assumptions that is the third level of culture. Underlying assumptions are taken for granted values that operate at the unconscious level after repeated and successful use of them within the organization. The concept of culture has been studied at the country level (Hofstede, 1980; House et al. 1999; Trompenaars & Hampden-Turner, 1998) occupational-level (Van Mannan, 1975), and industry-level (Gordon, 1991).

Organizations also form unique cultures that are composed of consistent and compatible artifacts, values, and underlying assumptions. The study of organizational culture was first
undertaken in the 1980s by scholars such as Ouchi (1981), Pascale & Athos (1981), Peters and Waterman (1982), and Deal and Kennedy (1982). Many of these studies were taken on with the purpose of better understanding drivers of organizational effectiveness.

The Competing Values Framework (CVF) (Quinn & Rohrbaugh, 1983) explores processes related to organizational effectiveness. Although not originally framed as a measure of organizational culture, it was designed as a tool to help managers master and better understand a both/and perceptive rather than an either/or approach to “competing values” in the workplace. The quadrants of the CVF represent a circular structure, called a “circumplex” (Denison, Hooijberg, & Quinn, 1995). In each quadrant of the circumplex, the cultures are distinct from one another while having a specific spatial relationship with the cultures sharing the same dimensions.

The meaning of “competing values” is not the same as “personal values” as defined by Rokeach (1973) or Schwartz (1992). Value in the case of the Competing Values Framework refers to the benefits gained by an organization exceeding the costs of creating the product or service. Value to a hospital is created when the quality of care to patients exceeds the costs of providing the care. Value to a government agency is gained when police and parks, as well as many other services are provided at a benefit greater than the cost. The CVF has been shown to be associated with managerial communications (Quinn, Hildebrandt, Rogers & Thompson, 1991), group decision making (Reagan & Rohrbaugh, 1990), organizational context, environment, and structure (Buenger, Daft, Conlon, & Austin, 1996), and corporate ethical codes (Stevens, 1996).
Cross-culture Research

Measuring culture at the organizational level, the Competing Values Framework has been utilized in approximately 10,000 organizations across the world (Cameron, 2008). Dastmalchian, Lee, and Ng (2000) studied six different industries (manufacturing, communication/utilities/public transportation, wholesale/retail, finance/insurance, health/social service, and hospitality) in Canada and South Korea using the CVF, finding that national culture, industry and context do contribute to perceptions of organizational culture. In a study using the CVF carried out in Greece with 104 organizations, Panayotopoulou, Bourantas, and Papalexandris (2003) found that the dominant culture of the organizations in the study was the internal process/hierarchy culture and that when strategic human resource management is in alignment with competitive strategy, it has significant effects on financial performance. In Hong Kong, the CVF was used to study its potential as a tool to differentiate organizations in eight government-funded higher education institutions (Kwan & Walker, 2004).

Workplace Research

The Competing Values Framework (CVF) has been utilized in a variety of industries (private sector, public sector, and education, healthcare, new start-ups, and non-governmental organizations (Cameron, 2008). Following are examples of published research using the CVF in various industries. The CVF has been studied as a tool to support employee involvement in unionized automobile plant settings (McGraw, 1993) as well as a tool for management training and development, again in the automotive industry (Sendelbach, 1993). In the public sector, Rohrbaugh (1980) analyzed organizational effectiveness in a longitudinal study of 30 local offices of Employment Services. Smart (2003) also studied organizational effectiveness using the competing values framework, although the sample was 2-year colleges. And in healthcare, CVF
has been utilized as a way to better understand high quality diabetes care in small office-based general practices (Bosch, Dijkstra, Wensing, van der Weijden, & Grol, 2008).

**Gender**

Most organizational cultures have been developed by men (Marshall, 1993) and the values of the dominant gender tend to be reinforced by the organization (Klenke, 1996). Cultures shaped by men tend to value hierarchy, independence, and top-down communication (Connelly & Rhoton, 1988; Helgesen, 1990; Maier, 1999; Marshall, 1993). In contrast, cultures shaped by women are more likely to value interpersonal relationships (Connelly & Rhoton, 1988; Grant, 1988) and the sharing of power (Connelly & Rhoton, 1988; Helgesen, 1990; Rosener, 1990). Marshall (1993) and Still (1994) argued that male dominated organizational culture was related to the Glass Ceiling for women. A Glass Ceiling is a limitation that prevents qualified candidates from entering higher levels of leadership or management.

Vilkinas and Cartan (2006) call for gender research on a variation of the CVF, the integrated competing values framework (ICVF), which identifies eight managerial roles using the same four quadrant construct as the culture measure. When gender and the competing values framework are studied, the competing leadership roles framework (Quinn, 1984, 1988) is most frequently cited because of the interest in the relationship between males and females as leaders and managers.

**Age**

No existing research was identified that studied the relationship between age and organizational culture. Exploring questions regarding the relationship between age and organizational culture would be interesting as older employees might be more interested in organizations that value routine (hierarchy culture) while younger employees might find greater
person – organization fit with organizations that value innovation and change (development culture). As the workforce ages, this would have implications for potential increases in one type of culture or another.

Employee Level

No existing research was available that explored the relationship between employee level or job title relative to organizational culture. Theoretically, this makes sense as all cultures have managers at various levels (entry level, mid-level, and executive). It would be counter to organizational effectiveness if managers at different levels had different organizational culture perceptions within specific organizations.

Cognitive Moral Development

Cognitive moral development describes how people make ethical decisions; it is the reasoning people use when facing ethical dilemmas. There are three levels of cognitive moral development (pre-conventional, conventional, and post-conventional) and each level has 2 stages (stages 1, 2, 3, 4, 5, and 6). The first level is defined by a concern about avoiding danger for oneself. The second level is a focus on complying with conventional standards to do what is right. At the third level, a person determines what is right based on universal principles of justice.

Kohlberg’s cognitive moral development stages are based on studies of children and adolescents. In his 1963 publication, Kohlberg studied 72 boys from middle- and lower-class families in the Chicago area, ages 10, 13, and 16. His research found that as age advanced, so did level of moral reasoning, due to increased social experiences and cognitive growth. Kohlberg emphasized the developmental nature of these findings where the children were able to actively process and organize their world, as opposed to simply being programmed or “stamped” by the
external environment in regards to what is right and wrong. Cognitively, the children progressed from deciding right and wrong based on power and punishment or exchanges and need satisfactions (Stages 1 and 2), to the maintenance of legitimate expectations (Stages 3 and 4), to ideals or general logical principles of social organization (Stages 5 and 6). Moving from lower to higher stages involved restructuring, where higher stages inhibit lower stages of reasoning. Crane (1985) has summarized examples of responses for each stage for the Heinz dilemma.

Preconventional Morality Level 1

Stage 1. Obedience and Punishment Orientation. Heinz was wrong to steal the drug because “It's against the law,” or “It's bad to steal. “ Stealing is bad “because you'll get punished” (Kohlberg, 1958b). The child might also respond by saying “Heinz can steal it because he asked first and it's not like he stole something big; he won't get punished” (see Rest, 1973).

Stage 2. Individualism and Exchange. “Heinz might think it's right to take the drug, the druggist would not. “ Heinz might steal the drug if he wanted his wife to live, but that he doesn't have to if he wants to marry someone younger and better-looking (Kohlberg, 1963, p. 24). Another response might say “Heinz might steal it because maybe they had children and he might need someone at home to look after them. But maybe he shouldn't steal it because they might put him in prison for more years than he could stand.” (Colby and Kauffman, 1983, p. 300). Heinz was right to steal the drug because the druggist was unwilling to make a fair deal; he was “trying to rip Heinz off. “ Heinz should steal for his wife “because she might return the favor some day” (Gibbs et al., 1983, p. 19).

Conventional Morality Level 2

Stage 3. Good Interpersonal Relationships. Heinz, they typically argue, was right to steal the drug because “He was a good man for wanting to save her” and “His intentions were good, that of saving the life of someone he loves. “ “I don't think any husband should sit back and watch his wife die” (Gibbs et al., 1983, pp. 36-42; Kohlberg, 1963). The druggist was “selfish,” “greedy, “ and “only interested in himself, not another life. “Maybe the druggist ought to be put in jail (Gibbs et al., 1983, pp. 26-29, 40-42). “It was really the druggist's fault, he was unfair, trying to overcharge and letting someone die. Heinz loved his wife and wanted to save her. I think anyone would. I don't think they would put him in jail. The judge would look at all sides, and see that the druggist was charging too much.” (Kohlberg, 1963, p. 25)

Stage 4. Maintaining the Social Order. Respondents often understand that Heinz's motives were good, but they cannot condone the theft. What would happen if we all started breaking the laws whenever we felt we had a good reason? The result would be chaos; society couldn't function. “I don't want to sound like Spiro Agnew, law and order and wave the flag, but if everybody did as he wanted to do, set up his own beliefs as to right and wrong, then I think you would have chaos. The only thing I think we have in
civilization nowadays is some sort of legal structure which people are sort of bound to follow. [Society needs] a centralizing framework” (Gibbs et al., 1983, pp. 140-41)

Postconventional Morality Level 3

Stage 5. Social Contract and Individual Rights. In response to the Heinz dilemma, respondents do not generally favor breaking laws; laws are social contracts that we agree to uphold until we can change them by democratic means. It is the husband's duty to save his wife. The fact that her life is in danger transcends every other standard you might use to judge his action. Life is more important than property. “From a moral standpoint, Heinz should save the life of even a stranger, since to be consistent, the value of a life means any life. When asked if the judge should punish Heinz, he replied: Usually the moral and legal standpoints coincide. Here they conflict. The judge should weight the moral standpoint more heavily but preserve the legal law in punishing Heinz lightly. (Kohlberg, 1976, p. 38) These respondents are trying to determine logically what a society ought to be like (Kohlberg, 1981, pp. 21-22; Gibbs et al., 1983, p. 83).

Stage 6: Universal Principles. Principles of justice require us to treat the claims of all parties in an impartial manner, respecting the basic dignity, of all people as individuals. The principles of justice are therefore universal; they apply to all. In the Heinz dilemma, this would mean that all parties--the druggist, Heinz, and his wife--take the roles of the others. To do this in an impartial manner, people can assume a “veil of ignorance” (Rawls, 1971), acting as if they do not know which role they will eventually occupy. If the druggist did this, even he would recognize that life must take priority over property; for he wouldn't want to risk finding himself in the wife's shoes with property valued over life. Thus, they would all agree that the wife must be saved--this would be the fair solution. Such a solution, we must note, requires not only impartiality, but the principle that everyone is given full and equal respect. If the wife were considered of less value than the others, a just solution could not be reached.

Kohlberg is credited with identifying the Cognitive Moral Development (CMD) construct. Since then, a number of relationships have been established between cognitive moral development and other variables, including religious beliefs (Clouse, 1985; Glover, 1997), participation in social protest activities (Franz & McClelland, 1994; Presley, 1985), attitudes toward minorities (Glover, 1994), risk taking behaviors (Levenson, 1990), behaviors of teachers (MacCallum, 1993), child rearing practices (Pratt et al., 1999), optimism (Rim, 1992), behaviors of jury members (e.g., Rotenberg et al., 1998), and political affiliations and voting behavior (Thoma, 1993). Pennino (2002) found that among 270 U.S. managers, there was a negative relationship between higher levels of directive decision style and lower levels of moral reasoning.
as measured by the DIT. Forte (2005) studied 400 managers and executives working throughout the U.S. and found that higher levels of internal locus of control were positively related to higher levels of moral reasoning.

**Concerns with Cognitive Moral Development Theory**

Kohlberg’s theory of Cognitive Moral development has been criticized in several ways. The first critique argues that the theory is gender biased. This concern is addressed here and is also further reviewed later in the literature review. A second critique of cognitive moral development is that the theory shows a preference for a morality of justice over other values. Additional concerns address the invariance of stages and the shortcomings of the original instrument, the Moral Judgment Interview (MJI). Each of the critiques have been addressed below with the exception of the concerns regarding the MJI (the need for an 800 page scoring guide to interpret open-ended interview questions, as well as limitations by participants to verbalize responses) which have been addressed in the instrumentation section of this study.

*Gender bias.* This critique was initiated by Gilligan’s (1982) work where she proposed that women follow an ethic of care and that cognitive moral development inherently discounts a woman’s way of moral reasoning. In the light that women do have distinct gender differences from men, Rosener (1990) noted that women have a greater tendency to encourage participation and information sharing, processes that are counter to more male traditions of power and domination.

Literally in the workplace, there have been recent examples of women in the headlines that have demonstrated high levels of ethical decision making through their acts of whistle blowing (e.g., Cynthia Cooper at WorldCom, Coleen Rowley at the FBI, and Sherron Watkins at Enron). However, one only needs to look to Martha Stuart’s missteps to see that women can also
demonstrate lower levels of moral reasoning in business as well. While only anecdotal examples, these women represent highly visible examples of both higher and lower levels of moral reasoning.

As recently as 2008, researchers have transitioned the argument about gender differences from biological sex traits (male or female) to one of psychosocial measures of femininity. Using the Bem Sex Role Inventory (BSRI), Kracher and Marble (2008) found that high levels of femininity are significantly associated with lower level of cognitive moral development. Both men and women can score high levels of femininity. Given the mixed results throughout the literature of the relationship between cognitive moral development and gender, it is suggested that in studies where no gender differences are found and gender is measured by sex (male or female) (Ford & Richardson, 1994; Fritzscbe, 2000; Rest, 1975; Robin & Babin, 1997; Thoma, 1986; Walker, 1984; Weber & Wasieleski, 2001), the biological and psychosocial measures are correlated. However, in studies where gender differences are found and gender is measured by sex (male or female) (Bussey & Maughan, 1982; Haan et al., 1976; Holstein, 1976; Parikh, 1980), biological and psychosocial measures are not correlated.

Focusing on moral reasoning in the workplace (ie specifically in a business context), Kracher and Marble (2008) sampled 194 fulltime practicing business professionals (including 148 part-time business graduate students) and CMD was measured using the Sociomoral Reflection Objective Measure (SROM) (Gibbs, 1984). Results not only indicated that psychosocial measures of gender are negatively associated with cognitive moral development, they also indicated that sex does moderate the effect of gender indirectly and education significantly moderates moral reasoning. Kracher and Marble’s interpretation is that graduate
business school can mitigate gender’s negative effect on moral reasoning in business (ie graduate business school teaches all students to value justice over femininity).

Although Kracher and Marble’s research (2008) contributes to the gender versus sex distinction, it does not address the fundamental concern that care (as associated with high levels of femininity) is considered a lower level of moral reasoning than justice, or that there may be omissions in the cognitive moral development framework due to the all male sample of Kohlberg’s original sample.

*Preference for a morality of justice.* Kohlberg’s theory of cognitive moral development is a deontological approach to moral reasoning; that is to say that it focuses on intentions and acts rather than on consequences (such as with a teleological approach or virtue ethics) to determine what is right. The purpose in acknowledging this relationship is to point out that Kohlberg places a higher value on justice, a particularly Western European perspective, than any other value, including care. Individuals who value justice score higher on the P Score, and are therefore more ethical and will arrive at the right decision, according to the theory. Fraedrich, Thorne, and Ferrell (1994) point out that from a pluralist point of view, such as that of Plato or Ross, “multiple intrinsic ‘goods’ determine what becomes ethical. In Kohlberg’s monistic theory, there is only one good or end state. Therefore, the theory is problematic because it does not take into account equally viable end states” (p.832).

*Invariance of stages.* Kohlberg (1971) is clear about the invariance of stage development. In 1980, Meiland criticized Kohlberg’s 6 stage model based on a lack of empirical evidence. Approximately 10 years later, Puka (1991) also questioned the empirical validity of cognitive moral development and Jaffe and Hyde (2000) later continued to question the existence of empirical evidence that morals develop over time. A concern that arises with the invariance of
stages are the cases where an individual may regress (Helkama, et al., 2003) or use different levels of moral reasoning in different situations, it may contradict the theory (Fraedrich, Thorne, & Ferrell, 1994). However, longitudinal studies have supported the sequential nature of the theory with variations due to measurement error (Armon & Dawson, 1997; Walker, 1989).

Cognitive Moral Development, with its strengths and weaknesses as a theory, remains one of the most established and commonly used frameworks to understand moral reasoning. The following sections address the many studies that have been completed involving cognitive moral development and cross-cultural settings, workplace environments, gender, age, and organizational position.

Cross-Cultural Research

Kohlberg’s cognitive moral development theory is recognized as a dominant theory that explains the moral judgment process. Cognitive moral development is relevant to organizations working with stakeholders from multiple cultures and has been validated across cultures. Kohlberg himself claimed that his interview assessment process had “cultural universality” because the presented dilemmas focused on universal issues including life, property, authority, and trust and that with appropriate modifications, would represent moral conflicts to anyone anywhere. In the design of Kohlberg’s interview protocol, three variations were created that allowed researchers to choose between three different dilemmas that represented each of three different areas of conflict: life versus law, conscience versus punishment, and contract versus authority.

In 1985, Snarey reviewed 45 studies from 27 different countries and found that Kohlberg’s claim of cultural universality of moral development had been studied widely enough to be empirically validated. It is important to note that Snarey emphasized the importance of
adapting Kohlberg’s interview protocol for cultural relevance and contextual language.

Examples of adaptation include translation of dilemmas into the native language of the participants, use of indigenous names for characters in the dilemmas, and all but 9 of the 45 studies created alternative dilemmas that were more realistic and culturally relevant. Examples of cultural adaptation of the Heinz dilemma are:

**Adapted Kenyan Version** (Edwards, 1974)
In a rural area of Kenya, a woman was near death from a special kind of heart disease. There was one kind of medicine that the doctors at the government hospital thought might save her. It was a form of medicine that a chemist in Nairobi had recently invented. The drug was expensive to make, but the chemist was charging 10 times what the drug cost him to make. He paid 80 shillings for the drug, and then charged 800 shillings for a small dose of the drug. The sick woman's husband, Joseph, went to everyone he knew to borrow the money, but he could only get together 400 shillings, which was half of what it cost. He told the chemist that his wife was dying, and asked him to sell it cheaper or let him pay the rest later. But the chemist said, “No, I'm the one who invented this medicine, and I'm going to make money from it.” So Joseph got desperate and broke into the store to steal the drug for his wife. Should Joseph have done that, broken into the store to take the drug? Why or why not?

**Adapted Turkish Version** (Turiel, Edwards, & Kohlberg, 1978)
A man and wife have just migrated from the high mountains. They started to farm, but there was no rain and no crops grew. No one had enough food. The wife became sick from having little food and could only sleep. Finally, she was close to dying from having no food. The husband could not get any work and the wife could not move to another town. There was only one grocery store in the village, and the storekeeper charged a very high price for the food because there was no other store and people had no place else to go to buy food. The husband asked the storekeeper for some food for his wife, and said he would pay for it later. The storekeeper said, “No, I won’t give you any food unless you pay first.” The husband went to all the people in the village to ask for food, but no one had food to spare. So he got desperate and broke into the store to steal food for his wife. Should the husband have done that? Why or why not?

Moon (1985) reviewed 20 cross-cultural studies and found support for the generalizability of moral reasoning using the Defining Issues Test in cultures outside the United States. These studies were considered to be cross-cultural because all or part of the samples were drawn from non-Americans, specifically representing Australia, Brazil, Greece, Hong Kong,
Workplace Research

Research indicates that ethical decision-making can be influenced by the context and content of the situations individuals face (Jones, 1991; Weber, 1990). In a study of moral reasoning in the workplace, Weber (1990) found that managers reason at the conventional level of Kohlberg’s stages of moral development. Weber studied 37 managers using three ethical dilemmas, one in a non-business setting and two in business settings. The study was designed to compare moral reasoning of managers both in and outside the workplace. A significant finding is that managers used lower levels of moral reasoning in workplace settings than in non-workplace settings. Treviño (1992) explains these results based on literature in cultural anthropology:

….individuals play highly differentiated roles that allow them to accept different values, norms and behaviors in different life domains (e.g., work and home). This context-specificity allows human beings to cognitively organize their experience while limiting cognitive dissonance and felt contradiction. (p. 450)

She suggests that in the workplace, reward structures, obedience to authority, and conformity with the group may override managers’ actual level of moral reasoning. In later research, Weber and Wasieleski (2001) studied 308 MBA students who were concurrently also fulltime employed managers. Weber’s (1991) Adapted Moral Judgment Interview (AMJI) was utilized to measure moral reasoning. Results replicated that individuals use lower levels of moral development when presented with workplace dilemmas than when presented with personal life dilemmas.

Gender Research

Controversy has long surrounded the relationship between gender and cognitive moral development as mentioned earlier in the literature review regarding concerns about cognitive
moral development. “A possible explanation for the mixed results [regarding ethical reasoning and gender] . . . may be that the ethical responses of women and men are contingent on the type of ethical situation with which they are presented” (Hoffman, 1998, p. 63). In addition, the mixed results may also be partially explained by social role theory (Eagly, 1987) and sex role stereotypes (Terpestra, Rozell, & Robinson, 1993), which explain that normative expectations have a strong impact on adult behaviors. However, in some studies, when gender is reported to have a significant relationship with moral reasoning, women exhibit higher levels than men (Borkowski & Ugas, 1998; O’Fallon & Butterfield, 2005; Turiel, Edwards, & Kohlberg, 1978). Barnett and Karson (1989), Derry (1989), and Schminke (1997) are examples of researchers trying to better understand the relationship of gender and cognitive moral development, particularly after the publication of work by Gilligan (1977).

According to Gilligan (1977), males view morality as based on rights (the ethic of justice) while females view morality as based on responsibility (the ethic of care). She states:

The conception of morality as concerned with the activity of care centers moral development around the understanding of responsibility and relationships, just as the conception of morality as fairness ties moral development to the understanding of rights and rules. (p. 19)

The ethic of justice has been characterized as being factual, logical, focused on the present, right and wrong, practical, and self-maximizing. The ethic of care has been described as compassionate, future focused, relational, interdependent, involving shades of grey, and self-nurturing. Similar to the ethic of justice, a responsibility or care view of morality involves three stages: the selfish stage, the social conventional stage, and a principled post-conventional stage. In the first stage, female children are focused taking care of their own needs. In stage two, the main concern is to prioritize caring for others; selfishness is wrong. In the third, post-
conventional stage, women value relationships and in relationships, both parties (self and other) musts be valued and cared for.

Gilligan’s critique of Kohlberg’s work involved the lack of females in his original interviews. Gilligan’s thesis was supported in research by Langdale (1983) and Lyons (1983) who found the two distinct moral orientations, justice and care, were significantly related to gender. Both studies found that the women were more likely to utilize a care orientation while men were more likely to use a justice orientation. However, both men and women used both orientations. Other researchers have questioned an oppositional approach that sets a feminine ethic of care in opposition to a masculine ethic of justice (Acker, 1991; Court, 1994; Davies, 1992; Gherardi, 1994).

Barnett and Karson (1989) completed a study with 513 executives at an insurance company. The study used 10 vignettes designed by the authors to research the relationship between sex roles, organization level, career stage, gender, and level of interest in ethics, economics, and methods/ results. The study hypothesized no difference between men and women on decisions involving relationships (ethic of care) and no difference between men and women on decisions involving business ethics. Mixed results were reported for both of these hypotheses.

Derry (1989) studied the moral reasoning of first level managers at a Fortune 100 manufacturing company. The random sample was composed of 20 males and 20 females who were asked to describe a moral conflict in his or her work life in an open-ended and semi-structured interview. Results of the content analysis indicated the predominance of a justice orientation for all participants, male and female. The author suggested that the predominance of the justice orientation may be a result of organizational culture and / or adaptability; in order to
have been successful as a manager in this business, adapting to a justice orientation may have been required of the women in the study.

Schminke (1997) used the Survey of Ethical Theoretic Aptitudes (Utilitarian vs. Formalist), SETA, to examine the relationship between gender and ethical decision models. The sample was composed of 175 participants; half of the participants were full time managers and half were senior undergraduate business students. Results again suggest that men and women do not differ in their underlying ethical models.

Age Research

Mixed results regarding the relationship between age and moral reasoning have been found (O’Fallon & Butterfield, 2005). One reason for the mixed results may be a reflection of the fact that Kohlberg’s original work on cognitive moral development was based on the theories of Piaget, and both of these researchers focused on development of youth and adolescents. Studies of moral reasoning in the workplace tend to sample college students and / or working adults. Unlike personality traits that are considered to be fairly stable in adults, moral reasoning can (but may or may not) continue to develop with training and other opportunities to practice moral reasoning (Treviño, 1992). This may explain in part the variation in the relationship between age and cognitive moral development for an adult population.

Some studies have found that age is positively correlated with cognitive moral development (Haines, Diekhoff, LaBeff, & Clark, 1986; Hunt & Chonko, 1984; Kelley, Ferrell, & Skinner, 1990; McCabe, Dukerich, & Dutton, 1991). For example, Ruegger and King (1992) studied the effect of age on business students’ ethics. The study involved 2,196 business students with groups defined as students: under 21 years, 22-30 years, 31-40 years, and 40 plus years. The study used a 10 question instrument designed by the authors and asked participants to respond to
the level of acceptability of each situation presented. Students who were 40 years of age of older
had the highest ethical scores and the level of ethical reasoning decreased consistent with a
decrease in age. It may be important to note that the sample was composed of students, however,
and not working managers.

It should be noted that Grover, Bumpus, Logan, and Ciesla (1997) found that age was not
a predictor of ethical decision making using a laboratory design to create realistic conditions for
decision making. The study involved 367 business students with a median age of 21 ranging
between 18 and 68 years of age. Studying managers, Elm and Nichols (1993) found a negative
correlation with age and moral reasoning; younger managers had higher levels of moral
reasoning than older managers. They studied 243 middle managers from four manufacturing
firms using the DIT. The authors called for additional research to see if the results could be
replicated.

*Employee Level*

Research on the relationship between organizational level and cognitive moral
development will become of increasing interest as more older managers begin to retire and are
replaced with younger managers by default, given the smaller number of younger workers
entering the workforce. Studies to date have questioned if organizational level is correlated with
age (Barnett & Karson, 1987).

Barnett and Karson’s (1987) research studied organizational level of participants (top,
middle, entry) as an independent variable. The sample was 136 executive MBA students from
New England light manufacturing, service and high technology companies. Participants were
asked to rank themselves as to how interested they were in economic, environmental, ethical and
political issues and to make decisions in five dilemmas designed by the authors. Although the
sample was not random, the results indicate that individuals at higher levels of an organization become more ethical and may reflect the increasing ethical concern of older executives, assuming age is correlated with organization level.

In Harris’ 1990 work, participants identified their organization level as top-level executive, middle-level manager, first-level manager, or sales/service personnel. Participants were employees at a service firm and the study had a sample size of 112. The study was predominantly interested in the ethical values of fraud, coercive power, influence dealing, self-interest, and deceit. Respondents were asked to indicate their degree of (dis-) approval for 15 scenarios developed by the author. Results indicate that there is a difference between top managers and others regarding fraudulent practices while first-level managers are less tolerant of self-interest behaviors. There was no significant difference in the other three ethical values by organization level.

The Relationship between Values, Organizational Culture Perceptions, and Cognitive Moral Development

Values are a personal characteristic. Organizational culture is a situational variable. Treviño (1986) introduced the interactionist model of ethics that identified both personal characteristics and situational variables as significant influences on ethical behavior. According to the interactionist model, situational variables include job context, organizational culture, and work characteristics. These situational variables provide feedback and can influence individual differences. For example, the situational variable of ethics training can influence the level of moral reasoning of an individual (Izzo, Langford, & Vitell, 2006; Loe & Weeks, 2000; Penn & Collier, 1985). Treviño’s analogy and practical guidance is to maintain a “good” barrel (social context), because a “bad barrel” will spoil a good apple. Since then, several empirical studies
have supported this theory (Ashkanasy, Windsor, & Treviño, 2006; Church, Gaa, Nairn, & Shehata, 2005; Greenberg, 2002; Treviño & Youngblood, 1990).

The current study builds on the theoretical foundation laid by Treviño by exploring the impact of various combinations of values and organizational culture perceptions with correlation and forward regression analysis. However, the current study does not study actual interactionist variables and moral reasoning. The following sections review the literature first on values and cognitive moral development and then on organizational culture and cognitive moral development.

Values and Cognitive Moral Development

Researchers have studied the relationship between cognitive moral development and values. Of particular interest is the work by Lan, Gowing, McMahon, Rieger, and King (2008). Using the Schwartz Values Survey and the DIT2, the Lan, McMahon, Rieger, and King study explored the relationship between values and moral judgment of 131 fourth year business students. Results of the study indicate several significant correlations between value types and levels of moral reasoning. Two value types, power and tradition had a significant negative correlation with the post-conventional (highest) level of moral reasoning. The values types of conformity and universal are positively related to the maintaining norms (conventional) level of moral reasoning. Tradition and stimulation are positively correlated to personal interest (pre-conventional) level of moral reasoning while stimulation has a significant negative correlation.

In earlier research by Ostini and Ellerman (1997), cognitive moral development and values were studied utilizing the Schwartz Value Survey (1992) and DIT. Their sample was 124 Australian university students. While results indicated a significant correlation between equality
and post-conventional reasoning, the authors concluded that “... the relationship between values and moral judgment is neither obvious nor easily assessed” (p. 701).

Using the DIT and the Rokeach Value Scale (RVS), Feather (1988) found the post-conventional levels of moral reasoning were significantly positively correlated with several values (Inner Harmony, Broadminded, and Logical), and negatively with the values of Clean and Obedient. Of note, Abdolmohammadi (2006) studied the relationship between accountants’ personal values with the Rokeach Values Survey and their moral reasoning with the DIT. Their sample was 164 accounting students in the Northeastern United States. Results indicated strong negative relationship between conformity values and higher levels of moral reasoning.

Over the past thirty years, other studies involving moral reasoning and values have used multiple instruments to measure the relationship between moral reasoning and values. Finegan (1994) studied 69 undergraduate psychology students using the Rokeach Value Survey and five business scenarios developed by the authors to measure ethics. Honesty was the only value that was found to predict ethical decision making. Glover, Bumpus, Logan, and Ciesla (1997) also studied students, this time using a sample of 367 business majors. Moral reasoning was measured by four scenarios designed by the authors and the Comparative Emphasis Scale (Ravlin & Meglino, 1987) measured values of achievement, fairness, honesty/ integrity, and concern for others. A positive relationship was found between individuals who value achievement and ethical decision making when the moral intensity is not extreme. In a study of managers, rather than students, Sturdivant and Gintner’s research (1977) sampled 130 managers from 23 companies. The study demonstrated a positive relationship between liberal values and corporate social responsibility. Level of corporate social responsibility was decided by whether a company had been pre-determined to be a benchmark organization by a third party. Values were measured
by asking participants the degree to which they agreed with 65 socially sensitive issues
developed by the authors. Studying 492 practicing members of the American marketing
Association, Singhapakdi and Vitell (1993) found that ethical decisions making could be
explained by values. Personal values were measured by the List of Values instrument (Kahle,
1983) and elements of the AMA Code of Ethics. Ethical decision making was evaluated using
three marketing scenarios (Dornoff & Tankersley, 1975). The results from the Singhapakdi and
Vitell exploratory study indicated that a “sense of accomplishment” and “excitement”
(hedonism) were negatively related to ethical decision making. Self-respect and the values
established by the AMA Code of ethics were positively related to ethical decision making.

Organizational Culture Perception and Cognitive Moral Development

Treviño (1990) defined ethical culture as a multidimensional construct consisting of
various formal and informal systems of behavioral control. By encouraging ethical conduct,
people will behave more ethically. Ethical cultures are established by leadership, policies,
authority structures and reward systems, norms, heroes, rituals, myths and language. With greater
presence of these variables, individuals may increase their ability to recognize ethical issues
(O’Fallen & Butterfield 2005). A small number of studies have been done on either ethical
climate (an employee attitude) or ethical culture (a more stable characteristic of an organization).
Although there is debate about the commonalities and differences of these two constructs, the
current literature review focused only on culture. At this time, no studies involving the CVF and
cognitive moral development have been identified. However, some research has been conducted
studying ethical culture and cognitive moral development.

In an effort to further define ethical business culture, Ardichvili, Mitchell, and Jondl
(2009) questioned 67 executives from various industries (materials/commodities, conglomerates,
consumer goods, financial services, health care, manufacturing/technology, service/retail, transportation, utilities). They found five distinct characteristics: Mission and Values-Driven, Stakeholder Balance, Leadership Effectiveness, Process Integrity, and Long-term Perspective. As a result of their work, the authors called for additional research that might use these characteristics as the foundation for a model that would support a sustained ethical culture.

An alternative tool, the Corporate Ethics Scale (CEP) (Hunt, Wood, & Chonko, 1989), was used by Douglas, Davidson, and Schwartz (2001) when they studied more than 300 practicing accountants. Using the CEP to measure ethical culture and accounting scenarios to measure moral judgment, the researchers also considered the effect of moral intensity (Jones, 1991). CEP scores of ethical culture were correlated with the value of idealism. Corporate ethical culture, and a relatively strong firm rules orientation, affected auditors' idealism but not relativism, and therefore indirectly affected ethical judgments.

Summary

Existing research has provided a foundation for the current study. A brief summary of the results for each of the current variables (values, organizational culture perception, and cognitive moral development) is discussed below.

The Schwartz Value Survey (Schwartz, 1992) has been studied cross-culturally (Schwartz, 1992, 2005a, 2005b; Schwartz & Boehnke, 2004). Values in general have been measured as both a predictor of managerial success (England & Lee, 1974) and of professional orientation (Myyry & Helkama, 2001). Studies have found mixed results regarding gender differences in values (Aygun, & Imamoglu, 2002; Ryckman & Houston, 2003). When gender differences were found, men more highly valued self-enhancement and openness meta-values while women more highly valued self-transcendence and conservation (Schwartz & Ruble,
Relative to the current study, it should be noted that no gender differences were found in studies involving people with similar jobs (Major, 1987; Major, McFarlin, & Gagnon, 1984; McCarrey et al., 1989). As people age, research results show a positive correlation with self-transcendence and conservation (Schwartz, 1992). And in regards to organizational position, career success measured as promotion has been positively correlated with men who value ambition, capability (Thomas, 1997), power (Frieze, Olson, Murrell, & Selvan, 2006; McClelland, 1987), risk taking, and profit (England & Lee, 1974).

The Competing Values Framework (Quinn & Rohrbaugh, 1983) has been applied in organizations around the world and in a multitude of industries (Cameron, 2008). Researchers have found that male dominated cultures can be described as hierarchical, independent, have top down communication (Connelly & Rhoton, 1988; Helgesen, 1990; Maier, 1999; Marshall, 1993). Cultures dominated by women are relational and share power (Connelly & Rhoton, 1988; Helgesen, 1990; Rosener, 1990). No studies at this time were identified that considered the relationship between age and organizational position with organization culture.

Cognitive moral development (Kohlberg, 1958) has also been tested internationally (Snarey, 1985). Of note, the context of the scenarios (personal versus organizational) has been shown to create a significant impact on levels of moral reasoning (Weber, 1990). Mixed results have been found with gender (for example Bussey & Maughan, 1982 and Weber & Wasieleski, 2001), but may be better understood in terms of social role theory (Eagly, 1987) and sex role stereotypes (Terpestra, Rozell, & Robinson, 1993). Mixed results were also found with age and organizational position.

Building directly on the work of Lan, Gowing, McMahon, Rieger, and King (2008), the current study adds to the knowledge regarding the relationship between cognitive moral
development and values. A next step in further understanding this relationship between moral reasoning and values at the workplace involves 1) utilizing the MMJT, a measure of moral reasoning developed specifically with business scenarios, 2) utilizing the SVS, a cross-culturally validated measure of values, 3) measuring organizational culture perceptions using the Competing Values framework, and 4) sampling actual managers based on findings that there is a relationship between organizational level and age with moral reasoning. This research has not been done before and organizations will benefit from the more specific and relevant results. Although empirical research in business ethics is growing, there are still many questions left to be answered.
CHAPTER III. METHODOLOGY

This chapter describes the research design, participants, data collection instruments, variables, data collection procedures, and data analysis procedures.

Research Design

The research uses a correlational design to collect data from employees with the purpose of examining the relationship between values and cognitive moral development. A correlation design allows the study of associations between variables and is effective and efficient means of data collection. Correlational design also permits generalization from a sample to a population so inferences can be made (Babbie, 1990) with rapid turnaround and limited financial costs.

Participants

The sample was purchased through the market research firm, eRewards. eRewards is an established firm providing “active panelists” for research purposes. eRewards partners with diverse companies such as AIRMILES, Best Buy,® BLOCKBUSTER,® Air France/KLM, Borders,® British Airways, Continental Airlines,® Delta Air Lines,® Hilton HHonors,® Macy's,® Pizza Hut,® and Virgin Atlantic Airways that represent a broad range of industries and demographics using a “by-invitation-only” process to recruit study participants. At the time of this study, there were more than 3.2 million active individual panelists enrolled with eRewards.

eRewards uses a two-phase process to identify appropriate survey participants. In the first phase, employees are invited to become “active panelists” with eRewards. Once individuals have become active panelists, they may be invited to participate in specific research efforts, depending on the match of the panelists profile with the needs of the each specific research project.

Typical language in an email invitation to become a member of eRewards was: “We’d like to invite you to join an online survey panel from one of the country's leading market
research companies, and earn rewards just for sharing your opinions.” Once a person was enrolled, a Member Profile Survey was completed with over 300 data points. The identity verification process included requiring a unique email address for each panelist, a verified physical address, and quality assurance checks for illogical answers (i.e. an 18 year old doctor). Once a person had opted in and agreed to provide truthful and well considered answers, they were eligible to begin receiving survey invitations. eRewards complies with privacy standards established by The Council of American Survey Research (CASRO), World Association of Research Professionals (ESOMAR), and The Marketing Research Association (MRA).

The specific sample for this study was defined as managers employed at organizations in retail/service, government, or not-for-profit industries. eRewards pulled sample files randomly from qualified members. eRewards maintains “certified email sender” status to ensure deliverability of email survey invitations to the sample. Each panel member was rewarded for his/her survey participation in eRewards currency, depending on the desired sample (in this case, managers) and approximate length of the survey (in this case, approximately 30 minutes). A typical survey invitation included the following language:

Sender: e-Rewards
Subject: Get Rewarded for Your Time - Study about values and ethics.
Body: Based on your e-Rewards profile, you are invited to earn e-Rewards Currency for participating in a research survey. If you qualify and complete the survey:
Full reward amount: $12 in e-Rewards Currency
Full survey length: approximately 25 minutes

With this process, eRewards can provide a “random quota” approach to sampling. For example in the current study, before invitations were first sent to panelists, the researcher determined the required profile for perspective study participants. Forty eight hours after the initial invitation was sent out, the researcher could review the number of responses from each of the categories being studied (industry, size of organization, gender, etc.). A second invitation
was then sent to a new sample that supported getting acceptable numbers of responses (n≥30) in as many categories as possible for purposes of analysis. This process was repeated until a total of 100 surveys were completed.

The sample consisted of 100 managers: 34 from the retail/service industry, 35 from government, and 31 from the not-for-profit industry. The companies of the participants varied in size: 32 had 1-100 employees, 30 had 101-1,000 employees, 9 had 1,001 – 2,500 employees and 29 had more than 2,500 employees. The managers themselves came from different levels within their organization: 29 self-identified as executives, 43 as mid-level managers, 13 as entry level managers, and 15 as non-managers. (All participants were pre-qualified as holding positions that were responsible for making employment related decisions.) Men made up 48% of the sample and women made up the remaining 52%. The age of the sample ranged from 24 to 66, with a mean of 43. All managers participated in the study on a voluntary basis with remuneration from the market research company for completing the survey.

Instrumentation

The Values, Culture and Managerial Morals (VCMM) survey developed for the current research was composed of four parts. The instrument can be found in Appendix A. The first section contained the Schwarz Values Survey (Schwartz, 1992), followed by the Managerial Moral Judgment Test (Loviscky, Treviño, & Jacobs, 2007) and the Competing Values Framework (Quinn and Rohrbaugh, 1983), and concluded with demographic questions. In total, the VCMM had 178 items. The following sections describe the evolution of each instrument and the scoring procedures for the version of the instrument used in this study. Instructions for scoring can be found in Appendix B.

*Schwartz Value Survey*
Four different measures have been developed to assess Schwartz’s values construct: the Schwartz Values Survey (Schwartz, 1992), the Portrait Values Questionnaire (Schwartz, Melech, Lehmann, Burgess, & Harris, 2001), the Short Schwartz’s Value Survey (Lindeman & Verkasalo, 2005), and the short version of the Portrait Values Questionnaire (Schwartz, 2005b). This study utilized the Schwartz Values Survey (SVS) (Schwartz, 1992), which is summarized below.

The SVS provides respondents with two lists of abstract values that in combination represent each of the ten value types. Each item is followed by an explanatory phrase in parenthesis to clarify the meaning of the item. For example, “EQUALITY (equal opportunity for all)” is a universalism value type; “PLEASURE (gratification of desires)” is a hedonism value type. There are a total of fifty-six or fifty-seven items in the two lists. Respondents rate the importance of each item “as a guiding principle in MY life” on a 9-point scale ranging from 7 (of supreme importance) through 0 (not important) to -1 (opposed to my values). The survey items are combined to calculate the scores for meta-values and value types.

This process is used to encourage variability and integrity in the ratings as well as to discourage rating errors such as central tendency (using all middle ratings), leniency (using all high ratings), and to discourage social desirability (bias on self-report measures where respondents endorse items with a high social desirability value and reject those that are socially undesirable, rather than endorsing items that they believe apply to themselves).

After rating the two items that the respondents most and least agree with, respondents are asked to finish rating all remaining items, using the same Likert-scale with a range of 7 (of supreme importance) to 0 (not important) and -1 (opposed to my values). The scale provides more responses on the upper end of importance to recognize that values are perceived to vary
from mildly to very important. The rating of -1 (opposed to my values) allows people to respond to values that may be counter to their own cultural beliefs.

Analysis of the ratings results in scores of four meta-values and ten value types. Due to individual differences in the use of rating scales, an adjustment known as centering must be made to identify people’s priorities or relative importance of the different values. The centering process, also known as ipsatizing, converts original value scores into scores that indicate the relative importance of each value to the person (Schwartz, 1992, 2003). Fischer (2004) supports the legitimacy of ipsatizing value scores from the Schwartz value theory instruments.

Scoring for each value type is determined by the average of the ipsatized rating for each item designated a priori as a marker of that value. Meta-Values are then determined by the average of the value type scores that compose each meta-value. At least three items were used to measure each value, with eight items used to measure universalism. The variability in the number of items reflects the conceptual breadth of each of the values. Alpha reliabilities of the 10 values average .68, ranging from .61 for tradition to .75 for universalism (Schwartz, 2005b).

*Competing Values Framework*

Several instruments have been designed to measure the various cultures of the competing values framework. The original instrument was developed by Cameron and Ettington (1988) and was later revised to create the Organization Culture Assessment Instrument (OCAI) (Cameron & Quinn, 1999). An alternative tool was developed by Quinn and Spreitzer (1991) and an adapted version of this alternative tool was utilized in the current study. In the following section, the OCAI will be explained followed by a discussion of the instrument used in the current study.

The Organizational Culture Assessment Instrument (OCAI) asks participants to consider six questions involving dominant characteristics, organizational leadership, management of
employees, organizational glue, strategic emphasis, and criteria of success. Directions indicate that there are 100 points to be divided between the four alternatives that are provided for each of the six questions. The highest number of points should be allocated to the alternative that is most like the participant’s organization; the alternative that is the least like the participant’s organization should be awarded the fewest points. The sum total of the points awarded for the four alternatives should equal exactly 100 points. As an example, if the first alternative is most like the participant’s organization, s/he might award the first alternative 55 points. If the second and third alternatives are somewhat like the participant’s organization, 20 points might be awarded to each. If the fourth alternative is only slightly like the participant’s organization, 5 points might be awarded. To check the total, $55 + 20 + 20 + 5 = 100$ points. The process should be repeated for each of the six questions. As the instrument is designed for use as a culture change tool, participants are first asked to think of their organization as it currently exists. They are then asked to repeat the process thinking of the organization as they would prefer it to be in five years. The first question is provided as an example in Table 1. The score is derived by averaging the responses and finding a score for each of the four cultures, the higher the score, the stronger the culture.

A limitation of the process is that a high score in one alternative necessitates a lower score for other alternatives. The process involves a trade-off or fixed choice and as such, the measures are “not suitable for correlation-based statistical analysis, such as factor analysis and regression…” (Quinn & Spreitzer, 1991, p. 117)
Table 1

*Sample CVF Question (OCAI) (Cameron & Quinn, 1999)*

<table>
<thead>
<tr>
<th>1. Dominant Characteristics</th>
<th>Now</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization is a very dynamic entrepreneurial place. People are willing to stick their necks out and take risks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization is a very controlled and structured place. Formal procedures generally govern what people do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Quinn and Spreitzer (1991) developed a process such that each of the four cultures could be measured without having to use the point allocation process. Participants are instructed to indicate the “extent to which each statement described the business in which you worked.”

Ratings were 1 = Low extent to 5 = High extent. An example of an item was: “This organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.”

Due to the time-consuming and demanding nature of the VCMM assessment of this study, the researcher chose to use the 12 item version adapted by Yeung, Brockbank, and Ulrich (1991).

*Managerial Moral Judgment Test*

This study utilized the Managerial Moral Judgment Test designed by Loviscky, Treviño, and Jacobs (2007). The assessment is based on previous cognitive moral development instruments, beginning with the Moral Judgment Interview (Kohlberg, 1963), the Defining Issues Test (Rest, 1979) and most recently the Adapted Moral Judgment Interview (Weber, 1991). This
section begins with a brief explanation of each of these tools and then more fully explains the use of the instrument in this study.

*Moral Judgment Interview (MJI, 1963).* The original assessment to determine a participant’s level of cognitive moral development is an open-ended interview protocol that involves scoring of responses to 3 ethical dilemmas. It is known as the Moral Judgment Interview (MJI). Responses are scored for stage level based on the reasoning of how the participant came to her or his conclusion (Kohlberg, 1963):

1. Punishment by another.
2. Manipulation of goods, rewards by another.
3. Disapproval by others.
4. Censure by legitimate authorities followed by guilt feelings.
5. Community respect and disrespect.

Multiple raters assign moral levels and inter-rater reliability is established through agreement. A familiar dilemma involves Heinz and whether or not he should steal drugs.

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000 which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said: “No, I discovered the drug and I'm going to make money from it.” So Heinz got desperate and broke into the man's store to steal the drug-for his wife. Should the husband have done that? (Kohlberg, 1963, p. 19)

*The Defining Issues Test (DIT, 1979).* DIT is a “neo-Kohlbergian” instrument developed by Rest (1979). The DIT and the revised DIT 2 use a Likert-scale for responses to six moral dilemmas. This provides a quantitative technique as opposed to Kohlberg’s original open-ended interview protocol to measure cognitive moral development. Similar to the Kohlberg's three
The Managerial Moral Judgment Test (MMJT) uses a dilemma – decision – reason protocol and is a reliable instrument with a coefficient alpha greater than .70. The analysis in this study provided a Principled Reasoning score (P score), with points awarded for higher ranking of Stages 5 and 6 (Level 3, Post-conventional reasoning) decision criteria. A second measure of
moral reason, called the simple sum score, was also computed using Likert-scale questions (“What level of importance was the above issue in your decision making process? None, Little, Some, Much, Great”). In each of the six dilemmas, twelve decision criteria were both ranked (with the data used to compute a P score) and rated (with the data used to compute a simple sum score), resulting in the two measures of moral reasoning. The analysis of the data indicated a level of cognitive moral development with a P score from 0-100 for each of the 6 scenarios and a simple sum score ranging from 1-5 for each of 12 rating questions for each of 6 scenarios. Using the scoring directions provided by authors of the MMJT, a total P score could range from 0-100 and a total simple sum score could range from 72-360. Higher scores in both the P score and Simple Sum Score indicate higher levels of moral reasoning.

Following is an example of each of the three steps in the MMJT for one scenario:

Scenario: Alex is supervising an employee who used a sick day to take the previous day off from work. However, Alex has learned from the employee’s co-workers that the employee was not actually sick but used the day as a “mental health” day. That is, the employee was not physically sick but felt tired mentally. Alex knows that the company’s sick leave policy does not allow for mental health days. Should Alex reprimand the employee according to the company policy?

Step one, indicate your decision: Should reprimand, Should not reprimand, or Can’t decide.

Step two, rate the following decision criteria in terms of its importance (None, Little, Some, Much, Great) in making the decision. An example from the twelve decision criteria is: Every time an employee escapes punishment for a policy violation, doesn’t that just encourage more violation?

The third and final step is to rank the four most important items from the previous list of twelve decision criteria. The three step process is repeated with the five additional scenarios.

Demographic data collected included gender, age, level within the organization (executive, mid-level, and entry level management), organization size, and industry
(government, not-for-profit, and retail/service). Questions regarding generation were included for future research purposes.

Procedures

The primary investigator gained approval for the research from the Human Subjects Review Board (HSRB) at Bowling Green State University prior to collecting data. Following completion of the HSRB review process, the survey instrument was created in an online format using Survey Monkey.

Once the study received HSRB approval, the invitation and survey link were sent to a random sample of qualified eRewards members. The survey was initially disseminated by eRewards; the demographics of the completed survey participants and the time for completion were reviewed by the researcher on a daily basis. Over the period of less than two weeks, eRewards continued to randomly sample qualified members until 100 survey instruments were completed. Requirements for completion were that all survey questions were answered and the participant completion time exceeded 20 minutes. The latter condition was designed as a screen to eliminate participants that did not complete the instrument in a thoughtful manner.

Using the online survey link, results were tabulated and analyzed directly by the researcher. All results were anonymous and confidential. The researcher was concerned with the potential negative effects of respondent burden on the integrity of the data given the length of the survey instrument and the cognitive effort required to answer some of the questions thoughtfully. Length of survey has been demonstrated to have a statistically significant impact on respondent burden perceptions (Sharp & Frankel, 1983). A pilot of the survey indicated that the instrument in this study would require a minimum of twenty minutes to complete. Because survey respondents in the actual study were rewarded by the market research firm for the completion of
the survey, there was an extrinsic incentive to complete the survey. Although respondents were instructed by the market research firm to be thoughtful in their responses, it was possible for respondents to “click” their way through the instrument with minimal cognitive effort. To address concerns with data that may have resulted from simply “clicking” rather than thoughtful replies, the researcher reviewed the time stamps from the electronic surveys. Any surveys that were completed in less than twenty minutes was removed from the sample prior to statistical analysis. Although respondents were able to move back and forth between survey questions, the electronic design required that all questions be completed prior to submission thus eliminating any incomplete replies from being included in the sample.

Research Questions

1. Is there a relationship between *meta-values* (SVS) and levels of cognitive moral development (MMJT) for managers?

2. Which *meta-values* (SVS) best predict levels of cognitive moral development (MMJT) for managers?

3. Is there a relationship between *value types* (SVS) and levels of cognitive moral development (MMJT) for managers?

4. Which *value types* (SVS) best predict levels of cognitive moral development (MMJT) for managers?

5. Is there a relationship between *organization culture perceptions* (CVF) and levels of cognitive moral development (MMJT) for managers?

6. Which *organization culture perceptions* (CVF) best predict levels of cognitive moral development (MMJT) for managers?
7. Which *meta-values (SVS)*, *value types (SVS)*, and *organization culture perceptions (CVF)* best predict levels of cognitive moral development (MMJT) for managers?

8. Are there significant group differences (gender, age, level within the organization (executive, mid-level, and entry level management), organization size, and industry (government, not-for-profit, and retail/service)) among meta-values, value types, organization culture perception and cognitive moral development?

**Data Analysis**

Data analysis began with descriptive statistics about the sample and response rate data. Descriptive statistics including mean and standard deviation were then documented for the independent and dependent variables. Research questions 1, 3, and 5 were analyzed using a person correlation with the significance level established at the .05 level or less. Research questions 2, 4, 6 and 7 were calculated using multiple regression. Research question 8 utilized a t-test of Independent Samples and ANOVA. The following chapter provides the results of the data analysis. Table 2 provides a summary of each research question, independent and dependent variables, and data analysis techniques.
Table 2

Research Questions and Data Analysis Techniques

| Question | | | Data Analysis |
|----------|---|----------------|
| **Question 1**: Is there a relationship between *meta-values* (SVS) and levels of cognitive moral development (MMJT) for managers? | Meta-Values (SVS)\(^1\) | Cognitive Moral Development (MMJT) \(^4\) | Correlation |
| **Question 2**: Which *meta-values* (SVS) best predict levels of cognitive moral development (MMJT) for managers? | Meta-Values (SVS)\(^1\) | Cognitive Moral Development (MMJT) \(^4\) | Multiple Regression |
| **Question 3**: Is there a relationship between *value types* (SVS) and levels of cognitive moral development (MMJT) for managers? | Value Types (SVS)\(^2\) | Cognitive Moral Development (MMJT) \(^4\) | Correlation |
| **Question 4**: Which *value types* (SVS) best predict levels of cognitive moral development (MMJT) for managers? | Value Types (SVS)\(^2\) | Cognitive Moral Development (MMJT) \(^4\) | Multiple Regression |
| **Question 5**: Is there a relationship between *organizational culture perceptions* (CVF) and levels of cognitive moral development (MMJT) for managers? | Organization Culture perception (CVF)\(^3\) | Cognitive Moral Development (MMJT) \(^4\) | Correlation |
| **Question 6**: Which *organizational culture perceptions* (CVF) best predict levels of cognitive moral development (MMJT) for managers? | Organization Culture perception (CVF)\(^3\) | Cognitive Moral Development (MMJT) \(^4\) | Multiple Regression |
| **Question 7**: Which *meta-values (SVS), value types (SVS), and organizational culture perceptions* (CVF) best predict levels of cognitive moral development (MMJT) for managers? | Meta-Values (SVS)\(^1\) Value Types (SVS)\(^2\) Organization Culture perception (CVF)\(^3\) | Cognitive Moral Development (MMJT) \(^4\) | Multiple Regression |
Table 2 (continued)

*Research Questions and Data Analysis Techniques*

<table>
<thead>
<tr>
<th>Question 8: Are there significant group differences (gender, age, level within the organization (executive, mid-level, and entry level management), organization size, and industry (government, not-for-profit, and retail/service)) among meta-values, value types, organizational culture perception and cognitive moral development?</th>
<th>Group differences</th>
<th>Meta-Values (SVS)¹</th>
<th>t-test of Independent Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Value Types (SVS)²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organization Culture perception (CVF)³</td>
<td>ANOVA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cognitive moral development (MMJT)⁴</td>
<td></td>
</tr>
</tbody>
</table>

¹Meta-Values are: Self-Enhancement, Self-Transcendence, Openness to Change, and Conservatism.
²Value Types are: Power, Achievement, Hedonism, Stimulation, Self-direction, Universalism, Benevolence, Tradition, Conformity, and Security.
³Organizational Culture Perceptions are: Group, Developmental, Hierarchy, and Rational.
⁴Cognitive Moral Development measures are: P score and simple sum score.
CHAPTER IV. RESULTS

The purpose of this quantitative study was to examine the relationship between values, organizational culture perception, and managerial moral reasoning of 100 managers. This chapter provides the results from the completion of the Values, Culture, and Managerial Morals (VCMM) survey. The VCMM instrument was a compilation of established measures. Values were measured using the Schwartz Value Survey (SVS) (Schwartz, 1992). Organization culture perception was measured with the Competing Values Framework (CVF) (Quinn and Rohrbaugh, 1983). And, moral reasoning by managers in workplace settings was measured by the Managerial Moral Judgment Test (MMJT) (Lovisky, Treviño, & Jacobs, 2007). Demographic data were also collected regarding industry, organization size, managerial position, gender and age. Statistics describing these items are presented under sample characteristics.

Descriptive statistics for each of the variables (meta-values, value types, organization culture perception, and cognitive moral development) including mean, standard deviation, and minimum and maximum values are then presented. Finally inferential results are presented for each of the research questions.

Sample Characteristics

The sample for the current study consisted of 100 managers. It was a diverse sample in terms of gender, age, industry, number of employees, and respondent management level. Men made up 48% of the sample and women made up the remaining 52%. The age of the respondents ranged from 24 to 66, with a mean of 43 years of age. Respondents were asked to give their year of birth. Age was calculated by subtracting the current year from the year of birth. Six percent of the sample was 60-69, 21% of the sample was age 50-59, 34% of the sample was 40-49, 28% was 30-39, and 11% were 20-29 years of age. In regards to industry, 34 managers came from
retail/service, 35 from government, and 31 from not-for-profit. The organizations of the participants varied in size: 32 had 1-100 employees, 30 had 101-1,000 employees, 9 had 1,001 – 2,500 employees, and 29 had more than 2,500 employees. The managers themselves came from different levels within their respective organizations: 29 self-identified as executives, 43 as mid-level managers, 13 as entry level managers, and 15 as non-managers. (All participants were pre-qualified as holding positions that were responsible for supervising employees.) All managers participated in the study on a voluntary basis with remuneration from the market research company for completing the survey. Overall, the sample provided data for all group variables of interest, with fewer replies from organizations with 1,001-2,500 employees \( (n = 9) \) and entry level managers \( (n = 13) \).

Instrument

The Values, Culture and Managerial Morals (VCMM) survey first collected rating responses to values using a 9-point Likert-type scale with -1 defined as “Opposed to my values” and 7 defined as “Of supreme importance” (57 items). An example of a value item is “Social Power (control over others, dominance).” All rating data in this portion of the instrument were ipsatized to address individual differences in using rating scales. Second, the VCMM requested respondents to rate and then rank twelve decision criteria in each of six different workplace scenarios to measure cognitive moral development (102 total items). A simple sum score was calculated using the rating data, and a P Score was calculated using the ranking data. The ratings used a 5-point Likert-type scale ranging from “none” to “great” in terms of how important the criteria was in making a decision for each scenario. The rankings questions asked respondents to list their four most important decision criteria for each scenario, specifically identifying the “most important,” “2\(^{nd}\) most important,” “3\(^{rd}\) most important,” and “4\(^{th}\) most important” criteria.
Third, organization culture perception data was collected using 5-point Likert-type rating questions where 1 was defined as a statement that described the respondent’s organization at a “low” level and 5 was defined as a statement that described the respondent’s organization at a “high” level (12 items). An example of a statement is “This organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.” To conclude the VCMM, demographic information was collected.

Table 3 presents the descriptive statistics of the meta-values, value type, organization culture perception, and cognitive moral development variables. Overall, the sample rated the self-transcendence meta-value with the highest mean of .47 (ipsatized) and self-enhancement with the lowest mean of -.77. The greatest range between minimum and maximum values occurred in the openness to change meta-value with a minimum score of -2.10 and a maximum score of 1.90 and a standard deviation of .76. The value type of benevolence had the highest mean score (.86) while power had the lowest (-1.76). Stimulation created the greatest range in responses for value types, with a minimum of -3.07 to a maximum of 1.84 and a standard deviation of 1.16. The mean of the organization culture perceptions showed little variation in the mean and each of the organization culture perceptions had a similar range score as well. Data from the cognitive moral development measures had relatively the same mean, with a P Score mean of 203.6 and a simple sum score mean of 203.9. This merits further exploration in the Discussion chapter due to the difference in the overall range of scores possible in these two different measures (Using the scoring directions provided by authors of the MMJT, the P Score range = 0-100 and the simple sum score range = 72-360).
Table 3

*Descriptive Statistics of Meta-values, Value Types, Organization Culture Perception, and Cognitive Moral Development*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meta-values</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Openness to Change</td>
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<td>.76</td>
<td>-2.10</td>
<td>1.90</td>
</tr>
<tr>
<td>Conservation</td>
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<td>.68</td>
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</tr>
<tr>
<td>Self-Enhancement</td>
<td>-.77</td>
<td>.71</td>
<td>-2.46</td>
<td>.75</td>
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<tr>
<td>Self-Transcendence</td>
<td>.47</td>
<td>.63</td>
<td>-1.17</td>
<td>1.82</td>
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<tr>
<td><strong>Value types</strong></td>
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<td></td>
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<tr>
<td>Conformity</td>
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<td>.84</td>
<td>-1.56</td>
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<td>Tradition</td>
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<td>1.05</td>
<td>-3.73</td>
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<td>Benevolence</td>
<td>.86</td>
<td>.76</td>
<td>-1.23</td>
<td>2.76</td>
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<td>Universalism</td>
<td>.08</td>
<td>.94</td>
<td>-2.59</td>
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<td>Self-direction</td>
<td>.52</td>
<td>.76</td>
<td>-1.04</td>
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<td>Stimulation</td>
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<td>1.16</td>
<td>-3.70</td>
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<td>Hedonism</td>
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<td>1.10</td>
<td>-3.37</td>
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<tr>
<td>Achievement</td>
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<td>.68</td>
<td>-1.28</td>
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<td>Power</td>
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<td>1.06</td>
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<td>.84</td>
<td>1.25</td>
<td>5.00</td>
</tr>
<tr>
<td>Rational</td>
<td>3.33</td>
<td>.79</td>
<td>1.25</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Cognitive Moral Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P score</td>
<td>33.93</td>
<td>9.82</td>
<td>13.33</td>
<td>60.00</td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td>203.90</td>
<td>14.09</td>
<td>169.00</td>
<td>244.00</td>
</tr>
</tbody>
</table>

**Results for Research Questions**

1. *Is there a Relationship between Meta-values (SVS) and Levels of Cognitive Moral Development (MMJT) for Managers?*

   Respondents were asked about their values in part A of the VCMM survey instrument and then were asked about their moral reasoning in part B. Pearson correlation coefficients were calculated (see Table 4). Results indicated that there was significance at the .01 level between conservation and the simple sum score in a negative direction (i.e., the more the meta-value of
conservation is valued, the lower the simple sum score). In addition, there was statistical significance at the .05 level between the meta-value of self-transcendence and the simple sum score, this time in a positive direction indicating the more self-transcendence is valued, the higher the simple sum score.

Table 4

*Correlation Coefficients between Meta-values and Cognitive Moral Development*

<table>
<thead>
<tr>
<th>Meta-values</th>
<th>P Score</th>
<th>Simple Sum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness to Change</td>
<td>-.025</td>
<td>.123</td>
</tr>
<tr>
<td>Conservation</td>
<td>.003</td>
<td>-.287 **</td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td>.015</td>
<td>-.029</td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>-.087</td>
<td>.197 *</td>
</tr>
</tbody>
</table>

*Note: *p*.05, **p*.01

2. Which Meta-values (SVS) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

Multiple regression using Forward method was conducted to determine which meta-values (SVS) best predict levels of cognitive moral development (MMJT) for managers. Although there are significant correlations between some of the meta-values and cognitive moral development, there was no significant model for the regression of meta-values with cognitive moral development using the P score. However, a significant model was generated to predict cognitive moral development when measured by the simple sum score. See Table 5. This model consisted of only one variable, conservation; $R^2=.082$, $R^2_{adj}=.073$, $F(1,98)=8.79$, $p=.004$.

Although significant, the model only accounted for approximately 8% of the variance. Analysis of regression coefficients indicated that meta-value conservation negatively explained cognitive moral development thus indicating as conservation increased, cognitive moral development decreased.
Table 5

*Regression Coefficients of Meta-values with Cognitive Moral Development (Simple Sum Score)*

<table>
<thead>
<tr>
<th>Meta-value</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation</td>
<td>-5.97</td>
<td>-2.87</td>
<td>-2.96</td>
<td>.00</td>
</tr>
</tbody>
</table>

3. *Is there a Relationship between Value Types (SVS) and Levels of Cognitive Moral Development (MMJT) for Managers?*

Pearson correlation coefficients, presented in Table 6, indicate that no value types were significantly correlated with the P score. Two value types, tradition and benevolence, were significantly related at the .05 level with the simple sum score. Tradition was negatively correlated with both the P score and simple sum score indicating that as tradition is valued more, cognitive moral development decreases. In contrast, when benevolence is valued more, cognitive moral development increases.

Table 6

*Correlation Coefficients between Value Types and Cognitive Moral Development*

<table>
<thead>
<tr>
<th>Value types</th>
<th>P Score</th>
<th>Simple Sum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conformity</td>
<td>-.057</td>
<td>-.189</td>
</tr>
<tr>
<td>Tradition</td>
<td>-.110</td>
<td>-.252 *</td>
</tr>
<tr>
<td>Benevolence</td>
<td>-.110</td>
<td>.215 *</td>
</tr>
<tr>
<td>Universalism</td>
<td>-.027</td>
<td>.090</td>
</tr>
<tr>
<td>Self-direction</td>
<td>.022</td>
<td>.244</td>
</tr>
<tr>
<td>Stimulation</td>
<td>-.047</td>
<td>.000</td>
</tr>
<tr>
<td>Hedonism</td>
<td>.129</td>
<td>-.062</td>
</tr>
<tr>
<td>Achievement</td>
<td>.011</td>
<td>.230</td>
</tr>
<tr>
<td>Power</td>
<td>.013</td>
<td>-.186</td>
</tr>
<tr>
<td>Security</td>
<td>.209</td>
<td>-.192</td>
</tr>
</tbody>
</table>

*Note: *p* < .05
4. Which Value Types (SVS) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

A significant model was generated to predict cognitive moral development when measured by the P score. This model consisted of only one variable, security; \( R^2 = .044, R^2_{adj} = .034, F(1,98) = 4.470, p = .037 \). The model only accounted for approximately 4% of the variance in the cognitive moral development as measured by the P score. Analysis of regression coefficients (see Table 7) indicated that the value type of security positively explained cognitive moral development thus indicating as security increased, cognitive moral development increased. Interestingly, the value type of security was not significantly related to cognitive moral development (\( r = .209, p > .05 \)).

Table 7

<table>
<thead>
<tr>
<th>Value Type</th>
<th>( B )</th>
<th>( \beta )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>2.52</td>
<td>.21</td>
<td>2.11</td>
<td>.037</td>
</tr>
</tbody>
</table>

As documented in Table 8, the research conducted Forward multiple regression to analyze value types as predictors of cognitive moral development as measured by the simple sum score. Results indicate a significant regression model with two variables—tradition and benevolence. Tradition negatively explained cognitive moral development while benevolence positively explained it. Examination of the factors indicated that at the .01 level of significance, only 12% of the variance could be explained; \( R^2 = .121, R^2_{adj} = .103, F(1,97) = 6.707, p = .002 \).
Table 8

Regression Coefficients of Value Types with Cognitive Moral Development (Simple Sum Score)

<table>
<thead>
<tr>
<th>Value Type</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradition</td>
<td>-3.67</td>
<td>-.28</td>
<td>-2.88</td>
<td>.005</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4.47</td>
<td>.24</td>
<td>2.54</td>
<td>.013</td>
</tr>
</tbody>
</table>

5. Is there a Relationship between Organizational Culture Perceptions (CVF) and Levels of Cognitive Moral Development (MMJT) for Managers?

Pearson correlation coefficients were calculated to examine the relationship between organization culture perceptions and levels of cognitive moral development (see Table 9). All cultural perception variables were negatively correlated with both measures of cognitive moral development. The only significant result was the relationship between hierarchy and the simple sum score of cognitive moral development. However, this negative correlation was quite weak.

Table 9

Correlation Coefficients between Culture Perceptions and Cognitive Moral Development

<table>
<thead>
<tr>
<th>Culture Perception</th>
<th>P Score</th>
<th>Simple Sum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>-.196</td>
<td>-.038</td>
</tr>
<tr>
<td>Developmental</td>
<td>-.084</td>
<td>-.156</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>-.073</td>
<td>-.279 **</td>
</tr>
<tr>
<td>Rational</td>
<td>-.092</td>
<td>-.079</td>
</tr>
</tbody>
</table>

Note: **p<.01
6. Which Organizational Culture Perceptions (CVF) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

Forward multiple regression generated no significant model for organization culture perceptions with cognitive moral development (P score). A model did emerge when using the simple sum score with the hierarchy culture as the only predictor (see Table 10). This variable explained 8% of the variance ($R^2=.078$, $R^2_{adj}=.068$, $F(1,98)=8.279$, $p=.005$). Results reveal a negative regression coefficient, which indicates that as hierarchy increased, cognitive moral development decreased.

Table 10

Regression Coefficients of Culture Perceptions with Cognitive Moral Development (Simple Sum Score)

<table>
<thead>
<tr>
<th>Culture Perception</th>
<th>B</th>
<th>$\beta$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchy</td>
<td>-4.68</td>
<td>-.28</td>
<td>-2.88</td>
<td>.005</td>
</tr>
</tbody>
</table>

7. Which Meta-values (SVS), Value Types (SVS), and Organizational Culture Perceptions (CVF) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

Forward multiple regression was conducted with all meta-values, value types, and organization culture perceptions as possible predictors of cognitive moral development. Because meta-values are based on value types, three separate regression analyses were conducted to account for the different combinations between values and organization culture perceptions. The independent variables studied were first, meta-values and organization culture perceptions, second, value types and organization culture perceptions, and third, meta-values, value types, and culture perceptions. Each of these three sets of independent variables was then tested first as predictors of P scores and then as predictors of simple sum scores. For each analysis,
multicollinearity among the independent variables was evaluated through the analysis of
tolerance statistics. Of primary concern, was the third analysis in which meta-values and value
types would be included as independent variables. Since meta-values and value types data are
derived from the same instrument constructs and lack independence of observation, the
researcher predicted that multicollinearity would be a problem. However, all tolerance statistics
were well above 0.1 indicating that multicollinearity was not an issue.

The first analysis to predict cognitive moral development with a P score did not generate
a significant model from the independent variables of meta-values and organization culture
perceptions. When using these same independent variables to predict cognitive moral
development when measured by the simple sum score, a significant model was produced (see
Table 11). This model consisted of two variables, conservation (meta-value) and hierarchy
(organizational culture perception); $R^2 = .122, R^2_{\text{adj}} = .104, F(1,97) = 6.733, p = .001$. Although
significant, the model only accounted for approximately 12% of the variance. Analysis of
regression coefficients indicated that both meta-value conservation and organizational culture
perception hierarchy negatively explained cognitive moral development thus indicating as
conservation and hierarchy increased, cognitive moral development decreased.

Table 11

*Regression Coefficients of Meta-values and Culture Perceptions with Cognitive Moral Development (Simple Sum Score)*

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta-Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>-5.97</td>
<td>-.29</td>
<td>-2.96</td>
<td>.001</td>
</tr>
<tr>
<td>Culture Perception</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hierarchy</td>
<td>-3.51</td>
<td>-.21</td>
<td>-2.09</td>
<td>.040</td>
</tr>
</tbody>
</table>
The second analysis utilized value types and organizational culture perceptions as predictors of cognitive moral development when measured by the P score. Results indicate a significant model that consisted of only one variable, the value type security; $R^2=.044$, $R^2_{adj}=.034$, $F(1,98)=4.470$, $p=.037$. Table 12 indicates the significance of the model, however, the model only accounted for approximately 4% of the variance. Analysis of regression coefficients indicated that security positively explained cognitive moral development thus indicating as security increased, cognitive moral development increased.

Table 12

| Regression Coefficients of Value Types and Culture Perceptions with Cognitive Moral Development (P Score) |
|-------------------------------------------------|-------|--------|-----|
| Value Type                                      | $B$   | $\beta$ | $t$ | $p$  |
| Security                                       | 2.52  | .21    | 2.11| .037 |

When considering value types and organization culture perceptions as predictors of cognitive moral development as measured by the simple sum score, a significant model was generated (see Table 13). This model consisted of three variables, hierarchy (culture perception), achievement (value type), and power (value type); $R^2=.192$, $R^2_{adj}=.167$, $F(1,96)=7.62$, $p=.001$. Although significant, the model only accounted for approximately 19% of the variance. Analysis of regression coefficients indicated that hierarchy and power negatively explained cognitive moral development while achievement positively impacted it.
Finally, when all three sets of independent variables were considered as predictors of the P score, the same model emerged as when value types and culture perceptions were used as the independent variables (see Table 14). This model included only the value type of security. The resulting statistics duplicated the earlier model; $R^2=.044$, $R^2_{adj}=.034$, $F(1,98)=4.470$, $p=.037$. As before, the more security is valued, the higher the P score measure.

Table 14

Regression Coefficients of Meta-Values, Value Types and Culture Perceptions with Cognitive Moral Development (P Score)

<table>
<thead>
<tr>
<th>Value Type</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>2.52</td>
<td>.21</td>
<td>2.11</td>
<td>.037</td>
</tr>
</tbody>
</table>

When all three categories of independent variables (meta-values, value types, and culture perception) were used as predictors of the simple sum score, a significant model was produced that contained three variables: conservation (meta-value), benevolence (value type), and achievement (value type); $R^2=.162$, $R^2_{adj}=.136$, $F(1,96)=6.179$, $p=.001$ (see Table 15). Although significant, the model only accounted for approximately 16% of the variance. Analysis of regression coefficients indicated that conservation negatively explained cognitive moral development while benevolence and achievement positively impacted it. Interestingly, no culture
perceptions were entered into the model to predict cognitive moral development (simple sum score).

Table 15

Regression Coefficients of Meta-Values, Value Types and Culture Perceptions with Cognitive Moral Development (Simple Sum Score)

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta-Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>-5.13</td>
<td>-.25</td>
<td>-2.60</td>
<td>.011</td>
</tr>
<tr>
<td>Value Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td>3.93</td>
<td>.21</td>
<td>2.28</td>
<td>.025</td>
</tr>
<tr>
<td>Achievement</td>
<td>4.11</td>
<td>.20</td>
<td>2.08</td>
<td>.041</td>
</tr>
</tbody>
</table>

8. Are there Significant Group Differences (Gender, Age, Level within the organization (Executive, Mid-level, and Entry Level Management), Organization size, and Industry (Government, Not-for-profit, and Retail/Service) among Meta-values, Value Types, Organizational Culture Perception and Cognitive Moral Development?

Group differences in meta-values, value types, organizational culture perceptions, and cognitive moral development were examined using t-test of independent samples and analysis of variance (ANOVA).

Gender. The sample was composed of 100 respondents, 48 men and 52 women. T-test results along with group means and standard deviations are presented in Table 16. One significant difference was found between genders relative to the meta-value self-transcendence. Women scored a higher mean of .60 while the mean for men was .33. Results indicate that there were no gender differences in value types, organizational culture perceptions, or cognitive moral development as measured by either the P score or the simple sum score.
Table 16

**Gender Differences**

<table>
<thead>
<tr>
<th></th>
<th>Males (n=48)</th>
<th>Females (n=52)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meta-values</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to Change</td>
<td>-.15 .57</td>
<td>-.08 .90</td>
<td>-.47</td>
<td>.642</td>
</tr>
<tr>
<td>Conservation</td>
<td>-.16 .57</td>
<td>-.39 .75</td>
<td>1.71</td>
<td>.090</td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td>-.717 .76</td>
<td>-.82 .66</td>
<td>.70</td>
<td>.485</td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>.329 .69</td>
<td>.60 .56</td>
<td>-2.17</td>
<td>.033</td>
</tr>
<tr>
<td><strong>Value types</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>.31 .77</td>
<td>.14 .90</td>
<td>1.02</td>
<td>.312</td>
</tr>
<tr>
<td>Tradition</td>
<td>-.89 .96</td>
<td>-1.13 1.14</td>
<td>1.15</td>
<td>.253</td>
</tr>
<tr>
<td>Benevolence</td>
<td>.74 .72</td>
<td>.98 .79</td>
<td>-1.58</td>
<td>.118</td>
</tr>
<tr>
<td>Universalism</td>
<td>-.08 .98</td>
<td>.22 .90</td>
<td>-1.60</td>
<td>.114</td>
</tr>
<tr>
<td>Self-direction</td>
<td>.45 .74</td>
<td>.59 .79</td>
<td>-88</td>
<td>.381</td>
</tr>
<tr>
<td>Stimulation</td>
<td>-.75 .87</td>
<td>-.74 1.39</td>
<td>-02</td>
<td>.984</td>
</tr>
<tr>
<td>Hedonism</td>
<td>-.39 1.14</td>
<td>-.51 1.07</td>
<td>.54</td>
<td>.592</td>
</tr>
<tr>
<td>Achievement</td>
<td>.16 .67</td>
<td>.28 .68</td>
<td>-88</td>
<td>.380</td>
</tr>
<tr>
<td>Power</td>
<td>-1.60 1.14</td>
<td>-1.91 .96</td>
<td>1.51</td>
<td>.135</td>
</tr>
<tr>
<td>Security</td>
<td>.11 .68</td>
<td>-.17 .91</td>
<td>1.70</td>
<td>.093</td>
</tr>
<tr>
<td><strong>Culture Perception</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>3.00 .84</td>
<td>3.12 .90</td>
<td>-690</td>
<td>.492</td>
</tr>
<tr>
<td>Developmental</td>
<td>3.04 .82</td>
<td>3.08 .84</td>
<td>-231</td>
<td>.832</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>3.05 .92</td>
<td>3.12 .77</td>
<td>-372</td>
<td>.711</td>
</tr>
<tr>
<td>Rational</td>
<td>3.25 .88</td>
<td>3.40 .69</td>
<td>-980</td>
<td>.329</td>
</tr>
<tr>
<td><strong>Cognitive Moral Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Score</td>
<td>33.26 9.65</td>
<td>34.55 10.05</td>
<td>-.65</td>
<td>.516</td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td>202.15 11.78</td>
<td>205.58 15.86</td>
<td>-1.23</td>
<td>.220</td>
</tr>
</tbody>
</table>

*Age.* Age was reported by birth year. Due to the nature of the sample and to gain adequate numbers for analysis of categories, age was defined as those born in years up to and including 1965 (Baby Boomers, n=50) and those born in 1966 or later (Post-Baby Boomers, n=50). T-test results along with group means and standard deviations are presented in Table 17. Results indicate that there were no significant differences between Baby Boomers and Post-Baby Boomers in meta-values, value types, organizational culture perceptions, or cognitive moral development as measured the simple sum score. However, there was a significant age difference
in P score measures \((p<.05)\). The younger group, Post-Baby Boomers, had a higher P score mean of 35.97 compared to the Baby Boomer P score mean of 31.90. Although not significant, Post-Baby Boomers also had a higher simple sum score mean of 205.94 compared to the Baby Boomer simple sum score mean of 201.92.

Table 17

**Age Differences**

<table>
<thead>
<tr>
<th></th>
<th>Baby Boomers (n=50)</th>
<th>Post-Baby Boomers (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Meta-values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to Change</td>
<td>-0.12</td>
<td>0.83</td>
</tr>
<tr>
<td>Conservation</td>
<td>-0.20</td>
<td>0.63</td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td>-0.87</td>
<td>0.70</td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>0.53</td>
<td>0.71</td>
</tr>
<tr>
<td>Value types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>0.31</td>
<td>0.78</td>
</tr>
<tr>
<td>Tradition</td>
<td>-0.98</td>
<td>1.08</td>
</tr>
<tr>
<td>Benevolence</td>
<td>0.92</td>
<td>0.78</td>
</tr>
<tr>
<td>Universalism</td>
<td>0.13</td>
<td>0.99</td>
</tr>
<tr>
<td>Self-direction</td>
<td>0.57</td>
<td>0.79</td>
</tr>
<tr>
<td>Stimulation</td>
<td>-0.81</td>
<td>1.26</td>
</tr>
<tr>
<td>Hedonism</td>
<td>-0.63</td>
<td>1.06</td>
</tr>
<tr>
<td>Achievement</td>
<td>0.14</td>
<td>0.69</td>
</tr>
<tr>
<td>Power</td>
<td>-1.88</td>
<td>1.03</td>
</tr>
<tr>
<td>Security</td>
<td>0.08</td>
<td>0.88</td>
</tr>
<tr>
<td>Culture Perception</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>3.13</td>
<td>0.92</td>
</tr>
<tr>
<td>Developmental</td>
<td>3.06</td>
<td>0.93</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>3.25</td>
<td>0.83</td>
</tr>
<tr>
<td>Rational</td>
<td>3.41</td>
<td>0.85</td>
</tr>
<tr>
<td>Cognitive Moral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Score</td>
<td>31.90</td>
<td>10.67</td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td>201.92</td>
<td>13.52</td>
</tr>
</tbody>
</table>

*Type of industry.* Type of industry was identified using three categories: retail/service, government, and not-for-profit. ANOVA was conducted to analyze industry differences in the studied variables. Table 18 illustrates that there significant group differences among the
industries studied in meta-values, value types, culture perceptions and cognitive moral
development when measured by simple sum score.

Table 18

Industry Differences

<table>
<thead>
<tr>
<th></th>
<th>Retail/Sales (n=34)</th>
<th>Government (n=35)</th>
<th>Not-for-Profit (n=31)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td><strong>Meta-values</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to Change</td>
<td>-10</td>
<td>.75</td>
<td>-12</td>
</tr>
<tr>
<td>Conservation</td>
<td>-.09</td>
<td>.58</td>
<td>-.21</td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td>-.78</td>
<td>.72</td>
<td>-.67</td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>.37</td>
<td>.68</td>
<td>.33</td>
</tr>
<tr>
<td><strong>Value types</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>.52</td>
<td>.76</td>
<td>.28</td>
</tr>
<tr>
<td>Tradition</td>
<td>-.98</td>
<td>1.09</td>
<td>-1.08</td>
</tr>
<tr>
<td>Benevolence</td>
<td>.83</td>
<td>.78</td>
<td>.73</td>
</tr>
<tr>
<td>Universalism</td>
<td>-.10</td>
<td>1.02</td>
<td>-.08</td>
</tr>
<tr>
<td>Self-direction</td>
<td>.55</td>
<td>.82</td>
<td>.55</td>
</tr>
<tr>
<td>Stimulation</td>
<td>-.74</td>
<td>1.13</td>
<td>-.80</td>
</tr>
<tr>
<td>Hedonism</td>
<td>-.34</td>
<td>1.08</td>
<td>-.049</td>
</tr>
<tr>
<td>Achievement</td>
<td>.16</td>
<td>.66</td>
<td>.28</td>
</tr>
<tr>
<td>Power</td>
<td>-1.72</td>
<td>1.12</td>
<td>-1.62</td>
</tr>
<tr>
<td>Security</td>
<td>.19</td>
<td>.75</td>
<td>.17</td>
</tr>
<tr>
<td><strong>Culture Perception</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>3.11</td>
<td>.81</td>
<td>2.74</td>
</tr>
<tr>
<td>Developmental</td>
<td>3.23</td>
<td>.73</td>
<td>2.74</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>3.20</td>
<td>.78</td>
<td>3.17</td>
</tr>
<tr>
<td>Rational</td>
<td>3.51</td>
<td>.62</td>
<td>3.11</td>
</tr>
<tr>
<td><strong>Cognitive Moral Development</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Score</td>
<td>34.36</td>
<td>10.53</td>
<td>34.81</td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td>199.40</td>
<td>12.13</td>
<td>204.20</td>
</tr>
</tbody>
</table>

Industry differences within meta-values were revealed for two of the sub-scales:

conservation and self-transcendence. The not-for-profit respondents had the lowest mean
(-.55) for the conservation meta-value \(p<.05\), while retail/service respondents had the highest
mean score of -.09. For the meta-value self-transcendence \(p<.01\), not-for-profit respondents
again had the highest mean (.59), while retail/service and government respondents had relatively similar mean scores of .37 and .33, respectively.

In regards to value types, there were significant differences for conformity, universalism, and security. Starting with the conformity value ($p<.01$), retail/service had the highest mean score (.52) and not-for-profit not only had the lowest mean score of the three industries (-.16), conformity actually was less important as indicated by a negative ipsatized mean score. At the $p<.05$ level of significance, universalism was scored positively by the not-for-profit respondents ($M = .44$) while it was scored negatively by both the retail/service (-.10 mean) and the government (-.08 mean) respondents. The third value type with significant group differences was security ($p<.01$). In regards to security, retail/service and government again scored the mean in the same but opposite direction to not-for-profit respondents. Retail/service and government mean scores for security were .19 and .17 while the not-for-profit mean score was -.51.

Significant industry differences were also revealed for the organizational culture perceptions of group and developmental cultures. In this case, there is greater commonality between the not-for-profit and retail/service groups, with mean group culture scores of 3.38 for not-for-profit and 3.11 for retail/service. Government respondents scored group culture at 2.74. As for the significance found with the developmental culture, a similar pattern appeared with not-for-profit and retail/service respondents scoring developmental culture at 3.24 and 3.23 respectively while government respondents scored it at 2.74.

Finally, there were significant group differences with cognitive moral development as measured by the simple sum score ($p<.05$). This time, the not-for-profit and government respondents scored higher mean values (208 and 204), while the retail/service organizations reported a mean of 199.
**Organization Size.** Group differences based on organization size were also examined. Company size was measured by number of employees and categorized into four groups. The sample included 32 organizations with 1-100 employees, 30 organizations with 101-1,000 employees, 9 organizations with 1,001-2,500 employees, and 29 organizations with more than 2,500 employees. Analysis of variance revealed significant group differences in specific meta-values, value types, culture perceptions, and cognitive moral development (see Table 19).

**Table 19**

**Organization Size Differences (Number of Employees)**

<table>
<thead>
<tr>
<th></th>
<th>1-100 Employees (n=32)</th>
<th>101-1,000 Employees (n=30)</th>
<th>1,001-2,500 Employees (n=9)</th>
<th>&gt;2,500 Employees (n=29)</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meta-values</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to Change</td>
<td>-.14 (.79)</td>
<td>-.13 (.77)</td>
<td>.00 (.72)</td>
<td>-.09 (.75)</td>
<td>.10</td>
<td>.960</td>
</tr>
<tr>
<td>Conservation</td>
<td>-.38 (.89)</td>
<td>-.08 (.56)</td>
<td>-.41 (.69)</td>
<td>-.32 (.48)</td>
<td>1.20</td>
<td>.313</td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td>-.98 (.71)</td>
<td>-.80 (.71)</td>
<td>-.62 (.65)</td>
<td>-.55 (.68)</td>
<td>2.14</td>
<td>.100</td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>.75 (.66)</td>
<td>.38 (.61)</td>
<td>.19 (.43)</td>
<td>.24 (.59)</td>
<td>3.47</td>
<td>.019</td>
</tr>
<tr>
<td><strong>Value types</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>.02 (.97)</td>
<td>.58 (.79)</td>
<td>-.03 (.79)</td>
<td>.15 (.66)</td>
<td>2.94</td>
<td>.037</td>
</tr>
<tr>
<td>Tradition</td>
<td>-.83 (1.20)</td>
<td>-.92 (.96)</td>
<td>-1.3 (1.07)</td>
<td>-1.24 (.99)</td>
<td>1.05</td>
<td>.373</td>
</tr>
<tr>
<td>Benevolence</td>
<td>1.17 (.65)</td>
<td>.84 (.90)</td>
<td>.24 (.56)</td>
<td>.75 (.64)</td>
<td>4.38</td>
<td>.006</td>
</tr>
<tr>
<td>Universalism</td>
<td>.32 (1.08)</td>
<td>-.08 (.98)</td>
<td>.14 (.71)</td>
<td>-.06 (.78)</td>
<td>1.22</td>
<td>.307</td>
</tr>
<tr>
<td>Self-direction</td>
<td>.60 (.79)</td>
<td>.31 (.76)</td>
<td>.50 (.67)</td>
<td>.66 (.75)</td>
<td>1.20</td>
<td>.316</td>
</tr>
<tr>
<td>Stimulation</td>
<td>-.89 (1.23)</td>
<td>-.57 (1.13)</td>
<td>-.50 (1.04)</td>
<td>-.84 (1.19)</td>
<td>.57</td>
<td>.639</td>
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<tr>
<td>Hedonism</td>
<td>-.83 (1.19)</td>
<td>-.25 (1.09)</td>
<td>.24 (.73)</td>
<td>-.47 (.99)</td>
<td>2.92</td>
<td>.038</td>
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<tr>
<td>Achievement</td>
<td>.14 (.77)</td>
<td>.23 (.61)</td>
<td>.059 (.39)</td>
<td>.35 (.70)</td>
<td>.66</td>
<td>.578</td>
</tr>
<tr>
<td>Power</td>
<td>-2.10 (1.91)</td>
<td>-1.83 (1.12)</td>
<td>-1.30 (1.09)</td>
<td>-1.44 (1.05)</td>
<td>2.75</td>
<td>.047</td>
</tr>
<tr>
<td>Security</td>
<td>-.33 (1.03)</td>
<td>.08 (.64)</td>
<td>.08 (.71)</td>
<td>.14 (.68)</td>
<td>2.19</td>
<td>.094</td>
</tr>
<tr>
<td><strong>Culture Perception</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>3.41 (.77)</td>
<td>3.08 (.82)</td>
<td>3.06 (1.03)</td>
<td>2.67 (.85)</td>
<td>3.95</td>
<td>.011</td>
</tr>
<tr>
<td>Developmental</td>
<td>3.36 (.70)</td>
<td>3.15 (.72)</td>
<td>3.17 (.88)</td>
<td>2.60 (.87)</td>
<td>5.14</td>
<td>.002</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>2.99 (.86)</td>
<td>3.16 (.76)</td>
<td>3.31 (1.09)</td>
<td>3.06 (.84)</td>
<td>.41</td>
<td>.744</td>
</tr>
<tr>
<td>Rational</td>
<td>3.40 (.71)</td>
<td>3.38 (.73)</td>
<td>3.28 (1.14)</td>
<td>3.21 (.82)</td>
<td>.36</td>
<td>.785</td>
</tr>
<tr>
<td><strong>Cognitive Moral Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Score</td>
<td>30.5 (9.6)</td>
<td>35.1 (8.2)</td>
<td>36.5 (10.4)</td>
<td>35.8 (10.9)</td>
<td>2.06</td>
<td>.110</td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td>205 (14.8)</td>
<td>200 (11.8)</td>
<td>197 (17.8)</td>
<td>208 (12.9)</td>
<td>2.82</td>
<td>.043</td>
</tr>
</tbody>
</table>
Only one meta-value—self-transcendence—was significantly different across the company size group. This difference indicated that the meta-value self-transcendence was greatest in the smallest companies ($M = .75$). The mean score was lower in all other sized organizations studied, measuring .38 to .19 to .24 in increasing company size order.

An analysis of value types revealed three significant group differences at the $p < .05$ level—conformity, benevolence, and hedonism. Organizations with 101-1,000 employees have the highest conformity mean of .58, with smaller organizations scoring .02, and larger organizations scoring -.03, and .15, respectively. Statistical significance for group differences on the measure of benevolence moved from 1.17, to .84, to .24, and .75 in increasing organization size; again, the smaller organizations held the highest relative value of this value type. Hedonism was also found to have significant group differences. Organizations with 100 or fewer employees scored this value type at -.83, again the most extreme score relative to other sized organizations in this study. Other hedonism mean scores were for organizations with more than 2,500 employees ($M = -.47$), 101-1,000 employees ($M = -.25$), and 1,001-2,500 employees ($M = .24$).

Significant group differences were also found with the organizational culture perceptions for two variables—group ($p < .05$) and developmental ($p < .01$) cultures. For the group culture, smaller organizations again had the greatest mean (3.41) and the means decreased as the organization size increased (3.08, 3.06, 2.67). In a closely similar pattern, developmental culture was rated the highest by smaller organizations (3.36) while larger organizations have generally decreasing scores for the developmental culture (3.15, 3.17, 2.60).

Concluding the analysis of group differences in organization size, there were significant results relative to the simple sum score of cognitive moral development ($p < .05$). In this case, the
largest organizations, those with more than 2,500 employees had the highest simple sum score of 208. The smallest organizations, those with 1-100 employees were second with a score of 205, followed by organizations with 101-1,000 employees (200) and 1,001-2,500 employees (197).

Managerial level. The final group difference studied was the managerial level of the respondent. There were 29 executives in the study along with 43 mid-level managers, 13 entry level managers, and 15 respondents who did not classify themselves as managers. The researchers decided to include this latter group in the analysis for several reasons. First, as market research panelists, all respondents were pre-qualified as being managers prior to being asked to participate in this study. Second, the question asked about managerial level and there may be individuals who are responsible for employment related decisions such as hiring or performance review, who work in “flatter” organizations and do not relate to hierarchy assumed with levels within an organization. Table 20, however, shows that there were no significant managerial level group differences for meta-values, value types, culture perception, or cognitive moral development.
Table 20

Managerial Level Differences

<table>
<thead>
<tr>
<th></th>
<th>Executive (n=29)</th>
<th>Mid-level (n=43)</th>
<th>Entry (n=13)</th>
<th>Non (n=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Meta-values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to Change</td>
<td>-.32</td>
<td>.68</td>
<td>.05</td>
<td>.812</td>
</tr>
<tr>
<td>Conservation</td>
<td>-.29</td>
<td>.74</td>
<td>-.30</td>
<td>.65</td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td>-.80</td>
<td>.72</td>
<td>-.67</td>
<td>.72</td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>.57</td>
<td>.72</td>
<td>.44</td>
<td>.60</td>
</tr>
<tr>
<td>Value types</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td>.14</td>
<td>.88</td>
<td>.22</td>
<td>.80</td>
</tr>
<tr>
<td>Tradition</td>
<td>-.78</td>
<td>1.07</td>
<td>-1.26</td>
<td>1.11</td>
</tr>
<tr>
<td>Benevolence</td>
<td>1.00</td>
<td>.93</td>
<td>.92</td>
<td>.65</td>
</tr>
<tr>
<td>Universalism</td>
<td>.14</td>
<td>.97</td>
<td>-.04</td>
<td>.95</td>
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<tr>
<td>Self-direction</td>
<td>.40</td>
<td>.73</td>
<td>.62</td>
<td>.76</td>
</tr>
<tr>
<td>Stimulation</td>
<td>-1.04</td>
<td>1.03</td>
<td>-.53</td>
<td>1.24</td>
</tr>
<tr>
<td>Hedonism</td>
<td>-.70</td>
<td>1.29</td>
<td>-.47</td>
<td>1.05</td>
</tr>
<tr>
<td>Achievement</td>
<td>.25</td>
<td>.68</td>
<td>.29</td>
<td>.72</td>
</tr>
<tr>
<td>Power</td>
<td>-1.85</td>
<td>1.08</td>
<td>-1.64</td>
<td>1.08</td>
</tr>
<tr>
<td>Security</td>
<td>-.24</td>
<td>.86</td>
<td>.14</td>
<td>.67</td>
</tr>
<tr>
<td>Culture Perception</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>3.38</td>
<td>.82</td>
<td>2.85</td>
<td>.81</td>
</tr>
<tr>
<td>Developmental</td>
<td>3.24</td>
<td>.82</td>
<td>2.91</td>
<td>.77</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>3.29</td>
<td>.76</td>
<td>2.94</td>
<td>.74</td>
</tr>
<tr>
<td>Rational</td>
<td>3.48</td>
<td>.82</td>
<td>3.30</td>
<td>.70</td>
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<tr>
<td>Cognitive Moral Development</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>P Score</td>
<td>31.1</td>
<td>9.7</td>
<td>34.4</td>
<td>9.8</td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td>203</td>
<td>14.1</td>
<td>205</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Summary

This study examined the relationship of meta-values, value types, and culture perceptions with cognitive moral development. A variety of statistical methods were utilized. Information is organized by research question; significant outcomes were found for all research questions. Five
significant correlations were identified in the study along with seven unique regression models and seventeen group differences.

A summary of results of the correlation and regression analyses, which addressed Research Questions 1-7, is presented in Table 21. Correlation findings indicated significant relationships between meta-values, value types, and culture perceptions with cognitive moral development, but only when cognitive moral development was measured with the simple sum score. No correlations were found when cognitive moral development was measured with the P score.

Only one regression model resulted when cognitive moral development was measured with the P score. The value of security significantly predicted cognitive moral development. Whether each of the independent variables was considered individually or were combined (meta-values and culture perceptions, value types and culture perceptions, or meta-values and value types and culture perceptions), the results created the same identical model.

When cognitive moral development was measured by the simple sum score, six regression models resulted depending upon the different combinations of variables used as predictors. The first and second research questions explored meta-values in relation and as predictors of cognitive moral development. Conservation was the only meta-value to be both correlated and a predictor of cognitive moral development when measured by the simple sum score. Self-transcendence was also correlated with the simple sum score.

The third and fourth research questions focused on the association and predictive ability of value types. In this case, tradition (part of the conservation meta-value) and benevolence (part of the self-transcendence meta-value) were both associated with and predictive of cognitive
moral development as measured by the simple sum score. Additionally, security (also part of the conservation meta-value) was also found to be predictive of the P score.
Table 21

Summary of Significant Findings from Research Questions 1-7, Correlations and Regression

Analysis

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Cognitive Moral Development</th>
<th>P Score</th>
<th>Simple Sum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is there a relationship between meta-values and levels of cognitive moral development for managers?</td>
<td></td>
<td></td>
<td>Conservation, Self-Transcendence</td>
</tr>
<tr>
<td>2. Which meta-values best predict levels of cognitive moral development?</td>
<td>No model was identified</td>
<td></td>
<td>Conservation</td>
</tr>
<tr>
<td>3. Is there a relationship between value types and levels of cognitive moral development for managers?</td>
<td></td>
<td></td>
<td>Tradition, Benevolence</td>
</tr>
<tr>
<td>4. Which value types best predict levels of cognitive moral development?</td>
<td>Security</td>
<td></td>
<td>Tradition, Benevolence</td>
</tr>
<tr>
<td>5. Is there a relationship between organizational culture perceptions and levels of cognitive moral development for managers?</td>
<td></td>
<td></td>
<td>Hierarchy</td>
</tr>
<tr>
<td>6. Which organizational culture perceptions best predict levels of cognitive moral development?</td>
<td>No model was identified</td>
<td></td>
<td>Hierarchy</td>
</tr>
<tr>
<td>7a. Which meta-values and organizational culture perceptions best predict levels of cognitive moral development (P Score)</td>
<td>No model was identified</td>
<td></td>
<td>Conservation, Hierarchy</td>
</tr>
<tr>
<td>7b. Which value types and organizational culture perceptions best predict levels of cognitive moral development?</td>
<td>Security</td>
<td></td>
<td>Hierarchy, Achievement, Power</td>
</tr>
<tr>
<td>7c. Which meta-values, value types, and organizational culture perceptions best predict levels of cognitive moral development?</td>
<td>Security</td>
<td></td>
<td>Conservation, Benevolence, Achievement</td>
</tr>
</tbody>
</table>
Analysis of organizational culture perception variables was the focus of research questions five and six. Hierarchy was the only variable identified in either the correlation analysis or the regression analysis and it was both related to and predictive of the simple sum score.

The seventh research question had 3 specific variations. The purpose of the seventh research question was to explore combinations of meta-values, values, and organizational culture perceptions and cognitive moral development in forward regression analysis. Research question 7a combined meta-values and organizational culture perceptions. The outcomes produced no model that predicted cognitive moral development when measured by the P score, however did produce a model that predicted cognitive moral development when measured by the simple sum score with conservation (meta-value) and hierarchy (organizational culture perception) as independent variables. Research question 7b combined values and organizational culture perceptions as independent variables. A model was produced with hierarchy (organizational culture perception), achievement (value), and power (value) as predictors of the simple sum score. It should be noted that this is the only model to begin with a culture variable as well as the only model to identify power as predictor variable. No model was produced to predict the P score based on this research question. Finally, research question 7c examined all three independent variables with cognitive moral development. All tolerance statistics were above .1, indicating that multicollinearity was not an issue for any of the variables.

Research Question 8 examined group differences in meta-values, value types, culture perceptions, and cognitive moral development based upon the grouping variables of gender, age, industry type, organizational size, and managerial level. Table 22 shows the seventeen group differences found in the study. Only one group difference was found between genders and only
one group difference was found between age groups. However, eight group differences were found when industry was analyzed and seven group differences were found when organization size was considered. No group differences were found in the analysis of managerial level.

Table 22

*Summary of Significant Findings from Research Question 8, T test and ANOVA (Groups with the highest means reported)*

<table>
<thead>
<tr>
<th>Meta-values</th>
<th>Gender</th>
<th>Age</th>
<th>Industry</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness to Change</td>
<td></td>
<td></td>
<td>Retail/Service</td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Enhancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Transcendence</td>
<td>Women</td>
<td></td>
<td>Not-for profit</td>
<td>1-100</td>
</tr>
<tr>
<td>Value types</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conformity</td>
<td></td>
<td></td>
<td>Retail/Service</td>
<td>101-1,000</td>
</tr>
<tr>
<td>Tradition</td>
<td></td>
<td></td>
<td></td>
<td>1-100</td>
</tr>
<tr>
<td>Benevolence</td>
<td></td>
<td></td>
<td>Not-for profit</td>
<td></td>
</tr>
<tr>
<td>Universalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Self-direction</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Stimulation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedonism</td>
<td></td>
<td></td>
<td></td>
<td>1,001-2,500</td>
</tr>
<tr>
<td>Achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
<td>Retail/Service</td>
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<tr>
<td>Security</td>
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</tr>
<tr>
<td>Culture Perception</td>
<td></td>
<td></td>
<td>Not-for profit</td>
<td>1-100</td>
</tr>
<tr>
<td>Group</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Developmental</td>
<td></td>
<td></td>
<td>Not-for profit</td>
<td>1-100</td>
</tr>
<tr>
<td>Hierarchy</td>
<td></td>
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<tr>
<td>Rational</td>
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<tr>
<td>Cognitive Moral</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P score</td>
<td></td>
<td></td>
<td>Post-Baby Boomers</td>
<td></td>
</tr>
<tr>
<td>Simple Sum Score</td>
<td></td>
<td></td>
<td>Not-for profit</td>
<td>+ 2,500</td>
</tr>
</tbody>
</table>

The only difference found between men and women out of all of the variables in this study was with the meta-value of self-transcendence. Women had significantly higher self-
transcendence scores than men. All other variables had no significant differences in regards to gender.

In researching meta-values, value types, organizational culture perceptions, and cognitive moral development, there was only one significant difference between people born before 1966 and people born after 1965. The difference was found in P score measures, where younger people (Post-Baby Boomers) had significantly higher P scores.

There were eight significant differences identified when industry was analyzed. Categories for analysis were retail/service, government, and not-for profit. The government category did not have the highest score in any of these analyses. The not-for profit group had the highest scores relative to the retail/service and government responses in measures of self-transcendence (meta-value), universalism (value type), group and developmental culture perceptions, and simple sum score measures. The retail/service group had higher scores in regards to conservation (meta-value), conformity (value type), and security (value type).

When organizations were divided into size categories as determined by number of employees, there were seven significant differences. Each of the four categories of organization size scored the highest in at least one of the variables of interest. Small organizations (1-100 employees) scored higher in self-transcendence (meta-value), benevolence (value type), and group and developmental culture perceptions. Small to medium size organizations (101-1,000 employees) scored highest in conformity (value type) while medium to large organizations (1,001-2,500 employees) scored highest in hedonism. Large organizations (more than 2,500 employees) scored highest in the simple sum score.

When managerial level was compared, no significant group differences were revealed in any of the variables; as such these results are not reported in Table 22.
The final chapter is Chapter V. Discussion and Results. It is composed of the findings, implications, and suggestions for future research and is organized by research question.
CHAPTER V. DISCUSSION AND RECOMMENDATIONS

This chapter provides a brief review of the study followed by a discussion of the findings. The discussion is organized by demographics followed by a discussion of each research question, then discussion of measurement of the P score versus the simple sum score and closes with recommendations for future research.

Review of the Study

Prominent politicians as well as academicians have raised the question of how to impact moral reasoning. “At this moment, America’s highest economic need is higher ethical standards…” (Former US President George W. Bush, 2002). That statement was made in the aftermath of the Enron and WorldCom fiascos in the early 2000s. Seven years later, newly elected US President Obama (2009) said in his inauguration speech “Our economy is badly weakened, a consequence of greed and irresponsibility on the part of some, but also our collective failure to make hard choices and prepare the nation for a new age.” These political leaders are joined by academic researchers who have also called for additional studies “to identify the factors that influence the levels of moral judgment used in the workplace” (Loviscky, Treviño, & Jacobs, 2007, p. 276).

The purpose of this study was to explore the relationships between values, organizational culture perceptions, and managerial moral reasoning. Data for this study were collected from 100 managers from a variety of industries and organizations through an online survey. Using a Likert-scale, the Schwartz Values Survey (SVS) (Schwartz, 1992) measured four meta-values and ten value types. A 12 item Likert-scale version of the Competing Values Framework (CVF) (Quinn and Rohrbaugh, 1983) was used to measure four different organizational culture perceptions. Cognitive moral development was assessed by the Managerial Moral Judgment Test
(MMJT) (Loviscky, Treviño, & Jacobs, 2007), which determined levels of moral reasoning using six workplace scenarios asking respondents to make a decision and then both rate and rank the decision criteria. Demographic data were also collected (industry, organization size, managerial level, gender, and year of birth). Two additional questions were also asked about generational identity for future research purposes. When taken together these questions combined to form the Values, Culture, and Managerial Morals (VCMM) survey for the purpose of exploring variables that impact managerial moral reasoning at work.

Discussion of the Research Findings

This study expanded the understanding of two variables that impact the level of moral reasoning in the workplace: values and organizational culture perceptions. Statistically significant results were found; however, the magnitude of importance for the results when interpreting effect size was generally low. Despite this limitation, the researcher believes that this study provides a contribution to understanding the factors that impact managerial moral judgment, an area of significant practical importance. This study built upon previous research by Lan, Gowing, McMahon, Rieger, and King (2008), in which the relationship between personal values and moral reasoning was studied with an undergraduate business student sample. Because of the foundation established by the Lan, et al. study, it is referred to frequently in the latter portions of this chapter and called the “2008 study.” The results of the current study should be viewed with caution as the sample size for the study was 100 participants and discussion of group differences specifically should be viewed tentatively. The next section examines the demographics of the sample for the current study.
Demographics

The sample for this study consisted of 100 managers. It was a diverse sample in terms of gender, age, industry, number of employees, and respondent management level. Men made up 48% of the sample and women comprised the remaining 52%. The age of the respondents ranged from 24 to 66, with a mean of 43 years of age. Respondents were asked to give their year of birth and age was calculated by subtracting the year of birth from the year the study was completed. For purposes of analysis, age was categorized into two groups, those born after 1965 and those born in 1965 or earlier. The year 1965 was selected to delineate the two groups based on the generational divide that occurs between the baby boom generation born up to and including that year and the post-baby boomers born after that year. This resulted in 50 participants in each category. In regards to industry, 34 managers came from retail/service, 35 from government, and 31 from not-for-profit. The organizations of the participants varied in size: 32 had 1-100 employees, 30 had 101-1,000 employees, 9 had 1,001-2,500 employees and 29 had more than 2,500 employees. The managers themselves came from different levels within their respective organizations: 29 self-identified as executives, 43 as mid-level managers, 13 as entry level managers, and 15 as non-managers. (All participants were pre-qualified as holding positions that were responsible for supervising employees.) All respondents participated in the study on a voluntary basis with remuneration for completing the study from the market research company that supplied the sample. Overall, the sample provided data for all group variables of interest, with fewer replies from organizations with 1,001-2,500 employees (n = 9) and entry level managers (n = 13).

In comparison, the 2008 study sample was composed of 131 undergraduate business students (66 male and 64 female and one non-response to the gender question) with an average
age of 25 and 1.82 years of work experience. There are several notable differences between the samples of the present and 2008 studies. Although both studies were comprised of approximately 50% male and 50% female respondents interested in business as a profession, the average age of the present study participants was 18 years greater than the 2008 study and represented individuals who were currently employed in actual managerial positions rather than undergraduate students. Participants in the current study were representative of managers who were actively making decisions in the workplace. Beyond differences in the demographics of the sample, the 2008 study also measured moral reasoning with the DIT 2 instrument. Given the efforts to isolate variables that impact moral reasoning in the workplace, moral reasoning in the present study was measured with the Managerial Moral Judgment Test. The difference in assessments is also significant given past research which indicates that people reason at different levels when faced with personal versus workplace scenarios (Weber, 1991). A discussion of the responses from managers to each of the research questions follows.

1. *Is there a Relationship between Meta-values (SVS) and Levels of Cognitive Moral Development (MMJT) for Managers?*

A relationship was found between two of the four meta-values and cognitive moral development as measured with the simple sum score. The association was in a positive direction with self-transcendence (p<.05) and a negative direction with conservation (p<.01). A rank ordering of meta-values from highest to lowest importance of the mean ipsatized scores was self-transcendence (.47), openness to change (-.11), conservation (-.28), and self-enhancement (-.77). The 2008 study did not analyze meta-values; however, based on analysis of value types, it did recommend that further research explore the relationship between two of the meta-values: self-transcendence and self-enhancement.
In the O’Fallon and Butterfield’s (2005) review of ethical decision making literature, relative to philosophy/value orientation and moral judgment, the most consistent findings involved positive relationships with idealism (Forsyth, 1980) and deontology. Idealism is the belief that “right” actions will lead to desirable outcomes as opposed to “right” actions which may lead to desirable outcomes, but may also lead to undesirable outcomes as well. Deontology involves “duty-based” ethics where what is right is not based on consequences such as the greatest good, but rather on absolute rules. At this point, no studies have been identified that map idealism or deontology with the four meta-values of the SVS and of the 42 studies considered by O’Fallon and Butterfield, fewer than 10% utilized the Rokeach Value Survey and none of them utilized the Schwartz Value Survey itself.

Self-transcendence values are universalism (understanding, appreciation, tolerance, and protection for the welfare of all people and for nature) and benevolence (preservation and enhancement of the welfare of people with whom one is in frequent personal contact) (Schwartz, 1992). As a meta-value, self-transcendence focuses on a concern for the welfare of others (Schwartz, 1992). In a review of moral reasoning studies using the DIT or MJI and Rokeach or Schwartz values measures, Helkama (2003) identified 13 positive associations with universalism and 4 positive associations with benevolence. Kohlberg (1984) explained that the highest levels of moral reasoning are reached in stage 5 with an emphasis on social contracts, a legalistic orientation, and utilitarianism and in stage 6 with a universal-ethical-principle orientation. Placing high levels of importance on self-transcendence would be consistent with providing the greatest good for the greatest number of people, a defining element of post-conventional reasoning in stages 5 and 6. Findings in the current study indicate that managers who place a
high level of importance on self-transcendence are associated with having higher levels of moral reasoning in workplace settings.

Conservation, composed of the values of security, tradition, and conformity, emphasizes maintaining the status quo and avoiding threat. Placing a high level of importance on conservation is associated with lower levels of moral reasoning. At the pre-conventional lower levels of moral reasoning, decisions are based on consequences such as the avoidance of threats or punishments. Placing a low level of importance on conservation would indicate a willingness to take some risk, the potential to go against tradition and to not conform to a group for the sake of conformity. Consistent with the negative correlation, post-conventional levels of moral reasoning specifically involve self-determination of values and principles, regardless of membership with groups.

Reflecting on the Schwartz (1992) circumplex model, the two meta-values that are associated with moral reasoning in the present study are located adjacent to each other. The circumplex model is empirically designed to indicate the relationship of meta-values and values to each other. Meta-values that are closer to one another in the model are more closely related, while meta-values that are opposing have greater conflict with each other. It is interesting to note that the opposing meta-values on the circumplex model do not show correlations with moral reasoning in the present study. The opposing meta-value to self-transcendence is self-enhancement. Self-enhancement includes the values of power and achievement and indicates a preference to pursue one’s own interests. The opposing meta-value to conservation is openness to change defined by values of self-direction and stimulation, and indicates a general welcoming of change and encouraging a pursuit of new ideas and experiences. In the current study there was no association found between self-enhancement or openness to change and moral reasoning. This
finding suggests that opposing meta-values may be unique and separate constructs rather than opposing ends of a single continuum as defined on the Schwartz circumplex model.

2. Which Meta-values (SVS) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

Moving beyond correlation analysis to regression, only the meta-value of conservation was found to predict managerial moral reasoning using the simple sum score. Consistent with the correlation analysis, conservation predicts moral reasoning in a negative direction. Again, conservation is composed of the values of security, tradition, and conformity, and emphasizes maintaining the status quo and avoiding threat. Historically, many managers have focused on command and control models of engaging employees (the “Do it or else” model) (Randolph & Sashkin, 2002). In organizations today, economic forces and technology are encouraging wider spans of control and decentralized decision making (Lawler & Galbraith, 1993), both of which place trust in the ability of managers to model and make good (and moral) choices. Management theorists beginning as early as Follet in the early 20th century have recognized the potential to lead using a “pull vs. push” strategy. Particularly when managers are being asked to make more decisions, the implication is that managers who value conservation at lower levels will make workplace decisions using higher levels of moral reasoning based on individual rights and fairness.

Avoidance of threats is characteristic of pre-conventional reasoning (Kohlberg, 1984). Decisions based on loyalty to groups, actively maintaining, supporting, and justifying order, and identifying with the persons or groups are characteristic of conventional reasoning. There have been many studies on the effectiveness of ethics training as a means of supporting higher levels of moral reasoning. Antes, Murphy, Waples, Mumford, Brown, Connelly, and Devenport (2009)
found in a meta-analysis that overall ethics instruction was modestly effective; however, the impact of the instruction was related to several different program factors. An implication from the conservation findings in the present study is that ethics training may be more effective when there is an emphasis on critical thinking and values clarification. According to the findings in the present study, values that are upheld for the sake of loyalty and purely on the basis of acceptance of customs do not lead to higher levels of moral reasoning; higher levels of moral reasoning require an autonomous commitment to principles such as justice.

Managerial decisions include who to hire or promote, and compensation or bonus levels. Research indicates that female executives receive fewer promotions (Lyness & Judiesch, 1999) and that women make up only 15.7% of corporate officer positions and 5.2% of top earners in Fortune 500 companies as of 2002 (Jones, 2005). This phenomenon has been called the “glass ceiling” (Perrewe & Nelson, 2004). The “glass ceiling” is a barrier for advancement of an otherwise qualified person due to discrimination, placing limits not only on women, but others including people of color and people living with disabilities. These norms have been so prevalent that there are specific laws, such as Title VII of the Civil Rights Act, the Pregnancy Discrimination Act, and the Glass Ceiling Act itself, discouraging such practices. All the same, according to the U.S. Department of Labor (2006), women are still underrepresented among the highest earners. A manager with low levels of conservation may choose to not go along with the norms of hiring from the same networks that tend to promote white males over qualified females or other groups of qualified candidates.

The predictive relationship between conservation and cognitive moral development may also indicate that managers who value conservation highly may struggle when faced with ethical choices with implications for whistle blowing in the workplace. Whistleblowers are people who
raise concern about wrongdoing in an organization; by definition, they do not conform to norms of silence and they do risk retaliation when raising issues. Samuelson & Gentile (2005) points out the “bystander effect” which occurs when managers who are aware of moral wrongdoing do not intervene. Although whistleblowers are not necessarily managers, they do tend to be moderately powerful, relatively experienced, well-paid, high performing, and motivated by moral compulsion (Miceli & Near, 1984; Miceli, Near, & Schwenk, 1991; Miceli, Van Scortter, Near, & Rehg, 2001; Near & Miceli, 1996). The current study finding suggests that managers who do not value conservation highly may be more likely to make moral decisions and blow the whistle when they become aware of potential wrong doings at work.

3.  *Is there a Relationship between Value Types (SVS) and Levels of Cognitive Moral Development (MMJT) for Managers?*

Two value types were associated with cognitive moral development as measured by the simple sum score: benevolence and tradition. Average ipsatized value scores of the 10 value types ranged from a high of .86 to a low of -1.76. Consistent with the meta-value findings for self-transcendence, benevolence (a component of self-transcendence) was the value type of greatest importance ($M=.86$) in the sample. Self-enhancement was the meta-value with the lowest level of importance, and power, a component of self-enhancement, had the lowest level of importance ($M=-1.76$) among value types. The mean of the tradition value type (part of the conservation meta-value) was -1.01 and it was ranked as the 9th out of the 10 value types in terms of importance. Both the current study and the 2008 study found that the value type tradition ($p<.05$) was significantly negatively correlated with moral reasoning.

Benevolence is the preservation and enhancement of the welfare of people with whom one is in frequent personal contact (Schwartz, 1992). Concern for the welfare for others is
consistent with principles such as the Golden Rule, reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons. The association between benevolence and cognitive moral development found in the current study is in a positive direction. This result is consistent with previous research. Pohjanheimo (1988) found that helpfulness was positively correlated with DIT scores and Wilson (1983) found that responsibility was positively associated with DIT scores as well. For example, LaVan and Martin (2008) suggest that normative ethics models can be used to address workplace bullying. Benevolent managers, who are associated with higher levels of moral reasoning, may not be tolerant of harmful teasing or bullying that can occur based on the diversity of a workforce (Ayoko, Callan, & Hartel, 2003; Bagshaw, 2004; Heames, Garvey, & Treadway, 2006; Jehn, Northcraft, & Neale, 1999; Pelled, 1996). The benevolent manager cares and serves his/her employees in a fair and just way.

The tradition value type involves respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self. Tradition is a part of the conservation meta-value, which also had a negative relationship with cognitive moral development in the current study. The descriptive statistics indicate that tradition had the second lowest mean score of the 10 value types and, in addition, had the lowest minimum score in the range measurements. The acceptance of ideas (without critical thought) rather than the actual ideas themselves that are promoted by culture or religion is consistent with the negative association with moral reasoning.

In the workplace, managers who are appointed to director’s positions on company boards may consider the opportunity to represent the “pinnacle of their career” (Burgess & Tharenou, 2002). Boards of directors are responsible for representing the shareholders, to monitor and to
provide accountability within organizations (Economist, 2004). In this case, the acceptance of actions, policies, and procedures based on valuing tradition is associated with lower levels of moral reasoning. Corporate governance through the Board of Directors structure is based on the concept of oversight rather than acceptance of tradition and the results of this research question would suggest that a causal relationship between value types and moral reasoning should be further explored.

What is not clear to the author of the present study is the lack of association between universalism and moral reasoning. Universalism is understanding, appreciation, tolerance, and protection for the welfare of all people and for nature. As will be discussed later, there were no gender group differences in the universalism (or benevolence) value type; however, there were gender differences in the self-transcendence meta-value. It is worth questioning whether universalism is associated with conventional levels of reasoning that are not defined by the MMJT scoring procedures at this time.

4. Which Value Types (SVS) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

One model emerged with two values types as predictors of cognitive moral development when measured by the simple sum score. When tradition has a low level of importance and benevolence is held with a high level of importance, they will predict higher levels of moral reasoning. In sum, this model suggests that managerial decision making will use higher levels of moral reasoning when managers make decisions not based on tradition, but on concern for individual rights. The Ethics Resource Center provides ethics toolkit information, which focuses on codes of conduct and support for ethical decision making (Ethics Resource Center, 2009). The present study suggests that managers who clarify their values, and those particularly who
authentically value benevolence at a high level and tradition at lower levels, will not need the plethora of codes and polices in order to make moral decisions at work because ethical decisions will be driven intrinsically by “decision of conscience in accord with self-chosen ethical principles” (Kohlberg & Hersh, 1977, p. 55). This is not to say that ethics codes should one day become an historic artifact. Carasco and Singh (2003) find that codes of ethics are becoming standard communication tools of the largest global companies. On the contrary, ethics codes are evolving and research on a “new generation of corporate codes of ethics” indicates that more than 75% of corporations on the Global 500 and/or Fortune 500 have “third generation ethics codes” that reference interconnectedness with the environment, beyond legal corporate behavior and immediate stakeholders (Stohl, Stohl, & Popva, 2009). Some limitations of ethical codes are supported by findings of the Ethics Resource Center National Business Ethics Survey (2005), which indicated that even though there had been an increase in formal ethics programs (codes of ethics, ethics training, ethics hotlines, etc.), there had not been a corresponding decrease in misconduct. Higher moral reasoning scores (i.e., stages 5 and 6) come from values and principles that are autonomous, that is to say are apart from (but not necessarily in contradiction to) authority. Stage 5 reasoning recognizes clarity in and commitment to personal values that result in good for society and stage 6 reasoning involves valuing self-chosen universal principles. In contrast, stage 4 reasoning is a “law and order” perspective with respect for authority and fixed rules.

Given the relationship of values on Schwartz’s circumplex values diagram (see Chapter II), the value of tradition is opposed to the value of self-direction. With the negative correlation between tradition and moral reasoning, it would seem reasonable to expect a positive correlation between self-direction and moral reasoning. However, no correlation was found in the 2008
study or the current study between self-direction and moral reasoning. The researcher explains this by noting that self-direction is defined as independent thought and action-choosing, creating, exploring. By definition, self-direction does not involve an element of right or wrong and thus would not be associated with moral reasoning.

A second model emerged from the regression analysis; this one identified the value type of security as a predictor of P score. Security is defined by safety, harmony, and stability of society, of relationships, and of self. Interestingly, security is a part of the meta-value conservation. Previous findings in the current study indicated that the meta-value conservation (composed of tradition, conformity, and security) would negatively predict cognitive moral development; however, security itself had a positive predictive ability. This finding has interesting implications, particularly during stressful economic times when job security may be decreasing. According to these findings, a manager who values security will do everything possible to be fair and just (i.e., reason at higher moral levels). This finding raises questions regarding how managers handle decisions such as cutting costs. Would a manager who values security lay off employees, because in the long term it will maintain the greatest good for the greatest number who are able to maintain their employment if the organization stays in operation? Or would a manager who values security do everything possible to decrease expenses before considering layoffs because s/he values stability of relationships? Or would a manager who values security consider both of these options and/or others? Research by Pfeffer (1998) indicates that people centered organizations, such as those that provide greater job stability, have greater profitability.

The current study and the 2008 study have some consistent and some inconsistent findings involving regression analysis and value types. First, both studies found that tradition
negatively predicts cognitive moral development. It should be noted, however, that in the current study there was no model to predict the P score with tradition; rather the model predicted the simple sum score measurement. The 2008 study did not analyze the simple sum score results. In the current study, a Forward multiple regression was used in which all value types were considered as potential independent variables for the model. In the 2008 study, each value type was considered individually rather than in a Forward multiple regression. In addition, tradition in isolation was found to negatively predict the P score of cognitive moral development in the current study.

The 2008 study did not find a causal relationship between benevolence or security and cognitive moral development, as the current study did. Opposing the value of benevolence is the value of power. Power is the value of social status and prestige, and control or dominance over people and resources. Given the positive predictive ability of benevolence and cognitive moral development, it would be reasonable to expect a negative association between power and cognitive moral development. The current study did not find that correlation or regression model. However, the authors of the 2008 study did claim to find a negative regression model with power and moral reasoning ($p=.069$). Power does a play a role in the result of the current study; however, it will be discussed later as part of Research Question 7.

5. *Is there a Relationship between Organizational Culture Perceptions (CVF) and Levels of Cognitive Moral Development (MMJT) for Managers?*

The only organizational culture perception to be related to cognitive moral development for managers was the hierarchy culture. Organizations with hierarchy cultures are focused on efficiency and standardization. These practices are implemented through formalized policies and procedures to guide individuals’ behaviors. In these settings, it is understandable that there is a
negative relationship between the hierarchy culture and cognitive moral development because of the emphasis on following the rules. The rules in and of themselves can become the focus of the objective rather than the desired outcome.

For example, a manager in a hierarchy culture might follow the rules of a union contract to ensure that employees leave on time; however, the goal is that the product or service be delivered to the customer at the appropriate level of quality and on the agreed upon deadline. With the relationship found in this study, the rules of the organization would be associated with following the rules for the rules’ sake and potentially interfering with a manager’s moral judgment to decide what is just and fair. The results of this research question would suggest that a causal relationship between organizational culture perceptions and moral reasoning should be further explored.

6. Which Organizational Culture Perceptions (CVF) Best Predict Levels of Cognitive Moral Development (MMJT) for Managers?

The only organizational culture perception that is associated with cognitive moral development is also the only one to predict it in the current study. The hierarchy culture predicts levels of cognitive moral development, measured by the simple sum score, in a negative direction. None of the other culture perceptions (group, developmental, or rational) were part of a regression model. The implication for organizations who desire managers to use higher levels of moral reasoning is to rely less heavily on policies, rules, and standardization than they currently do. A tremendous amount of research activity has focused on ethics codes, a form of policy that is present in many organizational cultures, including hierarchy. This finding adds to the research indicating that the growth in ethics codes has not decreased unethical practices (Webley & Werner, 2008). Webley and Werner (2008) and others (ERC, 2005; Treviño, Weaver,
Gibson, & Toffler, 1999) have emphasized that the “tone at the top” is critical to ensuring ethical behavior. The findings show that hierarchy cultures do not drive higher levels of moral reasoning by managers, and therefore, do not encourage managers to demonstrate an ethical “tone at the top” through ethical decision making.

Standardized procedures create uniformity in products or services. These norms would tell organizational members that what is right is determined by compliance, a concept more consistent with conventional rather than post-conventional reasoning (Kohlberg, 1969). Implications for bureaucratic organizations, such as most government agencies, are concerning. The author hypothesizes an analogy with cognitive evaluation theory (Deci and Ryan, 1985). Cognitive evaluation theory states that increasing extrinsic motivators for behaviors results in decreasing intrinsic motivation for the same behaviors. In the case of the negative impact of hierarchy culture on moral reasoning, the more external rules are used to guide behaviors, the less internal/autonomous moral principles are utilized. Further understanding of this theory is needed as it may be in direct contradiction to the behaviors of the US government and the creation of the Sarbanes Oxley legislation, for example.

It is interesting to note that the rational culture did not predict moral reasoning by managers in either direction. Rational cultures are similar to hierarchy cultures in that they both emphasize stability and control; however, a rational culture has an external stakeholder focus as opposed to the internal focus of the hierarchy culture. Rational cultures are focused on interactions with customers, suppliers, and others and measure success by the bottom line and gains in market share. Given the public and political outcry over ethical breaches by businesses in particular, this finding supports that a rational culture is not inherently unethical.
This research question took a very different direction from past research involving culture and ethics in the workplace. The 2008 study did not consider organizational culture variables (and it may not have been appropriate given the design of that study). The researcher for the current study chose to explore the relationship between organizational culture as measured by a “general” organizational culture construct, rather than instruments established to explicitly measure ethical culture. This approach extends the research in understanding cognitive moral development of managers by considering organizational culture as a parsimonious tool, one that may drive not only organizational effectiveness and organizational change, but also moral reasoning. The design of the study measured perceptions of organizational culture by assessing individuals from multiple organizations regarding their own organization’s culture, rather than an assessment of multiple individuals from the same organization. Results indicate that further research should be done to further explore the relationship between organizational culture and moral reasoning.

7. Which meta-values (SVS), value types (SVS), and organizational culture perceptions (CVF) best predict levels of cognitive moral development (MMJT) for managers?

Meta-values and Organizational Culture Perceptions. When meta-values and culture perceptions were analyzed together to predict cognitive moral development, a model emerges suggesting that managers who highly value conservation and work in hierarchical cultures will use lower levels of moral reasoning. The concept of cognitive dissonance would indicate that individuals who prefer security and conformity in particular would gravitate towards organizations that provide clear rules for members to conform to, where attitudes and behaviors would be consistent. This theory could be tested empirically in future research. Future research could also explore the association between the meta-value conservation and the individual trait
of locus of control. It has already been demonstrated that individuals with an external locus of control tend to use lower levels of moral reasoning (Gephart, Harrison, & Treviño, 2007).

*Value Types and Organizational Culture Perceptions.* Two regression models were generated when value types and organizational culture perceptions were considered as independent variables. The first model was predictive of the P score while the second was predictive of the simple sum score.

The first model generated had one variable, security. This model was first generated by Research Question 4, which asked which value types best predict cognitive moral development when measured by the P score. The model generated for Research Question 4 is identical to the model generated here, where value types and organizational culture perceptions were analyzed. The discussion from the previous analysis of the model holds true in this case too. None of the organizational culture perceptions loaded onto this model. An implication is that regardless of organizational culture (group, developmental, hierarchy, or rational), managers who place a high level of importance on security will use higher levels of moral reasoning.

When value types and organizational culture perceptions were analyzed, a second model was generated that contained the combined variables of hierarchy (culture), achievement (value type) and power (value type). The difference between this model and the previous one is that this model is predictive of the simple sum score. Recall that hierarchy cultures value consistency and efficiency, and rules and standardized procedures to encourage uniformity. Achievement is a value that has not been discussed yet in this chapter. It represents valuing personal success through demonstrating competence according to social standards. The third variable in the model is power, defined as social status and prestige, control or dominance over people and resources.
When dissecting the hierarchy, achievement, power model, hierarchy and power predict in a negative direction, and achievement predicts in a positive direction. Achievement and power are not significantly related to moral reasoning on their own; however, hierarchy was shown to have a negative correlation and independently to predict moral reasoning (see Research Question 5). This analysis did not consider meta-values; however, achievement and power are the two values that make up self-enhancement. Self-enhancement as a meta-value was not correlated nor was it found to predict either measure of cognitive moral development.

Having already discussed hierarchy, the negative impact of power on moral reasoning deserves some additional consideration. Power is measured by the scale items: Social power (control over others, dominance), Wealth (material possessions, money), Authority (the right to lead or command), and Preserving my public image (protecting my “face”). All of these items stress an unequal control of resources, contrary to working with others in a fair way. If power is defined as a means to serve self-interests, there is a trade-off with mutuality of interests as well as climates of openness, cooperation and trust (Kreitner and Kinicki, 2007). Power, as defined by French and Bell (1959), is recognized to have multiple facets: reward, coercive, legitimate, expert, and referent. Power, as defined by in this study, is a much narrower construct, and not necessarily in alignment with expert or referent power, which are more relational in nature. This study points to the importance of defining power for managers in the broader framework (including all types of power); the cost of encouraging power to be understood in the traditional framework (social power, wealth, authority, and preserving public image) comes with the cost of deficiencies in moral reasoning.

With regards to achievement, it is defined as competence according to social standards. Ideas of getting ahead by “stepping on others” are not by definition achievement in the current
study. To be clear, the achievement value was measured by high levels of importance on the following scale items: Ambitious (hard-working, aspiring), Influential (having an impact on people and events), Capable (competent, effective, efficient), and Successful (achieving goals). If achievement is defined by standards, which have been critically examined and agreed upon by the whole society, it is consistent with and predictive of higher levels of moral reasoning. The cliché of “it’s a dog eat dog world” does not fit as a standard that has been critically examined under the lens of justice, fairness, and equity. In the same way, the “every man for himself” concept of getting ahead (achievement) does not fit.

Meta-values, Value Types, and Organizational Culture Perceptions. The last set of regression analyses considered meta-values, value types, and organizational culture perceptions combined as potential independent variables to predict cognitive moral development. In this case, one meta-value and two unrelated value types loaded onto the model predicting the simple sum score, but no organizational culture perception variables loaded. The model was made up of conservation, benevolence, and achievement. Each of these variables has already been reviewed relative to cognitive moral development earlier in this section.

The significance of this specific model is that it emphasizes the role of individual differences over culture in predicting cognitive moral development. The model indicates that a manager who values conservation at low levels and believes that benevolence and achievement are important will engage higher levels of moral reasoning. In other words, a manager who does not put a high priority on maintaining the status quo and avoiding threats, who is concerned with the welfare of people with whom s/he comes in frequent contact, and who also wants to gain personal success through competence according to social standards fits this model. In any of the cultures in this study, a manager such as the one previously described will use higher levels of
moral reasoning. Because this model focuses on personal values only, it has implications for
selection and training. Organizations seeking managers who will reason at high moral levels
would be well suited to hire and train for these qualities.

8. Are there Significant Group Differences (Gender, Age, Industry (Government, Not-for-profit,
and Retail/Service)), Organization Size, and Level within the Organization (Executive, Mid-level,
and Entry level Management), among Meta-values, Value Types, Organizational Culture
Perception and Cognitive Moral Development?

There are a number of significant group differences in the gender, age, industry, and
organization size categories. There were no significant group differences found in the categories
of Level within the organization. In general, group differences that were found in meta-values,
value types, and organizational cultures that did not have a relationship or were not predictive of
cognitive moral development are not discussed.

Gender. Women, more than men, were found to believe self-transcendence is of great
importance in the current study. These results find that women were more concerned with the
welfare of people; they understand, appreciate and protect others more than men do. This is a
personal (meta-) value. Using the circumplex model, female managers who value self-
transcendence highly may be in conflict with other managers who value self-enhancement
(power and achievement). Neither self-enhancement, power, nor achievement demonstrated
gender differences, so managers of either gender might find different value priorities with these
women.

Over time, there have been mixed research results in regards to gender differences in
moral reasoning (Barnett & Karson, 1989; Bussey & Maughan, 1982; Derry, 1989; Haan et al.,
1976; Holstein, 1976; Parikh, 1980; Schminke, 1997). Some researchers have posited that there
are no gender differences, but rather sex role differences (Terpestra, Rozell, & Robinson, 1993). Supporting that position, others have argued that enculturation or socialization, rather than biological gender, generates significant differences of moral reasoning (Eagly, 1987; Kracher & Marble, 2008). This study sampled managers. As such, managers are likely to have been acculturated in similar ways within their organizations and there were no gender group differences found in moral reasoning. It also speaks to the different roles women may be asked to play. The self-transcendence group difference is a difference of personal values. The lack of difference in managerial moral reasoning is a measure of cognitive moral development at work. This finding may be another facet of the role conflict or added stress from cognitive dissonance that women face as they have one set of personal values (self-transcendence) and a different set of values for moral reasoning at work. The research stream in this area should continue to be explored.

None the less, the “Kohlberg-Gilligan conflict” remains an active area of conversation regarding gender, and specifically a justice orientation versus care theory (see Donleavy, 2008; Fraedrich, Thorne, and Ferrell, 1994; Jorgensen, 2006). Of note, the instrumentation of the current study utilized the MMJT which was developed in part from the DIT and DIT 2, both Kohlberg based instruments. While concepts such as attachment (Reimer, 2005) and the Social Bonding Model (Hirschi, 1969) may link or bridge differences between Kohlberg (1969) and Gilligan (1977), at this time there is little evidence to support gender differences in managerial moral judgment.

Age. Many stereotypes about older workers exist: you cannot teach an old dog new tricks, older workers are more absent, etc. etc. What this study finds is that older workers, as defined by those born in and before 1965, have lower levels of moral reasoning as measured by the P score
than people born after 1965. The delineation of 1965 is based on commonly held understandings of the end of the “Baby Boomer” generation. Generational theory suggests that people are influenced by major environmental factors and can be grouped by generations with common values. The only age group difference was found in the P score measure, not in meta-values, value types, or organizational culture perceptions. This is the only group difference related to the P score. In addition, there were no correlations with the P score, and only one regression model was presented for the P score. Security is the only variable to predict moral reasoning with the P score and yet, there are no significant age group differences for security. The P score is calculated through a ranking process. Ranking is difficult because it requires concise decision making and is time consuming. Given the lack of age group difference for the value type security, a possible reason for the age difference outcome might be that younger people were better able or more willing to take the time to thoughtfully make concise distinctions between decision criteria in the survey instrument.

*Industry.* Several significant industry group differences emerged between retail/service, government, and not-for-profits. The differences occurred in conservation and self-transcendence meta-values; conformity, universalism, and security value types; group and developmental cultures; and the simple sum score. Discussion of group differences in constructs that were associated with or predictive of will be discussed further.

Conservation and security, where retail/service managers scored the greatest importance relative to the other industries, were predictive of cognitive moral development: conservation in a negative direction and security in a positive direction.

Retail/Service managers scored the lowest level of moral reasoning using the simple sum score, while not-for-profit managers scored the highest in the range. While the minimum scores
in the range for each industry were relatively similar (Retail/Service at 169, Government at 174, and Not-for-profit at 177), the maximum scores in the range varied (Retail/Service at 223, Government at 241, and Not-for-profit at 244). The means for each industry were: 195, 199, and 203, respectively. Managers who are looking for organizations that attract high moral reasoning would be well served to apply to not-for-profits. High moral reasoning at not-for-profits might also indicate that less oversight and regulation of managers is needed. Managers who reason at higher moral levels make decisions based on their own sense of principled reasoning, not because they are “rule followers.” This has recruiting implications particularly for not-for-profits. Frequently not-for-profits do not provide high levels of compensation relative to for-profit counterparts for their employees. However, a not-for-profit maybe able to distinguish itself to the talent pool by emphasizing the difference in moral reasoning of its managers. It has been suggested that there may be a future “talent war” as baby boomers retire and there are far fewer members of the upcoming millennial generation to replace them. Millennials are projected to be the next “Great Generation,” valuing service and community (Howe and Strauss, 2000). Not-for-profits may have a competitive advantage in recruiting these soon to be managers based on the findings of the present study; however, more research is needed.

*Organization Size.* Although there were seven significant group differences relative to group size, this section will only explore those that demonstrated differences relative to associations with or predictive ability of cognitive moral development. Group differences in self-transcendence, conformity, hedonism, and group and developmental culture were identified, but will not be explored. This section will discuss the organization size group differences relative to the value type benevolence and the simple sum score itself.
Benevolence was found to predict cognitive moral development when measured by the simple sum score and was found to have significant group differences relative to organization size. Managers in the smallest organizations in the study, those with 1-100 employees, placed the greatest importance on benevolence. This would be consistent with family atmospheres and caring for others. The mean for benevolence was markedly higher for managers in smaller organizations ($M=1.17$) and then dropped to $M=.84$ for managers in organizations with 101-1000 employees. Managers in organizations with 1,001-2,500 employees had a mean of .24 and managers in large organizations (more than 2,500 employees) had a mean of .75. A graph of the means would be a “u” shape, with the highest score for benevolence created by the managers of the smallest companies. Benevolence scores would fall for the second smallest group (101-1,000), then bottom out for the moderate size group (1,001-2,500 employees), and finally swing upward for the largest group (more than 2,500 employees). This curve suggests that caring for others by managers is greatest in smaller, familial settings. As organizations increase in size managers may become less personable and less benevolent, until managers in larger organizations reach a critical mass to once again break into and form small familial units. Again, the implication is that managers who do care for others (are benevolent) will also use higher levels of moral reasoning.

*Level within the Organization (Executive, Mid-level, and Entry level Management).*

There were no significant group differences found for managerial level in the current study. Existing research in this area has had mixed results. Barnett and Karson (1987) suggested that the higher levels of ethics in higher levels of management may have been a result of correlations between age and managerial level while Harris (1990) found that lower level managers were less tolerant of self-interest behaviors.
Measurement of Cognitive Moral Development: The P Score and the Simple Sum Score

The descriptive statistics for moral reassigning are provocative in the current study. The Managerial Moral Judgment Test (MMJT) (Loviscky, Treviño, & Jacobs, 2007) is based on the Defining Issues Test, as developed by Rest (1979). Rest (1979) has discussed several processes for calculating levels of moral reasoning, including the P Score (ranking), the simple sum score (rating), and two additional weighted sum scores. The P score has been reported to have reliability greater than .70. The authors of the MMJT provided scoring instructions for both the P score and simple sum score and the author of this study analyzed both measures.

The P score of moral reasoning is based on ranking the top four decision criteria in each of the six workplace scenarios. The simple sum score is based on a rating of each of 12 decision criteria. The decision criteria under consideration for both the rating and the ranking procedures are the same. Using the scoring directions provided by authors of the MMJT, the potential range for the overall P score is 0-100, while the potential range for the simple sum score is 72-360. The mean for the P score was 33.9 while the mean for the simple sum score was 203.9. These figures indicate a relatively lower level of moral reasoning using the P score measure compared to the simple sum score. In light of the appearance of inconsistency between the scores, the researcher of the current study calculated the correlation between the two scores and found that indeed, the P score and Simple score in this study were not correlated with each other (correlation = -0.098).

Alwin and Krosnik (1985) studied the strengths and weakness of rating versus ranking in the measurement of values. Although values are not the same as cognitive moral development, the assessment of measurement processes (rating versus ranking) may be generalizable. Because values (like cognitive moral development) inherently require comparisons and trade-offs, and by that nature involve choosing, there is a prevalence of values studies using ranking processes.
(Alwin & Krosnick, 1985; Feather, 1973; Kohn, 1977; Rokeach, 1973). However, ranking as a tool in survey research in general has a number of drawbacks. Ranking is difficult for respondents when there are a large number of items to be ranked (Rokeach, 1973). In addition, ranking is a time consuming process (Munson & McInyre, 1979) and presents a particular concern in lengthy data collection processes, as in the present study.

In contrast, rating tasks are purported to be less burdensome on respondents and to take one-third of the time that a ranking task would require (Munson & McInyre, 1979). However, as rating is an easier task, the resulting data may be less precise than ranking in regards to the relative distinctions between items (Feather, 1973). In addition, ratings are problematic due to individuals’ response styles (Berg, 1966; Block, 1965; Phillips, 1973), thus requiring the “ipsatizing” calculations for the values analysis used in this study.

Given the time and intellectual demands placed on respondents to the VCMM instrument in this study, data from the ranking process may be less valid than the rating data in the MMJT portion of the assessment. If this were the case, simple sum score results would receive greater emphasis. Given the ambiguity of the contextual impact on the ranking process, all P score as well as simple sum score calculations were included in the analysis. However, discrepancies presented by the results of the P scores and simple sum scores may be explained as well by the authors of the MMJT instrument who state that they find the simple sum score to be more reliable (Lovisky, Treviño, Jacobs, 2007).

Suggestions for Future Research

Several suggestions for future research have already been identified in the discussion section. The relationship between values, organizational culture perceptions, and cognitive moral
development is complex. The practical implications for understanding how to increase moral reasoning at work will impact individuals, organizations, and entire communities.

Research should attempt to replicate the results of this study. Given that some of the findings in this study are not consistent with the results of the 2008 Lan, et al. findings, more research is needed to explore the differences and to further understand moral reasoning of managers. The design of the current study was based off of the recent work by Lan, et al. (2008) and followed the definitions and direction of the 2008 study. However, future research should consider the directionality of the variables. Additional research should consider managerial moral judgment as the independent variable and values and organizational culture perceptions as the dependent variables in efforts to better understand the direction of the causality.

The current study explored various combinations of the independent variables (meta-values, values, and organizational cultural perceptions); however, an interactionist effect was not analyzed. Future research should draw from the findings of the interactionist model of Treviño (1986). An interactionist analysis may bring to light that both individual and contextual variables impact ethical behavior in an empirically different construct; adding to the findings of the current study which used forward regression analysis.

Additional research should consider not only organizational culture types, but also culture strength. Using the Competing Values Framework, culture strength is the degree of intensity that organizational members feel about different aspects of their organization. Using the CVF Likert instrument, a higher cumulative culture score would indicate a stronger culture – one that is evokes greater clarity describing an organization. A lower cumulative score on the CVF Likert instrument would indicate a lack of clarity about what describes the participant’s organization and thus a weaker culture (Yeung, Brockbank, and Ulrich, 1991). Expanding and clarifying
associations with culture measures that predict organizational effectiveness as well as moral reasoning would provide greater practical utility.

Given that the MMJT is a valid and reliable instrument, its usefulness would be increased if research was able to clarify the measures of pre-conventional, conventional, and post-conventional levels of reasoning. In addition, research exploring the veracity of the P score versus the simple sum score would be beneficial.

Given concerns of gender and/or sex bias in the cognitive moral development construct (Fraedrich, Thorne, and Ferrell, 1994; Kracher and Marble, 2008), as well as questions about the fundamental emphasis on justice (Fraedrich, Thorne, and Ferrell, 1994), the understanding of moral reasoning at work would benefit from the adaptation of other existing moral reasoning instruments to workplace settings and further testing of variables, including values and organizational culture perceptions.

This study focused on the “tone at the top” by attempting to better understand how values and organizational culture impact managerial moral judgment. Related research could explore antecedents to higher levels of moral reasoning of employees. The MMJT is designed to ask participants to make decisions about six managerial decisions, including issues of training expenditures, employee absences, and who to promote. If the MMJT adds value for organizations, a similar tool based on the DIT but using employee decisions might also be beneficial.

Longitudinal research by Helkama, Uutela, Pohjanheimo, Salminen, Koponen, & Rantanen-Vantsi (2003) consider that for medical students, increased stress may cause regression in moral reasoning motivation rather than a decrease in competence (regression) in moral reasoning. An implication for managers and moral reasoning is to test the hypothesis that
increased stress will encourage lower levels of moral motivation and not moral reasoning itself. The associations between stress and moral reasoning in the workplace should be considered.

One of the strengths of the current study is the documented validity and reliability of the instruments used to gather data. The VCMM instrument used in this study was made up of the Schwartz Values Survey (SVS), the Managerial Moral Judgment Test (MMJT), the Competing Values Framework (CVF), and demographic items. Specifically, the Schwartz Values Survey (1992) has been validated in over 70 different cultural groups (Schwartz, 1992, 2005a, 2005b; Schwartz & Boehnke, 2004). To validate the Managerial Moral Judgment Test (MMJT), Lovisky, Treviño, and Jacobs (2007) completed extensive research over two years, creating and testing the instrument with corporate ethics officers, human resource managers, and undergraduate and graduate students. The third component of the VCMM instrument of the current study is the Competing Values Framework (Quinn & Rohrbaugh, 1983). The validity of the CVF has been documented by Cameron and Freeman (1991), Kalliath, Bluedorn, and Gillespie (1999), Quinn and Spreitzer (1991), and Zammuto and Krakower (1991). It should be noted however, that the version of the CVF used in the VCMM study was developed by Yeung, Brockbank, and Ulrich (1991) and chosen for the current study because of its brevity and ease of understanding. This version of the CVF contained a total of 12 items; each of the four cultures was measured using 3 items (alphas ranged from .76 to .80). In addition, the 57 item Schwartz Values Survey (SVS) measured 10 values. The number of items that measured each value ranged from 3 to 8. For both the version of the CVF used in the current study and the SVS, additional research should consider the validity of concepts measured by small numbers of items. In addition, Howe and Strauss (1991, 1993, 1997, and 2000) have consistently argued that there are archetypal differences between generations. With a focus of this study on individual values and a
new generation (those born between 1982 and 2001) entering the managerial ranks, further research should be conducted to explore if the validity of the former three instruments of the VCMM remains unchanged.

Finally, future research should include predictive validity studies for managerial moral reasoning. There is some belief that people and organizations “do well by doing good” (Barret, 2007; Chen, 2007; IESE Business School University of Navarra, n.d.; Business of Good, 2009); however, there is still the concern that “nice guys finish last” (Durocher, 2009; Jensen-Campbell, Graziano, and West, 1995).

Conclusion

Research has not fully explored the relationship between values and cognitive moral development and has not fully explored the impact of various types of organization culture on moral reasoning at work. Given the calls for increased understanding of moral reasoning, particularly in the work place, questions about the relationship between values and organizational culture with moral reasoning are worth exploring. Because the values and organizational culture instruments have been validated in cross-cultural settings, the implications from this study are global.

Implications for these findings impact managerial reasoning in the retail/service, government, and not-for-profit industries regarding recruiting, hiring, compensation, and generally all employment related decisions. Principles of justice are at the heart of this study as the dependent variable. Justice, as the foundation for cognitive moral development, gives individuals the possibility to gain economic self-sufficiency and self-actualization. Hundreds of studies have been completed on the relationship between self-esteem and employment. (See Paul & Moser, 2006, for a meta-analysis.)
O’Fallon and Butterfield (2005), in *A Review of the Empirical Ethical Decision-Making Literature: 1996-2003*, called for future research to examine values to be studied as an individual difference in ethical decision making. Continuing this line of questioning, Lan, Gowing, McMahon, Rieger and King (2008) demonstrated eight significant outcomes between value types and levels of moral reasoning.

Findings of the study suggest that the personal values of managers and specific types of organizational culture do significantly drive moral reasoning in the workplace. Specific combinations of conservation, tradition, and power values as well as hierarchy cultures were demonstrated in the current study to predict lower levels of moral reasoning. In the other direction, managers who value specific combinations of benevolence, achievement, and security are predicted to reason at higher moral levels. The result that had the greatest practical significance for organizations was the regression model where hierarchy culture, achievement and power were combined ($R^2 = .192$). In this condition, organizations with hierarchy cultures and managers who value achievement and power, these organizations are predicted to see lower levels of moral reasoning at play.

Relevant significant group differences indicated that women do not reason at different levels than men at work. The younger generation of managers may utilize a higher level of moral reasoning than the older managers born in 1965 or earlier. In regards to industry, managers in not-for-profits utilize higher levels of moral reasoning than government and retail/service managers. Retail/service managers more highly value conservation which predicts lower levels of moral reasoning. That result many may be counterbalanced by the higher importance retail/service managers also place on security, which predicts higher levels of moral reasoning. Smaller organizations (1-100 employees) value benevolence the most, which predicts higher
levels of moral reasoning, however, large organizations (more than 2,500 employees) score the highest mean for moral reasoning at work.

Implications for these findings impact managerial reasoning in the retail/service, government, and not-for-profit industries regarding recruiting, hiring, compensation, and generally all employment related decisions. Over time, managers who reason at higher moral levels have the potential to not only begin to restore faith in the integrity of the corporate sector, but also in the government and not-for-profit sectors as well. A greater percentage of the talent pool may be able to stretch to their full capacities at work when discrimination issues such as the glass ceiling are handled by managers with higher moral reasoning as the decision makers. And in a global economy, the ability to make judgments at work based on the principles of justice may be beneficial for global citizenship.
REFERENCES


APPENDIX A: INSTRUMENT

Values, Culture and Managerial Morals

Kristine Hoover, Doctoral Candidate
Leadership Studies Program
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Email: hoover@bgsu.edu

Dear Manager,

I am a doctoral student in the Leadership Studies program at Bowling Green State University and invite you to participate in the research study that I am conducting for my dissertation. Your participation will be greatly appreciated and should take approximately 30 minutes to complete. The survey asks a variety of questions regarding the importance of certain values in your life as well as what decisions you would make in 6 workplace scenarios. Specifically, there are several parts to the survey:

- Values survey, with (2) lists,
- Managerial decisions survey, with (6) scenarios,
- Competing values survey, and
- Demographic information, such as your age, gender, etc.

Your participation is voluntary. The anticipated risks to you are no greater than those normally encountered in daily life. Your completion of this survey implies consent.

Your responses will be strictly confidential. I and my dissertation advisor will be the only people to view the raw data. Only summary data from all survey participants will be included in the final paper. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will not be disclosed. Findings will be presented in aggregate form only and no individual responses will be linked to any single respondent. Due to the Web-based nature of the survey, there exists a minimal chance that your responses could be intercepted during transmission by individuals not involved in this study. However, if you choose to participate, I will receive data in aggregate, electronic form and will not be able to trace responses back to individual participants. Your decision whether or not to participate will not impact your relationship with your company. If you decide to participate, you are free to discontinue participation at any time without penalty.

The data collected in this study will help us better understand how to encourage ethical decision-making at work. This increased understanding and awareness will not only help to improve leadership and management of companies, but will also support increased effectiveness and efficiency in organizations by discouraging the costs associated with unethical decisions made at work.
The survey will be administered beginning October 9, 2009. Please take the time to complete the survey now; if that is not possible, then at your earliest convenience.

Although it is my intent that no one else will see your individual responses, to further protect your confidentiality, please remember to clear your browser’s cache and page history after you submit the survey. Further, some establishments use tracking software to monitor keystrokes, mouse clicks, and web sites visited. So you may choose to complete the survey electronically in the comfort of your home computer.

If you have any questions regarding this study, please contact me, Kristine Hoover, at hoover@bgsu.edu or (419) 308-0571. You may also contact my dissertation chair, Dr. Rachel Vannatta, at rvanna@bgsu.edu or (419) 372-0451. If you have any questions regarding your rights as a research participant, please contact the chair of the Human Subjects Review Board at Bowling Green State University at (419) 372-7716 or hsrb@bgsu.edu.

Thank you for taking the time to provide us with this important information.

Sincerely,

Kristine Hoover
Leadership Studies Doctoral Student
Bowling Green State University

BGSU HSRB Approved for Use #H10O070GX2
Part A: VALUES SURVEY

In this questionnaire you are to ask yourself: “What values are important to ME as guiding principles in MY life, and what values are less important to me?” There are two lists of values on the following pages. These values come from different cultures. In the parentheses following each value is an explanation that may help you to understand its meaning.

Your task is to rate how important each value is for you as a guiding principle in your life. Use the rating scale below:

0--means the value is not at all important, it is not relevant as a guiding principle for you.
3--means the value is important.
6--means the value is very important.

The higher the number (0, 1, 2, 3, 4, 5, 6), the more important the value is as a guiding principle in YOUR life.

-1 is for rating any values opposed to the principles that guide you.
7 is for rating a value of supreme importance as a guiding principle in your life;

ordinarily there are no more than two such values.

In the space before each value, write the number (-1,0,1,2,3,4,5,6,7) that indicates the importance of that value for you, personally. Try to distinguish as much as possible between the values by using all the numbers. You will, of course, need to use numbers more than once.

AS A GUIDING PRINCIPLE IN MY LIFE, this value is:

opposed
values
-1
0
1
2
3
4
5
6
7

of
supreme
importance

Before you begin, read the values in List I, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values and rate it -1. If there is no such value, choose the value least important to you and rate it 0 or 1, according to its importance. Then rate the rest of the values in List I.
VALUES LIST I: AS A GUIDING PRINCIPLE IN MY LIFE, this value is:

<table>
<thead>
<tr>
<th></th>
<th>opposed to my values</th>
<th>not important</th>
<th>important</th>
<th>very important</th>
<th>of supreme importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EQUALITY (equal opportunity for all)</td>
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<tr>
<td>2</td>
<td>INNER HARMONY (at peace with myself)</td>
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<td>3</td>
<td>SOCIAL POWER (control over others, dominance)</td>
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<td>4</td>
<td>PLEASURE (gratification of desires)</td>
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<td>5</td>
<td>FREEDOM (freedom of action and thought)</td>
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<td>6</td>
<td>A SPIRITUAL LIFE (emphasis on spiritual not material matters)</td>
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<td>7</td>
<td>SENSE OF BELONGING (feeling that others care about me)</td>
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<td>8</td>
<td>SOCIAL ORDER (stability of society)</td>
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<td>9</td>
<td>AN EXCITING LIFE (stimulating experiences)</td>
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<td>10</td>
<td>MEANING IN LIFE (a purpose in life)</td>
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<td>11</td>
<td>POLITESNESS (courteous, good manners)</td>
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<td>12</td>
<td>WEALTH (material possessions, money)</td>
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<td>13</td>
<td>NATIONAL SECURITY (protection of my nation from enemies)</td>
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<td>14</td>
<td>SELF RESPECT (belief in one's own worth)</td>
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<td>15</td>
<td>RECIPROCATION OF FAVORS (avoidance of indebtedness)</td>
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<td>16</td>
<td>CREATIVITY (uniqueness, imagination)</td>
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<td>17</td>
<td>A WORLD AT PEACE (free of war and conflict)</td>
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<td>18</td>
<td>RESPECT FOR TRADITION (preservation of time-honored customs)</td>
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<td>19</td>
<td>MATURE LOVE (deep emotional &amp; spiritual intimacy)</td>
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<td>20</td>
<td>SELF-DISCIPLINE (self-restraint, resistance to temptation)</td>
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<td>21</td>
<td>PRIVACY (the right to a private sphere)</td>
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<td>22</td>
<td>FAMILY SECURITY (safety for loved ones)</td>
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<td>23</td>
<td>SOCIAL RECOGNITION (respect, approval by others)</td>
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<td>24</td>
<td>UNITY WITH NATURE (fitting into nature)</td>
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<td>25</td>
<td>A VARIED LIFE (filled with challenge, novelty and change)</td>
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<tr>
<td>26</td>
<td>WISDOM (a mature understanding of life)</td>
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<tr>
<td>27</td>
<td>AUTHORITY (the right to lead or command)</td>
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<td>28</td>
<td>TRUE FRIENDSHIP (close, supportive friends)</td>
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<td>29</td>
<td>A WORLD OF BEAUTY (beauty of nature and the arts)</td>
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</tbody>
</table>
30 SOCIAL JUSTICE (correcting injustice, care for the weak)
VALUES LIST II

Now rate how important each of the following values is for you as a guiding principle in your life. These values are phrased as ways of acting that may be more or less important for you. Once again, try to distinguish as much as possible between the values by using all the numbers.

Before you begin, read the values in List II, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values, or—if there is no such value—choose the value least important to you, and rate it -1, 0, or 1, according to its importance. Then rate the rest of the values.
VALUES LIST II: AS A GUIDING PRINCIPLE IN MY LIFE, this value is:

<table>
<thead>
<tr>
<th>Value Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>31</td>
<td>INDEPENDENT (self-reliant, self-sufficient)</td>
</tr>
<tr>
<td>32</td>
<td>MODERATE (avoiding extremes of feeling &amp; action)</td>
</tr>
<tr>
<td>33</td>
<td>LOYAL (faithful to my friends, group)</td>
</tr>
<tr>
<td>34</td>
<td>AMBITIOUS (hard-working, aspiring)</td>
</tr>
<tr>
<td>35</td>
<td>BROADMINDED (tolerant of different ideas and beliefs)</td>
</tr>
<tr>
<td>36</td>
<td>HUMBLE (modest, self-effacing)</td>
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<td>37</td>
<td>DARING (seeking adventure, risk)</td>
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<td>38</td>
<td>PROTECTING THE ENVIRONMENT (preserving nature)</td>
</tr>
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<td>39</td>
<td>INFLUENTIAL (having an impact on people and events)</td>
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<td>40</td>
<td>HONORING OF PARENTS AND ELDERS (showing respect)</td>
</tr>
<tr>
<td>41</td>
<td>CHOOSING OWN GOALS (selecting own purposes)</td>
</tr>
<tr>
<td>42</td>
<td>HEALTHY (not being sick physically or mentally)</td>
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<tr>
<td>43</td>
<td>CAPABLE (competent, effective, efficient)</td>
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<tr>
<td>44</td>
<td>ACCEPTING MY PORTION IN LIFE (submitting to life's circumstances)</td>
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<td>45</td>
<td>HONEST (genuine, sincere)</td>
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<td>46</td>
<td>PRESERVING MY PUBLIC IMAGE (protecting my “face”)</td>
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<tr>
<td>47</td>
<td>OBEDIENT (dutiful, meeting obligations)</td>
</tr>
<tr>
<td>48</td>
<td>INTELLIGENT (logical, thinking)</td>
</tr>
<tr>
<td>49</td>
<td>HELPFUL (working for the welfare of others)</td>
</tr>
<tr>
<td>50</td>
<td>ENJOYING LIFE (enjoying food, sex, leisure, etc.)</td>
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<tr>
<td>51</td>
<td>DEVOUT (holding to religious faith &amp; belief)</td>
</tr>
<tr>
<td>52</td>
<td>RESPONSIBLE (dependable, reliable)</td>
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<tr>
<td>53</td>
<td>CURIOUS (interested in everything, exploring)</td>
</tr>
<tr>
<td>54</td>
<td>FORGIVING (willing to pardon others)</td>
</tr>
<tr>
<td>55</td>
<td>SUCCESSFUL (achieving goals)</td>
</tr>
<tr>
<td>56</td>
<td>CLEAN (neat, tidy)</td>
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</tbody>
</table>
57 SELF-INDULGENT (doing pleasant things)
SCENARIO # 1 of 6

Alex is supervising an employee who used a sick day to take the previous day off from work. However, Alex has learned from the employee’s co-workers that the employee was not actually sick, but used the day as a “mental health” day. That is, the employee was not physically sick but felt tired mentally. Alex knows that the company’s sick leave policy does not allow for mental health days.

Should Alex reprimand the employee according to the company policy? (Check one)

_____ Should reprimand _____ Can’t decide _____ Should not reprimand

IMPORTANCE:

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<thead>
<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Issue:</th>
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<tbody>
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<td></td>
<td>1. Every time an employee escapes punishment for a policy violation, doesn’t that just encourage more violations?</td>
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<td>2. Was Alex a good friend of the employee?</td>
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<td>3. What is the value of health prior to society’s perspective on personal values?</td>
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<td>4. What values are going to be the basis for how companies treat their employees?</td>
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<td>5. Whether there is a law that requires employers to allow employees to take sick days for mental health problems.</td>
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<td>6. Whether reprimanding the employee or overlooking the transgression would be best for the company.</td>
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<td>7. Can society afford to let everybody take off work when they aren’t physically sick?</td>
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<td>8. Does the organization have the right to force their definition of health on their employees?</td>
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<td>9. Whether the policy in this case is interfering with an employee maintaining his/her health.</td>
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<td>10. How could anyone be so cruel as to reprimand an employee who needed a day off?</td>
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<td>11. Whether the employee’s co-workers are in favor of reprimanding the employee or not.</td>
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<td>12. What values Alex has set in his/her own personal code of behavior.</td>
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</tbody>
</table>

From the list of issues above, select the four most important:

Most important _____ 2nd most important _____ 3rd most important _____ 4th most important _____
SCENARIO #2 of 6
Kris has followed industry trends and decided that his subordinates would benefit greatly from a particular training program. In fact, Kris as much as promised these employees that they would receive the training in the near future. The employees were excited and looked forward to this developmental opportunity. At the time that Kris made that statement he felt that his budget would easily cover the training. However, upper management recently sent Kris and the other managers at his level a memo demanding increased efficiency over the next quarter, and outlining new rules saying funds could only be spent on essential functions. Kris believes that this focus on short-term goals would be detrimental to the long-term functioning of the unit that he manages because his subordinates would not be as knowledgeable as employees in competing companies.

Should Kris schedule the training? *(Check one)*

- [ ] Should schedule
- [ ] Can’t decide
- [ ] Should not schedule

### IMPORTANCE:

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<thead>
<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Issue:</th>
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<tbody>
<tr>
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<td></td>
<td></td>
<td>1. Whether Kris has a desire to develop the employees or cares more about what upper management might think.</td>
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<td>2. Isn’t it only natural for a supervisor to want to look out for his/her subordinates’ best interests that the supervisor would do what was possible to help them?</td>
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<td>3. What effect would delaying the training have on the employees’ ability to compete on a level-playing field?</td>
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<td>4. Whether Kris could make it appear like Kris scheduled the training before the memo with the new spending rules was sent.</td>
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<td>5. Would providing the training in the long run benefit more people to a greater extent?</td>
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<td>6. Whether Kris has experienced training Pomeranians.</td>
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<td>7. Would the employees lose faith in Kris if the training was not scheduled?</td>
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<td>8. Would sticking by her word be consistent with principles of fairness?</td>
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<td>9. Would Kris be following principles, which Kris believes, are above any form of company policy?</td>
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<td>10. Does Kris have any right to spend the company’s money as he/she sees fit?</td>
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<td>11. Did Kris promise that the employees would receive the training in this quarter, or did Kris just promise to provide training in the future?</td>
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<td>12. Does management have a right to make the rules about how the business should be run or not?</td>
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</table>
SCENARIO #3 of 6
Ray manages a unit in a company that calls itself a “total quality” organization. Part of the organization’s mission statement says that employees should strive to continually improve their performance. Lately, Ray’s unit has been extremely busy trying to get its work done on several important projects. Ray asked his boss for advice about how to meet all of the deadlines, and the boss basically told him that his unit would have to cut corners on quality in order to get everything done on time. The boss also told Ray that meeting deadlines is the best way to keep clients off their backs, and that the clients rarely complain about substandard work because its effects show up much later. However, Ray knows that doing substandard work for clients will only hurt the company’s reputation in the long run.

Should Ray instruct his subordinates to focus on meeting the deadlines at the expense of doing quality work? (Check one)

_____ Should instruct _____ Can’t decide _____ Should not instruct

IMPORTANCE:

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<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Issue:</th>
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<tbody>
<tr>
<td>1. Whether cutting corners would stir up discontent among Ray’s subordinates.</td>
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<tr>
<td>2. Whether other employees are in favor of cutting corners or not.</td>
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<tr>
<td>3. Whether the Tau Epsilon quality indicators are resonant with the organization’s goals.</td>
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<tr>
<td>4. Would allowing the subordinates to cut corners now encourage them to cut corners later after the deadlines are met?</td>
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<td>5. Can the company allow quality to be somewhat compromised and still satisfy customers in the long term?</td>
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<td>6. Can knowingly producing a substandard product ever be considered to be responsible?</td>
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<td>7. How would the public good best be served?</td>
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<td>8. Is Ray willing to risk his/her boss’s anger in order to preserve the company’s reputation for doing good work?</td>
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<tr>
<td>9. Will cutting corners anger customers and give the business a bad name?</td>
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<tr>
<td>10. Is Ray more responsible to the customers or to upper management?</td>
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<tr>
<td>11. Would cutting corners to meet deadlines be consistent with Ray’s own ethical beliefs?</td>
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<tr>
<td>12. Whether upper management stayed within the limits of its authority by ignoring the mission statement.</td>
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From the list of issues above, select the four most important:
Most important ____ 2nd most important ____ 3rd most important ____ 4th most important ____
Leigh has been looking forward to the day that a subordinate is rotated out of the unit. The subordinate usually works up to performance standards, but is very abrasive, mean-spirited, and hardly anyone can stand interacting with him. The subordinate is due to be rotated out of the work unit in two days. But, today Leigh has learned that the subordinate made a serious mistake. When others made the same mistake, Leigh has followed company policy by providing negative feedback and constructive criticism after writing a formal letter of discipline for the employee’s personnel file. In this situation, Leigh has written up the employee, but does not know if it is worth the time and effort to engage in what will probably be a very unpleasant interaction with the subordinate. After all, the subordinate will be rotated out of the unit very soon.

**SCENARIO #4 of 6**

**Should Leigh have the interaction with the subordinate? (Check one)**

_____ Should interact _____ Can’t decide _____ Should not interact

**IMPORTANCE:**

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<tr>
<th>Great</th>
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<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Issue:</th>
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<tbody>
<tr>
<td>1. Is Leigh willing to risk a very unpleasant interaction for the chance that it might help the subordinate?</td>
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<tr>
<td>2. Would Leigh confront the subordinate to really help him/her, or would it just be used as a chance to criticize the subordinate?</td>
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<tr>
<td>3. Would avoiding the confrontation make the other subordinates angry with Leigh?</td>
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<td>4. What benefits would discipline have apart from society especially for a charitable supervisor?</td>
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<td>5. Wouldn’t it be a manager’s duty to do what is possible to help develop subordinates regardless of the circumstances?</td>
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<tr>
<td>6. If a subordinate needs guidance, shouldn’t it be provided regardless of what the subordinate’s interpersonal skills are like?</td>
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<td>7. Is having the interaction consistent with principles of due process?</td>
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<td>8. Is If Leigh does not speak with the subordinate would Leigh be preventing the subordinate from providing an explanation for the mistake?</td>
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<tr>
<td>9. Every time an employee escapes discipline for serious mistakes, doesn’t that just encourage more misconduct?</td>
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<tr>
<td>10. What effect would failure to provide feedback have on the employee’s ability to improve?</td>
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<tr>
<td>11. Would Leigh’s conscience allow Leigh to avoid the interaction?</td>
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<tr>
<td>12. Whether an organization’s policies are going to be upheld.</td>
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</table>

**From the list of issues above, select the four most important:**

Most important _____ 2nd most important _____ 3rd most important _____ 4th most important _____
**SCENARIO #5 of 6**

Pat is responsible for providing expenditure estimates for his unit to the controller in his company who then determines the budget for all units in the company. Upper management has always emphasized the importance of providing timely and accurate financial estimates, and they have backed up this policy by disciplining managers for inaccurate or late estimates. Pat recently realized that the figures that he supplied contained a mistake. The mistake was that an expense was projected to be larger than it should have been. It will not affect the ability of the company to stay within the budget. However, the money could be used to cover other company expenditures. Up to this point, no one else has identified the mistake and it is unlikely that they will.

**Should Pat report the mistake? (Check one)**

_____ Should report _____ Can’t decide _____ Should not report

**IMPORTANCE:**

*Great* *Much* *Some* *Little* *No*

<table>
<thead>
<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Issue:</th>
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<td>1. Whether Pat was really loyal to his company.</td>
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<td>2. Can the company afford to have employees who determine themselves which policies to apply?</td>
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<td>3. Could Pat receive a more harsh punishment if the company finds the mistake without his/her help?</td>
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<td>4. What values Pat has set for him/herself in his/her own personal code of behavior.</td>
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<td>5. Whether or not company policy ought to be respected by all employees.</td>
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<td>6. Whether Pat has been a good employee for a long time to prove that he/she isn’t a bad person.</td>
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<td>7. Does Pat have the freedom of speech to remain silent in this case?</td>
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<td>8. Would keeping the mistake to himself be consistent with Pat’s own ethical beliefs?</td>
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<td>9. Would reporting the mistake do any good for the Pat or society?</td>
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<td>10. Whether Pat’s subordinates and peers would lose faith in Pat if Pat is caught instead of reporting the mistake him/herself.</td>
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<td>11. Given Pat’s job responsibility, doesn’t Pat owe it to the company to be honest?</td>
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<td>12. What values are going to be the basis for how people behave in employment contexts?</td>
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</table>

From the list of issues above, select the four most important:

Most important ____ 2nd most important ____ 3rd most important ____ 4th most important ____
SCENARIO #6 of 6

A position has recently become available in the work unit that Fran manages. Fran will be primarily responsible for determining who fills the position. The position is a desirable one to Fran’s subordinates because it is quite visible to higher management, and the people who have held it in the past have been promoted to other desirable positions. Since the last time the position was open a relatively inexperienced subordinate has impressed Fran by performing very well and often going beyond the call of duty. Since the company weights employee development highly, Fran thinks that promoting this potential superstar as soon as possible would contribute to his own goal of getting promoted out of the unit in the next round of promotions. However, this person is so new that the work unit has not yet benefited from its investment in training the person. Furthermore, promoting someone with much less experience than other workers in the unit would likely cause low morale. Fran thinks that both of these factors could probably be detrimental to the unit in the long run.

Should Fran promote the potential superstar? (Check one)  
_____ Should promote _____ Can’t decide _____ Should not promote

IMPORTANCE:

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<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Issue:</th>
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<td>1. Whether the more experienced employees’ seniority has to be honored.</td>
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<td>2. Whether Fran would be making the decision to help him/herself or doing this solely to help someone else.</td>
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<td>3. Whether promoting the potential superstar or not would be best for the performance of Fran’s work unit.</td>
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<td>4. Whether Fran should be influenced by the feelings of the other employees when it is Fran who knows best what would benefit the company.</td>
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<td>5. Whether Fran has a bias against young people or whether he/she would mean nothing personal by promoting someone else.</td>
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<td>6. Whether the superstar would receive commercial endorsements for promoting the company.</td>
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<td>7. Who would the majority of people in Fran’s society feel is deserving of the promotion, the potential superstar or a high performing veteran subordinate?</td>
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<td>8. Would promoting the newer employee in any way violate the rights of the other employees?</td>
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<td>9. What principles of fairness are appropriate in such a situation?</td>
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<td>10. Could Fran be so hard-hearted as to refuse the job to a veteran subordinate, knowing that it would mean so much to him/her?</td>
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<td>11. Is Fran more responsible to the more experienced employees or to the highest performing employees?</td>
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<td>12. Would promoting the newer employee bring about more total good for more people or not.</td>
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</tbody>
</table>

From the list of issues above, select the four most important:  
Most important _____ 2nd most important _____ 3rd most important _____ 4th most important _____
Part C: Competing Values Survey

The following statements describe types of operating values which may exist in your business. Please indicate the extent to which each statement describes the business in which you work. None of the descriptions is any better than others; they are just different. Please rate each item using a scale 1-5, where 1 = Low and 5 = High.

1. _____ This organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.

2. _____ This organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.

3. _____ This organization is a very formal and structured place. People pay attention to procedures to get things done.

4. _____ This organization is a very production-oriented place. People are concerned about getting the job done.

5. _____ The glue that holds this place together is loyalty and tradition. Commitment runs high.

6. _____ The glue that holds this place together is commitment to innovation and development. There is an emphasis on being first with new products and services.

7. _____ The glue that holds this place together is formal rules and policies. Following the rules is important.

8. _____ The glue that holds this place together is an emphasis on tasks and goal accomplishment. A production and achievement orientation is shared.

9. _____ This organization emphasizes human resources. Morale is important.

10. _____ This organization emphasizes growth through developing new ideas. Generating new products or services is important.

11. _____ This organization emphasizes permanence and stability. Efficiency is important.

12. _____ This organization emphasizes outcomes and achievement. Accomplishing goals is important.
13. Part D: Background Items

1. Which category best describes the industry of your organization?
   a. Retail/Service
   b. Government
   c. Not-for-Profit
   d. Other

2. How many total employees does your company employ?
   a. 1-100
   b. 101-1,000
   c. 1,001-2,500
   d. More than 2,500

3. Which category best describes your employment status?
   a. Executive
   b. Mid-level Manager
   c. Entry Level Manager
   d. Non-manager

4. Your Sex
   a. Male
   b. Female

5. What year were you born? ______

6. Which group of notable people, technologies, and events has the greatest meaning to you?
   a. Texting, IM, YouTube, Facebook, Myspace, Twitter, Napster, Goosebumps, Teenage Mutant Ninja Turtles, Barack Obama
   b. Rosemary’s Baby, Ronald Regan, George H. W. Bush, End of the cold war, Fall of the Berlin Wall
   c. Watergate, Nixon resigns, Cold War, Deborah Harry, Annie Lennox, MTV
   d. Beatlemania, Woodstock, Cuban Missile Crisis, Asssignation of JFK, Civil Rights Movement, Jimi Hendrix
   e. The Sun Also Rises, Casablanca, Catcher in the Rye, the Green Hornet, Eldridge Cleaver, Neil Armstrong, Tom Hayden, Rod McKuen, Ralph Nader, Van Cliburn
   f. Great Depression, World War II

7. To which generation do you feel you belong?
   a. Generation Y / Millennial
   b. Generation X
   c. Baby Boomer Generation
   d. The Silent Generation
   e. The Great Generation
   f. Don’t know
   g. Don’t identify with any of these categories.

Your time and efforts are greatly appreciated. If you have comments or concerns, please feel free to contact me at hoover@bgsu.edu.
APPENDIX B: INSTRUMENT SCORING

Values, Culture and Managerial Morals (VCMM) Survey Scoring

Part A: Values Survey

**Scale Use Correction for the 56 or 57 item SVS**

Individuals and cultural groups differ in their use of the response scale.\(^1\) When treating value priorities either as independent or as dependent variables, it is necessary to correct for scale use. In such analyses, scale use differences often distort findings and lead to incorrect conclusions.\(^2\) Follow the appropriate instructions below to correct for scale use.

1. **For correlation analyses:**
   A. Compute each individual’s total score on all value items and divide by the total number of items (56 or 57). I call this the MRAT.\(^3\)
   B1. Center scores of each of the items for an individual around that individual’s MRAT. Then compute scores for the 10 values by taking the means of the centered items. Use these centered value scores in correlations.
   B2. Alternatively, use the raw scores for the 10 values, but use partial correlation to correlate them with other variables, partialing out their relations to MRAT (i.e., use MRAT as a covariate).
   
   *The two alternative methods yield virtually identical results.*

2. **For group mean comparisons, analysis of variance or of covariance (t-tests, ANOVA, MANOVA, ANCOVA, MANCOVA):**
   A. Compute MRAT as in 1A above
   B1. Center scores for each item and compute 10 value scores as in 1B1. Then use these centered scores in the analyses.
   B2. Alternatively, use raw scores and include MRAT as a covariate (i.e., a control at the individual level) in all analyses.
   
   *The two alternative methods yield virtually identical results.*

3. **For regression:**
   A. Compute MRAT as in 1A above.
   B. Center scores of all items and compute 10 value scores as in 1B1.
   C. Enter **up to 8** centered values as predictors in the regression.
      1. If all 10 values are included, the regression weights for the values will be inaccurate and uninterpretable.
      2. Choose the values to exclude as predictors *a priori* on theoretical grounds because they are irrelevant to the topic.
   D. Alternatively, use raw value scores as predictors, but be sure to include *at least 3* values and *no more than 8* as predictors [*Do not use MRAT in this case*]
   E. If you are interested **only** in the total variance accounted for by values, you
may include all 10 as predictors in either method (do not interpret the coefficients obtained this way!).

F. If the value is your dependent variable, use the centered value score.

G. In publications, I strongly advise providing a Table with the correlations between the values and the dependent variables in addition to any regression. Use correlations following 1B1 or 1B2, above. These correlations will aid in understanding results and reduce confusion due either to multicolinearity or to intercorrelations among the values.

4. **For multidimensional scaling, canonical, discriminant, or confirmatory factor analyses:**
   Use raw value scores for the items or 10 value means.

5. **Exploratory factor analysis** is not recommended to search for factors underlying the value items. EFA is not suitable for discovering a set of relations among variables that form a circumplex, as the values data do. The first unrotated factor represents scale use or acquiescence. It is not a substantive common factor. You can obtain a crude representation of the circular structure of values using EFA by plotting the locations of the value items on factors 2 x 3 of the unrotated solution.

Footnotes


2. Individual differences in the mean of the 56 values are largely a scale use bias. This assertion is grounded both in theory and empirically.

   A first theoretical ground is the assumption that, across the full range of value contents, everyone views values as approximately equally important. Some attribute more importance to one value, others to another. But, on average, values as a whole are of equal importance. This assumption is dependent on the further assumption that the value instrument covers all of the major types of values to which people attribute importance. Empirical evidence to support this assumption appears in Schwartz 1992, 2004. To the extent that individuals' attribute the same average importance to the full set of values, their mean score (MRAT) should be the same. Differences in individual MRATs therefore reflect scale use and not value substance. Of course, differences in MRAT may reflect some substance, but the empirical analyses suggest that substance is a much smaller component of MRAT than scale use bias is (Schwartz, et al., 1997).

   A second theoretical ground is that values are of interest because they form a system of priorities that guide, influence, and are influenced by thought, feeling and action. Values do not function in isolation from one another but as systems. For example, a decision to vote for one or another party is influenced by the perceived consequences of that vote for the attainment or frustration of multiple values—promoting equality or freedom of expression versus social power or tradition. It is the trade-off among the relevant values that affects the vote. Consequently, what is really of interest are the **priorities** among the values that form an individual's value system. Correcting for scale use with MRAT converts absolute value scores into scores that indicate the relative importance of each value in the value system, i.e., the individual’s value priorities.
The empirical basis for viewing differences in MRAT as bias is the findings of many analyses (50 or so, at least) that related value priorities to other variables--attitudes, behavior, background. The associations obtained (mean differences, correlations) when using scores corrected for MRAT are consistently more supportive of hypotheses based on theorizing about how values should relate to these other variables than the associations with raw scores. Indeed, with raw scores associations sometimes reverse. In no case have raw score associations made better sense than those corrected for MRAT.

3. A more refined way to measure MRAT is possible. Separate MRATs may be calculated for each of the ten values. For this purpose, the average response on all items other than those that index a value is computed as the MRAT for each value. Scores on the items that index each of the 10 values are then centered around their own MRAT. Alternatively, the particular MRAT for each value is used as the covariate when correlating that value with other variables. Studies indicate that using this more refined method with the SVS makes virtually no difference.

NOTE: Lindeman and Verkasalo (2005) describe the calculations to control rating bias as follows:

…. we used proportional sum variables. This was done in the following way. A personal mean of all 57 items was counted for each participant separately. The reason for selecting all 57 items was that the mean of the 45 items would have caused the problem of linear dependency in some analyses. Scores for each of the 10 scales were obtained by dividing the sum of the appropriate items by the personal mean of all items multiplied by the number of items on the scale. For example, the score of value Power was counted as follows: Power = (social power + wealth + authority)/(3 × personal mean of all items). (p.3)
Part B: Managerial Moral Judgment Test Scoring

The chart below shows the “scoring key” for the Managerial Moral Judgment Test (MMJT). Each item was designed to represent one of the stages in Kohlberg’s moral development theory. Each scenario has:

- One Stage 2 item
- Three Stage 3 items
- Three Stage 4 items
- Three Stage 5 items
- One Stage 6 item
- One “M” item (nonsensical item)

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<tr>
<th>Scenario</th>
<th>Item 1</th>
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<th>Item 3</th>
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<th>Item 6</th>
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The Simple Sum scoring scheme exclusively uses the rating data gathered by the MMJT. Calculate a simple sum score for each scenario by adding the importance ratings of items representing post-conventional reasoning (stages 5 and 6), as well as the reverse-scored ratings for items representing non-principled reasoning (stages 2, 3, and 4). After calculating a simple sum score for each scenario, add them to calculate the overall simple sum score.

The \( p \)-score scoring scheme is based on the ranking data gathered by the MMJT. Calculate a \( p \)-score for each scenario by determining which, if any, of the four items that were ranked as most important were stage 5 and/or stage 6 items (i.e., post-conventional reasoning items). Add 40 points to the scenario \( p \)-score if the respondent ranked a stage 5 or stage 6 item as most important, 30 points if ranked second most important, 20 points if ranked third most important, and 10 points if ranked fourth most important. An overall \( p \)-score is calculated for each respondent by calculating the average of the six scenario \( p \)-scores.

The Simple Sum scoring scheme offers the advantage of including information about how respondents discount issues that represent basic stages of moral judgment. In addition, we obtained higher reliability estimates with the simple sum scores.

To illustrate how to calculate Simple Sum and \( p \)-scores, the following pages provide an example set of responses for a scenario and scores them using both scoring schemes.
EXAMPLE - SCENARIO #1:
Alex is supervising an employee who used a sick day to take the previous day off from work. However, Alex has learned from the employee’s co-workers that the employee was not actually sick, but used the day as a “mental health” day. That is, the employee was not physically sick but felt tired mentally. Alex knows that the company’s sick leave policy does not allow for mental health days.

Should Alex reprimand the employee according to the company policy? (Check one)

_____ Should reprimand     _____ Can’t decide  __

_____ Should not reprimand

IMPORTANCE:

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1. Everytime an employee escapes punishment for a policy violation, doesn’t that just encourage more violations? (STAGE 4)
2. Was Alex a good friend of the employee? (STAGE 3)
3. What is the value of health prior to society’s perspective on personal values? (M ITEM)
4. What values are going to be the basis for how companies treat their employees? (STAGE 6)
5. Whether there is a law that requires employers to allow employees to take sick days for mental health problems. (STAGE 4)
6. Whether reprimanding the employee or overlooking the transgression would be best for the company. (STAGE 2)
7. Can society afford to let everybody take off work when they aren’t physically sick? (STAGE 4)
8. Does the organization have the right to force their definition of health on their employees? (STAGE 5)
9. Whether the policy in this case is interfering with an employee maintaining his/her health. (STAGE 5)
10. How could anyone be so cruel as to reprimand an employee who needed a day off? (STAGE 3)
11. Whether the employee’s co-workers are in favor of reprimanding the employee or not. (STAGE 3)
12. What values Alex has set in his/her own personal code of behavior. (STAGE 5)

From the list of issues above, select the four most important:

Most important __9__  2nd most important __8__
3rd most important __6__  4th most important __12__

Simple Sum Score: 38 = 3+4+4+3+2+4+4+5+3+2+4
A five-point rating scale is used with Great = 5 and No = 1. The “M” item was not scored. Ratings for items 1, 2, 5, 6, 7, 10, and 11 were reverse-scored because they represent non-principled reasoning stages.

\[ p\text{-score}: 80 = 40+30+10; \] Items 9, 8, and 12 are post-conventional items, but Item 6 is not.

Part C: Organization Culture Perception (Competing Values Framework) Test Scoring

\[
\text{Group Culture} = \frac{(Q1 + Q5 + Q9)}{3} \quad \text{(alpha = .79)}
\]

\[
\text{Developmental Culture} = \frac{(Q2 + Q6 + Q10)}{3} \quad \text{(alpha = .80)}
\]

\[
\text{Hierarchy Culture} = \frac{(Q3 + Q7 + Q11)}{3} \quad \text{(alpha = .76)}
\]

\[
\text{Rational Culture} = \frac{(Q4 + Q8 + Q12)}{3} \quad \text{(alpha = .77)}
\]