

## INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

**The quality of this reproduction is dependent upon the quality of the copy submitted.** Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
800-521-0600

UMI<sup>®</sup>



UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

AN INTERACTIONIST MODEL ON THE INFLUENCES OF MORAL INTENSITY,  
ORGANIZATIONAL ENVIRONMENT AND TEMPERAMENTAL  
CHARACTERISTICS ON ETHICAL DECISION MAKING  
IN ORGANIZATIONS

A Dissertation  
SUBMITTED TO THE GRADUATE FACULTY  
In partial fulfillment of the requirements for the  
Degree of  
DOCTOR OF PHILOSOPHY

By  
Tommie A. Mobbs  
NORMAN, OKLAHOMA  
2001

UMI Number: 3025983

UMI<sup>®</sup>

---

UMI Microform 3025983

Copyright 2001 by Bell & Howell Information and Learning Company.

All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.

---

Bell & Howell Information and Learning Company  
300 North Zeeb Road  
P.O. Box 1346  
Ann Arbor, MI 48106-1346



AN INTERACTIONIST MODEL ON THE INFLUENCES OF MORAL INTENSITY,  
ORGANIZATIONAL ENVIRONMENT AND TEMPERAMENTAL  
CHARACTERISTICS ON ETHICAL DECISION MAKING  
IN ORGANIZATIONS

A Dissertation APPROVED FOR THE  
DEPARTMENT OF PSYCHOLOGY

BY

Michael R. Buckley

Michael Hannon

Shane Connelly

Jim O'Leary

John J. Haddock

Robert Long

## ACKNOWLEDGEMENTS

I want to thank my entire graduate committee, who provided thoughtful insight and encouragement throughout my graduate school years. Extra gratitude is deserving Professor Michael Buckley, whose constant persistence will always be appreciated. Thank you to my fellow graduate students who were always supportive and helpful, and provided a comforting contrast to my competitive nature. A special thank you to my friends who have always kept me level-headed and would never in a million years consider addressing me as “Doctor.”

To my parents, no words can describe the importance of the unconditional support always given to me. The encouragement you gave, combined with love, will always align my priorities in the right direction. To my sisters, Kathleen and Amanda, I hope I’ve provided an excuse for you to stay in college for 8 years. Finally, I would like to thank Michelle, who put up with the crankiness and stubbornness that resulted from the following pages – I couldn’t have done it without you!

## Table of Contents

|                                                  |     |
|--------------------------------------------------|-----|
| Acknowledgments.....                             | iv  |
| Abstract.....                                    | vii |
| Chapter 1.....                                   | 1   |
| Introduction.....                                | 1   |
| Chapter 2.....                                   | 9   |
| Literature Review.....                           | 9   |
| Research on Ethical Decision Making.....         | 9   |
| Individual Factors.....                          | 10  |
| Situational Factors.....                         | 14  |
| The Big Five.....                                | 20  |
| Temperament.....                                 | 22  |
| Leadership and Corporate Social Performance..... | 30  |
| Accountability.....                              | 35  |
| Moral Intensity.....                             | 37  |
| Chapter 3.....                                   | 42  |
| Methodology.....                                 | 42  |
| Participants.....                                | 42  |
| Measures.....                                    | 42  |
| Procedure.....                                   | 43  |
| Variables.....                                   | 43  |
| Criterion Variables.....                         | 43  |
| Predictor Variables.....                         | 45  |
| Research Questions.....                          | 46  |
| Hypotheses.....                                  | 47  |
| Chapter 4.....                                   | 50  |
| Results.....                                     | 50  |
| Grouping the Personality Variables.....          | 57  |
| Big Five Results.....                            | 60  |
| Temperament Results.....                         | 65  |
| Organizational Level Results.....                | 74  |

|                                                     |     |
|-----------------------------------------------------|-----|
| Extra-Role Behaviors.....                           | 98  |
| Major and Gender.....                               | 105 |
| Chapter 5.....                                      | 107 |
| Discussion.....                                     | 107 |
| Using Temperament as a Predictor Variable.....      | 107 |
| Conclusions.....                                    | 111 |
| Organizational Variables.....                       | 111 |
| Temperamental Variables.....                        | 116 |
| Gender and School Major.....                        | 120 |
| Predictive Power: Temperament vs. The Big Five..... | 121 |
| Limitations and Future Directions.....              | 122 |
| Implications.....                                   | 125 |
| References.....                                     | 129 |
| Appendix A.....                                     | 139 |

## ABSTRACT

The study investigated the relationship between ethical decision-making in organizations and individual personality variables, the organizational level variables of leadership and corporate social responsibility and accountability, and the situational variable of moral intensity. It was hypothesized that individual differences as measured through a temperament questionnaire would be more predictive of ethical decision-making compared to a trait measure of personality. Further, it was hypothesized that individuals within organizations with high levels of accountability and leadership would display a higher level of ethical behavior compared to those individuals in organizations with low accountability and low leadership. It was also hypothesized that situations with high moral intensity would elicit a higher level of ethical decision making in organizations compared to situations with low moral intensity. Finally, it was hypothesized that individual, organizational, and situational variables would also be associated with whistle blowing activities and extra role behaviors within organizations.

Participants in the study were students in an upper-division management class at a large Midwestern university. The participants were asked to complete a temperament and Big Five personality instrument, and indicate how they would behave in eight separate organizational environments. A factor analysis was done on the temperament instrument to further investigate the biologically-based personality construct, and the relationship between temperament and a trait model of personality. An ethical behavior score (EBS) was calculated for each participant. Internal and external whistle blowing were also

examined along with the participant's propensity to engage in behaviors that went above and beyond the job description.

The temperamental measures of Effortful Control and Affiliativeness were found to be significantly related to ethical decision making, and explain more variance than the Big Five measures of Conscientiousness and Agreeableness. The situational variable of Moral Intensity had a significant influence on ethical decision-making, whistle blowing, and engaging in extra-role behaviors. The organizational-level variable of Leadership and Corporate Social Performance was significantly related to whistle blowing and extra-role behaviors, but not significantly related to ethical decision-making. Accountability within the organization was significantly related to ethical decision-making and whistle blowing. Accountability was also significantly related to performing extra-role behaviors, although it was in the opposite direction than hypothesized.

## CHAPTER 1

### Introduction

A universally accepted definition for the term “business ethics” does not exist. The concept of business ethics, however, has been explored from countless angles and perspectives, and it even warrants two journals, *Business Ethics Quarterly* and *Journal of Business Ethics*. Investigators have examined how the organizational environment, individual characteristics, and a combination of the two, influence ethical behavior in the workplace. Although countless research has been conducted regarding ethical behavior and personality, it has lacked theoretical underpinnings that attempt to explain why people make the decisions they do in organizational context.

Contemporary theories concerning ethics are commonly divided into two fundamental types, teleological and deontological. The teleological theory of utilitarianism purports that an action is right (when compared to another, alternative action) if it leads to the greatest amount of good for the most people, or the least amount of bad for the fewest people. This theory, widely studied in the business ethics literature, holds that the moral worth of actions or practices is determined solely by the consequences of the actions or practices (Beauchamp & Bowie, 1983). The idea of minimizing harms and maximizing benefits are integral parts of the philosophical writings of David Hume (1711-1776), Jeremy Bentham (1748-1832), and John Stuart Mill (1806-1873).

Utilitarianism can be further broken down into act utilitarianism and rule utilitarianism. While act utilitarianism prescribes acting in a way that best promotes the

welfare of everyone possible, a lack of this information necessitates rule utilitarianism.

Strict rule and flexible rule utilitarianism comprise two ways of choosing the best rule for a particular situation. The philosopher David Hume proposed strict rule utilitarianism that stipulates a person should simply follow the rule that society endorses. If a rule does not exist for a given situation, a simple and clear rule should be developed. Philosopher John Stuart Mill argued for flexible rule utilitarianism, suggesting that rules should be broken in cases where following them would be disastrous for everyone concerned.

Conversely, deontological theories deny exactly what the teleological theory of utilitarianism asserts. Instead of believing that only the consequences of actions matter, and that actions are justified by their consequences, deontologists argue many factors other than beneficial outcomes exist when determining the correctness of an ethical decision. Namely, deontologists assert motives, personal rights, and character, transcend utilitarian calculations. Deontologists argue that, because we are often unaware of our ultimate goals and unable to predict the consequences of our actions, we should not focus on goals and the most efficient means to arrive at them. Instead, they argue morality demands that people must observe the rights of others, and ultimately the motive for an act is more important than the consequences. The influential philosopher Immanuel Kant (1734-1804) emphasized performing one's duty only for the sake of duty, and for no other reason. In order to have "moral credit" according to Kant, one cannot perform a morally correct action for reasons of self-interest. If a vehicle company recalls thousands of cars because they fear pending lawsuits, Kant would insist that, although they acted correctly, they deserve no moral credit for doing so because their interest were self-serving.

A discussion of business ethics would be incomplete if the concept of law were not addressed. According to the reinforcement view of law, law is a product of how societies weave together the four economic conditions of competition, property, laws, and information together with the four ethical values of self-interest, personal relationships, group interest, and intrinsic value. Table 1 demonstrates how these four economic and four ethical values could be used in the United States to show how law can support or conflict with institutional values, practices and relationships (Dienhart & Curnutt, 1998).

Table 1 Legal Intersection of Ethics and Economics for the United States

|             | Self-Interest                                                          | Personal Relationships                                              | Group Interest                                                                 | Intrinsic Value: Rights, Fairness                                                             |
|-------------|------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Competition | Open markets allow individuals to choose good products for good prices | Child labor restrictions promote family stability, protect children | Anti-trust laws increase product quality                                       | State regulation of natural monopolies ensures fair(er) prices                                |
| Property    | Private property laws allow us to pursue our interests as we see fit   | Inheritance laws promote family continuity                          | Laws protecting the environment promote group well-being                       | Due process laws preventing the arbitrary seizure of property are fair                        |
| Risk-Reward | Taxes interfere with the pursuit of wealth and security for oneself    | Family and Medical Leave Act promotes caring family relationships   | Laws shielding managers from lawsuits promote the economic wealth of the group | Reducing voting age from 21 to 18 during the Vietnam War gave those drafted the right to vote |
| Information | Privacy laws prevent disclosure of our medical information to others   | Food labeling laws promote family well-being                        | Freedom of information necessary for economic growth                           | Laws requiring managers to inform workers about workplaces dangers respect employee rights    |

Dienhart and Curnutt (1998) propose that the laws most important for business embody the reinforcement view of law, and demonstrate the intersection of ethics and economics. Of course, an exhaustive analysis of laws pertaining to business practices is not practical, however, a brief examination of federal laws is necessary. The U.S. Constitution states federal laws take precedence over state laws (Supremacy Clause) and that Congress has the power to regulate business activity between and within states (Commerce Clause). Therefore, the federal and state governments, at least in the United States, are the preeminent force creating and enforcing legal standards for business. Civil laws, which are made up of statutes and regulations written in Congress and signed by the President of the United States, as well as state laws, are most relevant to business today.

Ultimately, individuals in present day organizations are making the decisions. It is likely they are unfamiliar with the terms teleological and deontological. Decisions are made to better the company, to beat the competition, and to survive the capitalistic economy that guides much of American commerce. That is not to say there is not an ethical component to the present day decisions in the corporate world. In fact, it is this intriguing and illusive component that the present research strives to illuminate. In taking an epidemiological perspective, the substrate of personality, temperament, is investigated in order to understand the foundation of ethical decision making.

The federal government of the United States has the enormous responsibility of investigating and enforcing questionable business practices. This sometimes proves to be an overwhelming task, as a recent dilemma has brought to light. The enormous recall of Firestone Tires in August 2000 is a salient case study on how the National Highway Traffic Safety Administration (NHTSA) may have failed to take actions that could have

saved many lives. According to a USA Today article, at least 148 people have been killed and 525 injured in accidents linked to Firestone tires found mostly on the Ford Explorer (USA Today, 2000). The NHTSA had many complaints regarding Firestone Tires dating back to 1991, but because of flawed filing systems, they were unable to detect the problem. The article reports that Firestone also knew there was a problem with the tires many years before the recall began. Congress approved an additional nine million dollars to the NHTSA for the year 2001, to help alleviate an agency that “sees itself as understaffed and underfunded and incapable of fully investigating every complaint that one day might become a big problem”(USA Today, 2000, p.9).

If it could be assumed that individuals within organizations such as Firestone would always act in a completely ethical manner, the need of governmental agencies such as the NHTSA to act as policing agents may be greatly decreased. Both the teleological and deontological schools of ethic would argue that Firestone acted in an unethical manner if it indeed had information that there was a problem with their tires, but did nothing to correct the situation. Teleological purists would propose that a fast and prudent recall would have been the correct decision, and produced the best consequences for Firestone for several reasons. A faster recall could have saved human lives and would have dampened the \$1.3 billion recall costs. Further, a more timely recall may have prevented shareholders from losing money, as Firestone saw its shares dwindle to one-third of their previous value after the recall.

Those with a deontological perspective of ethics would propose that the lives saved, recall costs, and the dwindling share prices have little to do with why Firestone should have acted more quickly in their recall efforts. Deontological oriented theorists

would suggest Firestone should have recalled the tires at the first sign of trouble because it is the duty of Firestone to do what is morally right, regardless of the ultimate costs or benefits.

The NHTSA was created, at least in part, in response to the 1966 book by Ralph Nader, titled *Unsafe at Any Speed*, a book about the unsafe characteristics of the Chevrolet Corvair. The recent investigations into Firestone tires is not the first time the NHTSA has been associated with an ethical quandary related to automobiles. The governmental organization was convinced by Ford and the auto industry in the late 1960's that cost-benefit analysis would be an appropriate basis for creating safety standards for vehicles. Ford decided to use a gas tank design in its new Pinto that had failed during several crash tests, and proved to be susceptible to rupturing, causing the car to burst into flames.

An entire book, *The Ford Pinto Case*, profiles the ethical dilemmas present in the decision making of the major vehicle manufacturer (Birsch & Fielder, 1994). According to the book, a 1971 study by the NHTSA calculated the estimated cost to society every time someone was killed in a care accident was \$200,000. With this information, Ford calculated the costs of improving the Pinto's design with an \$11 gas tank versus the benefits of saving a projected 180 lives, 180 serious burn injuries, and 2100 burned cars. The costs of the new fuel tanks outweighed the benefits by almost three times, and Ford made no changes to the gas tanks.

The Ford Pinto case serves to illustrate that in business environments it is possible for purely economic concerns to override the concerns of contemporary ethical philosophies. In fact, in addition to the teleological and deontological normative ethical

theories, the cost-benefit analysis approach should be understood. This approach is often a legitimate approach to decision making that may be most often found in institutionalized context. A downside, however, is that by reducing ethical concerns to a quantitative exercise, individuals may discard the ethical content of a particular situation, without even realizing they are doing so. Trevino and Nelson (1995) suggest having decision-makers analyze the ethical aspects of their decisions and to include the analysis in their reports. In doing this, a teleological approach is undertaken, where decision makers are forced to think about what kind of far-reaching consequences their actions may have.

Examining conflicting ethical arguments concerning what course of action may or may not be ethical, and for what reasons, is beyond the scope of this study. The importance of improving the understanding of how individuals within organizations make the decisions they do is of extreme importance, and will serve as the backdrop for the present study's questions, hypotheses, and findings. Given the examples above, it is apparent that the ethical decisions individuals make in organizations need to be more completely understood. Both the environment that an individual operates in and basic personality dispositions, in the form of temperament, that an individual brings to the environment, impact the decisions that are made. Understanding the ethical decision-making process from this level is what this dissertation attempts to accomplish.

The present research suggests that when faced with ethical dilemmas of great magnitude, most individuals will act in accordance with generally accepted ethical standards. Although accounts of rampant unethical behavior in present day organizations may seem the norm, it is highly likely that when the really important decisions need to be

made, tomorrow's workforce will know what the right thing to do is, and take steps to work in that direction. Less weighty decisions, however, may present more of a challenge to individuals within an organization. When a life is on the line, most people will agree immediate action is imperative. Decisions concerning more common organizational occurrences such as money, hiring practices and operating procedures, however, may present situations where individuals show more variability in their behavior due to the increased ambiguity. When is it acceptable to "borrow" money out of the petty cash or hire underage workers overseas? These types of problems are very real, and the individual and organizational antecedents to the decision-making processes regarding them need to be further understood.

## Chapter 2

### Literature Review

The present study builds on the numerous research projects and scholarly articles that have investigated ethical decision making in organizations and the processes through which the decisions are made. Although a number of authors have proposed various models attempting to explain and predict ethical decisions in organizational context, there is surprisingly little effort aimed toward theory testing (Randall & Gibson, 1990). In an attempt to overcome the lack of empirically driven research grounded on theory, an argument derived from the existing literature will be proposed, that includes theoretical concepts underlying ethical decision making in organizations.

Three broad areas of psychological literatures are reviewed to provide a theoretically grounded model of ethical decision making in organizations. These areas are business ethics, personality structure and measurement, and temperament. The review will be necessarily focused on issues relevant with the model proposed in the next chapter. Of course, an exhaustive review of any one of these three areas of psychology in itself would be endless, and add equivocal value. Instead, a concentrated effort will be made to develop a theoretically grounded model examining how individuals within organizations make daily decisions that may have far reaching impact on a breadth of outcomes.

#### Research on Ethical Decision Making

A majority of the ethical decision making models proposed in the literature suggest that decision-making is ultimately influenced by two broad categories, individual

attributes and environmental context (Ford & Richardson, 1994). Individual attributes have been extensively investigated in the empirical literature, and included demographic (e.g. age, gender) and personality variables (e.g. moral development, locus of control). More recently, the characteristics of the moral issue itself have been shown to affect the decision making process.

### Individual Factors

Individual attributes an individual is born with, or are determined by circumstances of birth, that have been examined include religion (Hegarty & Sims, 1978; McNichols & Zimmerer, 1985) and nationality (Abratt, Nel, & Higgs, 1992; Becker & Fritzsche, 1987; Hegarty & Sims, 1978; White & Rhodeback, 1992). Of the various components of religion examined, only strength of religious beliefs (McNichols & Zimmerer, 1985) was positively related to strength of ethical standards. The nationality research, although not directly comparable across studies, found no difference between South African and Australian managers (Abratt et al., 1992), but significant correlations between unethical behavior and non-U.S. citizenship (White & Rhodeback, 1992). Becker and Fritzsche (1987) further provided evidence that French managers have greater faith in ethical codes compared to their U.S. and German counterparts.

Investigations of gender and ethical decision-making have provided mixed results. In a review of empirical literature, Ford and Richardson (1994) identified 14 studies investigating gender, with seven revealing a propensity for females to act more ethically than males in some situations. The seven other studies, however, found no difference between gender and ethical beliefs. In the same review, Ford and Richardson identified

eight studies examining the relationship between age and ethical beliefs. Only three of the eight studies found a significant relationship. Browning and Zabriskie (1983) reported younger managers have a more ethical viewpoint than their older counterparts, while Serwinek (1992) found older workers have stricter interpretations of ethical standards. Finally, in an examination of students, Ruegger and King (1992) found older age corresponded to being more ethical.

Individual differences in personality may also play a role in choice of career (Muchinsky, 1984), and therefore, major in college. McLean and Jones (1992) found that business students, and especially marketing students, scored higher in Machiavellianism than non-business majors. Some components of Machiavellianism may be related to unethical behavior. For instance, it may be argued that individuals that believe any means are justified in obtaining a certain end, may have a greater propensity to act in an unethical manner. A recent study suggests fundamental differences may exist in self-enhancement bias (SEB) (describing oneself more positive and others more negative) between accounting and marketing majors, with the latter more likely to self-enhance (Manley, Russell, & Buckley, 2001). This may have implications for ethical behavior in organizations, as measures of SEB and ethical intentions are thought to be intertwined.

Investigations into an individual's education and employment history have shown inconclusive, mixed results. While some researchers have shown a propensity for managers with technical backgrounds to be more ethical than those with non-technical backgrounds (Chonko & Hunt, 1985), most evidence suggests no relationship between ethical beliefs and type of education (Goodman & Crawford, 1974; Laczniak & Inderrieden, 1987; McNichols & Zimmerer, 1985). It also appears that years of

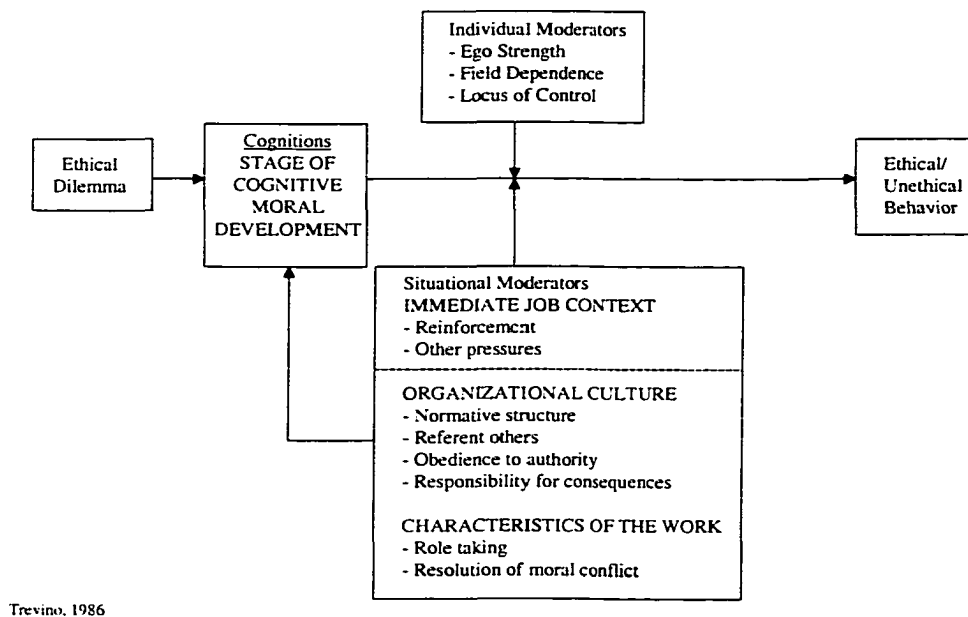
employment and ethical beliefs are independent (Stevens, Richardson, & Abramowitz, 1989), while some authors have suggested managers may be more ethical than students (Arlow & Ulrich, 1980; Stevens, 1984).

The most comprehensive analysis of personality factors and their relationship to ethical behavior is reported in two articles by Hegarty and Sims (1978, 1979). In these laboratory investigations, the Allport-Vernon-Lindzey Scale of Values, Rotter External-Internal Locus of Control Scales, Eysenck Neuroticism-Extroversion Scales, and the Machiavellianism Scale were used to gauge the relationship between a diverse range of personality variables and ethical behavior. Hegarty and Sims (1978, 1979) found that Machiavellianism, a measure of economic value orientation, and locus of control all had a significant relationship with ethical behavior, although mixed results were found regarding locus of control between the 1978 and 1979 studies. In the earlier study, internal locus of control was significantly related to ethical behavior, but this finding was not supported in the 1979 study.

Another individual-level component that has been investigated is cognitive moral development. In her interactionist model of ethical decision making in organizations, Trevino (1986) suggest an individual's level of moral development strongly influences what that person understands as right or wrong (see Figure 1). Trevino proposed that Kohlberg's model of cognitive moral development (Kohlberg, 1969) was a key to understanding how decision makers think about ethical dilemmas. Specifically, it was hypothesized that managers at higher levels of moral reasoning would exhibit significantly more consistency between moral judgment and moral action than those at lower stages. Therefore, the perception of an ethical dilemma influences the cognitive

processes that in turn influence the ethical behavior of the individual. This theoretical piece also included the individual moderators of ego strength, field dependence, and locus of control and the situational moderators of immediate job context, organizational culture, and characteristics of the work.

Figure 1 Trevino's Interactionist Ethical Decision-Making Model



Trevino's (1986) model builds implicitly on the model proposed by Rest (1986) that also suggests that Kohlberg's cognitive moral development is an important determinant of ethical decision-making. Instead of going directly from the moral judgment phase to moral behavior as in Trevino's model, Rest postulates explicitly a step where the ethical decision maker establishes moral intent before engaging in the moral behavior.

### Situational Factors

Situational factors represent external pressures outside the individual that may influence ethical decision-making in some way and are necessarily distinct from the individual factors described in the previous section. The people in an organization represent a part of the environmental context that has been investigated at the peer and top management level. Zey-Ferrell, Weaver, & Ferrell, (1979) found that an ethical decision maker's beliefs are largely influenced by their perceptions of how they think their peers believe. This influence largely disappears, however, when workers interact with their peers on a less intense and less frequent basis (Zey-Ferrell & Ferrell, 1982). Further investigations have shown that people believe they are more ethical than their peers, supervisors, and others (Izraeli, 1988; Jones & Gaultschi, 1988; Vitell & Festervand, 1987). An interesting study on self-enhancement bias supports and gives theoretical evidence for these findings (Manley, Russell, & Buckley, 2001).

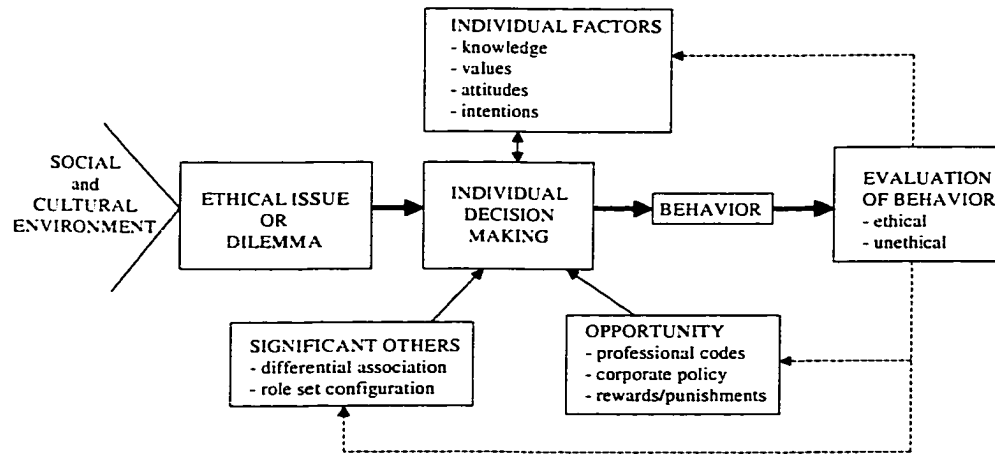
The influence of top management on ethical decision-making has been shown to significantly influence ethical decision-making and outweigh the influences of formal company policy, the industry's ethical climate, and peer behavior (Baumhart, 1961; Brenner & Molander, 1977; Posner & Schmidt, 1984; Vitell & Festervand, 1987). Perhaps linked to top management influence, are the pressures of rewards and sanctions on ethical decision making. Several researchers have found support for the idea that a relationship exists between rewards and ethical behavior (Fritzsche & Becker, 1983; Hegarty & Sims, 1978; Laczniak & Inderrieden, 1987). Further, evidence suggests formal corporate codes of conduct may act as surrogates for top managements commitment to

ethical behavior and positively increase an individual's ethical beliefs and decision behavior (Hegarty & Sims, 1979; Singhapakdi & Vitell, 1990; Weeks & Nantel, 1992).

Several organizational characteristics have also been examined in the ethical decision making literature. It has been shown that as the ethical climate and culture of an organization increase, the ethical beliefs and decision behavior of the individuals within that organization increase (Akaah & Riordan, 1989; Victor & Cullen, 1987). In a 1990 study, Weber found a consistent, though small, relationship between organization size and stage of moral reasoning. Members of large, bureaucratic organizations, Weber posited, may see themselves as cogs in the machine and behave less ethically than those in smaller organizations who feel a greater sense of responsibility to the firm. On a broader spectrum, Gottlieb and Sanzgiri (1996) and Stark (1993) have proposed that a society as a whole may have a "moral climate" that influences awareness and attitudes toward ethics across an entire culture.

In addition to the Trevino (1986) and Rest (1986) models already described, several researchers have attempted to explain how the individual and situational variables influence ethical decision making in organizations. A model often referred to in the business ethics literature is that of Ferrell and Gresham (1985). Their contingency model proposes that social and cultural environment influence the ethical issue that in turn influences the ethical decision making of the individual (see Figure 2). Both individual and organizational influences, therefore, have a marked impact on the decision maker. Also included in the model is the opportunity available to behave unethically, which allude to many of the situational factors previously mentioned.

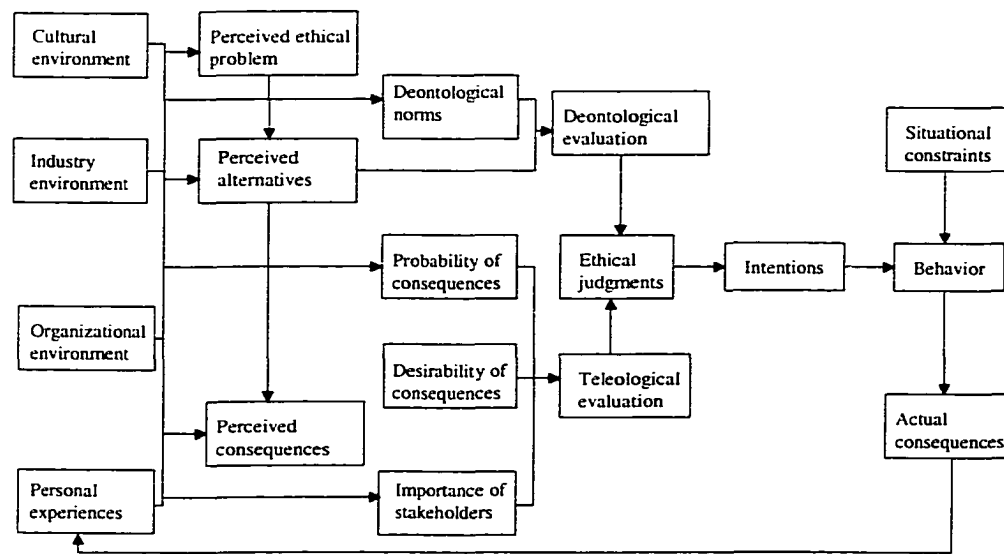
Figure 2 Ferrell &amp; Gresham Contingency Model of Ethical Decision Making



Ferrell & Gresham, 1985

In response to the Ferrell and Grisham model (1985), Hunt and Vitell (1986) proposed an inclusive model of marketing ethics. They suggested that ethical perceptions influence ethical judgments, which in turn influence ethical intentions. Ethical perception, according to the model, is impacted by cultural, industry, organizational, and personal variables. A feedback loop illustrates the circularity from behavior to actual consequences and back to personal experiences (see Figure 3).

Figure 3 Hunt &amp; Vitell Marketing Ethics Model

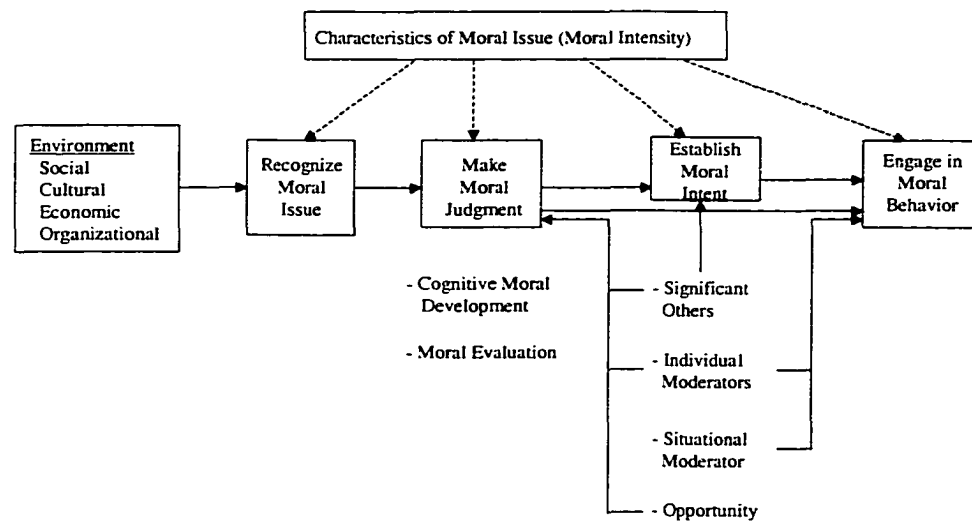


Hunt &amp; Vitell, 1986

Finally, the type of ethical decision that an individual is faced with should be considered. It was not until an article by Jones (1991), surprisingly, that a model of ethical decision making explicitly included the characteristics of the moral issues itself as an independent or a moderating variable. Without this additional component, Jones reports, it is assumed people will act consistently across situations that have vastly different degrees of ethical implications. Jones proposed a model of ethical decision making that is issue contingent, where characteristics of the moral issue itself will have influence on the final decision and behavior. Jones labeled the individual's perception of the specific characteristics of the moral issue "moral intensity." Jones introduced the construct of moral intensity through a synthesis of the models developed by Rest (1986),

Trevino (1986), Dubinsky & Loken, (1989), Ferrell & Gresham, 1985, and Hunt & Vitell (1986).

Figure 4 Jones Moral Intensity Model of Ethical Decision Making

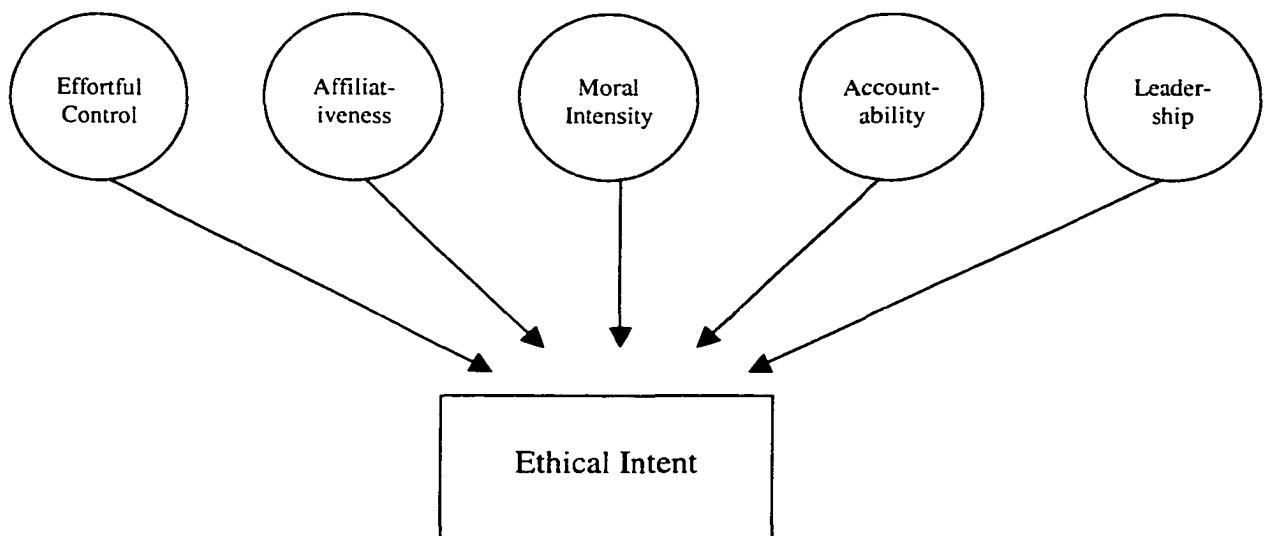


Jones, 1991

The model proposed in this current research is consistent with the interactionist models that recognize both situational factors and individual attributes are important determinants in ethical decision making (see Figure 5). Specifically, the organizational-level variables of Leadership and corporate social responsibility, along with Accountability are examined. The model also identifies the characteristics of the moral issue itself as an important variable in the ethical decision making process, and includes

the construct of moral intensity as defined by Jones (1991). Moral intensity and temperamental characteristics are exogenous variables that influence the recognition of ethical dilemmas, ethical judgments, and behavioral intention. Although not previously investigated in the ethical decision making literature, temperament has been shown to be an enduring, stable, and predictive variable. More importantly, new research has proposed temperamental substrates are at the core of the Big Five domains (Evans & Rothbart, 2001). In this model, ethical decision-making is an outcome of a complex, underlying temperament system interacting with an equally multifarious environment.

Figure 5 Temperamental Model of Ethical Decision Making



### The Big Five

The Big Five has emerged as a general model for describing personality structure. The model began when Allport and Odbert (1936) tried to identify individual differences by extracting all relevant terms from *Webster's* unabridged dictionary. This list consisted of 18,000 terms, 4500 of which referred to generalized and stable traits. Around the same time, Thurstone (1934) factor analyzed peer ratings using 60 common adjectives, and identified 5 factors, a precursor to the model we know today. The work of Cattell (1943), serves as a conceptual foundation for much of the contemporary work in personality measurement. Cattell used Allport and Odbert's trait-descriptive terms as a starting point for his examination of personality structure. Later analyses of Cattell's work show five factors were reliably obtained (Norman, 1963; Tupes & Christal, 1961). Although the model has not been universally embraced, several discussions have highlighted its importance in the study of personality.

Donald Fiske (1949), Tupes and Christal (1961) and Norman (1963) all confirmed a five-factor model using a selected set of Cattell's variables. McCrae and Costa in an extensive line of research (e.g., 1987, 1990; Costa & McCrae, 1992, 1995) have continually identified a Big Five structure by investigating personality questions as opposed to descriptive terms. The factors comprising the Big Five are: (a) Extraversion, which represents the tendency to be sociable, assertive, active, and directive, (b) Agreeableness, representing the tendency to be likable, cheerful, adaptable, and cooperative, (c) Conscientiousness, comprised of the two main subfactors of achievement and dependability, (d) Neuroticism, which is the tendency to exhibit poor emotional adjustment and experience negative affects such as fear, anxiety, and impulsivity, and (e)

Openness to Experience, which is the disposition to be curious, creative, nonconforming, and autonomous. Costa and McCrae developed the NEO-PI to measure the structure. Recent work using the Big Five has often used the Revised NEO-PI-R (Costa & McCrae, 1992), which specifies six specific facets that comprise each of the Big Five factors.

An existing and constantly expanding literature has shown that the five factors represent independent constructs that provide a comprehensive description of normal personality. The five-factor structure of the model has shown generalizability across cultures and rating formats. It has further been shown that the Big Five are heritable and remarkably stable over decades of time (Costa & McCrae, 1992). Remarkably parsimonious measures have been developed based on the conceptual developments providing evidence for a lexical approach, which states that the degree of representation of an attribute in language roughly corresponds to its importance (Saucier & Goldberg, 1996). This approach suggests the best way to measure personality structure is through the language used to describe the person. Through the use of phenotypic (i.e. observable) attributes of individuals that are described in language, personality dimensionality can be defined. The lexical approach, using thousands of trait adjective found in many languages, strongly supports the 5-factor model and the Big Five traits (Goldberg, 1990).

The behavioral genetics literature has documented the heritability of the Big Five dimensions, suggesting that they are more than a summary description of behavior, but rather temperamental dispositions of individuals to act consistently over time in the way they think, act, and feel (Heath, Neale, Kessler, Eaves, & Kendler, 1992; Viken, Rose, Kaprio, & Koskenvuo, 1994). This line of research suggests that between 25% and 50% of the variance in observed personality variables is linked to genetic factors (Bouchard &

McGue, 1990; Hershberger, Plomin, & Pedersen, 1995; Plomin, Chipuer, & Loehlin, 1990). A specific examination of the Big Five using the NEO-PI-R (Costa & McCrae, 1992) showed heritability coefficients from 41% (Neuroticism) to 61% (Openness) (Jang, Livesley, & Vernon, 1996). The biological evidence of the Big Five factors suggest an underlying source of motivation that organizes and directs the course of human development, instead of merely describing superficial aspects of an individual.

The current research used Saucier's "Mini-markers" (1994) which are perhaps the most parsimonious lexical Big Five measure to date, using 40-trait descriptors, eight for each of the five domains. The "Mini-Markers" are derived from the 100 set of markers put forth by Goldberg (1992), and are thus highly correlated with them. The measure has acceptable reliability and tight, pure scales. The measure is also beneficial in that it has fewer difficult items than longer inventories and takes most participants less than 10 minutes to complete. The 40 "Mini-Markers" were presented in alphabetical order and scored using a Likert-type scale ranging from one (extremely untrue) to nine (extremely true).

### Temperament

In order to have a solid theoretical and conceptual base from which to examine ethical intent, the construct of temperament was chosen for several reasons. First, the author feels there is compelling evidence suggesting a temperamental substrate underlying the Big Five factors. Therefore, investigating the Big Five alone may be dismissive of certain motivational aspects responsible for the ethical actions chosen by the participants in the study. However, because a conceptual link of temperament to the

Big Five has only very recently emerged (e.g. Evans & Rothbart, 2001), it was important to have a Big Five measure in the current research to facilitate a better understanding of the theoretical underpinnings of behavior.

Research on temperament has recently begun to expose a clearer picture of a construct that explains personality development through a solid foundation of psychological and biological substrates. In fact, temperament may be at the heart of examining individual differences, and has been analogously referred to as the ice ball from which the snowball of personality develops. Allport (1961) emphasized the importance of temperament in understanding personality when he defined it as “the characteristic phenomena of an individual’s emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, and the quality of his prevailing mood, these phenomena being regarded as dependent upon constitutional makeup” (p.34).

The current definition of temperament is extended beyond the parameters of mood and emotion, to include motor tendencies and attention, which encompass self-regulatory and reactive processes. Temperament is currently defined as individual differences in reactivity and self-regulation assumed to have a constitutional basis (Rothbart & Derryberry, 1981). In the same paper, constitutional was defined as “the relatively enduring biological makeup of the organism, influenced over time by heredity, maturation, and experience. Reactivity refers to the excitability, responsivity, or arousability of the behavioral and physiological systems of the organism, whereas self-regulation refers to neural and behavioral processes functioning to modulate this underlying reactivity” (p. 40). This definition stresses the dynamic relationship of

reactive and regulatory processes and their resultant responses. Further, this definition demands temperamental characteristics be studied in the context of the stimuli that elicits them. For example, extraversion would not be revealed in a situation where an individual is not in contact with other people.

Although a universally accepted definition of the construct does not exist, there is a consensus that temperament refers to a group of traits, as opposed to a trait itself, similar to intelligence. Temperament has been studied in an eclectic variety of psychology fields, including developmental, personality, psychophysiology, clinical psychiatry, behavioral genetics, and education (Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983). This variance in study environments has facilitated a loose understanding of the construct, because each individual field has examined temperament from different perspectives. A Roundtable discussion in 1987 attempted to delineate what areas of temperament are agreed upon, and those areas where consensus has not been reached (Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde, & McCall, 1987). Agreement existed regarding temperament's reflection of behavioral tendencies, its biological underpinnings, and continuity. Further, it is agreed that temperament refers to individual differences instead of species-general characteristics (Goldsmith et al., 1987).

The revised version of the Adult Temperament Questionnaire (ATQ-2) (Evans & Rothbart, 2001) used in the present study was derived from the Physiological Reactions Questionnaire (PRQ), a theory driven approach to the measurement of adult temperament first developed by Derryberry and Rothbart (1988). The PRQ defined broad domains of temperament, including affect, arousal, and attention. Scales were developed to assess multiple components within the domains. Sub-constructs were identified, operationalized,

and measured showing both a 6-factor and 3-factor solution, both of which included perceptual sensitivity as a core component in the most robust factor. Empirical evidence showed these automatic attentional processes were not correlated with attentional scales that included an effortful component. Separating the volitional and automatic aspects of attention became a goal of later research that produced the Adult Temperament Questionnaire (ATQ), which in turn gave rise to the ATQ-2.

This study uses a five-factor model of temperament that includes two motivational-emotional and two attentional-cognitive constructs. In addition, the ATQ-2 includes an affiliativeness component that was not included in the ATQ. Recent animal research (Panksepp, 1998) has shown support for the idea that brain systems are related to affiliativeness, and this scale was developed to further understand this construct. The motivational-emotional constructs are Negative Affect and Extraversion. Effortful Control and Orienting Reactivity are attentional-cognitive constructs. In summary, the model includes positive and negative incentive constructs and automatic and effortful attentional constructs, along with affiliativeness.

The items below are an abbreviated reference offered by Evans and Rothbart (2001) that give a brief definition of the five general constructs along with definitions of sub-constructs and sample items. General constructs are capitalized, in bold, and underlined. Sub-constructs are underlined.

**NEGATIVE AFFECT** – represents different sorts of distress such as fear, sadness, discomfort, and frustration. Includes both aggressive and non-aggressive negative affect sub-constructs.

**Aggression Control**: Capacity to inhibit the behavioral expression of anger.

Example: I do not have a problem in controlling hostile impulses.

**Discomfort:** Unpleasant affect resulting from the sensory qualities of stimulation.

Example: I find loud noises to be very irritating.

**Fear:** Unpleasant affect related to anticipation of pain or distress.

Example: Sometimes loud noises scare me.

**Frustration:** Unpleasant affect related to the interruption of tasks and behavior.

Example: I seldom become irritated when someone is late. (reverse coded)

**Sadness:** Negative affect and lowered mood and energy related to object or person loss, disappointment, and exposure to suffering.

Example: I rarely feel sad after saying good-bye to friends or relatives (reverse coded).

**Social Anger:** Hostility felt toward other people.

Example: I rarely feel angry at people.

**EXTRAVERSION/SURGENY** –an appetitive or positive incentive (reward) motivational-emotional construct. It includes the experience of positive affect, approach, and enjoyment derived from higher levels of stimulation.

**Sociability:** Enjoyment derived from social interaction and being in the presence of others.

Example: I usually enjoy being with people.

**Positive Affect:** Latency, threshold, intensity, duration, and frequency of experiencing pleasure.

Example: It doesn't take much to evoke a happy response in me.

**High Intensity Pleasure:** Pleasure related to situations involving high stimulus intensity, rate, complexity, novelty, and incongruity.

Example: I would not enjoy the sensation of listening to loud music with a laser light show (reverse coded).

**EFFORTFUL CONTROL**– Various facets of applying effort to control attention and thus behavior. Each and every item addresses effort explicitly.

**Activation Control:** Capacity to perform an action when there is a strong tendency

to avoid it.

Example: When I am afraid of how a situation might turn out, I usually avoid dealing with it (reverse coded).

Attentional Control: Capacity to focus attention as well as to shift attention when desired.

Example: When I am trying to focus my attention, I am easily distracted.

Inhibitory Control: Capacity to inhibit inappropriate behavior.

Example: It is easy for me to hold back my laughter in a situation where it is not appropriate.

**ORIENTING REACTIVITY** – General cognitive awareness associated with automatic or reactive attentional processing.

Affective Perceptual Sensitivity: Spontaneous emotionally valenced explicit cognition associated with low intensity stimuli.

Example: I am often consciously aware of how the weather seems to affect my mood.

Associative Sensitivity: Spontaneous cognitive content that is not related to standard associations with the environment.

Example: When I am resting with my eyes closed, I sometimes see visual images.

Neutral Perceptual Sensitivity: Awareness of slight, low intensity stimulation arising from the environment and within the body.

Example: I rarely notice the color of people's eyes.

**AFFILITATIVENESS** – A construct related to attachment, empathy, and guilt that involves positive concern for others.

Emotional Empathy: Affective response congruent with what others are perceived to feel.

Example: I am rarely bothered by the apparent suffering of strangers.

Empathetic Guilt: Distress in response to negatively affecting other people.

Example: Whenever I believe that I have hurt someone's feelings, I feel

guilty.

Social Closeness: Feelings of warmth, closeness, interest and involvement with others.

Example: There are some people that I feel very close to.

Rothbart, Ahadi, and Evans (2000) stress the importance of understanding temperament in order to understand personality. This research eloquently describes how the examination of temperament provides process-oriented models by establishing links between individual differences in behavior and their psychological and biological substrates. An emphasis on developmental and biological psychology is especially evident in current temperament research, and more is being understood about temperament's relationship with the constructs of the "Big Five" factors of personality.

Evans & Rothbart (2001) demonstrated a one-to-one correspondence between the 5-factor temperament structure derived from the ATQ-2 and the Big Five as measured from Saucier's (1994) "Mini-Markers." Correlations between the temperament factors and the Big Five scales in their study are shown in Table 1.

Table 1 Correlations of Temperament Factor Scores with Big Five Scales

| Factor Scores        | Big Five Scales |            |            |            |            |
|----------------------|-----------------|------------|------------|------------|------------|
|                      | N               | I/O        | E          | A          | C          |
| Negative Affect      | <b>.74</b>      | -.04       | -.14       | -.30       | -.24       |
| Orienting Reactivity | .22             | <b>.65</b> | .13        | .22        | .02        |
| Extraversion         | .04             | .21        | <b>.67</b> | <b>.31</b> | -.06       |
| Affiliativeness      | -.09            | .18        | .26        | <b>.69</b> | .25        |
| Effortful Control    | <b>-.41</b>     | .13        | .14        | .12        | <b>.64</b> |

Note. Abbreviations: I/O = Intellect/Openness, C = Conscientiousness, E = Extraversion, A = Agreeableness, N = Neuroticism.  
Correlations greater than .30 are in bold.

These correlations suggest a conceptually coherent, robust relationship between temperament processes and the Big Five factors, with correlations ranging from .64 to .74. The Orienting Reactivity measure of temperament was most related to Intellect/Openness and the Effortful Attention factor of temperament was related to Conscientiousness. The Extraversion scale of temperament was highly correlated with the Big Five measure of Extraversion, and the Negative Affect component of Temperament was most related to the Neuroticism scale. Affiliativeness was highly correlated with Agreeableness, although Extraversion was also to a lesser extent. Evans and Rothbart (2001) demonstrated that the one-to-one convergence of the five-factor temperament model and the Big Five was not an artifact of factor analysis by showing the general

construct scale scores that were conceptually derived corresponded to the Big Five at relatively the same level as the factors scores converged with the Big Five.

McCrae and colleagues (McCrae, Costa, Ostendorf, Angleitner, Hrebickova, Avia, Sanz, Sanchez-Bernardos, Kusdil, Woodfield, & Smith 2000; McCrae & Costa, 1996) have recently suggested that the Big Five can be subsumed under temperament. That is, the heritability and stability across development and cultures that has been shown in temperament studies suggest that the Big Five structure may emerge from early developing temperament. If, as the surfacing research suggest, basic temperament processes are at the core of global traits, it is paramount to examine personality from this perspective. A plausible extension to this line of research is the exploration of outcomes that may be associated with basic, biological substrates that underlie personality.

### Leadership and Corporate Social Performance

Individuals work within an organization, and their behavior must be considered in this social context. There have been countless studies regarding organizational culture, and the subtle and not so subtle ways an organization's socialization process defines appropriate ways of behaving within that organization. Of specific interests in the present study, are corporate social responsibility and corporate social performance, and the attitudes executives within the company portray concerning them. Corporate social performance, as defined by Wood (1991), takes into account three elements of being socially responsible: principle, process, and outcome. For example, if an organization has environmental concerns about packaging, *the principles* of corporate social responsibility would lead the company to recognize an obligation to change its packaging in order to

protect the environment. The *processes* might consist of establishing an office of environmental affairs, and the *outcomes* may include the switch to environmentally responsible packaging (Boatright, 2000).

Boatright (2000) has given examples on the type of corporate activities that show social responsibility, even though there is some disagreements regarding the exact meaning of the term.

1. Choosing to operate on an ethical level that is higher than what the law requires.
2. Making contributions to civic and charitable organizations and nonprofit institutions.
3. Providing benefits for employees and improving the quality of life in the workplace beyond economic and legal requirements.
4. Taking advantage of an economic opportunity that is judged to be less profitable but more socially desirable than some alternatives.
5. Using corporate resources to operate a program that addresses some major social problem.

These types of activities were used explicitly in the present studies vignettes, in order to address the large window of behaviors that fall under the term corporate social performance and responsibility. The above examples, it should be noted, are not necessarily mutually exclusive to organizational interests. It is often the case that acting in a socially responsible manner will have a positive impact on the organization.

Efforts to investigate social responsibility and corporate performance have been hampered by a lack of adequate operationalizations and measures of social responsibility. The literature has shown both positive and negative relationships between corporate social responsibility and financial performance (Cochran & Wood, 1984; Aupperle,

Carroll, and Hatfield, 1985; Lehman, 1985). The well-known comments of Milton Friedman (1962) that “Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than making as much money for their stockholders as possible” (p. 133) has not dissuaded present-day companies from acting in a prosocial manner. In acting in a socially responsible manner, organizations often must forgo a certain measure of profit in order to achieve noneconomic returns.

Research on the social behavior of organizations has provided mixed results. There are those who proclaim corporate social actions are of considerable importance to organizational effectiveness (e.g., Kraft, 1990,1991), those who suggest the main social responsibility of a company is to make a profit (e.g., Friedman and Friedman, 1981), and those who have shown neither penalties nor rewards are an outcome of acting in a socially responsible manner (e.g., Hunt, Kiecker, and Chonko, 1990). The goal of the present study, however, is not to determine the overall impact of acting socially responsible. One goal is, however, to determine how past corporate social behavior may influence individual-level decision-making. Emerging theories of marketing ethics have shown the decision-making process of marketers in situations having ethical content is a function of different categories of factors such as cultural environment, organizational environment, and individual level variables (i.e., Ferrell, Gresham, and Fraedrich, 1989; Hunt and Vitell, 1986, 1993). Hunt and Vitell (1986) describe ethical judgments as including a teleological evaluation in which the person evaluates an evoked set of alternative actions by considering their perceived consequences as well as the probability and desirability of consequences.

Robin and Reidenbach (1987) have proposed that a key determinant in successful programs aimed at instilling socially responsible behavior in a corporate context is management's ability to integrate ethical core values into the organizational culture. The organizational environment, the formal and informal ethical norms within the organization, has repeatedly been recognized as an important determinant of decision making in ethical situations (Ferrell and Gresham, 1985). Trevino (1986) has suggested that organizational culture is a situational moderator influencing different aspects of an individual's decision process concerning ethical choices. Her "person-situation interactionist" model proposes organizational culture is an important factor in moral development because it "influences thoughts and feelings, and guides behavior. It manifests itself in norms, rituals, ceremonies, legends, and the organization's choice of heroes and heroines" (p. 611).

Corporate social performance in the present study was manipulated, along with executive commitment, so the organization had either a high level of prosocial behavior, or a low level of prosocial behavior, with corresponding parallel levels of leadership. In this manner, it was possible to investigate the influences that organizational-level prosocial behavior may have on individual-level decision-making regarding ethical behavior. Because of the demonstrated importance of an organization's prosocial stance, it is expected that an organization high in corporate social responsibility will encourage more individual-level ethical behavior compared to a company low in social responsibility.

In making decisions at work, organizational members in executive and managerial positions play a role in considering what options are available. A managerial choice

perspective (Child, 1972, 1997) highlights the active role of management, and recognizes that managers enjoy 'bounded autonomy.' This perspective purports that both the proactive exercise of managerial discretion and reactions to real or perceived environmental expectations are reflected in organizational structures and actions (Dutton and Duncan, 1987; Weick, 1979). If ethical behavior within an organization is considered the norm, it may be at least partially due to the executives' attitudes regarding ethics. It is the top executives who have the status necessary to influence organizational actions, and therefore the value commitments of these officers are of particular importance (Finkelstein and Hambrick, 1996).

In addition to considering bottom-line organizational goals, executives who have a personal commitment to ethics also regularly express concern about how the companies' goals are achieved (Howard, 1990). An executive with a firm commitment to ethics will communicate the aforementioned ideas of corporate social responsibility. Further, a manager committed to ethics will likely consider an investment in ethics programs, policies, and structures to be an important way to demonstrate and symbolize that commitment (Weaver, Trevino, and Cochran, 1999). Lastly, managers often project their own attitudes and values onto others (Mowday, 1982), and therefore executives who are committed to ethics will likely communicate that message through various mediums to other organizational members.

The business ethics literature has consistently stressed the importance of executives' in the organization commitment to ethics (Paine, 1996; Trevino, 1990). In one of the first study to employ a systematic methodology to investigate the importance of the executive commitment empirically, Weaver et al. (1999) found support for the

proposition by demonstrating that top managers' commitment to ethics is associated with both the scope and the control orientation of their companies' ethics programs. They concluded that top managers play a central role in the process of managing ethics, although they investigated ethics programs themselves, not the resultant effectiveness of such programs. Still, the ethical perspective executives' hold must be considered an important influence on an organization's ethical structures and practices (Etzioni, 1988).

As previously mentioned, executive commitment in the present study was manipulated consistently with corporate social performance, to be appropriately constant with what would be expected in real-world organizations. That is, organizations displaying high levels of corporate social performance had executives committed to this ideal. Likewise, organizations low on corporate social responsibility had executives with low commitment to social performance.

### Accountability

Accountability in this study refers to the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others (Tetlock, 1992). Being accountable also implies that a lack of satisfactory justification for a behavior may result in negative consequences such as being terminated from a job (Stenning, 1995). Positive accolades, such as getting a raise, may also result from accountability, given proper justifications are made. The construct of accountability is dynamic and complex, and empirical work has supported just a handful of response patterns that coincide with varying levels of accountability.

One consistent finding in the literature is that conformity often plays a role when the view of an audience is known prior to forming one's own opinion (Tetlock, 1983). Empirical investigations have supported the predictions that participants shift their attitudes toward that of an audience, when the views of the audience are known (Cialdini, Levy, Herman, Kozlowski, and Petty, 1976; Tetlock, Skitka, and Boettger, 1989; Klimoski and Inks, 1990). Further, studies have shown that when the views of an audience are completely unknown, people often engage in preemptive self-criticism (Tetlock, 1983). This means they attempt to think in integratively complex ways that consider multiple perspectives on the issue and try to speculate objections that reasonable others may make. This makes people more tolerant for recognizing both good and bad features of particular policies and considering value trade-offs.

In a summation of the accountability research, Lerner and Tetlock (1999) assert the most complex and effortful thinking occurs when decision makers learn prior to forming any opinions that they will be accountable to an audience (a) whose views are unknown, (b) who is interested in accuracy, (c) who is interested in processes rather than specific outcomes, (d) who is reasonably well-informed, and (e) who has a legitimate reason for inquiring into the reasons behind participants' judgments. However, the results in all the above areas have proven to be highly variable across dependent variables and judgment tasks. The researchers assert that accountability must not be thought of as a cognitive or social panacea, but rather a logically complex construct capable of producing negative, as well as beneficial effects.

Of most relevance to the current study, are the links suggested by Tetlock (1992) that connect individuals and the authority relationships within which they work and live.

A practical importance exist, to understand how accountability should be considered when devising organizational structures and reporting relationships. As Stryker and Statham (1985) stressed, an appropriately dynamic framework is needed, that “facilitates movement from the level of social structure to the level of the person, and vice versa, as well as explanatory principles articulating the two levels that reflect the inherent complexity of both” (p. 311). Accountability in this study will be examined as affecting judgment and choice with the perspective that no decisions or judgments are made in isolation, but rather in a dynamic and complex social system. What must be remembered throughout this study is the social settings in which people make a majority of their decisions is of importance in predicting behavior. Whether it is family, friends, or coworkers, rarely is a decision made that does not have interpersonal consequences.

### Moral Intensity

Models investigating ethical decision-making in organizations have predominantly focused on individual or organizational level variables, and less often, both. These models imply, for the most part, that individuals will act in the same manner across all situations, regardless of the situation or gravity of the issues. It was not until Jones (1991) that a component of the moral issue itself was considered in an ethical model. Jones defined the issue-contingent variable of his model “moral intensity,” and proposed it played a role in the recognition of moral issues and therefore “in the actual engagement of moral decision-making processes instead of, or in addition to, other decision-making schemata”(p.391). If a person fails to recognize they are dealing with a

moral issue, the decisions and behaviors they display regarding the issue become irrelevant.

Moral intensity is derived, in part, from present day legal concepts and the normative arguments of moral philosophers. Just as criminal laws attempt to levy penalties that are in accordance with the violation, so might moral intensity moderate decisions dealing with ethical issues. According to Garrett (1966) and Jones (1991), moral philosophers differentiated levels of moral responsibility based on proportionality related to:

1. The type of goodness or evil involved.
2. The urgency of the situation.
3. The certainty of probability of effects.
4. The extent of the moral agent's influence on events.
5. The availability of alternate means.

Jones' (1991) model suggests a systematic relationship between consequences and subsequent behavior, a component absent in previous models. On an intuitive level, Jones hypothesized people are much more concerned about moral issues affecting those close to them, as opposed to those with whom they have little or no contact. Similarly, people are more sensitive to injustices that have immediate impact rather than those that have effects in the distant future. In accounting for differences in ethical issues, Jones used the variable of moral intensity as the collective characteristics of the moral issue itself. Moral intensity is a multidimensional construct that includes the 6 component parts of magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. Moral intensity does not include

individual level or organizational level variables. The components, as identified and defined by Jones (1991, p.374-378), are given below in greater detail.

1. The *magnitude of consequences* component of moral intensity is the sum of the harms (or benefits) done to victims (or beneficiaries) of the moral act, and is based on common sense and empirical investigations regarding human behavior. According to this definition, an act that causes harm to 1000 people has a greater magnitude than does an act that causes harm to 100 people. Further, an act that causes human death has a greater impact than an act resulting in minor injury to a person.
2. The *social consensus* component is defined as the degree of social agreement that a proposed act is evil (or good). Logically, social consensus states a person has to know what good ethics prescribes in a given situation in order to make an ethical decision, and a consensus reduces any ambiguity. Empirically, Laczniak and Inderrieden (1987) found people reject illegal decisions significantly more than unethical (but not illegal) decisions in an ethical judgment experiment. In this case, legal prohibition may equate to a social consensus that an act is unethical.
3. The *probability of effect* component of moral intensity is the product of the magnitude of consequences, the probability that the act will actually take place, and the probability the act will actually cause the harm (benefit) predicted. As the probabilities mentioned reach certainty, so does the probability of effect.
4. *Temporal immediacy* refers to the length of time between the present and the onset of consequences of the moral act. People tend to discount the impact of future events, and as time elapses, the probability that the act in question will actually cause the predicted harm declines.
5. *Proximity* refers to the feeling of nearness (social, cultural, psychological, or physical) that the moral agent has for victims (beneficiaries) of the evil (beneficial) act in question. For example, a high toxin level in the drinking

water of an individual's hometown has a greater moral proximity than the same toxin levels in drinking water in a different country. Jones (1991) used the empirical investigations of Milgram (1974) to demonstrate the profound effects proximity can have on behavior. In his experiments on obedience, Milgram found significantly fewer subjects were willing to "shock" a victim when actual physical contact with the victim had to be made.

6. Finally, the *concentration of effect* component of moral intensity is an inverse function of the number of people affected by an act of given magnitude. Jones also suggests people are more sensitive to seeking justice for individuals, more so than institutional entities such as corporations or government agencies.

A limited number of studies have empirically examined moral intensity as defined by Jones. Jalajas (1993) found no differences caused by moral intensity in undergraduate students in a study that manipulated moral intensity by varying the levels of the magnitude of consequences, social consensus, temporal immediacy, and proximity. Dukerich, Waller, George, and Huber (1993) found that managers differentiate between ethical and non-ethical problems based on moral intensity, and as a result, this may influence the way they handle situations.

Several researchers have found that perceptions of moral intensity do influence an individual's ethical perceptions and, indirectly, their intentions. A factor analysis done by Singhapakdi, Vitell, and Kraft (1996) suggested the six components of moral intensity developed by Jones (1991) could be synthesized into only two components. Their results suggested that all six components of moral intensity, however, were related to ethical perceptions and ultimately the intentions on a survey of marketing professionals. Morris and McDonald (1995), Singer (1996; Singer & Singer, 1997), and Harrington (1997)

found the strongest support for the social consensus and magnitude of effects components of moral intensity on individual ethical perceptions. In another survey of marketing professionals, Singhapakdi, Vitell, and Frank (1999) found that moral intensity has a direct and indirect effect on ethical intentions.

For the purposes of the present study, moral intensity will be examined at both extremes. That is, all six components of the construct will be aggregated in order to convey as sense of high moral intensity or low moral intensity, in order to parsimoniously examine the influence of the construct. Due to previous research findings, the magnitude of effects and social consensus components of the ethical dilemma were especially important in the present research. Although the relative importance of the components and their relationships to each other has not yet been specified, understanding the structure of moral intensity was not a goal of this study. What is known, however, is all of the components comprising moral intensity are characteristics of the moral issue itself and they are expected to have interactive effects. Jones (1991) suggested making the distinctions between levels of moral intensity in research considerable enough to influence perception, and that has been incorporated into the present research design.

## CHAPTER 3

### Methodology

#### Participants

The participants in this study were 214 undergraduate students (58% male and 42% female) in an upper division management class at a large southwestern university. These students were chosen because they represent individuals who may be considering employment in the business sector, and will likely be faced with decisions concerning ethical dilemmas in the workplace. All 214 questionnaires were fully completed and used in the analysis. English was the first language for 87% of the participants and 83.6% of the participants identified the United States as their country of origin.

The mean age of the participants was 22.7 years, with a standard deviation of 4.31. The median age was 22. The youngest participants are 19 years old and the oldest was 51 years old. The mean GPA of the participants was 3.22, with a .42 standard deviation. 30.8% of the participants were MIS majors, 7.5% were management majors, 10.3% were marketing majors, 7.5% were finance majors, 12.1% were accounting majors, 1.4% were social science majors, and 30.4% majored in other areas. Although the demographic information was collected in order to include them in the analysis to check for interactions, they were not a primary focus of the research.

#### Measures

The students filled out the revised version of the adult temperament questionnaire (ATQ-2), the Big Five Mini-Markers, and the Ethical Scenarios Questionnaire (ESQ)

(see Appendix A). The ATQ-2 had a total of 250 items, the ESQ contained 8 scenarios with six items each, and the Big Five Mini-Markers consisted of 40 adjectives that were rated by the participants.

### Procedure

The measures were presented in an incomplete counterbalanced format to account for any possible order effects and were administered during regular class hours with the researcher present. The students were given one hour and fifteen minutes to complete the questionnaires, and were given extra credit upon completion of the measures. The students were instructed that participation was completely voluntary, that they were allowed to quit at anytime without penalty, and that their responses would remain completely anonymous.

### Variables

Criterion Variables. The study used the Ethical Scenarios Questionnaire (ESQ) developed by the author. Ethical scenarios are frequently used in research because they allow researchers to present concrete decision-making situations that could plausibly be encountered in real-life situations, and empirical evidence supports the linkage between judgments concerning an action and intentions to perform the action (Bass, Barnett, & Brown, 1999; Weber, 1992). The vignettes making up the ESQ were pre-tested for clarity and construct reliability. Each of the three organizational-level variables (Moral Intensity, Leadership and corporate social performance, and Accountability) was made to be either

high or low, in order to examine most clearly the relationship among the variables themselves and with an individual's personality characteristics.

The research employed a repeated measures design, with every participant answering six questions for all eight vignettes. The eight vignettes contained all possible combinations of the three organizational level variables. The vignettes were incompletely counterbalanced to control for any order effects, and used 5-point Likert-type response options. Questions 1 (To what extent would you overlook laws pertaining to this scenario?), 4 (To what extent would you engage in falsifying paperwork, which would benefit this company?), and 5 (To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?) pertained directly to the ethical intentions of the participants in a particular situation, and made up the Ethical Behavior Score (EBS), the main dependent variable of the study. Questions 1 and 4 were reversed scored, so that a higher EBS equated with higher ethical intent.

Questions 2 (To what extent would you feel compelled to discuss this situation with your supervisor?) and 3 (To what extent would you discuss this situation with individuals outside the company, i.e. governmental law enforcement?) assessed the degree the participant felt it was necessary to talk with individuals within and outside the company about the particular dilemma. These questions are thought to be highly related to ethical intent, but also may provide evidence for how individual's decide when "whistle-blowing" may be appropriate. Finally, question 6 (To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?) attempts to determine to what extent participants may be willing to engage

in extra-role behaviors within particular organizational context. The questions were carefully and purposefully worded so that a particular response did not seem “right” or “wrong” and a pretest showed variability in response patterns for the same questions across different scenarios for the same individual. This supports the notion that the scenarios realistically portrayed a situation where competing interests existed and each decision carries with it advantages and disadvantages.

Predictor Variables. This study examines four main predictor variables. The first predictor variable is personality as measured through a five-factor temperament and a lexical big five model. The two five-factor models are the revised Adult Temperament Questionnaire (ATQ-2) (Evans & Rothbart, 2001) and the Big Five Mini-Markers (Saucier, 1994), both described in detail in Chapter 2. The reliability of the 18 temperament scales making up the ATQ-2 has typically been at a level of .80 or higher (Evans & Rothbart, 2001). Recent research has pointed to the possibility that hierarchical relations may exist among temperament variables and global personality traits (Rothbart, Ahadi, & Evans, 2000), and for several reasons suggested in the previous chapter, both personality measures were used in the present study.

Two organizational level variables and one situational variable were manipulated in the scenarios examined by the participants. Leadership and corporate social performance, accountability, and moral intensity were either high or low in each vignette, resulting in eight different scenarios each with a different combination of the three variables. Moral intensity is a construct defined as “the extent of issue-related moral imperative in a situation” (Jones, 1991, p.372). Scenarios with high moral intensity

include a situation where a medical device is implicated in the deaths of many people. An example of a low moral intensity scenario is a telemarketing firm calling households 30 minutes past their 8pm deadline.

Leadership and corporate social performance were manipulated simultaneously in the scenarios under the premise that if an organization has executives committed to ethical behavior, it will likely show up in the companies actions. An example of a vignette containing low Lead is an energy company with a CEO that stresses cost-savings above everything else in an organization that has never shown concern for being socially responsible. Scenarios with high Lead include an organization with a CEO that personally communicates a desire for prosocial behavior and communicates that vision through personal and organizational actions.

### Research Questions

- R<sub>1</sub>. Do personality differences, as assessed using a temperament measure and a lexical Big Five model of personality, influence ethical intentions, whistle blowing, and extra-role behaviors in a workplace environment?
- R<sub>2</sub>. Do temperamental characteristics yield more predictive information about how individual's might behave, compared to lexical big five characteristics, given the formers biological and emotional foundation?
- R<sub>3</sub>. Does the organization's history of behavior and leadership attitude influence ethical intent, whistle blowing, and extra-role behaviors? What personality factors are associated with being influenced by the organizational level variables of past behavior and leadership attitude?

- R<sub>4</sub>. Does accountability influence ethical intent, whistle blowing, and extra-role behaviors? What personality factors are associated with being influenced by the accountability of a particular situation?
- R<sub>5</sub>. Does moral intensity influence ethical intent, whistle blowing, and extra-role behaviors? What personality factors are associated with being influenced by the moral intensity of a particular situation?

### Hypotheses

The following hypotheses are drawn from the Temperamental Ethical Decision-making Model presented in detail in the previous chapter.

- H<sub>1</sub> Moral intensity will have a main effect on an individual's ethical intentions.
- H<sub>1.1</sub> Decisions made in situations with high moral intensity will be more ethical than those made in situations with low moral intensity.
- H<sub>2</sub> Accountability will have a main effect on an individual's ethical intentions.
- H<sub>2.1</sub> Individuals specifically held accountable for outcomes and behaviors will have less unethical intent compared to situations with high accountability.
- H<sub>3</sub> An organizations history of acting in a socially responsible manner and having leaders within the company who foster such beliefs will have a main effect on individuals' ethical intentions.

- H<sub>3.1</sub> Organizations with a history of making ethical decisions and leaders who encourage this behavior will influence individuals within the organization to act in a consistently ethical manner compared to organizations with no history of corporate social performance and leadership.
- H<sub>4</sub> Individual personality differences will have a main effect on ethical decision-making in organizations.
  - H<sub>4.1</sub> Individuals high on Affiliativeness (and agreeableness to a lesser extent) will make more ethical decisions than those low on Affiliativeness.
  - H<sub>4.2</sub> Individuals high on Effortful Control (and conscientiousness to a lesser extent) will make more ethical decisions than those low on Effortful Control.
  - H<sub>4.3</sub> Individual differences in temperament as measured by the ATQ-2, will have more predictive power related to ethical decision making than the corresponding Big Five personality traits as measured by the Mini-Markers, because of the formers biological underpinnings.
- H<sub>5</sub> Temperamental characteristics (and Big Five characteristics to a lesser extent) will have significant interactions with the organizational level variables of Leadership and Accountability.
  - H<sub>5.1</sub> Effortful Control (and conscientiousness to a lesser extent) will interact with the organizational level variable of Leadership. Those high on Effortful Control will be influenced less by Leadership than those low on Effortful Control.

- H<sub>5.2</sub>    Effortful Control (and conscientiousness to a lesser extent) will interact with the organizational level variable of Accountability. Those high on Effortful Control will be influenced less by Accountability than those low on Effortful Control.
- H<sub>5.3</sub>    Affiliativeness (and agreeableness to a lesser extent) will interact with the organizational level variable of Leadership. Those high on Affiliativeness will be influenced more by Leadership than those low on Affiliativeness.

Ethical intentions are the dependent variables being focused upon in the present study. However, the related items of whistle-blowing and extra-role behaviors are examined with respect to the aforementioned organizational level variables of Leadership, Moral Intensity, and Accountability and temperamental characteristics of Affiliativeness and Effortful Control.

- H<sub>6</sub>      Situations high in Moral Intensity, Leadership, and/or Accountability will elicit a significantly higher rate of whistle blowing and extra-role behaviors compared to situations low in Moral Intensity, Leadership, and/or Accountability.
- H<sub>7</sub>      Effortful Control and Affiliativeness will be positively related an increase in whistle blowing and extra-role behaviors.

## CHAPTER 4

### Results

All results in this chapter are based on  $N=214$  unless otherwise noted. Reliability analysis for each of the temperament and Big 5 scales were computed followed by factor analysis of the scale scores. The alpha coefficients of reliability ranged from .67 to .89. The means, standard deviations, and alpha coefficients of reliability are reported in Table 2. The ATQ was measured on a 1 to 7 Likert type scale, and the Big Five Mini-Markers were assessed using a 1 to 9 Likert type scale.

The reliability of the two temperament components of interest in this study, Effortful Control and Affiliativeness, were also assessed. Effortful Control, which was comprised of Inhibition Control, Activation Control, and Attentional Control scales, had an Alpha of .78. Affiliativeness, which was comprised of Emotional Empathy, Empathetic Guilt, and Social Closeness scales, had an Alpha of .80.

Table 2 Standard Deviations, Means, and Alpha Reliability Coefficients for Adult Temperament Questionnaire and Big Five Scales

| Scales                           | Mean | SD   | Alpha |
|----------------------------------|------|------|-------|
| ATQ Scales                       |      |      |       |
| Frustration                      | 4.29 | .94  | .84   |
| Social Anger                     | 3.68 | .98  | .85   |
| Aggression Control               | 4.87 | .98  | .86   |
| Sadness                          | 4.00 | .88  | .80   |
| Discomfort                       | 3.89 | .79  | .71   |
| Fear                             | 4.07 | .98  | .79   |
| Attentional Control              | 4.12 | 1.02 | .88   |
| Inhibitory Control               | 4.38 | .73  | .67   |
| Activation Control               | 4.69 | .96  | .84   |
| Neutral Perceptual Sensitivity   | 4.92 | .72  | .79   |
| Affective Perceptual Sensitivity | 4.38 | .74  | .82   |
| Associative Sensitivity          | 5.06 | .71  | .79   |
| Sociability                      | 5.31 | .93  | .89   |
| High Pleasure                    | 5.02 | .71  | .74   |
| Positive Affect                  | 5.22 | .89  | .83   |
| Emotional Empathy                | 4.90 | .75  | .77   |
| Empathetic Guilt                 | 5.60 | .86  | .85   |
| Social Closeness                 | 5.70 | .65  | .82   |
| Big Five Scales                  |      |      |       |
| Neuroticism                      | 4.56 | 1.32 | .78   |
| Intellect/Openness               | 6.67 | 1.15 | .77   |
| Extraversion                     | 6.05 | 1.58 | .88   |
| Agreeableness                    | 7.07 | 1.15 | .85   |
| Conscientiousness                | 6.69 | 1.20 | .81   |

Note: SD = Standard Deviation

A conceptually clear five-factor solution was obtained from the Big Five Mini-Markers, with all of the adjectives loading heavily onto their predicted scale. Table 3 shows the factor loadings of the adjectives.

Table 3 Factor Loadings of Big Five adjectives

|                | Extraverted | Agreeableness | Neuroticism | Conscientiousness | Intellect  |
|----------------|-------------|---------------|-------------|-------------------|------------|
| Bashful        | <b>.76</b>  |               |             |                   |            |
| Bold           | <b>.65</b>  |               |             |                   | .26        |
| Energetic      | <b>.66</b>  |               |             |                   |            |
| Quiet          | <b>.81</b>  |               |             |                   |            |
| Shy            | <b>.83</b>  |               |             |                   |            |
| Talkative      | <b>.73</b>  |               |             |                   |            |
| Withdrawn      | <b>.67</b>  | .26           |             |                   |            |
| Extraverted    | <b>.68</b>  |               |             |                   |            |
| Cold           |             | <b>.69</b>    |             |                   |            |
| Cooperative    |             | <b>.56</b>    |             |                   | .25        |
| Harsh          |             | <b>.67</b>    | -.41        |                   |            |
| Kind           |             | <b>.73</b>    |             |                   |            |
| Rude           |             | <b>.61</b>    | -.37        |                   |            |
| Sympathetic    |             | <b>.75</b>    |             |                   |            |
| Unsympathetic  |             | <b>.62</b>    |             |                   |            |
| Warm           | .28         | <b>.72</b>    |             |                   |            |
| Envious        |             |               | <b>.82</b>  |                   |            |
| Fretful        | -.27        |               | <b>.55</b>  |                   |            |
| Jealous        |             |               | <b>.75</b>  |                   |            |
| Moody          |             |               | <b>.54</b>  |                   |            |
| Relaxed        |             |               | <b>.57</b>  |                   |            |
| Temperamental  |             | -.33          | <b>.52</b>  |                   |            |
| Touchy         |             |               | <b>.32</b>  |                   |            |
| Unenvious      |             |               | <b>.64</b>  |                   |            |
| Careless       |             |               |             | <b>.53</b>        |            |
| Disorganized   |             |               |             | <b>.76</b>        |            |
| Efficient      |             |               |             | <b>.58</b>        | .26        |
| Inefficient    |             |               | -.27        | <b>.60</b>        |            |
| Organized      |             |               |             | <b>.82</b>        |            |
| Practical      |             |               |             | <b>.56</b>        |            |
| Sloppy         |             |               |             | <b>.66</b>        |            |
| Systematic     |             |               |             | <b>.55</b>        |            |
| Complex        |             |               |             |                   | <b>.65</b> |
| Creative       |             |               |             |                   | <b>.62</b> |
| Deep           |             |               |             |                   | <b>.69</b> |
| Imaginative    | .34         |               |             |                   | <b>.61</b> |
| Intellectual   |             |               |             |                   | <b>.59</b> |
| Philosophical  |             |               |             |                   | <b>.57</b> |
| Uncreative     | .27         |               | -.26        |                   | <b>.53</b> |
| Unintellectual |             |               |             |                   | <b>.38</b> |

Extraction: Principal Axis Factoring. Rotation Method: Promax Loadings > .45 in bold print. Loadings < .25 omitted

An exploratory factor analysis (i.e. principal axes factor analysis) with oblique (i.e. promax) rotations was conducted to examine both convergent and divergent

evidence of the conceptual temperamental constructs. The sub-construct level scales were used to construct higher-level general construct scales. Correlations between the factor scores and the general construct scales were examined, to determine how the factors contributed to each general construct. As opposed to orthogonal rotations, oblique rotations generate both a structure matrix (simple correlation between the latent factors and the manifest variables) and a pattern matrix (partial regression weights used to predict the variables from the factors). The 5-factor pattern matrix, using partial regression weights to predict the variables from the factors, is shown in Table 4.

Table 4 Factor Loadings for Temperament

|          | Neg. Affect | Affiliation | Orienting  | Effort Cont. | Extraversion |
|----------|-------------|-------------|------------|--------------|--------------|
| SOCANGER | <b>.86</b>  | -.25        |            |              |              |
| FEAR     | <b>.81</b>  | .43         |            |              |              |
| SADNESS  | <b>.69</b>  | .30         |            |              |              |
| FRUSTRAT | <b>.60</b>  |             |            |              |              |
| AGGCONTR | <b>-.60</b> | .38         |            |              |              |
| DISCOMF  | .34         |             |            |              | -.42         |
| EMPGUILT |             | <b>.90</b>  |            |              |              |
| EMOTEMPA |             | <b>.78</b>  |            |              |              |
| SOCCLOSE |             | <b>.59</b>  |            |              |              |
| GENPERCE |             |             | <b>.87</b> |              |              |
| AFFPERCE |             |             | <b>.72</b> |              |              |
| ASSOCSEN |             |             | <b>.46</b> |              | .34          |
| ATTENCON |             |             |            | <b>.82</b>   |              |
| INHIBCON |             |             |            | <b>.69</b>   | -.29         |
| ACTIVCON |             | .30         |            | <b>.66</b>   |              |
| HIGHPLES |             |             |            |              | <b>.76</b>   |
| SOCIABIL |             | .36         |            |              | <b>.57</b>   |
| POSAFFEC | -.30        | .37         |            |              | .28          |

Extraction Method: Principal Axis Factoring. Rotation Method: Promax  
Loadings above .45 in bold print. Loadings less than .25 omitted.

Some interpretable deviations from previous temperament research are found in the factor analysis. First, discomfort and positive affect scales do not load substantially onto any factor. Also, all of the constructs were more intercorrelated than in previous

studies, likely due to the tendency of the present sample to group good traits together and bad traits together. The first factor, negative affect, included loadings from social anger, fear, sadness, frustration, and aggression control and smaller secondary loadings from discomfort and positive affect (negative loading). Negative affect was highly correlated with Big Five neuroticism ( $r = .66$ ).

Factor II included loadings from scales that assessed the Affiliativeness construct. In addition to these three factors (emotional empathy, empathetic guilt, and social closeness), affiliation had moderate secondary loadings from fear, aggression control, sociability and positive affect, and even smaller secondary loadings from social anger (negative loading), sadness, and activation control. Affiliativeness was highly correlated with Big Five agreeableness ( $r = .70$ ). Factor III included loadings from neutral perceptual sensitivity, affective perceptual sensitivity, and associative sensitivity. All of these scales were composed of loadings that assessed orienting reactivity. This factor was highly related to Big Five Intellect ( $r = .59$ ).

Factor IV, the effortful control factor, included high loadings from inhibitory control, activation control, and attentional control. Effortful control was significantly correlated with Big Five Conscientiousness ( $r = .58$ ). Finally, the extraversion factor included high loadings from high pleasure and sociability, along with smaller loadings from positive affect, associative sensitivity, inhibitory control (negative loading), and discomfort (negative loading). This factor was highly related to Big Five extraversion ( $r = .62$ ). Tables 5, 6, and 7 report the correlations between temperament and the Big Five factors, along with the correlations among the scales themselves.

Table 5 Correlations of Temperament Factor Scores with Big Five Scales

| Factor Scores         | Big Five Scales |            |            |            |            |
|-----------------------|-----------------|------------|------------|------------|------------|
|                       | N               | I/O        | E          | A          | C          |
| Negative Affect       | <b>.66</b>      | -.23       | -.32       | -.24       | -.17       |
| Orienting Sensitivity | -.19            | <b>.59</b> | .29        | .29        | .13        |
| Extraversion          | <b>-.36</b>     | <b>.37</b> | <b>.62</b> | <b>.50</b> | .11        |
| Affiliativeness       | -.28            | .25        | .19        | <b>.70</b> | .21        |
| Effortful Control     | <b>-.44</b>     | .23        | .06        | .18        | <b>.58</b> |

Note. Abbreviations: I/O = Intellect/Openness, C = Conscientiousness, E = Extraversion, A = Agreeableness, N = Neuroticism. Correlations greater than .35 are in bold.

Table 6 Intercorrelations among the Big Five Scales

| Big Five Scales    | Big Five Scales |     |     |     |     |
|--------------------|-----------------|-----|-----|-----|-----|
|                    | N               | I/O | E   | A   | C   |
| Neuroticism        | 1.0             |     |     |     |     |
| Intellect/Openness | -.23            | 1.0 |     |     |     |
| Extraversion       | -.24            | .28 | 1.0 |     |     |
| Agreeableness      | -.43            | .22 | .16 | 1.0 |     |
| Conscientiousness  | -.26            | .13 | .09 | .25 | 1.0 |

Table 7 Intercorrelations among the Temperament Scales

| Temperament Scales   |       |       |        |     |        |
|----------------------|-------|-------|--------|-----|--------|
| Temperament Scales   |       |       |        |     |        |
|                      | Extra | Affil | Effcon | Neg | Orient |
| Extraversion         | 1.0   |       |        |     |        |
| Affiliativeness      | .58   | 1.0   |        |     |        |
| Effortful Control    | .16   | .20   | 1.0    |     |        |
| Negative Affect      | -.41  | -.07  | -.41   | 1.0 |        |
| Orienting Reactivity | .52   | .44   | .16    | .09 | 1.0    |

The main dependent variable in the study was the Ethical Behavior Score (EBS), which was calculated for each of the eight scenarios. The EBS score was the sum of the Likert responses for question 1 (To what extent would you overlook laws pertaining to this scenario?), question 4 (To what extent would you engage in falsifying paperwork, which would benefit this company?) and question 5 (To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?). Questions 1 and 4 were reversed scored, so that a higher EBS equated with higher ethical intent. The EBS score across all scenarios for this study had an alpha of .90, and as table 8 illustrates, alphas for the EBS within each scenario ranged from .67 to .74.

Table 8 Reliability for the EBS by Scenario (Alpha for EBS =.90)

| Scenario | Leadership | Moral Intensity | Accountability | Alpha |
|----------|------------|-----------------|----------------|-------|
| 1        | Low        | High            | High           | .67   |
| 2        | High       | High            | Low            | .72   |
| 3        | Low        | High            | Low            | .68   |
| 4        | High       | High            | High           | .70   |
| 5        | High       | Low             | High           | .69   |
| 6        | Low        | Low             | Low            | .66   |
| 7        | High       | Low             | Low            | .70   |
| 8        | Low        | Low             | High           | .74   |

### Grouping the Personality Variables

A median-split procedure was used for all of the personality variables (Effortful Control, Affiliativeness, Conscientiousness, and Agreeableness). Those individuals scoring below the median in a particular personality score (i.e. Effortful Control) were classified as “low” and those participants scoring above the median were classified as “high” in that particular score. This procedure allowed all of the 214 participants’ scores to be used, and resulted in equitable n sizes for all of the conditions. The characteristics of the groups are shown in Tables 9-12.

Table 9 Characteristics of Big Five Conscientiousness Groups – Alpha = .81

| Conscientiousness | Mean  | Std. Error | 95% Confidence Interval |             |
|-------------------|-------|------------|-------------------------|-------------|
|                   |       |            | Lower Bound             | Upper Bound |
| Low               | 12.19 | 0.17       | 11.86                   | 12.53       |
| High              | 13.03 | 0.17       | 12.68                   | 13.37       |

Table 10 Characteristics of Big Five Agreeableness Groups – Alpha = .85

| Agreeableness | Mean  | Std. Error | 95% Confidence Interval |             |
|---------------|-------|------------|-------------------------|-------------|
|               |       |            | Lower Bound             | Upper Bound |
| Low           | 12.14 | 0.18       | 11.80                   | 12.49       |
| High          | 13.07 | 0.17       | 12.74                   | 13.41       |

Table 11 Characteristics of Effortful Control Groups – Alpha = .78

| Effortful Control | Mean  | Std. Error | 95% Confidence Interval |             |
|-------------------|-------|------------|-------------------------|-------------|
|                   |       |            | Lower Bound             | Upper Bound |
| Low               | 12.10 | 0.16       | 11.77                   | 12.42       |
| High              | 13.06 | 0.16       | 12.73                   | 13.38       |

Table 12 Characteristics of Affiliativeness Groups – Alpha = .80

| Affiliativeness | Mean  | Std. Error | 95% Confidence Interval |             |
|-----------------|-------|------------|-------------------------|-------------|
|                 |       |            | Lower Bound             | Upper Bound |
| Low             | 11.91 | 0.16       | 11.59                   | 12.23       |
| High            | 13.24 | 0.16       | 12.92                   | 13.57       |

Effortful Control and Affiliativeness were both examined from the factor scale level (i.e. Effortful Control) as opposed to the lower level scales (i.e. attentional control). This was done both for the parsimony offered by using only two personality constructs, and to get the “big picture” of how the constructs operate on decisions with ethical implications. A median-split procedure was used to assign participants to groups. Those individuals scoring below the median on a particular personality factor (i.e. Effortful

Control) were classified as “low” and those participants scoring above the median were classified as “high” in that particular factor. This procedure allowed all of the 214 participants’ scores to be used, and resulted in equitable n sizes for all of the conditions. Perhaps somewhat unique to a study of this size, 100% of the completed questionnaires were used in the study. That is, participants in the study appeared to take the task of accurately deciding how they would behave in a particular organization, seriously. Three individuals used extreme-scoring procedures exclusively (circling only “1” or “5” on a 5-point scale), but removal of their data did not influence the results, and their answers were used in the final analyses.

Although the scale scores on Effortful Control and Affiliativeness might be regarded as continuous variables, a 2 X 2 between subjects (high and low EffCon X high and low Affil) by 2 X 2 X 2 within subjects (high and low M.I X high and low Lead X high and low Account) mixed design was chosen as the first method to examine the data. The median split was successful in creating two distinct groups (high and low) for Effortful Control and Affiliativeness. This is shown by the *p* value of less than .001 for the Effortful Control main effect and the Affil main effect, which means that a difference as large as was observed in the sample would only occur in less than 1 of every 1000 experiments if the null hypothesis were true. This implies that the two marginal means between high and low Effortful Control and the two marginal means between high and low Affiliativeness are different from one another in the population. Because there are only two levels of Effortful Control and Affiliativeness, it is unnecessary to perform further tests to ascertain which specific levels of either variable are different from one another.

A Games-Howell post hoc test was used to examine a four level categorical analysis of Affiliativeness and Effortful Control. A value of 1 was assigned to cases below the 25<sup>th</sup> percentile, 2 to cases between the 25<sup>th</sup> and 50<sup>th</sup> percentile, 3 to cases between the 50<sup>th</sup> and 75<sup>th</sup> percentile, and 4 for cases above the 75<sup>th</sup> percentile. The main effects and interactions in the quartile split were consistent with the median split analyses. On the Affiliativeness scale, cases below the 25<sup>th</sup> percentile were not significantly different from the cases between the 25<sup>th</sup> and 50<sup>th</sup> percentile, but were significantly different from both cases 3 and 4. Cases above the 75<sup>th</sup> percentile were significantly different from the other 3 levels. On the Effortful Control scale, the first 3 cases were not significantly different from each other, but were all significantly different from level 4. The descriptive statistics in the quartile post hoc analysis were in the hypothesized directions.

### **Big Five Results**

Repeated measures general linear models were tested in accordance with the hypotheses given in the previous chapter. A general linear model with within-subjects factors of Leadership and Corporate Social Performance (Lead), Moral Intensity (M.I.), and Accountability (Acct) and between-subjects factors of Big Five agreeableness (Agree) and Big Five conscientiousness (Cons) resulted in the descriptive statistics seen in Table 13.

Table 13 Descriptive Statistics for Big Five Analysis

| Agreeableness | Conscientiousness | Leadership | Moral Intensity | Accountability | Mean EBS | Std. Error |
|---------------|-------------------|------------|-----------------|----------------|----------|------------|
| Low           | Low               | Low        | Low             | Low            | 9.98     | 0.32       |
|               |                   |            |                 | High           | 10.85    | 0.31       |
|               |                   |            | High            | Low            | 11.87    | 0.27       |
|               |                   |            |                 | High           | 12.39    | 0.28       |
|               |                   | High       | Low             | Low            | 11.10    | 0.33       |
|               |                   |            |                 | High           | 11.44    | 0.28       |
|               |                   |            | High            | Low            | 11.44    | 0.30       |
|               |                   |            |                 | High           | 12.21    | 0.28       |
|               | High              | Low        | Low             | Low            | 11.19    | 0.39       |
|               |                   |            |                 | High           | 13.07    | 0.38       |
|               |                   |            | High            | Low            | 12.98    | 0.33       |
|               |                   |            |                 | High           | 13.64    | 0.34       |
|               |                   | High       | Low             | Low            | 12.38    | 0.40       |
|               |                   |            |                 | High           | 13.50    | 0.34       |
|               |                   |            | High            | Low            | 12.69    | 0.37       |
|               |                   |            |                 | High           | 13.55    | 0.33       |
| High          | Low               | Low        | Low             | Low            | 11.65    | 0.37       |
|               |                   |            |                 | High           | 12.83    | 0.36       |
|               |                   |            | High            | Low            | 13.80    | 0.31       |
|               |                   |            |                 | High           | 13.74    | 0.32       |
|               |                   | High       | Low             | Low            | 12.33    | 0.38       |
|               |                   |            |                 | High           | 12.83    | 0.33       |
|               |                   |            | High            | Low            | 12.93    | 0.35       |
|               |                   |            |                 | High           | 13.67    | 0.32       |
|               | High              | Low        | Low             | Low            | 12.20    | 0.31       |
|               |                   |            |                 | High           | 12.88    | 0.30       |
|               |                   |            | High            | Low            | 13.77    | 0.26       |
|               |                   |            |                 | High           | 14.00    | 0.27       |
|               |                   | High       | Low             | Low            | 12.06    | 0.32       |
|               |                   |            |                 | High           | 13.28    | 0.28       |
|               |                   |            | High            | Low            | 13.17    | 0.29       |
|               |                   |            |                 | High           | 14.05    | 0.27       |

N = 214

Big Five Agreeableness and Big Five Conscientiousness had significant main effects on EBS, and the Agreeableness \* Conscientiousness interaction was also significant (see Table 14). Those with high scores on Agreeableness had an average EBS of 13.07 (SD = .17), while those low on Agreeableness had an average EBS of 12.14 (SD = .18). Participants with high scores on Conscientiousness had an average EBS of 13.01 (SD = .17), and those low on Conscientiousness had an average EBS of

12.2 (SD = .17). The effect sizes, measured by partial Eta squared, were .065 for Agreeableness and .053 for Conscientiousness.

Table 14 Agreeableness and Conscientiousness Analysis

| Source            | Type III Sum of Squares | df     | Mean Square | F        | Sig. |
|-------------------|-------------------------|--------|-------------|----------|------|
| Intercept         | 263159.78               | 1.00   | 263159.78   | 10785.73 | 0.00 |
| Agreeableness     | 358.28                  | 1.00   | 358.28      | 14.68    | 0.00 |
| Conscientiousness | 286.91                  | 1.00   | 286.91      | 11.76    | 0.00 |
| AGREE * CONSCI    | 164.49                  | 1.00   | 164.49      | 6.74     | 0.01 |
| Error             | 5123.76                 | 210.00 | 24.40       |          |      |

Table 15 shows the means for the significant Agreeableness X Conscientiousness interaction. It appears that individuals low on both Agreeableness and Conscientiousness were significantly less likely to act ethically compared to those low on Agreeableness but high on Conscientiousness. Individuals low and high on Conscientiousness but high on Agreeableness also showed a greater propensity to make ethical decisions compared to those low on both Agreeableness and Conscientiousness.

Table 15 Agreeableness X Conscientiousness Interaction

| Agreeableness      | Conscientiousness | Mean  | Std. Error |
|--------------------|-------------------|-------|------------|
| Low Agreeableness  | Low               | 11.41 | 0.22       |
|                    | High              | 12.88 | 0.27       |
| High Agreeableness | Low               | 12.97 | 0.26       |
|                    | High              | 13.18 | 0.22       |

p < .05

The only significant interaction involving a Big Five variable and organizational variable was between Agreeableness and Leadership. Intuitively, those low on

Agreeableness acted in a more ethical manner when the Leadership in an organization was also high. Surprisingly, however, those with high Agreeableness scores were influenced little by the level of Leadership within the organization. In fact, they acted in a slightly less ethical manner in organizations displaying higher levels of Leadership and Corporate Social Performance (see Figure 6 and Table 16). This interaction was significant at the  $p < .05$  level by all multivariate criteria (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root). The partial Eta squared of the interaction was .023.

Figure 6 Agreeableness X Leadership Interaction

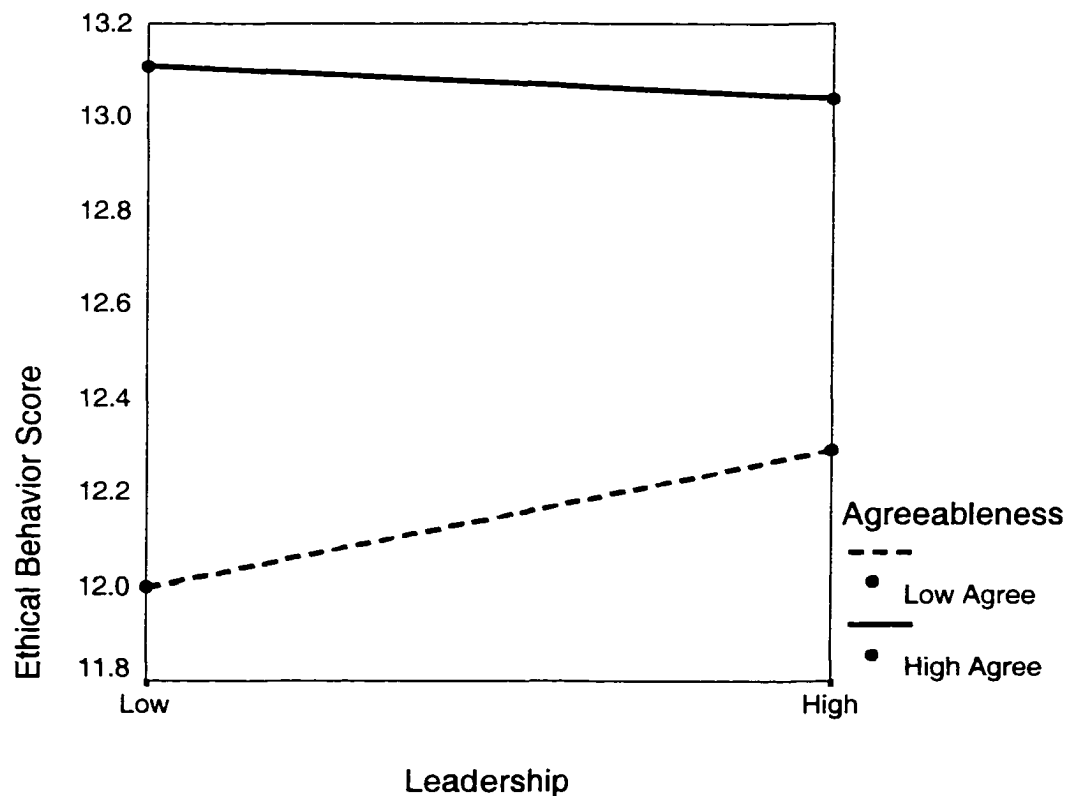


Table 16 Agreeableness X Leadership Interaction

| Agreeableness      | Leadership | Mean  | Std. Error |
|--------------------|------------|-------|------------|
| Low Agreeableness  | Low        | 12.00 | 0.18       |
|                    | High       | 12.29 | 0.19       |
| High Agreeableness | Low        | 13.11 | 0.17       |
|                    | High       | 13.04 | 0.18       |

p &lt; .05

Table 17 is a report of the partial Eta squared for the significant independent variables in the model  $EBS = \beta_0 + \beta_1 \text{ Agreeableness} + \beta_2 \text{ Conscientiousness} + \beta_3 \text{ Moral Intensity} + \beta_4 \text{ Leadership} + \beta_5 \text{ Accountability} + (\beta_6 \text{ Leadership} * \text{Moral Intensity}) + (\beta_7 \text{ Leadership} * \text{Accountability}) + (\beta_8 \text{ Moral Intensity} * \text{Accountability}) + (\beta_9 \text{ Leadership} * \text{Moral Intensity} * \text{Accountability}) + e$ . Partial Eta squared is a calculation of the proportional improvement in the understanding of the Ethical Behavior Score in relation to the independent variables. The sums of the partial Eta squared are not additive and do not sum to the amount of dependent variable variance accounted for by the independent variables. The table shows that Moral Intensity and Accountability account for most of the variance observed in Ethical Behavior Scores across the scenarios, followed by the Big Five measures of Agreeableness and Conscientiousness.

Table 17 Eta Squared for EBS Model with Big Five

| <b><u>Independent Variable</u></b> | <b><u>Partial Eta Squared</u></b> |
|------------------------------------|-----------------------------------|
| Moral Intensity                    | .353                              |
| Accountability                     | .267                              |
| Big Five Agreeableness             | .065                              |
| Big Five Conscientiousness         | .053                              |
| Accountability X Moral Intensity   | .032                              |
| Leadership X Agreeableness         | .023                              |
| Leadership X M.I. X Accountability | .034                              |
| Leadership X Moral Intensity       | .140                              |

### **Temperament Results**

A repeated measures general linear model was tested in accordance with the hypotheses given in the previous chapter. A general linear model with within-subjects factors of Leadership and Corporate Social Performance, Moral Intensity, and Accountability and between-subjects factors of Affiliativeness and Effortful Control resulted in the descriptive statistics seen in Table 18.

Table 18 Descriptive Statistics for Temperament Analysis

| Affiliative | Effortful Control | LEAD | MI   | Account | Mean EBS | Std. Error |
|-------------|-------------------|------|------|---------|----------|------------|
| Low         | Low               | Low  | Low  | Low     | 9.96     | 0.33       |
|             |                   |      |      | High    | 10.88    | 0.32       |
|             |                   |      | High | Low     | 11.45    | 0.27       |
|             |                   |      |      | High    | 12.34    | 0.29       |
|             |                   | High | Low  | Low     | 10.93    | 0.34       |
|             |                   |      |      | High    | 11.61    | 0.30       |
|             |                   |      | High | Low     | 11.13    | 0.30       |
|             |                   |      |      | High    | 12.13    | 0.28       |
|             | High              | Low  | Low  | Low     | 11.08    | 0.35       |
|             |                   |      |      | High    | 12.59    | 0.34       |
|             |                   |      | High | Low     | 12.88    | 0.28       |
|             |                   |      |      | High    | 13.25    | 0.31       |
|             |                   | High | Low  | Low     | 12.04    | 0.36       |
|             |                   |      |      | High    | 12.88    | 0.31       |
|             |                   |      | High | Low     | 12.35    | 0.32       |
|             |                   |      |      | High    | 13.06    | 0.30       |
| High        | Low               | Low  | Low  | Low     | 11.63    | 0.35       |
|             |                   |      |      | High    | 12.43    | 0.34       |
|             |                   |      | High | Low     | 13.92    | 0.28       |
|             |                   |      |      | High    | 13.90    | 0.31       |
|             |                   | High | Low  | Low     | 11.90    | 0.36       |
|             |                   |      |      | High    | 12.47    | 0.31       |
|             |                   |      | High | Low     | 12.98    | 0.32       |
|             |                   |      |      | High    | 13.90    | 0.30       |
|             | High              | Low  | Low  | Low     | 12.36    | 0.33       |
|             |                   |      |      | High    | 13.45    | 0.32       |
|             |                   |      | High | Low     | 14.13    | 0.27       |
|             |                   |      |      | High    | 14.20    | 0.29       |
|             |                   | High | Low  | Low     | 12.77    | 0.34       |
|             |                   |      |      | High    | 13.84    | 0.30       |
|             |                   |      | High | Low     | 13.70    | 0.30       |
|             |                   |      |      | High    | 14.32    | 0.28       |

Both Affiliativeness and Effortful Control had significant main effects on EBS, although there was no Affiliativeness \* Effortful Control interaction (see Table 19).

Those with high scores Affiliativeness had an average EBS of 13.24 (SD = .16) , while those low on Affiliativeness had an average EBS of 11.91 (SD = .16). Participants with high scores on Effortful Control had an average EBS of 13.01 (SD = .16), and those low on Effortful Control had an average EBS of 12.10 (SD = .16). The effect sizes, measured

by partial Eta squared, were .136 for Affiliativeness, more than double the variance accounted for by the Big Five counterpart of Agreeableness. Effortful Control had a partial Eta squared of .075, also a step up from the Big Five counterpart of Conscientiousness (see Table 19).

Table 19 Affiliativeness and Effortful Control Analysis

| Source                        | Type III Sum of Squares | df      | Mean Square | F         | Sig.  |
|-------------------------------|-------------------------|---------|-------------|-----------|-------|
| Intercept                     | 270175.781              | 1.000   | 270175.781  | 11757.687 | 0.000 |
| Affiliativeness               | 759.651                 | 1.000   | 759.651     | 33.059    | 0.000 |
| Effortful Control             | 392.523                 | 1.000   | 392.523     | 17.082    | 0.000 |
| Affiliative * Effort. Control | 28.232                  | 1.000   | 28.232      | 1.229     | 0.269 |
| Error                         | 4825.517                | 210.000 | 22.979      |           |       |

Several significant interactions existed between Affiliativeness and Effortful Control and organizational-level variables. A significant interaction between Moral Intensity and Affiliativeness at the  $p < .02$  level (partial Eta squared = .027) is shown in Figure 7 and Table 20. The Moral Intensity of a particular situation appeared to influence participants scoring high in Affiliativeness to a greater degree compared to those low in Affiliativeness. Although this interaction is significant, it may be driven by the large main effect of Moral Intensity.

Figure 7 Moral Intensity X Affiliative

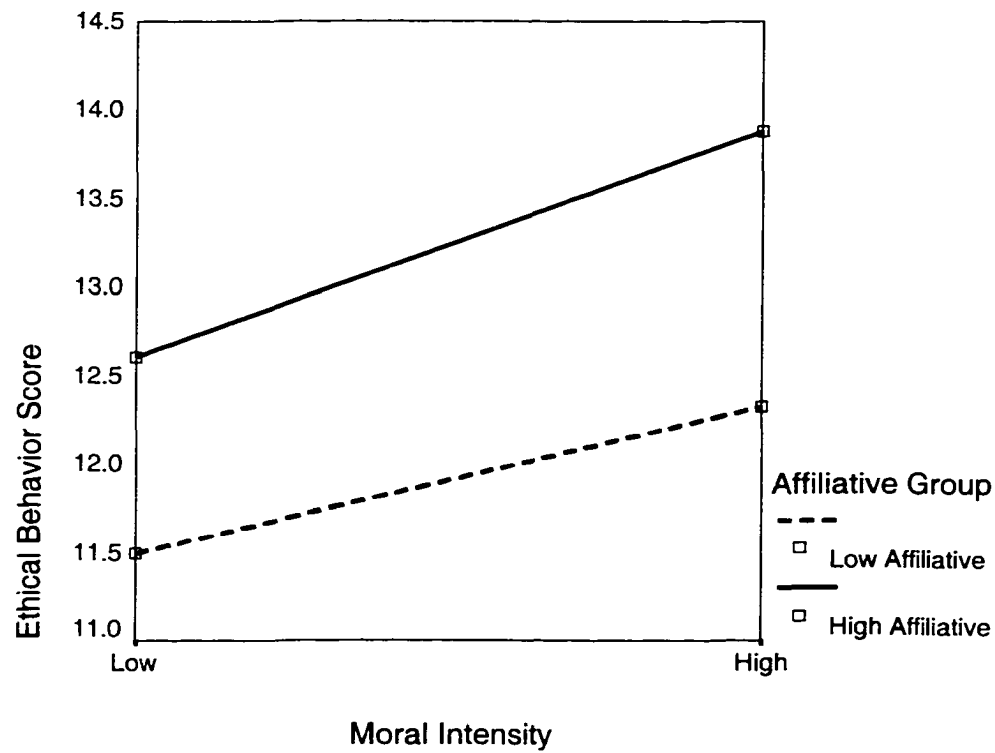


Table 20 Moral Intensity X Affiliative

| Affiliative          | Moral Intensity | Mean  | Std. Error |
|----------------------|-----------------|-------|------------|
| Low Affiliativeness  | Low             | 11.50 | 0.18       |
|                      | High            | 12.32 | 0.17       |
| High Affiliativeness | Low             | 12.61 | 0.18       |
|                      | High            | 13.88 | 0.17       |

Moral Intensity also significantly interacts with Effortful Control at the  $p < .05$  level (partial Eta squared = .02). As shown in Figure 8 and Table 21, those individuals low on Effortful Control show a greater change in ethical intent from low to high levels

of Moral Intensity, although they score lower in both instances than participants high on Effortful Control. Again, it appears that the significant Moral Intensity X Effortful Control interaction may be driven by the large, significant main effect of Moral Intensity.

Figure 8 Moral Intensity X Effortful Control

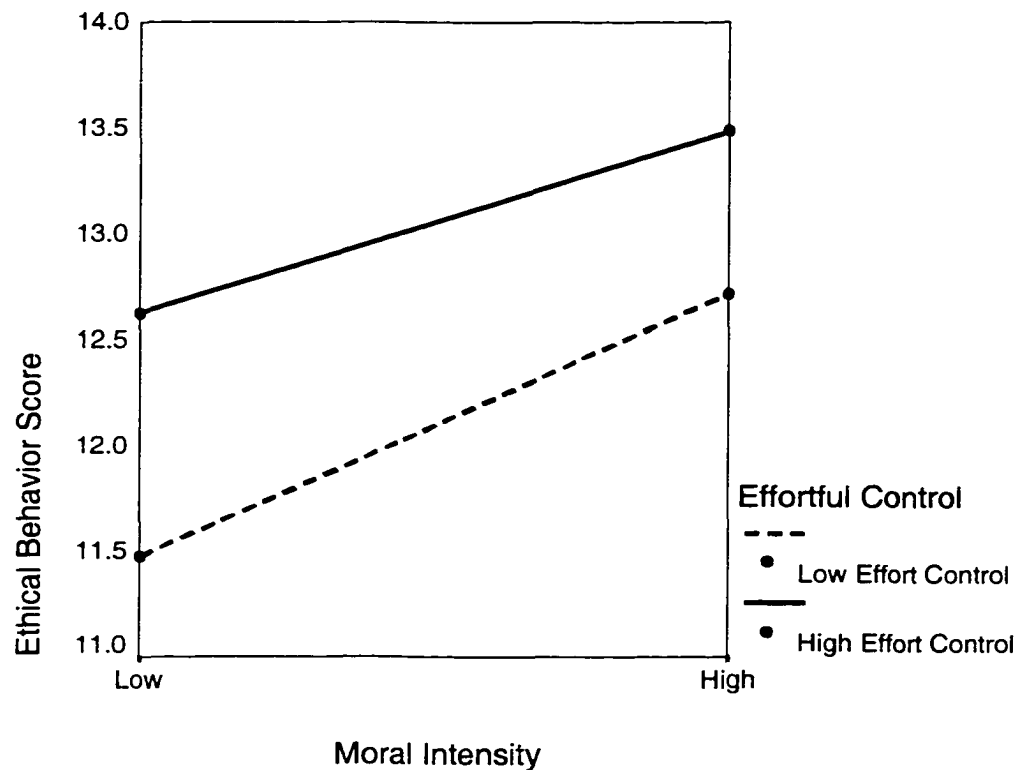


Table 21 Moral Intensity X Effortful Control

| Effortful Control      | Moral Intensity | Mean  | Std. Error |
|------------------------|-----------------|-------|------------|
| Low Effortful Control  | Low             | 11.48 | 0.18       |
|                        | High            | 12.72 | 0.17       |
| High Effortful Control | Low             | 12.62 | 0.18       |
|                        | High            | 13.49 | 0.17       |

The multivariate analysis also showed a significant 3-way interaction between Moral Intensity, Accountability, and Effortful Control,  $F(1, 210) = 1.45$ ,  $p = .029$  ( $\eta^2 = .022$ ) (see Table 22).

Table 22 Moral Intensity X Accountability X Effortful Control

| Effortful Control | Moral Intensity | Account | Mean  | Std. Error |
|-------------------|-----------------|---------|-------|------------|
| Low               | Low             | Low     | 11.11 | 0.20       |
|                   |                 | High    | 11.85 | 0.20       |
|                   | High            | Low     | 12.37 | 0.18       |
|                   |                 | High    | 13.07 | 0.19       |
| High              | Low             | Low     | 12.06 | 0.20       |
|                   |                 | High    | 13.19 | 0.20       |
|                   | High            | Low     | 13.26 | 0.18       |
|                   |                 | High    | 13.71 | 0.19       |

Table 23 is a report of the partial Eta squared for the significant independent variables in the model  $EBS = \beta_0 + \beta_1 \text{Affiliativeness} + \beta_2 \text{Effortful Control} + \beta_3 \text{Moral Intensity} + \beta_4 \text{Leadership} + \beta_5 \text{Accountability} + (\beta_6 \text{Lead} * \text{MI}) + (\beta_7 \text{Lead} * \text{Acct}) + (\beta_8 \text{MI} * \text{Acct}) + (\beta_9 \text{Lead} * \text{MI} * \text{Acct}) + e$ . As the table shows, Moral Intensity and Accountability account for most of the variance in the model. The sums of the partial Eta squared are not additive and do not sum to the amount of dependent variable variance accounted for by the independent variables. Note the significant improvement in variance accounted for from Affiliativeness and Effortful control compared to Big Five Agreeableness and Conscientiousness.

Table 23 Partial Eta Squared for EBS Model with Temperament

| <b><u>Independent Variable</u></b> | <b><u>Partial Eta Squared</u></b> |
|------------------------------------|-----------------------------------|
| Moral Intensity                    | .382                              |
| Accountability                     | .260                              |
| Temp. Affiliativeness              | .136                              |
| Temp. Effortful Control            | .075                              |
| Leadership X M.I.                  | .137                              |
| M.I. X Accountability              | .028                              |
| M.I. X Affiliativeness             | .027                              |
| M.I. X Account X Effortful Control | .022                              |
| M.I. X Effortful Control           | .020                              |

Hypothesis 4 ( $H_4-H_{4.2}$ ) predicted individual personality variables would significantly influence ethical decision-making, with high scores on all of the measures equating with higher ethical intent. The personality measures of Agreeableness, Conscientiousness, Effortful Control and Affiliativeness all had a significant main effect on Ethical Behavior Scores in the predicted direction at the  $p < .001$  level. Those with high scores on Agreeableness had an average EBS of 13.07 ( $SD = .17$ ), while those low on Agreeableness had an average EBS of 12.14 ( $SD = .18$ ). Participants with high scores on Cons had an average EBS of 13.01 ( $SD = .17$ ), and those low on Cons had an average EBS of 12.2 ( $SD = .17$ ). Those with high scores Affiliativeness had an average EBS of 13.24 ( $SD = .16$ ), while those low on Affiliativeness had an average EBS of 11.91 ( $SD = .16$ ). Participants with high scores on Effortful Control had an average EBS of 13.01 ( $SD = .16$ ), and those low on Effortful Control had an average EBS of 12.10 ( $SD = .16$ ). Hypothesis 4 ( $H_4-H_{4.2}$ ) was supported.

Hypothesis 4.3 predicted that individual differences in temperament as measured by the ATQ-2 would have more predictive power related to ethical decision making than

the corresponding Big Five personality traits as measured by the Mini-Markers, because of the former's biological underpinnings. This was the case. The effect sizes, measured by partial Eta squared, show Affiliativeness accounted for 13.6% of the variance, more than double the variance accounted for by the Big Five counterpart of Agreeableness (Partial Eta squared = .065). Effortful Control accounted for 7.5% of the variance, also a step up from the Big Five counterpart of Conscientiousness (5.3%) (see Tables 16 and 22).

Therefore, hypothesis 4.3 was supported.

Hypothesis 5 predicted that the temperamental characteristics of Effortful Control (and Conscientiousness to a lesser degree) and Affiliativeness (and Agreeableness to a lesser degree) would have significant interactions with the organizational level variables of Leadership and Accountability. None of these interactions were significant.

Hypothesis 5.1 predicted that individuals high on Effortful Control (and conscientiousness to a lesser extent) would be influenced less by the organizational-level variable of Leadership compared to those low on Effortful Control. There was no relationship between Effortful Control and Leadership with respect to Ethical Behavior Scores,  $F(1,210) = .146$ ,  $p = .70$  (see Table 53). Hypothesis 5 (5.1) was not supported.

Table 53 Leadership X Effortful Control

| <b>Effortful Control</b> | <b>Leadership</b> | <b>Mean</b> | <b>Std. Error</b> |
|--------------------------|-------------------|-------------|-------------------|
| Low Effortful Control    | Low               | 12.06       | 0.17              |
|                          | High              | 12.13       | 0.18              |
| High Effortful Control   | Low               | 12.99       | 0.17              |
|                          | High              | 13.12       | 0.18              |

Hypothesis 5.2 predicted that individuals high on Effortful Control (and conscientiousness to a lesser extent) would be influenced less by the organizational-level variable of Accountability compared to those low on Effortful Control. There was no relationship between Effortful Control and Accountability with respect to Ethical Behavior Scores,  $F(1,210) = .144$ ,  $p = .71$  (see Table 54). Hypothesis 5.2 was not supported.

Table 54 Accountability X Effortful Control

| Effortful Control      | Accountability | Mean  | Std. Error |
|------------------------|----------------|-------|------------|
| Low Effortful Control  | Low            | 11.74 | 0.18       |
|                        | High           | 12.46 | 0.18       |
| High Effortful Control | Low            | 12.66 | 0.18       |
|                        | High           | 13.45 | 0.18       |

Hypothesis 5.3 predicted that individuals high on Affiliativeness (and agreeableness to a lesser extent) would be influenced more by the organizational-level variable of Leadership compared to those low on Affiliativeness. There was no relationship between Affiliativeness and Leadership with respect to Ethical Behavior Scores,  $F(1,210) = 1.97$ ,  $p = .162$  (see Table 55). Hypothesis 5.3 was not supported.

Table 55 Affiliativeness X Leadership

| Affiliativeness      | Leadership | Mean  | Std. Error |
|----------------------|------------|-------|------------|
| Low Affiliativeness  | Low        | 11.80 | 0.17       |
|                      | High       | 12.01 | 0.18       |
| High Affiliativeness | Low        | 13.25 | 0.17       |
|                      | High       | 13.23 | 0.18       |

## Organizational Level Results

Moral Intensity and Accountability had significant main effects on EBS, although Leadership did not. Situations that involved low Moral Intensity had an average EBS of 12.05 (SD= .13) , while those high on Moral Intensity had an average EBS of 13.10 (SD=.12). This difference was significant at the  $p < .001$  level by all multivariate criteria (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root) and accounted for 38% of the variance. Situations that involved low Accountability had an average EBS of 12.2 (SD= .12), and those high on Accountability had an average EBS of 13.0 (SD= .12). This difference was significant at the  $p < .001$  level by all multivariate criteria and accounted for 26% of the variance.

In situations with high Moral Intensity, Accountability was less likely to be a factor in an individual's ethical intent (see Figure 9 and Table 24). The Moral Intensity X Accountability interaction was significant at the  $p < .02$  level, and had a partial Eta squared of .03.

Figure 9 Moral Intensity X Accountability



Table 24 Moral Intensity X Accountability

| Moral Intensity | Account | Mean  | Std. Error |
|-----------------|---------|-------|------------|
| Low             | Low     | 11.58 | 0.14       |
|                 | High    | 12.52 | 0.14       |
| High            | Low     | 12.82 | 0.13       |
|                 | High    | 13.39 | 0.13       |

$p < .02$

An organizations Leadership did show an interesting impact on ethical intent.

Moral Intensity significantly interacted with Leadership at the  $p < .001$  level (partial Eta squared = .14). Figure 10 and Table 25 illustrates that individuals in organizations with low levels of Leadership (and Corporate Social Performance) are heavily influenced by

high Moral Intensity, compared to individuals in organizations with high Leadership. Individuals in organizations with high Leadership (and CSP), while behaving more ethically in situations with low Moral Intensity, do not adjust their ethical intent to the degree seen in low Leadership environments when a situation has high Moral Intensity.

Figure 10 Moral Intensity X Leadership

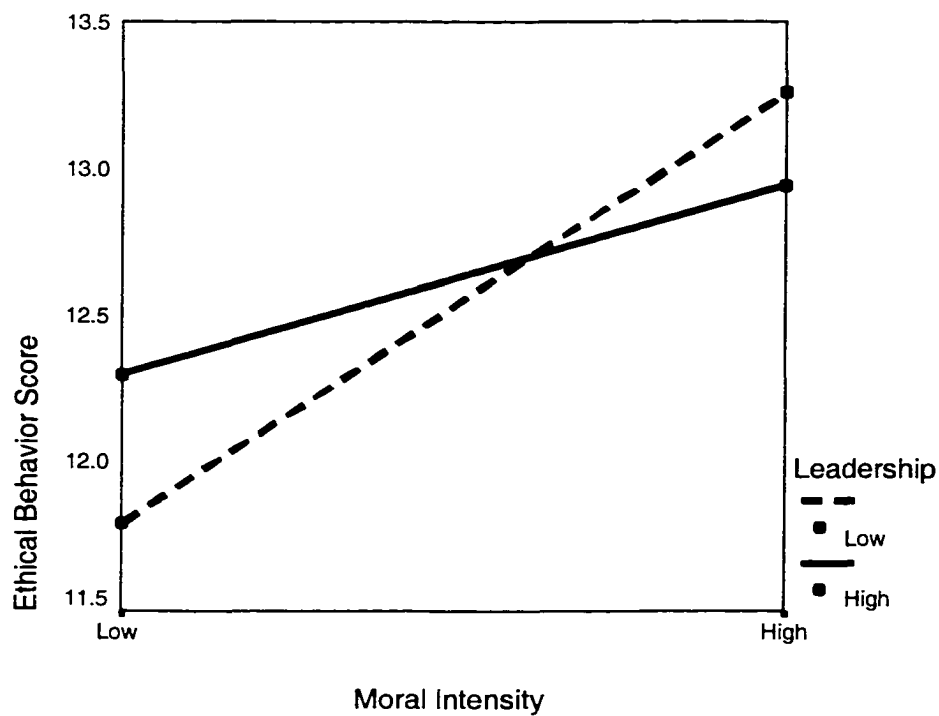


Table 25 Moral Intensity X Leadership

| Leadership | Moral Intensity | Mean  | Std. Error |
|------------|-----------------|-------|------------|
| Low        | Low             | 11.80 | 0.14       |
|            | High            | 13.26 | 0.12       |
| High       | Low             | 12.30 | 0.14       |
|            | High            | 12.95 | 0.13       |

$p < .001$

The multivariate analysis also showed a significant 3-way interaction between Moral Intensity, Accountability, and Leadership,  $F(1, 210) = 6.59, p = .01$  (partial Eta squared = .03) (see Table 26).

Table 26 Moral Intensity X Accountability X Leadership

| Leadership | Moral Intensity | Account | Mean  | Std. Error |
|------------|-----------------|---------|-------|------------|
| Low        | Low             | Low     | 11.26 | 0.17       |
|            |                 | High    | 12.34 | 0.17       |
|            | High            | Low     | 13.09 | 0.14       |
|            |                 | High    | 13.42 | 0.15       |
| High       | Low             | Low     | 11.91 | 0.18       |
|            |                 | High    | 12.70 | 0.15       |
|            | High            | Low     | 12.54 | 0.16       |
|            |                 | High    | 13.35 | 0.14       |

$p = .01$

Hypothesis 1 ( $H_1-H_{1.1}$ ), that predicted Moral Intensity would have a significant main effect on ethical decision-making, was supported. The results were in the predicted direction, in that situations with high Moral Intensity elicited a significantly higher rate of ethical behavior compared to those situations low on Moral Intensity. Situations that involved low M.I. had an average EBS of 12.05 ( $SD = .13$ ), while those high on M.I. had an average EBS of 13.10 ( $SD = .12$ ). This difference was significant at the  $p < .001$  level by all multivariate criteria (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root). Hypothesis 1 was supported.

Hypothesis 2 ( $H_{2.1}$ ) predicted that Accountability would have a significant main effect on the EBS, so that when individuals were accountable in organizations, they would behave more ethically. Hypothesis 2 was supported. Situations that involved low

Accountability had an average EBS of 12.2 (SD= .12), and those high on Accountability had an average EBS of 13.0 (SD= .12). This difference was significant at the  $p < .001$  level. Hypothesis 2 was supported.

Hypothesis 3 ( $H_3-H_{3.1}$ ) predicted that participants would make significantly more ethical decisions in the context of organizations with a history of making ethical decisions and with leaders who encouraged ethical behavior. The relationship between Leadership (and corporate social performance) within an organization and ethical behavior, however, was not significant. That is, ethical decisions made in organizations were mostly independent of the Leadership within the company. Hypothesis 3 was not supported.

The dichotomization of the personality measures used as independent variables in the present study (affiliativeness, effortful control, conscientiousness, and agreeableness) is not without criticism. Some researchers argue that a regression approach is favored compared to splitting the scales at the sample median and defining high and low groups on the personality variables, and then analyzing the categorical variables' effects on the dependent variable (ethical behavior score) using analysis of variance (ANOVA).

Included in the drawbacks of using a median-split approach is a loss of information about individual differences, possible misinterpretation concerning the estimation of relationships among variables, a possible loss of effect size and power, and the risks of overlooking nonlinear effects. As noted previously, a Games-Howell post hoc test was used to examine a four level categorical analysis of the independent variables. This analysis supported the dichotomization of the affiliativeness and effortful control constructs. Further, one reason that dichotomization of two independent variables

has been criticized is that it forces the variables into an orthogonal design when in fact they may be highly correlated (Humphreys & Dachler, 1969). As shown in tables 6 and 7, however, neither agreeableness and conscientiousness nor affiliativeness and effortful control are highly correlated (.25 and .20 respectively).

Although an argument could be made that affiliativeness and effortful control may be well represented by dichotomization of their respective measures, or that any loss of information has resultant benefits, a regression analysis interpretation of the data was also examined. The linear relationship of affiliativeness, effortful control, conscientiousness, and agreeableness to ethical behavior can be studied easily using regression methods.

A regression analysis was investigated that examined the influence of affiliativeness, effortful control, conscientiousness, and agreeableness on the ethical behavior score (EBS) of the participants (N=214). An ANOVA shows that the full model, including the temperamental and Big 5 variables, is significant at the  $p < .001$  level, and has an overall  $R^2$  of .26. Model 1, a reduced model that included only the temperamental variables of effortful control and affiliativeness, had an  $R^2$  of .252 and an adjusted  $R^2$  of .241. Model 2, a reduced model that included only the Big 5 variables of conscientiousness and agreeableness had an  $R^2$  of .156 and an adjusted  $R^2$  of .144. The standardized beta coefficients for the full model, which included the temperamental and Big 5 measures, were 1.03 for affiliativeness, 1.226 for effortful control, .032 for agreeableness, and .11 for conscientiousness.

The regression analysis highlighted that, although the Big Five variables explained a significant amount of variance ( $F, 12.11, p < .001$ ), they did not explain a

significant amount of additional variance above and beyond that of the temperament variables (see table 27 and 28). That is, there was not a significant change in  $R^2$  when model 2, that included agreeableness and conscientiousness, was added to model 1 that included affiliativeness and effortful control.

Table 27 ANOVA with Dependent Variable Ethical Behavior Score

| Model                | Sum of Squares | df  | Mean Square | F      | Sig. |
|----------------------|----------------|-----|-------------|--------|------|
| <b>1a</b> Regression | 12194.506      | 3   | 4064.835    | 23.527 | .000 |
| Residual             | 36282.205      | 210 | 172.772     |        |      |
| Total                | 48476.71       | 213 |             |        |      |
| <b>2b</b> Regression | 12598.071      | 6   | 2099.678    | 12.114 | .000 |
| Residual             | 35878.64       | 207 | 173.327     |        |      |
| Total                | 48476.71       | 213 |             |        |      |

- a. Predictors: affiliativeness, effortful control, effortful control \* affiliativeness  
 b. predictors: affiliativeness, effortful control, effortful control \* affiliativeness, conscientiousness, agreeableness, conscientiousness \* agreeableness

Table 28 Analysis of change in  $R^2$

| Model     | Change Statistics |          |     |     |               |
|-----------|-------------------|----------|-----|-----|---------------|
|           | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| <b>1a</b> | .252              | 23.527   | 3   | 210 | .000          |
| <b>2b</b> | .008              | .776     | 3   | 207 | .509          |

- a. Predictors: affiliativeness, effortful control, affiliativeness \* effortful control  
 b. Predictors: affiliativeness, effortful control, affiliativeness \* effortful control, conscientiousness, agreeableness, conscientiousness \* agreeableness

However, model 2, that included the temperament variables, explained a significant amount of additional variance when added to the Big Five model (see table 29 and 30).

Table 29 ANOVA with dependent variable Ethical Behavior Score

| Model         | Sum of Squares | df  | Mean Square | F      | Sig. |
|---------------|----------------|-----|-------------|--------|------|
| 1a Regression | 7553.474       | 3   | 2517.825    | 12.920 | .000 |
| Residual      | 40923.236      | 210 | 194.873     |        |      |
| Total         | 48476.710      | 213 |             |        |      |
| 2b Regression | 12598.071      | 6   | 2099.678    | 12.114 | .000 |
| Residual      | 35878.64       | 207 | 173.327     |        |      |
| Total         | 48476.71       | 213 |             |        |      |

a. predictors: agreeableness, conscientiousness, agreeableness \* conscientiousness

b. predictors: agreeableness, conscientiousness, agreeableness \* conscientiousness, effortful control, affiliativeness, effortful control \* affiliativeness

Table 30 Analysis of change in  $R^2$ 

| Model | Change Statistics |          |     |     |               |
|-------|-------------------|----------|-----|-----|---------------|
|       | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1a    | .156              | 12.92    | 3   | 210 | .000          |
| 2b    | .104              | 9.7      | 3   | 207 | .000          |

a. Predictors: agreeableness, conscientiousness, agreeableness \* conscientiousness

b. Predictors: agreeableness, conscientiousness, agreeableness \* conscientiousness, effortful control, affiliativeness, effortful control \* affiliativeness

In summary, treating the personality variables as continuous supported the previous findings that there is a significant main effect for all four of the personality variables on ethical decision making. This is consistent with the results shown with the median split analysis. It appears temperamental personality constructs have more predictive value concerning ethical intent compared to their Big 5 counterparts, as evidenced by the median split analyses as well as the regression analyses .

## Whistle Blowing

Question number 2 (To what extent would you feel compelled to discuss this situation with your supervisor?) and question 3 (To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?) were designed to assess whistle-blowing behavior. However, the correlation between the two questions within the same scenario were low (see Table 31), indicating the questions were not assessing the same construct, and were therefore not similar enough to allow the use of the mean response for a “whistle-blowing indicator.” Instead, the questions were investigated individually. The reliabilities for the questions by themselves, using a composite scale score across scenarios, were sufficiently high (Alpha = .73 for Question 2, Alpha = .81 for question 3). The following analyses used the Likert type response averages for each question, with a 1 indicating “very unlikely” to blow the whistle and a 5 indicating “very likely” to blow the whistle. As suspected, individuals were more apt across all organizational situations to alert those within the company (internal whistle blowing)  $X = 4.2$  ( $SD = .04$ ) as opposed to alerting outside agents (external whistle blowing)  $X = 3.0$  ( $SD = .05$ ).

Table 31 Correlations between Question 2 and Question 3 by Scenario

| Question 3. External Whistle Blowing | Question 2. Internal Whistle Blowing |         |         |         |         |         |         |         |       |
|--------------------------------------|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|-------|
|                                      | Scen. 1                              | Scen. 2 | Scen. 3 | Scen. 4 | Scen. 5 | Scen. 6 | Scen. 7 | Scen. 8 |       |
|                                      | Scenario 1                           | 0.10    | 0.17    | 0.04    | 0.19    | 0.19    | 0.12    | 0.11    | 0.19  |
|                                      | Scenario 2                           | 0.04    | 0.24    | 0.03    | 0.05    | -0.03   | 0.14    | 0.15    | 0.11  |
|                                      | Scenario 3                           | 0.04    | 0.20    | 0.12    | 0.06    | 0.07    | 0.12    | 0.12    | 0.05  |
|                                      | Scenario 4                           | 0.10    | 0.15    | 0.09    | 0.12    | 0.10    | 0.02    | 0.05    | 0.05  |
|                                      | Scenario 5                           | -0.01   | 0.02    | 0.05    | 0.01    | 0.08    | 0.06    | 0.10    | 0.08  |
|                                      | Scenario 6                           | -0.07   | -0.11   | -0.06   | 0.00    | -0.06   | 0.15    | -0.06   | -0.09 |
|                                      | Scenario 7                           | -0.17   | -0.05   | -0.12   | -0.11   | -0.04   | 0.12    | 0.15    | -0.06 |
|                                      | Scenario 8                           | -0.09   | -0.03   | -0.02   | 0.07    | 0.04    | -0.01   | 0.03    | 0.09  |

A repeated measures general linear model was used to analyze a model that included question two, which assessed the degree to which individuals thought it was necessary to alert supervisors within the company about a particular behavior. A model including question 3 also assessed the propensity to blow the whistle to those outside the company. A significant main effect of Moral Intensity was found in both whistle-blowing models. Situations high in moral intensity elicited a higher rate of internal whistle-blowing  $F(1, 210) = 50.76, p < .0001$ , and external whistle-blowing  $F(1, 210) = 381.57, p < .0001$ . The mean response for internal whistle blowing was 4.37 ( $SD = .05$ ) for situations with high Moral Intensity, and 4.03 ( $SD = .05$ ) for situations with low Moral Intensity. The mean response for external whistle blowing was 3.6 ( $SD = .06$ ) for situations with high Moral Intensity, and 2.4 ( $SD = .05$ ) for situations with low Moral Intensity.

Like ethical behavior, whistle blowing within and outside the company was also influenced by Accountability. Situations where individuals were accountable for their decisions elicited a significantly higher rate of internal whistle blowing  $F(1, 210) =$

60.91,  $p < .0001$  and external whistle blowing  $F(1, 210) = 134.66$ ,  $p < .0001$ . The mean response for internal whistle blowing was 4.02 ( $SD = .05$ ) for situations low in accountability 4.39 ( $SD = .05$ ) for situations with high in accountability. The mean response for external whistle blowing was 2.69 ( $SD = .06$ ) for situations with low Accountability, and 3.31 ( $SD = .05$ ) for situations high in Accountability.

Unlike the ethical behavior results, Leadership significantly influenced the degree to which individuals were likely to blow the whistle both inside and outside the organization. Organizations with high Leadership (and corporate social performance) elicited a higher rate of internal whistle-blowing  $F(1, 210) = 29.51$ ,  $p < .0001$ , and external whistle-blowing  $F(1, 210) = 4.97$ ,  $p = .03$ . The mean response for internal whistle blowing was 4.09 ( $SD = .05$ ) for situations with low Leadership, and 4.31 ( $SD = .04$ ) for situations with high Leadership. The mean response for external whistle blowing was 2.94 ( $SD = .06$ ) for situations with low Leadership, and 3.05 ( $SD = .05$ ) for situations with high Leadership. This main effect for Leadership, however, may be derived from the Leadership X Accountability interaction.

Affiliativeness and Effortful Control both had a main effect on internal and external whistle blowing, while Effortful Control only had a significant influence on internal whistle blowing (see Table 31 and Table 32). Those high on Affiliativeness had a greater propensity to blow the whistle both outside ( $X = 3.14$  ( $SD = .07$ )) and within the company ( $X = 4.35$  ( $SD = .06$ )) compared to those low on Affiliativeness,  $X = 2.86$  ( $SD = .07$ ) and  $X = 4.05$  ( $SD = .06$ ) respectively. Those high on Effortful Control had a significantly higher rate of whistle blowing ( $X = 4.33$  ( $SD = .06$ )) within the company than those low on Effortful Control ( $X = 4.07$  ( $SD = .06$ )).

Table 31 MANOVA with Temperament and Outside of the Company Whistle Blowing

| Source            | Type III Sum of Squares | df  | Mean Square | F        | Sig.  |
|-------------------|-------------------------|-----|-------------|----------|-------|
| Intercept         | 15339.72046             | 1   | 15339.720   | 3267.353 | 0.000 |
| Affiliativeness   | 32.5884122              | 1   | 32.588      | 6.941    | 0.009 |
| Effortful Control | 0.632804728             | 1   | 0.633       | 0.135    | 0.714 |
| Affil * EffCon    | 0.853640025             | 1   | 0.854       | 0.182    | 0.670 |
| Error             | 985.9177609             | 210 | 4.695       |          |       |

Table 32 MANOVA with Temperament and Whistle Blowing Inside Company

| Source            | Type III Sum of Squares | df      | Mean Square | F         | Sig.  |
|-------------------|-------------------------|---------|-------------|-----------|-------|
| Intercept         | 30136.185               | 1.000   | 30136.185   | 10408.529 | 0.000 |
| Affiliativeness   | 38.712                  | 1.000   | 38.712      | 13.371    | 0.000 |
| Effortful Control | 28.198                  | 1.000   | 28.198      | 9.739     | 0.002 |
| Affil * EffCon    | 0.456                   | 1.000   | 0.456       | 0.158     | 0.692 |
| Error             | 608.020                 | 210.000 | 2.895       |           |       |

Both internal and external whistle blowing showed a significant Leadership by Accountability interaction, but in different directions. Participants were unlikely to alert company supervisors in low Accountability and low Leadership situations. However, in high Accountability situations, low Leadership organizations elicited the same amount of internal whistle blowing as high Leadership organizations (see Figure 11 and Table 33).

Figure 11 Accountability X Leadership – Internal whistle blowing

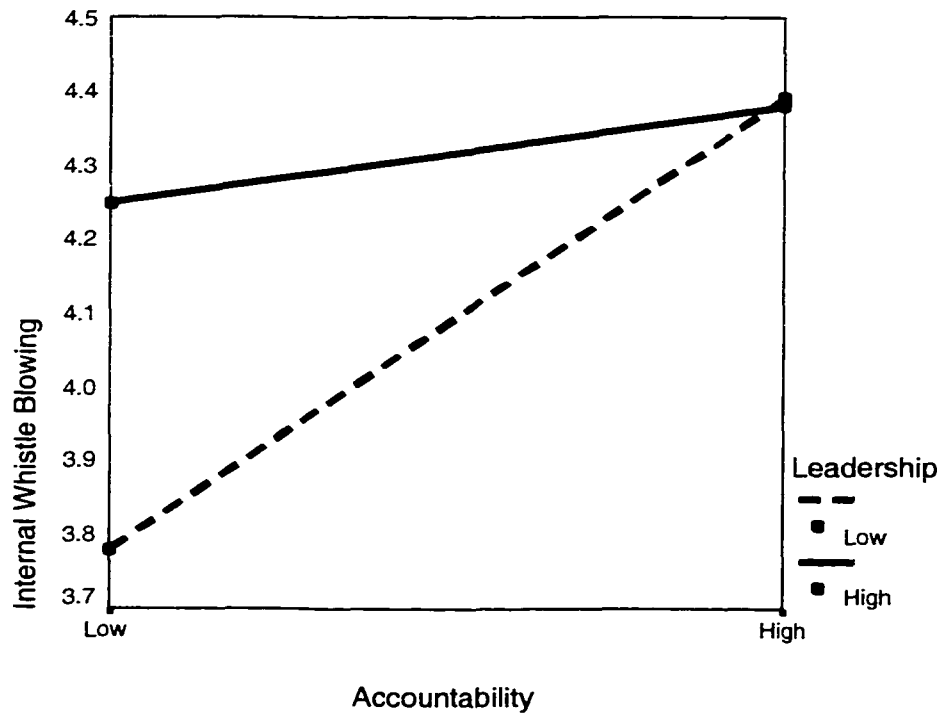


Table 33 Accountability X Leadership – Internal whistle blowing

| Leadership | Accountability | Mean | Std. Error |
|------------|----------------|------|------------|
| Low        | Low            | 3.78 | 0.06       |
|            | High           | 4.39 | 0.05       |
| High       | Low            | 4.25 | 0.05       |
|            | High           | 4.38 | 0.06       |

$p > .0001$

In contrast, organizations with low Leadership did not elicit significantly different external whistle blowing. However, individuals in high Leadership organizations had a much higher propensity to alert outside agents as the accountability of a situation became higher (see Figure 12 and Table 34).

Figure 12 Accountability X Leadership – Outside of company whistle blowing

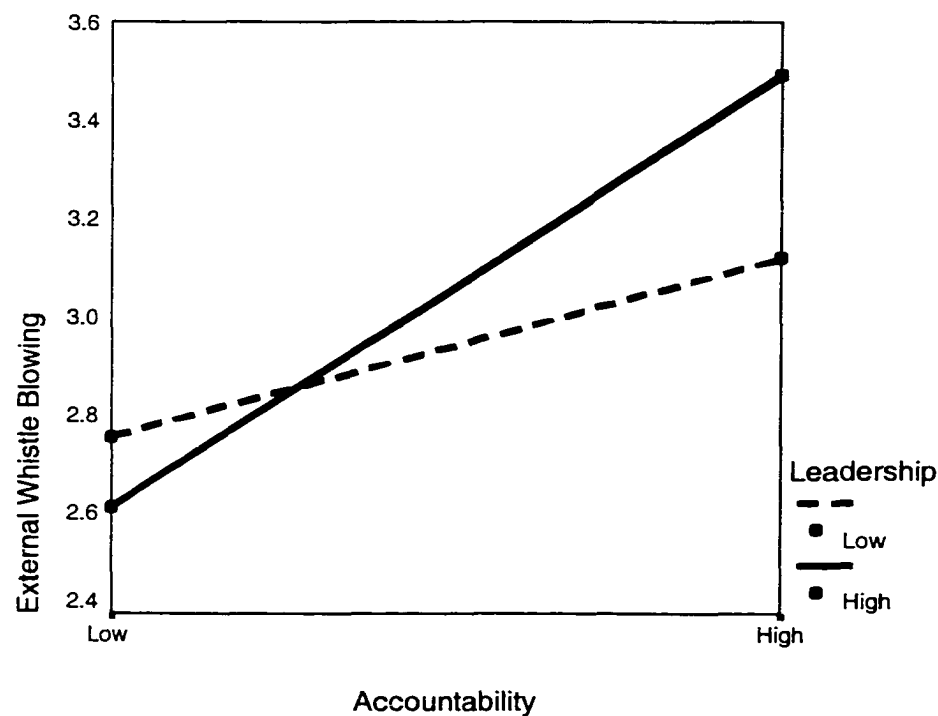


Table 34 Leadership X Accountability – External whistle blowing

| Leadership | Accountability | Mean | Std. Error |
|------------|----------------|------|------------|
| Low        | Low            | 2.76 | 0.07       |
|            | High           | 3.12 | 0.08       |
| High       | Low            | 2.62 | 0.07       |
|            | High           | 3.49 | 0.06       |

$p > .0001$

An interaction between Moral Intensity and Accountability also plays a significant role in whistle blowing, but again in opposite directions for internal and external conditions. Participants were unwavering in alerting supervisors within the company in situations with high Moral Intensity, independent of accountability. However, in low Morally Intense situations, internal whistle blowing was strongly

influenced by the presence of high Accountability (see Figure 13 and Table 35), with high accountability situations eliciting significantly more internal whistle blowing compared to low accountability situations.

Figure 13 Moral Intensity X Accountability – Internal whistle blowing

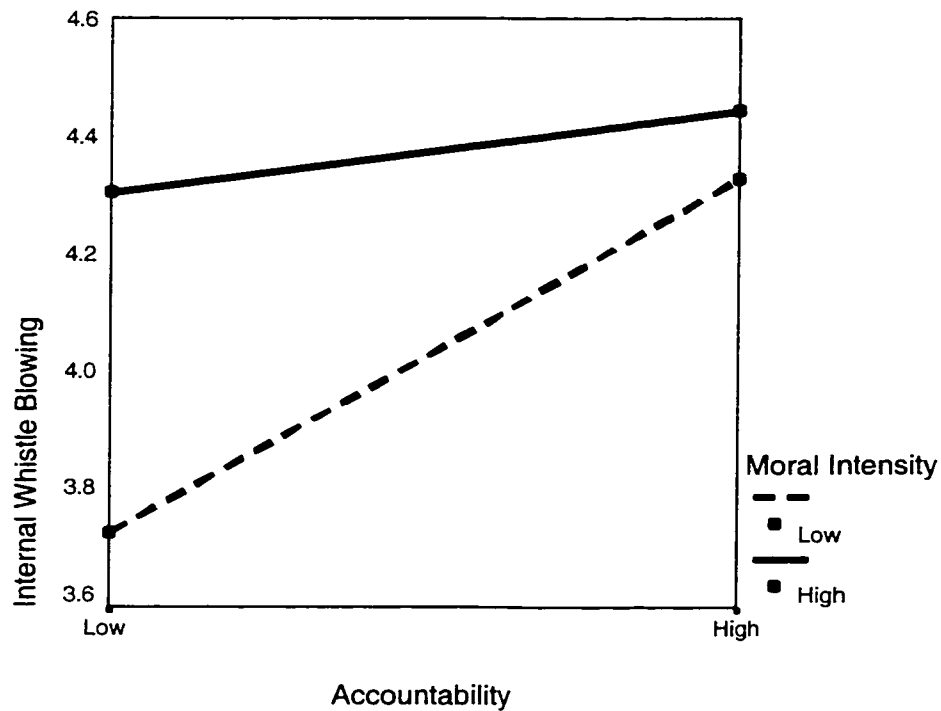


Table 35 Moral Intensity X Accountability – Internal whistle blowing

| Moral Intensity | Accountability | Mean | Std. Error |
|-----------------|----------------|------|------------|
| Low             | Low            | 3.73 | 0.06       |
|                 | High           | 4.33 | 0.05       |
| High            | Low            | 4.30 | 0.05       |
|                 | High           | 4.44 | 0.06       |

$p > .0001$

Situations with high Moral Intensity were especially influenced by the degree of accountability. While low Morally Intense situations were independent of accountability, situations with high Moral Intensity and high Accountability were especially likely to elicit external whistle blowing (see Figure 14 and Table 36).

Figure 14 Moral Intensity X Accountability – External whistle blowing

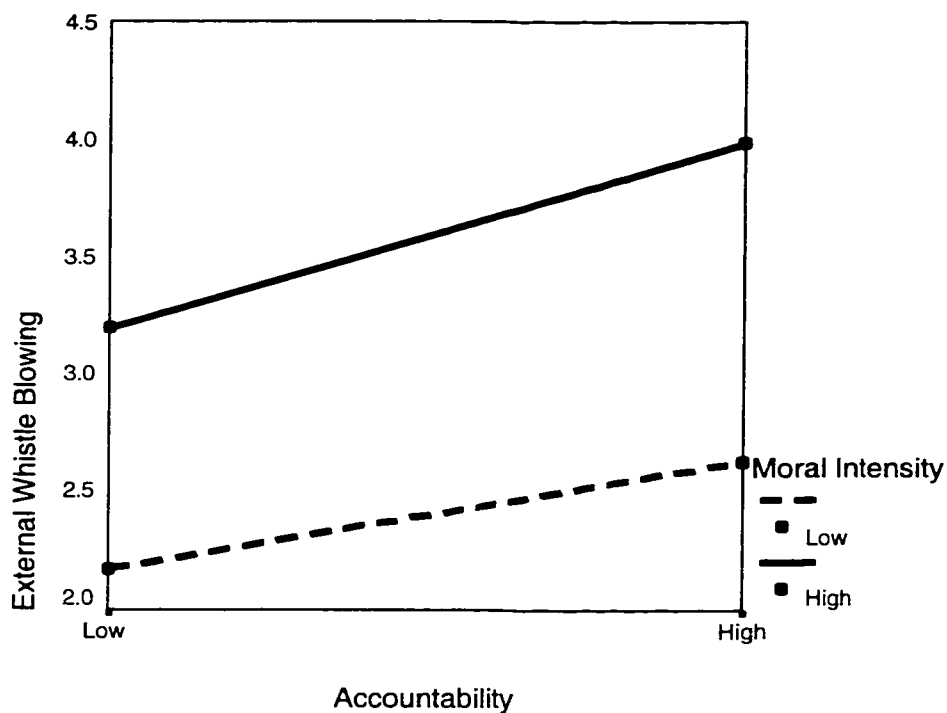


Table 36 Moral Intensity X Accountability – External whistle blowing

| Moral Intensity | Accountability | Mean | Std. Error |
|-----------------|----------------|------|------------|
| Low             | Low            | 2.17 | 0.07       |
|                 | High           | 2.63 | 0.07       |
| High            | Low            | 3.20 | 0.08       |
|                 | High           | 3.98 | 0.06       |

$p > .0001$

The multivariate analysis also showed a significant 3-way interaction between Moral Intensity, Accountability, and Leadership on internal whistle blowing  $F(1, 210) = 4.62, p = .03$  and external whistle blowing  $F(1, 210) = 66.5, p < .0001$  (see Tables 37 and 38).

Table 37 M.I. X Accountability X Leadership -- Internal company whistle blowing

| Leadership | Moral Intensity | Accountability | Mean        | Std. Error |
|------------|-----------------|----------------|-------------|------------|
| Low        | Low             | Low            | 3.354166667 | 0.087911   |
|            |                 | High           | 4.297531513 | 0.070495   |
|            | High            | Low            | 4.206932773 | 0.076623   |
|            |                 | High           | 4.485294118 | 0.063777   |
| High       | Low             | Low            | 4.096813725 | 0.077165   |
|            |                 | High           | 4.357668067 | 0.06734    |
|            | High            | Low            | 4.400560224 | 0.058902   |
|            |                 | High           | 4.402398459 | 0.071197   |

$p = .03$

Table 38 M.I. X Accountability X Leadership External whistle blowing

| Leadership | Moral Intensity | Accountability | Mean | Std. Error |
|------------|-----------------|----------------|------|------------|
| Low        | Low             | Low            | 2.10 | 0.09       |
|            |                 | High           | 2.68 | 0.09       |
|            | High            | Low            | 3.41 | 0.09       |
|            |                 | High           | 3.56 | 0.09       |
| High       | Low             | Low            | 2.24 | 0.08       |
|            |                 | High           | 2.58 | 0.09       |
|            | High            | Low            | 2.99 | 0.09       |
|            |                 | High           | 4.40 | 0.07       |

$p < .0001$

Leadership and Moral Intensity had a significant interaction on internal whistle blowing. In situations with high Leadership, participants were likely to discuss the situation with a supervisor regardless of Moral Intensity, but with low Leadership, participants waited until Moral Intensity was high before they would notify a supervisor (see Figure 15 and Table 39).

Figure 15 Leadership X Moral Intensity – Within company whistle blowing

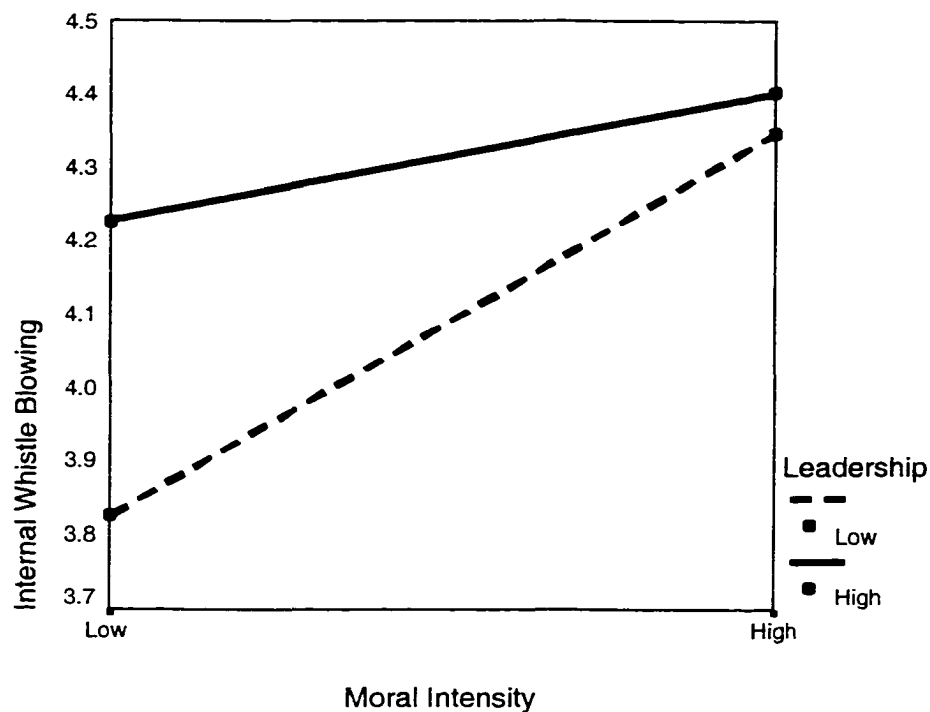


Table 39 Leadership X Moral Intensity – Within company whistle blowing

| LEAD | MI   | Mean | Std. Error |
|------|------|------|------------|
| Low  | Low  | 3.83 | 0.06       |
|      | High | 4.35 | 0.06       |
| High | Low  | 4.23 | 0.05       |
|      | High | 4.40 | 0.05       |

$p < .0001$

Also in internal company whistle blowing, there was a significant interaction between Accountability and Affiliativeness. While those high on Affiliativeness were only slightly more likely to tell a supervisor of a situation due to high Accountability, those low on Affiliativeness were more profoundly influenced by Accountability. However, those higher in Affiliativeness were more likely than their low counterparts to tell a supervisor at both levels of accountability (see Figure 16 and Table 40).

Figure 16 Accountability X Affiliativeness – Within company whistle blowing

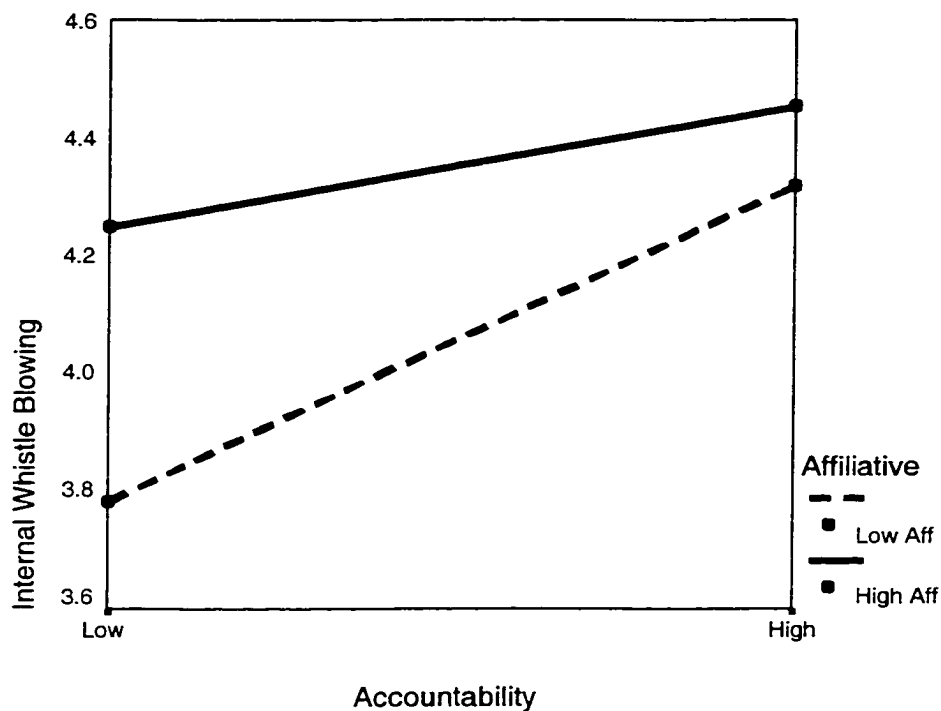


Table 40 Accountability X Affiliativeness – Internal whistle blowing

| <b>Affiliative</b> | <b>Accountability</b> | <b>Mean</b> | <b>Std. Error</b> |
|--------------------|-----------------------|-------------|-------------------|
| Low                | Low                   | 3.78        | 0.07              |
|                    | High                  | 4.32        | 0.07              |
| High               | Low                   | 4.25        | 0.07              |
|                    | High                  | 4.45        | 0.07              |

A significant three way interaction also existed in the within company whistle blowing group between Leadership, Accountability, and Effortful Control (see Table 41).

Table 41 Lead X Accountability X Effortful Control – Internal whistle blowing

| <b>Effortful Control</b> | <b>Leadership</b> | <b>Accountability</b> | <b>Mean</b> | <b>Std. Error</b> |
|--------------------------|-------------------|-----------------------|-------------|-------------------|
| Low                      | Low               | Low                   | 3.76        | 0.09              |
|                          |                   | High                  | 4.21        | 0.08              |
|                          | High              | Low                   | 4.09        | 0.07              |
|                          |                   | High                  | 4.23        | 0.08              |
| High                     | Low               | Low                   | 3.80        | 0.09              |
|                          |                   | High                  | 4.58        | 0.08              |
|                          | High              | Low                   | 4.40        | 0.07              |
|                          |                   | High                  | 4.53        | 0.08              |

Only one significant interaction was present in outside of the company whistle-blowing question that did not appear in within the company whistle blowing. A significant interaction between Affiliativeness and Moral Intensity was present when it came to alerting outside agents of organizational practices. In low Morally Intense situations, those high and low on Affiliativeness estimated they would discuss the situation with individuals outside the company at approximately the same rate. However, those high on Affiliativeness were significantly more likely to alert outside agents as the

Moral Intensity of the situation became high, compared to those low on Affiliativeness (see Figure 17 and Table 42).

Figure 17 Affiliativeness X Moral Intensity – External whistle blowing

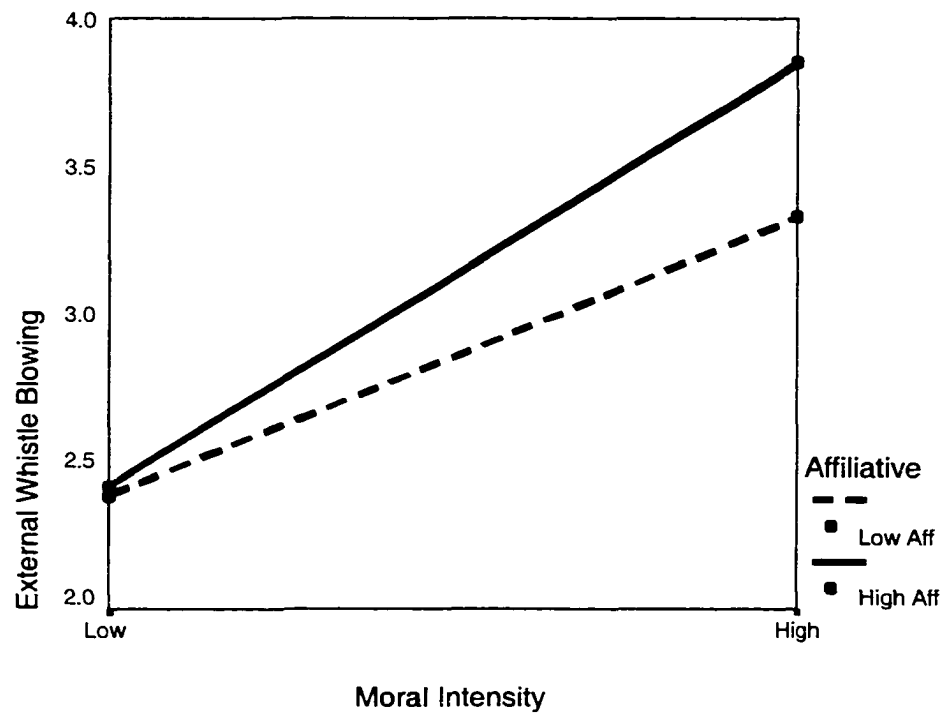


Table 42 Affiliativeness X Moral Intensity – External whistle blowing

| Affiliative | Moral Intensity | Mean | Std. Error |
|-------------|-----------------|------|------------|
| Low         | Low             | 2.39 | 0.09       |
|             | High            | 3.33 | 0.08       |
| High        | Low             | 2.42 | 0.09       |
|             | High            | 3.85 | 0.08       |

$p < .0001$

Table 43 and Table 44 report the partial Eta squared for the significant independent variables in the model  $\text{Whistle Blowing Within Company} = \beta_0 + \beta_1 \text{Affiliativeness} + \beta_2 \text{Effortful Control} + \beta_3 \text{Moral Intensity} + \beta_4 \text{Leadership} + \beta_5$

Accountability + ( $\beta_6$  Leadership \* Moral Intensity) + ( $\beta_7$  Leadership \* Accountability) + ( $\beta_8$  Moral Intensity \* Accountability) + ( $\beta_9$  Leadership \* Moral Intensity \* Accountability) + e and Whistle Blowing Outside Company =  $\beta_0$  +  $\beta_1$  Affiliativeness +  $\beta_2$

Effortful Control +  $\beta_3$  Moral Intensity +  $\beta_4$  Leadership +  $\beta_5$  Accountability + ( $\beta_6$  Leadership \* Moral Intensity) +  $\beta_7$  Leadership \* Accountability) + ( $\beta_8$  Moral Intensity \* Accountability) + ( $\beta_9$  Leadership \* Moral Intensity \* Accountability) + e, respectively.

As the table shows, Moral Intensity and Accountability account for most of the variance in both models.

Table 43 Partial Eta Squared for Internal Whistle Blowing

| <b><u>Independent Variable</u></b> | <b><u>Partial Eta Squared</u></b> |
|------------------------------------|-----------------------------------|
| Accountability                     | .225                              |
| Moral Intensity                    | .195                              |
| Leadership X Accountability        | .137                              |
| M.I. X Accountability              | .131                              |
| Leadership                         | .120                              |
| Leadership X M.I.                  | .066                              |
| Acct X Affiliativeness             | .054                              |
| Lead X M.I. X Acct                 | .022                              |
| Lead X Acct X Effortful Control    | .019                              |

Table 44 Partial Eta Squared for External Whistle Blowing

| <b><u>Independent Variable</u></b> | <b><u>Partial Eta Squared</u></b> |
|------------------------------------|-----------------------------------|
| Moral Intensity                    | .645                              |
| Accountability                     | .391                              |
| Leadership                         | .023                              |
| Lead X M.I. X Accountability       | .240                              |
| Lead X Accountability              | .108                              |
| M.I. X Affiliativeness             | .071                              |
| M.I. X Accountability              | .050                              |

Hypothesis 6 predicted that situations high in Moral Intensity would elicit a significantly higher rate of whistle blowing compared to situations low in Moral Intensity. A significant main effect of Moral Intensity was found in both whistle-blowing models. Situations high in moral intensity elicited a higher rate of within-company whistle-blowing  $F(1, 210) = 50.76, p < .0001$ , and outside of the company whistle-blowing  $F(1, 210) = 381.57, p < .0001$ . The mean response for whistle blowing inside the company was 4.37 ( $SD = .05$ ) for situations with high Moral Intensity, and 4.03 ( $SD = .05$ ) for situations with low Moral Intensity. The mean response for whistle blowing outside the company was 3.6 ( $SD = .06$ ) for situations with high Moral Intensity, and 2.4 ( $SD = .05$ ) for situations with low Moral Intensity. The first part of hypothesis 6 was supported.

Hypothesis 6 also predicted that whistle blowing would be significantly higher in organizations where Accountability was high, compared to organizations where Accountability was low. Situations where individuals were accountable for their decisions elicited a significantly higher rate of within the company whistle blowing  $F(1, 210) = 60.91, p < .0001$  and outside of the company whistle blowing  $F(1, 210) = 134.66, p < .0001$ . The mean response for whistle blowing inside the company was 4.02 ( $SD = .05$ ) for situations low in accountability 4.39 ( $SD = .05$ ) for situations with high in accountability. The mean response for whistle blowing outside the company was 2.69 ( $SD = .06$ ) for situations with low Accountability, and 3.31 ( $SD = .05$ ) for situations high in Accountability. This section of hypothesis 6 was supported.

Also, Hypothesis 6 predicted that whistle blowing activities would be significantly higher in organizations where Leadership was high, compared to organizations where Leadership was low. Organizations with high Leadership (and corporate social performance) elicited a higher rate of within-company whistle-blowing  $F(1, 210) = 29.51$ ,  $p < .0001$ , and outside of the company whistle-blowing  $F(1, 210) = 4.97$ ,  $p = .03$ . The mean response for whistle blowing inside the company was 4.09 ( $SD = .05$ ) for situations with low Leadership, and 4.31 ( $SD = .04$ ) for situations with high Leadership. The mean response for whistle blowing outside the company was 2.94 ( $SD = .06$ ) for situations with low Leadership, and 3.05 ( $SD = .05$ ) for situations with high Leadership. This part of Hypothesis 6 was supported.

Finally, Hypothesis 6 predicted that individuals high on Affiliativeness and Effortful Control would be less likely to blow the whistle compared to those low on Affiliativeness and Effortful Control. There was a significant difference between whistle blowing and Affiliativeness, but in the opposite direction than that predicted. Those high on Affiliativeness had a greater propensity to blow the whistle both outside ( $X = 3.14$  ( $SD = .07$ )) and within the company ( $X = 4.35$  ( $SD = .06$ )) compared to those low on Affiliativeness,  $X = 2.86$  ( $SD = .07$ ) and  $X = 4.05$  ( $SD = .06$ ) respectively. All Affiliativeness differences were significant at the  $p < .01$  level. Individuals high on Effortful Control had a significantly higher rate of whistle blowing ( $X = 4.33$  ( $SD = .06$ )) within the company than those low on Effortful Control ( $X = 4.07$  ( $SD = .06$ )),  $p < .005$ . However, there was no significant difference in Effortful Control and outside of the company whistle blowing.

### Extra-Role Behaviors (ERB's)

A repeated measures general linear model was used to test the model  $ERB = \beta_0 + \beta_1 \text{Affiliativeness} + \beta_2 \text{Effortful Control} + \beta_3 \text{MI} + \beta_4 \text{Lead} + \beta_5 \text{Acct} + (\beta_6 \text{Lead} * \text{MI}) + (\beta_7 \text{Lead} * \text{Acct}) + (\beta_8 \text{MI} * \text{Acct}) + (\beta_9 \text{Lead} * \text{MI} * \text{Acct}) + e$ , which as a DV used question six (To what extent would you work overtime and complete task that are above-and-beyond your job description for this organizations?), that assessed the degree to which individuals might engage in extra-role behaviors within the organization. Neither Affiliativeness nor Effortful Control had a significant main effect on the level of ERB's an individual said they would engage in (see Table 45).

Table 45 Temperament and Extra Role Behaviors

| Source            | Type III Sum of Squares | df      | Mean Square | F        | Sig.  |
|-------------------|-------------------------|---------|-------------|----------|-------|
| Intercept         | 18182.528               | 1.000   | 18182.528   | 2987.842 | 0.000 |
| Affiliativeness   | 3.041                   | 1.000   | 3.041       | 0.500    | 0.480 |
| Effortful Control | 3.789                   | 1.000   | 3.789       | 0.623    | 0.431 |
| Affil * EffCon    | 30.033                  | 1.000   | 30.033      | 4.935    | 0.027 |
| Error             | 1277.956                | 210.000 | 6.086       |          |       |

Neither personality variable had a significant main effect on extra role behaviors, but an interesting, significant interaction is notable (see Table 46). Those most likely to perform extra role behaviors had a consistent personality pattern, being either high or low on both Affiliativeness and Effortful Control. Those with mixed personality measures, though, either low on Affiliativeness and high on Agreeableness or vice versa, were significantly less likely to answer that they would perform extra role behaviors.

Table 46 Effortful Control X Affiliativeness Interaction – Extra Role Behaviors

| Affiliativeness | Effortful Control | Mean | Std. Error |
|-----------------|-------------------|------|------------|
| Low             | Low               | 3.31 | 0.12       |
|                 | High              | 3.13 | 0.12       |
| High            | Low               | 3.13 | 0.12       |
|                 | High              | 3.48 | 0.12       |

$p < .05$

As with whistle blowing, all three organizational variables had a significant influence on the participants' willingness to go "above-and-beyond" their job descriptions. A significant main effect of Moral Intensity was found, showing participants less likely to perform extra-role behaviors in organizations engaged in moral events with high (negative) Moral Intensity,  $F(1,210) = 42.22$ ,  $p < .0001$ . The mean response for ERB's inside the company was 3.44 ( $SD = .06$ ) for situations with low Moral Intensity, and 3.09 ( $SD = .07$ ) for situations with low Moral Intensity.

Similarly, organizations with high Leadership ( $F(1,210) = 141.98$ ,  $p < .0001$ ) propagated a higher rate of extra role behaviors. The mean response for ERB's was 2.91 ( $SD = .07$ ) for situations with low Leadership, and 3.62 ( $SD = .05$ ) for situations with high Leadership. Accountability was also somewhat significant, but in an unexpected direction. Organizations where individuals were held accountable elicited slightly less ERB's than organizations where Accountability was low ( $F(1,210) = 5.05$ ,  $p < .03$ ). The mean response for ERB's was 3.31 ( $SD = .06$ ) for situations with low Accountability, and 3.21 ( $SD = .07$ ) for situations with high Accountability.

Three 2-way interactions are notable. First, a significant interaction between Leadership and Accountability suggests the level of Accountability may impact high Leader organizations more. As Accountability rises, those in high Leadership

organizations become less likely to perform ERB's, although they still perform them at a higher rate than in organizations with low leadership (see Figure 18 and Table 47).

Figure 18 Accountability X Leadership – Extra Role Behaviors

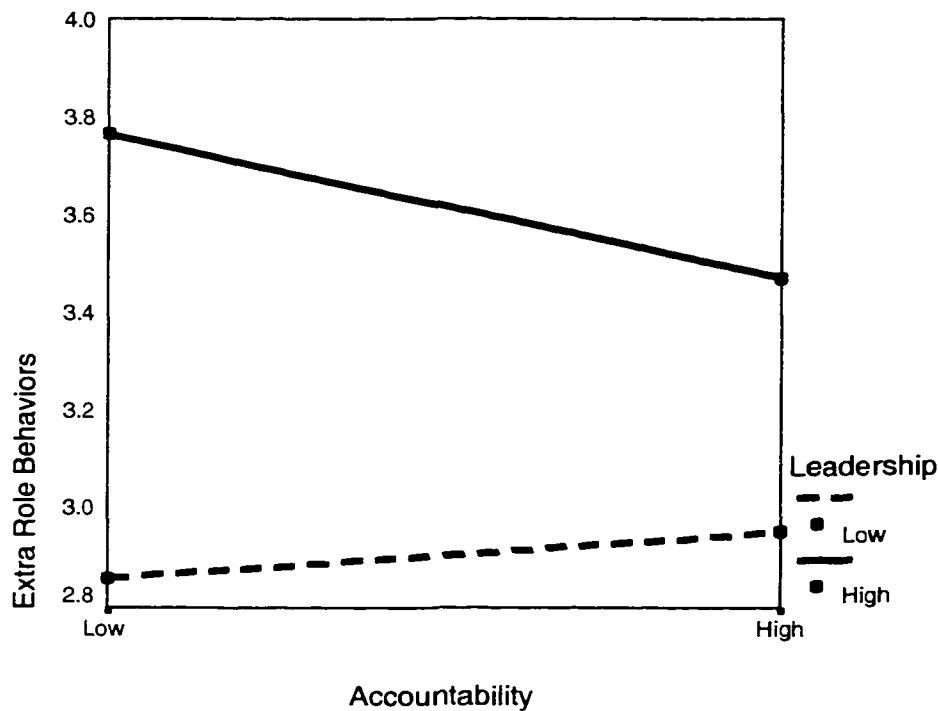


Table 47 Accountability X Leadership – Extra Role Behaviors

| Leadership | Accountability | Mean | Std. Error |
|------------|----------------|------|------------|
| Low        | Low            | 2.86 | 0.07       |
|            | High           | 2.95 | 0.08       |
| High       | Low            | 3.77 | 0.07       |
|            | High           | 3.47 | 0.07       |

$p < .0001$

Accountability also significantly interacts with Moral Intensity. Not only does high (negative) Moral Intensity cause individual's to be less likely to perform ERB's, but high Moral Intensity combined with high Accountability accentuates this effect, compared with low Moral Intensity That is, high Accountability causes those in high Moral Intensity situations to act perform even less ERB's, while low M.I. situations are impacted little by the level of Accountability (see Figure 19 and Table 48).

Figure 19 Moral Intensity X Accountability – Extra Role Behaviors

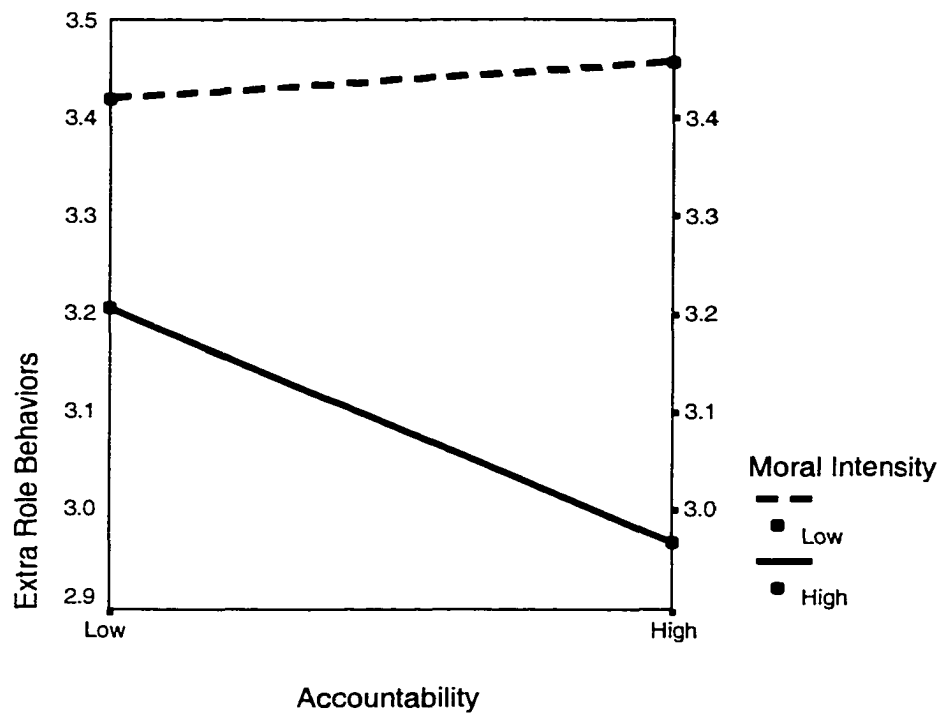


Table 48 Moral Intensity X Accountability – Extra Role Behaviors

| Moral Intensity | Accountability | Mean | Std. Error |
|-----------------|----------------|------|------------|
| Low             | Low            | 3.42 | 0.07       |
|                 | High           | 3.46 | 0.07       |
| High            | Low            | 3.21 | 0.07       |
|                 | High           | 3.21 | 0.07       |

$p = .001$

The temperamental characteristic of Effortful Control also significantly interacts with Moral Intensity, with people low on Effortful Control influenced to a significantly greater degree by the Moral Intensity of a situation (see Figure 20 and Table 49).

Figure 20 Effortful Control X Moral Intensity – Extra Role Behaviors

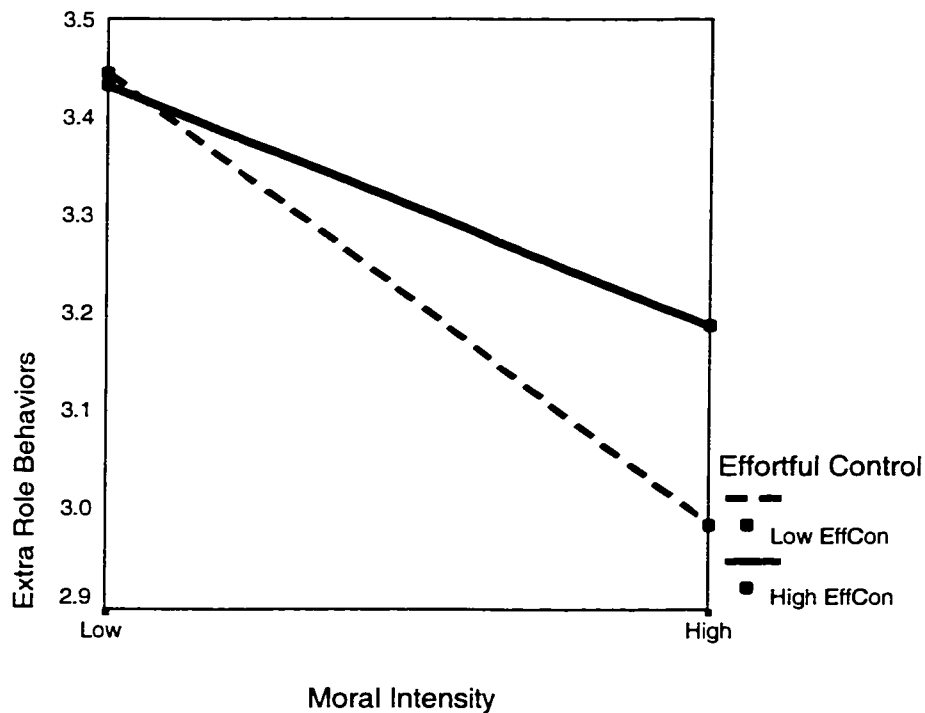


Table 49 Effortful Control X Moral Intensity – Extra Role Behaviors

| Effortful Control | Moral Intensity | Mean | Std. Error |
|-------------------|-----------------|------|------------|
| Low EffCon        | Low             | 3.44 | 0.09       |
|                   | High            | 2.99 | 0.10       |
| High EffCon       | Low             | 3.43 | 0.09       |
|                   | High            | 3.19 | 0.10       |

p &lt; .05

Finally, a significant three-way interaction exists between Moral Intensity, Accountability, and Affiliativeness (see Table 50).

Table 50 Moral Intensity X Acct X Affiliativeness – Extra Role Behaviors

| Affiliative | Moral Intensity | Accountability | Mean | Std. Error |
|-------------|-----------------|----------------|------|------------|
| Low Aff     | Low             | Low            | 3.41 | 0.10       |
|             |                 | High           | 3.35 | 0.10       |
|             | High            | Low            | 3.13 | 0.10       |
|             |                 | High           | 3.00 | 0.12       |
| High Aff    | Low             | Low            | 3.43 | 0.10       |
|             |                 | High           | 3.57 | 0.10       |
|             | High            | Low            | 3.28 | 0.10       |
|             |                 | High           | 2.93 | 0.12       |

p &lt; .02

Table 51 reports the partial Eta squared for the significant independent variables in the model.

Table 51 Partial Eta Squared for Extra Role Behaviors

| <b>Independent Variable</b>   | <b>Partial<br/>Eta Squared</b> |
|-------------------------------|--------------------------------|
| Leadership                    | .403                           |
| Moral Intensity               | .167                           |
| Accountability                | .023                           |
| Leadership X Accountability   | .097                           |
| M.I. X Accountability         | .050                           |
| M.I. X Acct X Affiliativeness | .029                           |
| M.I. X Effortful Control      | .018                           |

Hypothesis 7 predicted that individuals would be significantly more willing to perform extra-role behaviors in organizations that did not perform highly (negative) Morally Intense actions. A significant main effect of Moral Intensity was found, showing participants less likely to perform extra-role behaviors in organizations engaged in moral events with high (negative) Moral Intensity,  $F(1,210) = 42.22, p < .0001$ . The mean response for ERB's inside the company was 3.44 ( $SD = .06$ ) for situations with low Moral Intensity, and 3.09 ( $SD = .07$ ) for situations with low Moral Intensity. This part of Hypothesis 7 was supported.

Hypothesis 7 also predicted that individuals would be significantly more likely to perform extra-role behaviors in organizations with high Leadership and Accountability, compared to organizations with low Leadership and Accountability. Those participants judging organizations with high Leadership reported they would engage in a higher rate of extra role behaviors compared to organizations with low Leadership ( $F(1,210) = 141.98, p < .0001$ ). The mean response for ERB's was 2.91 ( $SD = .07$ ) for situations

with low Leadership, and 3.62 ( $SD = .05$ ) for situations with high Leadership. Although there was a significant difference between Accountability and ERB's, it was in the opposite direction than hypothesized. Organizations where individuals were held accountable elicited less ERB's than organizations where Accountability was low ( $F(1,210) = 5.05, p < .03$ ). The mean response for ERB's was 3.31 ( $SD = .06$ ) for situations with low Accountability, and 3.21 ( $SD = .07$ ) for situations with high Accountability. This part of Hypothesis 7 was partially supported, but significant, opposite effects, were found regarding Accountability.

Finally, Hypothesis 7 predicted participants high on Affiliativeness and Effortful Control would be more likely to perform extra-role behaviors compared to participants low on Affiliativeness and Effortful Control. Affiliativeness did not have a significant main effect on the level of ERB's an individual said they would engage in. Those high on Affiliativeness reported an average ERB of 3.31 ( $SD = .08$ ) and those low on Affiliativeness reported an average ERB of 3.22 ( $SD = .08$ ). Effortful Control also did not have a significant main effect on the level of ERB's an individual said they would engage in. Those high on Effortful Control reported an average ERB of 3.31 ( $SD = .08$ ) and those low on Effortful Control reported an average ERB of 3.22 ( $SD = .08$ ). This section of Hypothesis 7 was not supported.

### **Major and Gender**

While neither gender ( $n = 89$  female and  $n = 125$  males) nor school major ( $n = 26$  accountant majors,  $n = 38$  marketing/management majors) had any significant influence on ethical decision-making, one interaction was notable. Accounting majors were very

sensitive to the level of Accountability within the organization. While behaving only slightly less ethical than management majors in situations with low Accountability, Accounting majors showed a sharp, significant increase in ethical behavior in situations with high Accountability (see Figure 21 and Table 52).

Figure 21 School Major X Accountability

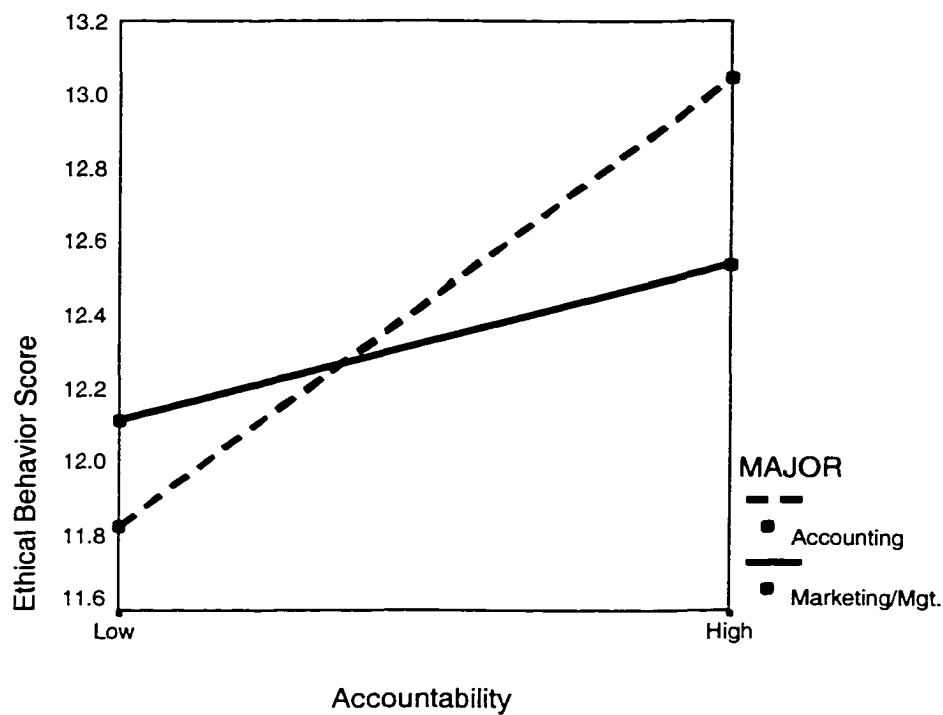


Table 52 Accountability X Major

| Accountability | Major       | Mean  | Std. Error |
|----------------|-------------|-------|------------|
| Low            | Accountants | 11.83 | 0.36       |
|                | Management  | 12.12 | 0.30       |
| High           | Accountants | 13.04 | 0.35       |
|                | Management  | 12.54 | 0.29       |

$p < .05$

## Chapter 5

### Discussion

The purpose of this study was to examine ethical decision making from a theoretical perspective to facilitate the understanding of what variables may be important, and unimportant, when individuals within organizations make ethical decisions. The hypotheses examined in the previous chapter addressed the organizational-level variables of Leadership, Moral Intensity, and Accountability. Further, the individual-level variables of Affiliativeness and Effortful Control were used as predictor variables to investigate the complex relationships involved when ethical decisions are made. More peripherally, the issues of whistle blowing and extra role behavior were examined.

Like many in-depth research endeavors, perhaps more questions arise than are answered. Since this research argues that temperamental characteristics may offer the firmest base from which to build future ethics models, a re-examination of each of the two temperamental characteristics of Effortful Control and Affiliativeness are in order, followed by a discussion of the research findings according to the research questions and hypotheses.

#### Using Temperament as a Predictor Variable

Many models on decision making rely heavily upon a cognitive component, in which outcomes, alternatives, and ultimately decisions are all part of a concisely defined formula. Recent research, drawn from clinical, physiological, and other subfields of

psychology, have suggested that emotional reactions to risky situations often diverge from cognitive assessments of those risk, causing emotional reactions to drive behavior (Loewenstein, Weber, Hsee, & Welch, 2001). Other research has suggested that an understanding of the emotional and stressful contexts in which ethical decisions are made, and an understanding of the moral emotions and reasoning that are typically thought of as precursors to or motivators for behavior will be they key to further examinations of ethical decision making frameworks (Dunsmore, 2001).

It has been suggested that temperament represents the biological foundation from which personality develops (McCrae et al. (2000); Rothbart, Ahadi, & Evans, 2000). By examining what may represent the psychological and biological substrate from which individual differences arise, a solid foundation for further exploration may develop. Temperament research emphasizes basic processes, such as effortful control, and allows a deeper, more biologically focused inspection of individual differences compared to trait research. It is yet to be understood how the five temperament scales combine to create a personality profile, but undoubtedly the understanding of configural patterns will be at the epicenter of new and exciting discoveries regarding the measurement of personality (Evans & Rothbart, 2001). It may seem overly eager to begin examining constitutionally based individual differences and the impact these differences may have on complex behaviors such as ethical decision-making. However, the present research argues that strong support exists regarding the construct of temperament. Support that allows the expansion of temperamental links to adult behavior, which may shed light on the murky area of organizational ethical decision-making.

### Effortful Control

The construct of Effortful Control was composed by the three subcomponents of inhibitory control, activation control, and attentional control. Inhibitory control is defined as the capacity to suppress positively toned impulses and thereby resists the execution of inappropriate approach tendencies (Evans & Rothbart, 2001). For example, the question “When I decide to quit a habitual behavioral pattern that I believe to be undesirable, I am usually successful” gives an indication of how an individual deals with resisting a habit that brings pleasure, or the cessation of cravings. Inhibitory control can be intuitively related to the ethical decisions faced by the participants in the experiment. A person with high inhibitory control would be less likely to make an unethical organizational decision that resulted in instant gratification (e.g. increased revenue) but may result in negative consequences down the road, compared to individuals low on inhibitory control.

Activation control is defined as the capacity to suppress negatively toned impulses and thereby resists the execution of inappropriate avoidance tendencies (Evans & Rothbart, 2001). The question “I can keep performing a task even when I would rather not do it” is an indicator of this measure. Again, it is possible to see the connection between activation control and ethical decision-making. In some situations, making an ethical decision may require the resistance of organizational norms that encourage unethical behavior, and in these situations it is likely those high on activation control would be more likely to overlook organizational norms to make the most ethical decisions compared to those low on activation control.

Attentional control is defined as the ability to intentionally shift and focus awareness in relation to task relevant stimuli and thoughts (Evans & Rothbart, 2001). An

example statement from the attentional control scale is “I am usually pretty good at keeping track of several things that are happening around me.” Therefore, it is likely that an individual high on attentional control may conduct a more thorough decision making process that considers all alternatives and consequences, compared to those low on attentional control. In doing this, it is likely the decision will be based upon a comprehensive consideration of factors, and more likely to be considered ethical.

### Affiliativeness

Like Effortful Control, Affiliativeness is made up of three components. The three components of emotional empathy, empathetic guilt, and social closeness all contribute to the Affiliativeness scale, and were hypothesized to have a marked influence on making decisions that involved the well-being of others. Emotional empathy is defined as the degree of affective response congruent with what others appear to fear (Evans & Rothbart, 2001). One statement used in the emotional empathy scale was “When I am around someone who feels depressed, it often makes me feel down too.” As individuals become more capable of empathizing with others on an emotional level, it is likely they will make decisions that take the emotions of others into consideration, and therefore act in a more ethical manner compared to individuals who are unable to understand the feelings of others.

Empathetic guilt is defined as the amount of distress in response to negatively affecting other people (Evans & Rothbart, 2001). This, of course, directly relates to ethical decision-making. An example of a statement used for the empathetic guilt factor is “If I were to impulsively take advantage of someone, I would later regret my behavior.”

The congruence between high empathetic guilt and ethical decision-making is intuitive. Individuals high on empathetic guilt would most likely make decisions in an organizational context that reduce possible distress caused by negatively affecting others. Therefore, those high on this factor may make more ethical decisions compared to those low on empathetic guilt.

Social closeness in the final factor comprising the construct of Affiliativeness, and is defined as the associated feelings of warmth and closeness combined with the interest and involvement with others (Evans & Rothbart, 2001). “I enjoy listening to other people talk about themselves” and “I am usually interested in hearing what people have to say” are examples of statements used in this factor. Like the preceding two Affiliativeness factors, those high on social closeness will show a higher concern for the well being of others in their decisions compared with those low on social closeness.

## Conclusions

### Organizational Variables

Hypotheses 1, 6, and 11 argued that Moral Intensity would be a significant factor in predicting when people will behave ethically, blow the whistle, and engage in extra-role behaviors, respectively. Across all three dimensions, Moral Intensity did significantly influence how the participants responded. When Jones (1991) suggested that the gravity of the moral act in consideration is an important determiner of how individuals will act in a given situation, he offered a six-component construct describing how the characteristics of the moral issue can vary. These six components, described in

detail in chapter 2, were manipulated in such a way in the present study, that Moral Intensity was either high or low. The manipulation of each of the six components, in such a way as to determine the relative importance of each to behavior outcomes, was beyond the scope of this study.

It is important to note that the manipulation of Moral Intensity in the vignettes was done in a prescribed manner, where even situations “low” on Moral Intensity were, by most definitions, immoral. For example, one vignette low on Moral Intensity described a law firm that systematically overcharged clients. A second vignette low on Moral Intensity concerns a retailer selling paint with higher amounts of lead than governmental regulations allow, while a third vignette low on M.I. described a company using inexpensive, overseas labor. The subjects of overseas labor and stealing from clients are rife with controversy, and are certainly not without moral implications. The scenarios low in Moral Intensity were manipulated, though, so that the component parts were minimized. That is, the magnitude of the consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect were all taken into consideration and the scenarios were constructed to coincide with the construct as defined by Jones (1991).

The situations described above were defined as having low Moral Intensity, even though they addressed theft, overseas labor, and selling a known poisonous product to consumers. The construction of vignettes concerning high Moral Intensity had to be done in a similar manner, to offer the greatest amount of ambiguity possible while still using the construct definition of Moral Intensity. Again, vignette creation with respect to situations with high Moral Intensity had to be done in a specified manner, with the six

component parts all high, but still a degree of ambiguity to the situation. For example, a scenario with high Moral Intensity describes an old plant that contains asbestos, which is linked to certain types of cancer. This certainly presents an increase across all of the component parts, but a cost benefit analysis is also presented in the vignette, explaining, “The cost of health insurance and lawsuits are much lower than the cost of reconstruction of the plant.” This served to add an element of vagueness to the decision making process.

Moral Intensity accounted for the largest proportion of variance accounted for in ethical decision-making and outside of the company whistle blowing. It was the second most explanatory variable with regards to inside the company whistle blowing and extra-role behaviors. Moral Intensity represents perhaps the most salient variable when individuals decide on behavioral intent regarding how to act in a given situation. When evidence is provided that a situation is high on the component parts that comprise Moral Intensity, individuals recognize the magnitude of possible consequences, and act accordingly.

It must be stressed that, although Moral Intensity had a significant main effect on Ethical Behavior Scores (EBS), whistle blowing, and extra-role behaviors, the mean response rate across vignettes with high and low Moral Intensity provided evidence that participants respond in a highly ethical manner across all situations. The EBS, as described in detail in Chapter 4, was a function of 3 response items regarding ethical behavior, and was shown to have high reliability,  $\alpha = .90$ . Mean answers on the scale (with higher scores indicating increased ethical decisions), which had a possible range from 3 to 15, were 12.05 ( $SD = .13$ ) for situations with low Moral Intensity and 13.10

(SD = .12) for situations with low Moral Intensity. This small, but significant difference, suggests that decisions across all the scenarios were made with ethical intent in mind.

Hypotheses 2 and 6 predicted Accountability would have a significant influence on ethical decision-making, whistle blowing, and extra-role behaviors. Accountability did have a significant impact on ethical decision making and whistle blowing in the expected direction. That is, in situations with high accountability, participants were more likely to respond that they would behave more ethically and be more likely to blow the whistle, both within and outside of the company. Extra-role behaviors were also significantly influenced by Accountability, but in the opposite direction than hypothesized. The participants were more likely to perform behaviors that went above-and-beyond their job description when accountability in the organization was low, compared to when Accountability was high. As was the case with Moral Intensity, although Accountability did significantly influence all three dependent variables, the differences were minimal. Most participants indicated they would act in an ethical manner regardless of the level of Accountability.

Hypotheses 3 and 6 predicted that participants would behave more ethically, be more apt to blow the whistle, and be more willing to engage in extra-role behaviors in organizations that had leaders committed to high ethical standards and a history of acting in a prosocial manner. While Leadership did not significantly impact ethical behavior, it did predict a higher rate of internal and external whistle blowing, and a higher rate of willingness to engage in extra-role behaviors. Participants answered that they would behave ethically regardless of the leadership style and the history of prosocial behavior within the company, with only a .10 difference in mean Ethical Behavior Scores between

the two Leadership environments. It appears that decisions regarding ethical actions are less susceptible to organizational environmental influences, compared to decisions regarding whether to alert others of misconduct or deciding whether to perform extra behaviors at work. Again, this is consistent with the pattern of results suggesting that high consideration is given to maintaining ethical intent across decision-making context.

Moral Intensity and Accountability had an intuitive interaction in the study. Both of the organizational-level variables by themselves had significant main effects on EBS, but in scenarios with high Moral Intensity, Accountability was less likely to influence decision-making concerning ethical intent. Participants indicated they would behave more ethically in the high M.I. situations, compared to the low M.I. situations (main effect for M.I.). As accountability became high, however, the respondents were more likely to act in an ethical manner even in low Morally Intense situations. The disparity between ethical intent involving differing levels of Accountability and high Moral Intensity was only slight. This provides further evidence that the characteristics of the moral issue itself are perhaps the most important determiner of ethical intent, and supports the notion that people may put more weight on the issue itself and not the possible negative, personal consequences.

An intriguing relationship existed between Moral Intensity and Leadership, which may have implications for organizational members in leadership positions. Participants in organizations with a low level of Leadership and no history of behaving in a socially responsible manner were influenced to a significantly greater degree by Moral Intensity than were participants in organizations with high Leadership. Perhaps individuals in low

Leadership organizations feel the need to overcompensate for their environment in situations involving morally intense dilemmas.

A significant main effect for Leadership was not found in the study, but ignoring it as an important variable in organizational decision-making would be dismissive of a key role it might play. The results have provided evidence that individuals will choose to act ethically in situations high Moral Intensity. It is the everyday dilemmas, however, that may be of the most concern to organizational leaders and scientist. Petty theft, breaking laws, and awarding kickbacks may provide a more difficult arena for decision making as opposed to life or death situations. It is the everyday dilemmas where ambiguity exists, and it is in these everyday dilemmas where organizational leaders provide an example to follow. This study found participants in organizations with high leadership are less unwavering, and steadier in their decision-making behavior, regardless of the Moral Intensity. Strong leaders provide unspoken guides for organizational members to follow, that assist them in not only making the “big” decisions, but also the small day-to-day ones that will be the most frequently encountered.

### Temperamental Variables

The personality variable of Affiliativeness was addressed in hypotheses 4, which asserted individuals high on Affiliativeness would make decisions with higher ethical intent compared to those low on Affiliativeness, given the former groups concern with the well-being of others. This, in fact, was the case. Participants in the low Affiliativeness group had an average EBS of 11.91 ( $SD = .16$ ), the lowest EBS mean found in the study compared to any other single main effect. This provides evidence that the component

parts of Affiliativeness, which are emotional empathy, empathetic guilt, and social closeness, all contribute to a construct very relevant to ethical intent in organizational context. Participants in the high Affiliativeness group were significantly more likely to act ethically in situations with high Moral Intensity, compared to the low Affiliativeness group, but this interaction may be derived, in large part, because of the large main effect of Moral Intensity and EBS. Affiliativeness did not significantly interact with Leadership or Accountability with regards to ethical decision-making. Those in the high Affiliativeness group consistently had a higher EBS in situations with varying levels of Leadership and Accountability, while those in the low Affiliativeness group were consistently less likely to make ethical decisions in the same contexts.

Hypothesis 7 predicted that individuals in the high Affiliativeness group would be less likely to blow the whistle compared to those low on Affiliativeness, because of the formers propensity to empathize and their desire to maintain social closeness with members in the organization. Only after the analyses revealed that those in the high Affiliativeness group were *more* likely to blow the whistle, both inside and outside the organization, compared to those low on Affiliativeness, did the shortsightedness of the hypothesis become apparent. That is, hypothesis 7 (and hypothesis 5.3, that predicted an Affil X Lead interaction on ethical behavior) failed to consider the “big picture” which would predict that those high on Affiliativeness would be highly concerned with the overall impact of a decision on a global scale, and therefore influenced little by the organizational variables of Leadership or Accountability. Likewise, those low on Affiliativeness are little influenced by Leadership and Accountability because of a general disinterest with concern for others.

This may, in part, explain the lack of significant interactions between Affil and any organizational level variable with regards to ethical behavior (with the exception of Affil X M.I., likely a by-product of M.I. main effects). Those high on Affil are able to understand and empathize better with the implications for their behavior outside of the organization, regardless of Leadership or Accountability levels. Those low on Affil have less empathy for individuals both within, and outside, the company, and are therefore also influenced little by Leadership or Accountability. So, while a significant disparity in ethical decision-making exists between those high and low on Affiliativeness, significant interactions are absent, because both groups are little influenced by outside variables.

The temperamental variable of Effortful Control had a significant influence on ethical decision making as hypothesized in the model. Those in the high Effortful Control group responded that they would behave in a significantly more ethical manner compared to the respondents in the low Effortful Control group. In addition, those high on Effortful Control were also significantly more likely to blow the whistle inside the company, but Effortful Control was not significantly related to outside of the company whistle blowing or the propensity to engage in extra-role behaviors. The construct of Effortful Control lends itself nicely to organizational decision-making, and perhaps the subcomponent of attentional control is most relevant in this domain. Attentional control, the ability to intentionally shift and focus awareness towards the decision at hand, may contribute to organizational members ability to conduct a thorough analysis that yields a more accurate assessment of the situation and options, and ultimately a highly ethical judgment.

Effortful Control did not significantly interact with the organizational level variables of Leadership or Accountability, as hypotheses 5.1 and 5.2 predicted. That is,

the level of Accountability or Leadership within an organization did not influence those high on Effortful Control and those low on Effortful Control in a different manner. It was hypothesized that the high Effortful Control group, because of their tendency to display a higher level of restraint on their behavior and perhaps consider alternative behaviors more thoroughly, would be less influenced by peripheral surroundings, and act in a consistently ethical pattern. While those high in Effortful Control did act consistently more ethical than those in the low Effortful Control group, their behavior was modified equally by Moral Intensity and Accountability, and similarly unaffected by Accountability. This suggests that Effortful Control may be an important indicator of ethical decision-making, but it does not indicate Effortful Control contributes to a propensity for, or against, the malleability of decisions dependent upon organizational attributes.

The absence of a relationship between effortful control and external whistle blowing is somewhat surprising. As noted by Boatright (2000), whistle blowers are generally conscientious people who expose some wrongdoing, often at great personal risk. The great level of possible retributions brought to whistle-blowers for their acts of dissent are well known, and the Effortful Control factor of activation control seems especially relevant to this area. Activation control is defined as the capacity to suppress negatively toned impulses and thereby resists the execution of inappropriate avoidance tendencies (Evans & Rothbart, 2001). In blowing the whistle to outside officials, an individual is knowingly going against organizational norms, and it was hypothesized those high on Effortful Control (and therefore, activation control) would be more likely to overlook organizational norms and possible negative consequences in order to expose

corruption and mismanagement, even at the expense of the well-being of the organization. The results suggests that the act of alerting outside officials of organizational wrongdoing is met with great hesitation, even for individuals with a propensity to act in the face of resistance.

### Gender and School Major

Although gender and school major neither had any significant main effects on ethical decision-making, one interaction was significant and noteworthy. Accounting majors were very sensitive to the level of Accountability within the organization, compared to Marketing and Management majors. In low Accountability vignettes, accounting majors had a mean EBS of 11.83 ( $SD = .36$ ), less than the marketing and management EBS of 12.12 ( $SD = .30$ ). In situations with high Accountability, though, accounting majors showed a drastic escalation in EBS, with a mean score of 13.04 ( $SD = .35$ ), while the marketing and management majors showed only a slight increase in EBS to 12.54 ( $SD = .29$ ).

Viewing this interaction in light of self-enhancement bias yields an interesting interpretation, consistent with previous research. A 2001 study (Manley et al.) showed students (both Marketing and Accounting majors) exhibited less enhanced perceptions of their own ethical behavior as the chance of being caught and punished increased. That is, self-enhancement bias, the tendency to rate oneself more virtuous than others, decreased as the risk of being held accountable increased. In that study, accounting majors were found to self-enhance less than marketing majors. If it is assumed that the high Accountability situations in this study decrease self-enhancement, as the previous

research suggests, marketing and management majors may have overestimated their ethical intentions in situations with low Accountability, and perhaps offered a more realistic response to situations with high Accountability.

#### Predictive Power: Temperament vs. The Big Five

Hypothesis 4.3 predicted that individual differences in temperament would have more predictive power related to ethical decision-making compared to the corresponding Big Five personality traits, because of the enduring, biological underpinnings offered through the temperament measure. Affiliativeness, Effortful Control, Conscientiousness, and Agreeableness all had significant main effects on Ethical Behavior Scores. The variance accounted for in the models, however, was significantly larger for the temperamental variables of Affiliativeness and Effortful Control compared to Conscientiousness and Agreeableness. The effect sizes, measured by partial Eta squared, show Affiliativeness accounted for 13.6% of the variance, more than double the variance accounted for by the Big Five counterpart of Agreeableness. Effortful Control accounted for 7.5% of the variance, also a step up from the Big Five counterpart of Conscientiousness (partial Eta squared = .053). If, as it has been argued throughout this research, temperament does represent the underlying structure from which personality develops, that it explains more variance in certain behaviors compared to trait models of personality makes sense.

The present research argues that examining ethical decision-making in organizations from a temperamental perspective offers several advantages compared to traditional trait research. First, recent research supports the idea that the enduring

qualities of temperament are at the core of global traits (McCrae et al., 2000). If this is the case, it is paramount to examine personality from this perspective. This study represents a logical next step, the exploration of outcomes that may be associated with the basic, biological substrates that underlie personality. It is further hoped that this research adds incremental value to the understanding of the underlying relationship between the Big Five personality traits and temperament, along the lines of the recent research pioneered by Rothbart, Ahadi, and Evans (2000).

### Limitations and Future Directions

Limitations of the study should be identified to benefit future research. A primary limitation in the study might include using self-report measures. Inherent in this methodology is the risk of participants responding in a socially desirable manner. Ethical intentions were examined with the systematic measurement of individual differences and manipulation of organizational contexts, and the anonymity offered by the methodology was targeted at reducing any inclination to be influenced by social desirability. If social desirability did have an impact, there is no reason to believe any group was affected differentially, and the results indicate robust differences not congruent with a pattern of socially desirable responses.

As mentioned in the previous chapter, there were some sizable intercorrelations off the main diagonal in the correlation matrix between the Big Five factors and the temperamental factors. Across the main diagonal, the correlations ranged from .58 to .70, indicating a strong one-on-one correspondence between the measures. The off-diagonal correlations seen between the Big Five and temperament scales are derived from the

higher intercorrelations among the temperamental factor scales. These correlations, slightly higher than previous research has found, inevitably result in higher off diagonal correlations in the matrix showing correlations between temperament factor scores and the Big Five scales. The off-diagonal intercorrelations in the matrix showing the Big Five scales correlated with themselves were also slightly higher than previous research has shown. For example, there was a -.43 correlation between neuroticism and agreeableness.

The higher correlations are in the expected directions with respect to desirable and undesirable traits, and they appear to be a function of the sample responding in a socially desirable manner. To investigate this, two groups previously shown to have different rates of self-enhancement behavior were examined. Research has shown marketing majors have a tendency to have higher levels of self-enhancement bias (SEB) when the risk of being caught is low, compared to accounting majors (Manley, Russell, & Buckley, 2001). An analysis of Ethical Behavior Scores between accounting majors and marketing majors in the 4 scenarios with low accountability showed no difference between the groups. School major and EBS were also shown to be independent in high accountability scenarios. Therefore, the level of self-enhancement did not seem to be a function of school major, but perhaps prevalent across everyone equally, as the intercorrelations seem to indicate.

The use of scenarios in business ethics research has been criticized, but they serve as important indicators of ethical intent and are widely supported and used in the literature (Alexander & Becker, 1978; Hunt & Vitell, 1986; Weber, 1990, 1992). The demographics of the sample indicate a large majority of the participants were enrolled in majors that imply they will likely self-select into business settings where decisions with

ethical implications will be made. The absence of a link between behavioral intentions and behaviors was not investigated in this research, although behavioral intentions represent an immediate determinant of behavior. Future research in applied settings is necessary to investigate the possible variables that may act to prevent intended behavior from being enacted.

It is recommended that the remaining three temperament scales be examined in relation to ethical decision-making. Several researchers have investigated the influence of affect on decision-making (i.e. Loewenstein, Weber, Hsee, & Welch, 2001; Daniels, 1999; Schwarz, 2000), but an operationalized measure of temperamental negative affect has yet to be investigated in the decision making literature. The biologically based negative affect scale from the ATQ-2 (Evans & Rothbart, 2001) would be a fitting measure to assess how different kinds of distress such as fear, sadness, discomfort, and frustration impact ethical decision making. Further, the temperamental construct of extraversion might be applicable to the decision-making literature. It is likely that individuals that experience positive affect and enjoyment from high levels of stimulation may respond differently to ethical dilemmas compared with those who derive less enjoyment from social interaction. Finally, an investigation of the temperamental construct of orienting reactivity may find that a higher level of general cognitive awareness associated with automatic or reactive attentional processing has an impact on decision-making regarding ethical behavior.

## Implications

Decisions made in organizations can have life or death consequences, as illustrated in Chapter 1 with the Firestone Tire case. More frequent, though, are organizational decisions that are less substantial, but nonetheless may have far reaching ethical implications. Ethical behavior should not be viewed as conflicting with organizational objectives. On the contrary, organizations benefit from conducting business in an ethical manner by promoting the achievement of business functions, and the failure to act in an ethical manner may lead to “moral decay” that inhibits business from satisfying customers, soliciting new business, and hiring high quality employees (Buckley, Wiese, & Johnston, 1996).

The temperamental model on ethical decision-making points to some interesting implications for organizational settings. If it is the desire of an organization to select individuals for employment with a propensity to act in an ethical manner, it is evident that Effortful Control and Affiliation may be important personality characteristics to consider. It is further suggested that temperament constructs are of greater predictive value with regard to ethical decision-making compared to trait personality measures, although the length of present temperamental measures may inhibit their use in some context. It may prove unnecessary to assess such personality characteristics at job levels that do not offer incumbents discretion to make organizational decisions, though inspection of most positions will reveal opportunities for a majority of employees to behave in ways that can both help and hinder organizational performance.

It is not suggested that individuals high on Effortful Control and Affiliativeness will always act in an ethical manner, or that those low on the constructs are less ethical

compared to them. An infinite variety of occupations exist, where the differences between the types of ethical decisions that have to be made are boundless. It is the duty of organizations to determine what characteristics and attributes are appropriate for the individuals they employ. Selection procedures based blindly upon criteria that are little understood would produce negligible results at best, and perhaps outcomes contrary to adverse impact and other employment laws.

The level of accountability within an organization also seems to be an important determiner of how individuals within the company make ethical decisions. Accountability seems to influence behavior regardless of the magnitude of the ethical act itself, or the behavior of the organizational leaders. Combined with leaders who exemplify an ethical environment, a clearly defined atmosphere that makes it possible for employees to know what is expected of them, and to further have an understanding of *why* it is expected of them, will undoubtedly promote desirable behaviors. Organizations that experience “symptoms” of unethical behavior by employees that contradict organizational philosophies should be aware of accountability when considering intervention strategies to address concerns immediately as they arise. Any display of complacency with unethical behavior is ultimately a promotion of it, and employing a system of accountability for actions may prove to be the largest antidote for destructive, unethical behavior. Formal rules cannot, and should not, however, attempt to take employee discretion out of the decision-making equation.

It has been suggested that the motivation behind ethical behavior may be immaterial. If ethical values are instilled in employees and ethical behavior is the outcome, whether it is driven by genuine moral concern or organizational compliance

may not be an important factor from an applied perspective (Buckley et al. 2001). From this perspective, it is beneficial that accountability can have such a profound impact on individual behavior. The implementation of intervention strategies is facilitated, by making it a primary goal to bring into line individual behavior with organizational-level expectancies. Addressing ethical concerns from an individual-level intervention would entail the understanding of an enormous diversity of human values, objectives, expectations, and experiences that drive motivation. Organizations must align their reward systems to coincide with ethical behavior, and managers within organizations should impose high standards of ethical conduct.

This research serves to address ethical concerns within organizations, but avoids taking a cynical stance on organizations or the individuals that comprise them. It appears that, in the least, individuals faced with difficult ethical dilemmas make a concerted effort to act in an ethical manner. The majority of individuals within business have well-meaning intentions, so that any intervention strategies aimed at addressing organizational integrity should act to bring into line personal and professional beliefs, instead of attempting to convert “unethical” individuals.

The value of personality assessment in the study of ethical decision-making cannot be overstated. Understanding how the fundamental temperamental characteristics of individuals relate to how they behave in their environment is paramount to understanding ethical behavior in organizations. Ethical decision-making is ultimately a small, but revealing element of a complete system enveloped in a psychosocial context. A further understanding of the organizational-level variables of Accountability and Leadership, the individual-level variables of Effortful Control and Affiliativeness, and the

situational variable of Moral Intensity should facilitate further exploration into the complex interactions involved in making ethical organizational decisions.

## References

- Abratt, R. D. & Higgs, N. S. (1992). An examination of the ethical beliefs of managers using selected scenarios in a cross-cultural environment. Journal of Business Ethics, 11, 29-35.
- Akaah, I. P. & Riordan, E. A. (1989). Judgments of marketing professionals about ethical issues in marketing research: A replication and extension. Journal of marketing research, 26(1), 112-120.
- Alexander, C. S. & Becker, H. J. (1978). The use of vignettes in survey research. Public Opinion Quarterly, 42, 93-104.
- Allport, G. W. & Odbert, H. S. (1936). Trait names: A psycho-lexical study. Psychological Monographs, 47, 1-19.
- Allport, G. W. (1961). Pattern and Growth in Personality. New York: Holt.
- Arlow, P. & Ulrich, T. A. (1980). Business ethics, social responsibility and business students: An empirical comparison of Clark's study. Akron Business and Economic Review, 11(3), 17-23.
- Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. Academy of Management Journal, 28, 446-463.
- Baumhart, R. (1961). Problems in review: How ethical are businessmen? Harvard Business Review, 39, 6-9.
- Bass, K., Barnett, T., & Brown, G. (1999). Individual difference variables, ethical judgments, and ethical behavioral intentions. Business Ethics Quarterly, 9(2), 183-405.
- Beauchamp, T. L. & Bowie, N. E. (1983). Ethical Theory and Business, 2<sup>nd</sup> Edition. New Jersey: Prentice Hall.
- Becker, H. & Fritzche, D. J. (1987). Business ethics: A cross-cultural comparison of managers' attitudes. Journal of business ethics, 6, 289-295.
- Birsch, D. & Fielder, J. H. (1994). The Ford Pinto Case. New York: State University of New York Press.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. Psychological Bulletin, 117, 187-215.
- Boatright, J. R. (2000). Ethics and the Conduct of Business. New Jersey: Prentice Hall.

- Bouchard, T. J. & McGue, M. (1990). Genetic and rearing environmental influence on adult personality: An analysis of adopted twins reared apart. Journal of Personality, 58, 263-292.
- Brenner, S. N & Molander, E. A. (1977). Is the ethics of business changing? Harvard Business Review, 55, 57-71.
- Browning, J. & Zabriskie, N. B. (1983). How ethical are industrial buyers? Industrial Marketing Management, 12, 219-224.
- Buckley, M. R., Beu, D. S., Frink, D. D., Howard, J. L., Berkson, H., Mobbs, T. A., & Ferris, G. R. (2001). Ethical issues in human resources systems. Human Resource Management Review, 11, 11-29.
- Buckley, M. R., Wiese, D. S., & Johnston, T. J. (1996). Ethical issues for Oklahoma organizations. Oklahoma Business Bulletin, 64(12), 7-14.
- Campos, J. J., Barrett, K. C., Lamb, M. E., Goldsmith, H. H., & Sternberg, C. (1983). Socioemotional development. In M. M. Haith & J. J. Campos (Eds.), Handbook of Child Psychology: Infancy and Developmental Psychobiology (Vol. 2, pp.783-915). New York: Wiley.
- Carlson, R. (1992). Shrinking personality: One cheer for the Big Five: Contemporary Psychology, 37, 644-645.
- Cattell, R. B. (1943). The description of personality: Basic traits resolved into clusters. Journal of Abnormal and Social Psychology, 38, 476-506.
- Child, J. (1972). Organizational structure, environment, and performance. Sociology, 6, 1-22.
- Child, J. (1997). Strategic choice in the analysis of action, structure, organizations and environment: Retrospect and prospect. Organisation Studies, 18, 43-76.
- Chonko, L. B. and Hunt, S. D. (1985). Ethics and marketing management: An empirical examination. Journal of Business Research, 13, 339-359.
- Cialdini, R. B., Levy, A., Herman, C. P., Kozlowski, I. T., & Petty, R. E. (1976). Elastic shifts of opinion: Determinants of direction and durability. Journal of Personality and Social Psychology, 34, 663-672.
- Cochran, P. L. & Wood, R. A. (1984). Corporate social responsibility and financial performance. Academy of Management Journal, 27, 42-56.
- Costa, P. T. Jr. & McCrae, R. R. (1992). Four ways five factors are basic. Personality and Individual Differences, 13, 653-665.

- Costa, P. T. Jr. & McCrae, R. R. (1992). Revised NEO personality inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, Fla.: Psychological Assessment Resources.
- Costa, P. T. Jr. & McCrae, R. R. (1995). Primary traits of Eysenck's P-E-N system: Three and five-factor solutions. Journal of Personality and Social Psychology, 69, 308-317.
- Daniels, K. (1999). Affect and strategic decision making. Psychologist, 12(1), 24-28.
- Dienhart, J. W. & Curnutt, J. (1998). Contemporary Ethical Issues. California: ABC-CLIO.
- Dubinsky, A. J. & Loken, B. (1989). Analyzing ethical decision making in marketing. Journal of Business Research, 19, 83-107.
- Dukerich, J. M., Waller, M. J., George, E. & Huber, G. P., (1993). Moral intensity in group problem solving. *Paper presented at the National Academy of Management Meetings*, Atlanta, Georgia.
- Dunsmore, J. C. (2001) Moral development and bioethics. Psychiatric Annals, 31(2), 93-101.
- Dutton, J. E., & Duncan, R. B. (1987). The creation of momentum for change through the process of strategic issue diagnosis. Strategic Management Journal, 8, 279-295.
- Etzioni, A. (1988). The Moral Dimension. New York. Free Press.
- Evans, D. E., & Rothbart, M. K. (2001). A Hierarchical Model of Temperament and the Big Five. Manuscript submitted for Publication. University of Oregon.
- Ferrell, O. C., & Gresham, L. G. (1985). A contingency framework for understanding ethical decision making in marketing. Journal of Marketing, 49, 87-96.
- Ferrell, O. C., Gresham, L. G., & Fraedrich, J. (1989). A synthesis of ethical decision models for marketing. Journal of Macromarketing, 11, 55-64.
- Finkelstein, S., & Hambrick, D. C. (1996). Strategic Leadership Top Executives and Their Effects on Organizations. Minneapolis: West.
- Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. Journal of Abnormal and Social Psychology, 44, 329-344.
- Ford, R. C. & Richardson, W. D. (1994). Ethical decision making: A review of the empirical literature. Journal of Business Ethics, 13, 205-221.
- Friedman, M. & Friedman, R. (1981). Free to Choose. New York: Avon.
- Friedman, M. (1962). Capitalism and Freedom. Chicago: University of Chicago Press.

- Fritzsche, D. J. & Becker, H. (1983). Ethical behavior of marketing managers. Journal of Business Ethics, 1, 291-299.
- Garrett, T. M. (1966). Business Ethics. Englewood Cliffs, NJ: Prentice Hall.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. Psychological Assessment, 4, 26-42.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. American Psychologist, 48, 26-34.
- Goldsmith, H. H, Buss, A. H, Plomin, R., Rothbart, M. K., Thomas, A., Chess, S., Hinde, R. A., & McCall, R. B. (1987). Roundtable: What is temperament? Four approaches. Child Development, 58, 505-529.
- Goodman, C. S. & Crawford, C. M. (1974). Young executives: A source of new ethics? Personnel Journal, March, 180-187.
- Gottlieb, J. Z. & Sanzgiri, J. (1996). Towards an ethical dimension of decision making in organizations. Journal of Business Ethics, 15, 1275-1285.
- Harrington, S. J. (1997). A test of a person-issue contingent model of ethical decision making in organizations. Journal of Business Ethics, 16, 363-375.
- Healey, J. R. (2000). Firestone leaves an indelible mark. USA Today. [On-line], Available: <http://www.usatoday.com/money/consumer/autos/mauto973.htm>
- Heath, A. C., Neale, M. C., Kessler, R. C., Eaves, L. J., & Kendler, K. S. (1992). Evidence for genetic influences on personality from self-reports and informant ratings. Journal of Personality and Social Psychology, 63, 85-96.
- Hegarty, W. H. & Sims, H. P. Jr. (1978). Some determinants of unethical decision behavior: An experiment. Journal of Applied Psychology, 63(4), 451-457.
- Hegarty, W. H. & Sims, H. P. Jr. (1979). Organizational philosophy, policies and objectives related to unethical decision behavior: A laboratory experiment. Journal of Applied Psychology, 64(3), 331-338.
- Hershberger, S. L., Plomin, R., & Pederson, N. L. (1995). Traits and metatraits: Their reliability, stability, and shared genetic influence. Journal of Personality and Social Psychology, 69, 673-685.
- Howard, R. (1990) Values make the company: An interview with Robert Haas. Harvard Business Review, 68(5), 132-144.

- Humphreys, L. G. & Dachler, H.P. (1969). Jensen's theory of intelligence: A rebuttal. Journal of Educational Psychology, 60, 432-433.
- Hunt, S. D., & Vitell, S. (1986). A general theory of marketing ethics. Journal of Macromarketing, 8, 5-16.
- Hunt, S. D., & Vitell, S. (1993). The general theory of marketing ethics: A retrospective and revision. In N. Craig Smith and John A. Quelch (Eds.) Ethics in Marketing. Homewood, IL: Irwin, 775-784.
- Hunt, S. D., Kiecker, P. L., & Chonko, L. B. (1990). Social responsibility and personal success: A research note. Journal of the Academy of Marketing Science, 18, 239-244.
- Izraeli, D. (1988). Ethical beliefs and behavior among managers: A cross-cultural perspective. Journal of Business Ethics, 7, 263-271.
- Jalajas, D. S., (1993). Ethical decision making in college students: A test of Jones's moral intensity concept. *Paper presented at the Eastern Academy of Management Meeting*, Providence, Rhode Island.
- Jang, K. L., Livesley, W. J., & Vernon, P. A. (1996). Heritability of the Big Five personality dimensions and their facets: A twin study. Journal of Personality, 64, 577-591.
- John, O. P. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L.A. Pervin (Ed.), Handbook of Personality: Theory and Research (pp. 66-100). New York: Guilford.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. Academy of Management Review, 16, 366-395.
- Jones, T. M. & Gaultschi, F. H. III (1988). Will the ethics of business change? A survey of future executives. Journal of Business Ethics, 7, 231-248.
- Klimoski, R., & Inks, L. (1990). Accountability forces in performance appraisal. Organizational Behavior and Human Decision Processes, 45, 194-208.
- Kochanska, G. (1991). Socialization and temperament in the development of guilt and conscience. Child Development, 62, 1379-1392.
- Kochanska, G. (1993). Toward a synthesis of parental socialization and child temperament in early development of conscience. Child Development, 64, 325-347.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D.A. Goslin (Ed.), Handbook of Socialization Theory and Research (p.347-480). Chicago: Rand McNally.

- Kraft, K. L. (1990). The relative importance of social responsibility in determining organizational effectiveness: Student responses. Journal of Business Ethics, 10, 179-188.
- Kraft, K. L. (1991). The relative importance of social responsibility in determining organizational effectiveness: Managers from two service industries. Journal of Business Ethics, 10, 485-491.
- Laczniak, G. R. & Inderrieden, E. J. (1987). The influence of sated organizational concern upon ethical decision making. Journal of Business Ethics, 6, 297-307.
- Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. Psychological Bulletin, 125, 255-275.
- Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. Psychological Bulletin, 127(2), 267-286.
- Manley, G. G., Russell, C. J. & Buckley, M. R. (2001). Self-enhancing in perceptions of behaving unethically. Manuscript submitted for publication.
- McAdams, D.P. (1992). The five-factor model in personality: A critical appraisal. Journal of Personality, 60, 329-361.
- McCrae, R. R. & Costa, P. T. Jr. (1987). Validation of the five-factor model of personality across instruments and observers. Journal of Personality and Social Psychology, 52, 81-90.
- McCrae, R. R. & Costa, P. T. Jr. (1989). Reinterpreting the Myers-Briggs Type Indicator from the perspective of the five-factor model of personality. Journal of Personality, 57, 17-40.
- McCrae, R. R. & Costa, P. T. Jr. (1990). Personality in Adulthood. New York: Guilford.
- McCrae, R. R. & Costa, P. T. Jr. (1996). Toward a new generation of personality theories: Theoretical contexts for the Five Factor Model. In Wiggins, J.S. (Ed), The Five Factor Model of Personality: Theoretical Perspectives, (pp.51-87). New York: Guilford Press.
- McCrae, R. R., Costa, P. T. Jr., Ostendorf, F., Angleitner, A., Hrebickova, M., Avia, M. D., Sanz, J., Sanchez-Bernardos, M. L., Kusdil, M. E., Woodfield, R., Saunders, P. R., Smith, P. B. (2000). Nature over nurture: Temperament, personality, and life span development. Journal of Personality and Social Psychology, 78, 173-186.
- McCrae, R. R. & John, O. P. (1992). An introduction to the five-factor model and its applications. Journal of Personality, 60, 175-215.

- McLean, P. A. & Jones, D. B. (1992). Machiavellianism and business education. Psychological Reports, 71 (10), 57-58.
- McNichols, C. W. & Zimmerer, T. W. (1985). Situational ethics; An empirical study of differentiators of student attitudes. Journal of Business, 4, 175-180.
- Milgram, S. (1963). Behavioral study of obedience. Journal of Abnormal and Social Psychology, 67, 371-378.
- Morris, S. A. & McDonald, R. A. (1995). The role of moral intensity in moral judgments: An empirical investigation. Journal of Business Ethics, 14, 715-726.
- Mowday, R. T. (1982). Employee-Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover. New York: Academic Press.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. Journal of Abnormal and Social Psychology, 66, 574-583.
- Paine, L. S. (1996). Moral thinking in management: An essential capability. Business Ethics Quarterly, 6, 477-492
- Panksepp, J. (1998). Affective Neuroscience: The Foundations of Human and Animal Emotions. New York: Oxford University Press.
- Plomin, R., Chipuer, H. M., & Loehlin, J. C. (1990). Behavioral genetics and personality. In L.A. Pervin (Ed.), Handbook of personality: Theory and research (pp. 225-243). New York: Guilford.
- Posner, B. Z. & Schmidt, W. H. (1984). Values and the American manager: An update. California Management Review, 26(3), 202-216.
- Randall, D. M. & Gibson, A. M. (1990). Methodology in business ethics research: A review and critical assessment. Journal of Business Ethics, 9, 457-471.
- Rest, J. R. (1986). Moral Development: Advances in Research and Theory. New York: Praeger.
- Robin, D. P., & Reidenbach, E. (1987). Social responsibility, ethics, and marketing strategy: Closing the gaps between concept and application. Journal of Marketing, 51, 44-58.
- Rothbart, M. K., & Derryberry, D. (1981). Development of individual differences in temperament. In M. E. Lamb & A. L. Brown (Eds.), Advances in Developmental Psychology, (Vol. 1), (p.37-86). Hillsdale, NJ: Erlbaum.

- Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and Personality: Origins and outcomes. Journal of Personality and Social Psychology, 78, 122-135.
- Rothbart, M. K., Ahadi, S. A., & Hershey, K. (1994). Temperament and social behavior in childhood. Merrill-Palmer Quarterly, 40, 21-39.
- Ruegger, D. & King, E. W. (1992). A study of the effect of age and gender upon student business ethics. Journal of Business Ethics, 11, 179-186.
- Schwarz, N. (2000). Emotion, cognition, and decision making. Cognition & Emotion, 14(4), 433-440.
- Serwinek, P. J. (1992). Demographic and related differences in ethical views among small businesses. Journal of Business Ethics, 11, 555-566.
- Singer, M. S. (1996). The role of moral intensity and fairness perception in judgments of ethicality: A comparison of managerial professionals and the general public. Journal of Business Ethics, 15, 459-474.
- Singer, M. S. & Singer, A. E. (1997). Observer judgments about moral agents ethical decisions: The role of scope of justice and moral intensity. Journal of Business ethics, 16, 473-484.
- Singhapakdi, A. & Vitell, S. J. (1990). Marketing ethics: Factors influencing perceptions of ethical problems and alternatives. Journal of Macromarketing, Spring, 4-18.
- Singhapakdi, A., Vitell, S. J., & Franke, G. R. (1999). Antecedents, consequences, and mediating effects of perceived moral intensity and personal moral philosophies. Journal of the Academy of Marketing Science, 27(1), 19-36.
- Singhapakdi, A., Vitell, S. J., & Kraft, K. L. (1996). Moral intensity and ethical decision-making of marketing professionals. Journal of Business Research, 36, 245-255.
- Stark, A. (1993). What's the matter with business ethics? Harvard Business Review, 71, 38-48.
- Stenning, P. C. (Ed.). (1995). Accountability for criminal justice. Toronto, Canada: University of Toronto Press.
- Stevens, G. E. (1984). Business ethics and social responsibility: The response of present and future managers. Akron Business and Economic Review, Fall, 6-11.
- Stevens, G. E., Richardson, W. D., & Abramowitz, A. E. (1989). Perceptual differences of ethical decision situations business vs. law: A difference of opinion? Southern Management Association Proceedings, 199-201.

- Stryker, S., & Statham, A. (1985). Symbolic interaction and role theory. In G. Lindzey & E. Aronson (Eds.), The Handbook of Social Psychology (Vol. 1, pp.311-378). New York: Random House.
- Tetlock, P. E. (1983). Accountability and complexity of thought. Journal of Personality and Social Psychology, 45, 74-83.
- Tetlock, P. E. (1983). Accountability and the perseverance of first impressions. Social Psychology Quarterly, 46, 285-292.
- Tetlock, P. E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. Advances in Experimental Social Psychology, 25, 331-376.
- Tetlock, P. E., Skitka, L., & Boettger, R. (1989). Social and cognitive strategies for coping with accountability: Conformity, complexity, and bolstering. Journal of Personality and Social Psychology, 57, 632-640.
- Thurstone, L. L. (1934). The vectors of mind. Psychological Review, 41, 1-32.
- Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. Academy of Management Review, 11, 601-617.
- Trevino, L. K. (1990). A cultural perspective on changing and developing organizational ethics. In R. Woodman & Passmore (Eds.), Research in Organizational Change and Development, vol. 4, 195-230. Greenwich, CT: JAI Press
- Tupes, E. C., & Christal, R. E. (1961). Recurrent personality factors based on trait ratings. Journal of Personality, 60, 225-251.
- Victor, B & Cullen, J. B. (1987). A theory and measure of ethical climate in organizations. In W.C. Frederick and L.E. Preston (eds.) Research in Corporate Social Performance and Policy. (p.51-71).
- Viken, R. J., Rose, R. J. Kaprio, J., & Koskenvuo, M. (1994). A developmental genetic analysis of adult personality: Extraversion and Neuroticism from 18 to 59 years of age. Journal of Personality and Social Psychology, 66, 722-730.
- Vitell, S. J. & Festervand, T. A. (1987). Business ethics: Conflict, practices and beliefs of industrial executives. Journal of Business Ethics, 6, 111-122.
- Weaver, G. R., Trevino, L. K., & Cochran, P. L. (1999). Corporate ethics programs as control systems: Influences of executive commitment and environmental factors. Academy of Management Journal, 42, 41-57.
- Weber, J. (1990). Managers moral reasoning: Assessing their responses in three moral dilemmas. Human Relations, 43(7), 687-702.

- Weber, J. (1992). Scenarios in business ethics research: Review, critical assessment, and recommendations. Business Ethics Quarterly, 2(2), 137-160.
- Weeks, W. A. & Nantel, J. (1992). Corporate codes of ethics and sales force behavior: A case study. Journal of Business Ethics, 11, 753-760.
- Weick, K. E. (1979). The Social Psychology of Organizing. New York: Random House.
- White, L. P. & Rhodeback, M. J. (1992). Ethical dilemmas in organization development: A cross-cultural analysis. Journal of Business Ethics, 11, 663-670.
- Wood, D. J. (1991). Corporate social performance revisited. Academy of Management Review, 16, 693.
- Zey-Ferrell, M. K. & Ferrell, O. C. (1982). Role-set configuration and opportunity as predictors of unethical behavior in organizations. Human Relations, 35(7), 587-604.
- Zey-Ferrell, M. K., Weaver, M., & Ferrell, O. C. (1979). Predicting unethical behavior among marketing practitioners. Human Relations, 32(7), 557-569.

The following pages contain 8 scenarios that are likely to be encountered in business situations. Please read each scenario carefully and give your most honest response concerning how you would behave in that particular situation. After each scenario you are to answer 6 questions. Please answer ALL six questions for each of the 8 scenarios. Circle the number that indicates how well a given statement describes your behavior.

You work for Bosco's, a major supplier of medical equipment. Although in existence for only two years, the company has won over 50 awards for social activism. The CEO acts as the head of a monthly campaign that donates countless hours and money to people who need have medical concerns but can't afford to pay for treatments. The CEO and company also sponsors many events that support the environment, foreign relations, and children's issues. You have recently discovered that a piece of medical equipment made by Bosco's has been linked to thousands of deaths across the country. Upon further inspection, it becomes apparent that Bosco's device is most likely the cause of these deaths. Millions of these devices are to be distributed in the next month. Although word of the deaths has not yet been discovered, it is highly likely word will get out soon. To save face, Bosco's would definitely terminate you if the news were to be discovered.

1. To what extent would you overlook laws pertaining to this scenario?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
2. To what extent would you feel compelled to discuss this situation with your supervisor?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
4. To what extent would you engage in falsifying paperwork, which would benefit this company?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |

You work for Safetron, a large manufacturer for car products. Safetron has made millions of dollars in contributions to civic and charitable organizations and non-profit institutions. Safetron has also made clear its policy to use corporate resources to operate programs that address major social problems such as poverty and drug use among children. The CEO recently donated his entire paycheck to a charity that supports children's cancer research. The CEO also has offered Safetron workers a bonus if they volunteer at local charitable organizations for a particular amount of hours per year. Your company is used as an outsourced maker of seatbelts by all 3 of the major U.S. vehicle companies. An internal investigation has revealed that the seatbelt fasteners in over 1 million cars are flawed. This flaw has been related to at least 50 vehicle fatalities, and is suspected in many more. There is a low probability that the seatbelt fastener problem will become public. The big 3 automobile manufacturers and governmental agencies do not have the aggregated data to warrant any suspicion about the problem, and you would not be personally held responsible for any of the problems associated with the seatbelts.

1. To what extent would you overlook laws pertaining to this scenario?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

2. To what extent would you feel compelled to discuss this situation with your supervisor?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

4. To what extent would you engage in falsifying paperwork, which would benefit this company?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

You work for company Ampro, a Fortune 500 energy company. The company has never received awards recognizing environmentally conscious energy production, and the CEO has never communicated a vision of being socially or environmentally conscious. You have recently been assigned to dump waste in a prohibited area as a cost-saving measure. Your research has shown substantial environmental damage would be caused by this dumping, perhaps threatening nearby residence. There is a high probability governmental regulatory agencies would find out about the dumping, and you would most likely be fired if the news got out.

1. To what extent would you overlook laws pertaining to this scenario?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
2. To what extent would you feel compelled to discuss this situation with your supervisor?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
4. To what extent would you engage in falsifying paperwork, which would benefit this company?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |

You work for Dutton Industries, a major chemical producer with headquarters in Chicago. A safety report has been brought to your attention with details regarding a plant in Dallas. The plant, constructed in the 1950's, contains large amounts of cancer-causing asbestos. Many employees have died as a result of cancer after having worked there several decades. The cost of health insurance and lawsuits, however, is much lower than the cost of reconstruction of the plant. There is little possibility of anyone finding out about the insulation concerns, and the company's CEO has recently stressed that cost-savings comes before anything else. Further, your position is not at risk as a result of any investigation concerning the asbestos. The company has never been known as being socially responsible, and has settled several employee lawsuits out of court.

1. To what extent would you overlook laws pertaining to this scenario?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
2. To what extent would you feel compelled to discuss this situation with your supervisor?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
4. To what extent would you engage in falsifying paperwork, which would benefit this company?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |

You work at Ellison and Associates, a prestigious law firm with a reputation for donating large amounts of time and money for social concerns. Ellison and Associates has many programs designed to benefit all its employees' quality of life in the workplace beyond any economic or legal requirements. Further, the CEO has personally communicated her desire to spend time and money on social issues, and often spends at least 10 hours a month on different charitable activities along with the other workers. You find out that some people within the company have rounded-up billable hours. This over-charges some clients a small amount of money every year. All of the clients whose hours are rounded up are corporations with at least 5 million dollars in revenue each year, and the amount over-billed has no effect on business operations. Billable hours for individual clients have never been rounded up. Even though the amount of money is very small, it is highly likely clients may become aware of this over billing during an upcoming audit. Further, as an account manager, you will be held personally responsible, and most likely terminated, if the over billing is discovered.

1. To what extent would you overlook laws pertaining to this scenario?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
2. To what extent would you feel compelled to discuss this situation with your supervisor?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
4. To what extent would you engage in falsifying paperwork, which would benefit this company?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |

You work for Spenard, a leading supplier of building materials. Your company has a history of being very socially conscious, and is a sponsor of many charitable organizations and projects that aid those in need. In fact, your company is the main sponsor for "Spenard Days," a weekend event held annually that raises money for disadvantaged children. Spenard has always been known to operate on an ethical level that is higher than what the law requires. The CEO recently had a wing at the local hospital named after him, due to his recent donations, and it is not uncommon to find him on the sales floor encouraging his employees to "always do what is right." It has come to your attention that a paint product you are selling contains higher amounts of lead than regulations allow. The amount of lead present is very minimal, and would likely cause no harm as a result. There is little chance anyone would ever find out about the paint that contains lead, and there is no reason to believe anyone suspects the paint contains lead. Further, your position would not be held responsible if the word got out about the paint.

1. To what extent would you overlook laws pertaining to this scenario?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

2. To what extent would you feel compelled to discuss this situation with your supervisor?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

4. To what extent would you engage in falsifying paperwork, which would benefit this company?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?

|               |                   |            |                 |             |
|---------------|-------------------|------------|-----------------|-------------|
| <b>1</b>      | <b>2</b>          | <b>3</b>   | <b>4</b>        | <b>5</b>    |
| very unlikely | somewhat unlikely | don't know | somewhat likely | very likely |

You work for Lorenz, a prominent clothing manufacturer. It is well known the CEO is very bottom-line oriented, and many business practices have been questioned by numerous media sources. The organization representatives have quickly handled the media attention by downplaying any accusations. You have been assigned to audit overseas production and find several inconsistencies in the paperwork. You find Lorenz is producing many products in countries paying pennies a month to its employees. Your research as a senior executive has shown that Lorenz actually helps the third-world communities that it has factories in. In fact, although they are paid relatively little, the wages earned by the workers help them purchase many necessities. Many other companies are employing these practices in the same areas, as the reduced production costs saves money. You discover that a large media outlet is investigating these practices, and will likely expose your company's practice of using cheap labor. If found out, your job is at stake, and you would likely be terminated.

1. To what extent would you overlook laws pertaining to this scenario?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
2. To what extent would you feel compelled to discuss this situation with your supervisor?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
4. To what extent would you engage in falsifying paperwork, which would benefit this company?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |

You work for Telex, a telemarketing company that hires a large number of entry-level workers. The company is three years old and has never been known for being socially active. In fact, the CEO has expressed little interest in social activism, and the company's philosophies reflect this attitude. It has come to your attention that your company is placing calls to residential customers up to 30 minutes later than 8pm, the time limit established by company rules. It is unlikely that anyone within the company will find out about the rule breaking, and there would be little consequences even if the late phone calls were discovered.

1. To what extent would you overlook laws pertaining to this scenario?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
2. To what extent would you feel compelled to discuss this situation with your supervisor?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
3. To what extent would you discuss this situation with individuals outside the company (i.e. governmental law enforcement)?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
4. To what extent would you engage in falsifying paperwork, which would benefit this company?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
5. To what extent would you act in an ethical manner in this company, even if your actions had a negative impact on the organizations bottom-line?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |
  
6. To what extent would you work overtime and complete task that are above-and-beyond your job description for this organization?  

|                  |                      |               |                    |                |
|------------------|----------------------|---------------|--------------------|----------------|
| <b>1</b>         | <b>2</b>             | <b>3</b>      | <b>4</b>           | <b>5</b>       |
| very<br>unlikely | somewhat<br>unlikely | don't<br>know | somewhat<br>likely | very<br>likely |

**Please provide the following information by checking the appropriate response or filling in the blank.**

**Sex:**            Male \_\_\_\_\_            Female \_\_\_\_\_

**Is English your first language?**    Yes \_\_\_\_\_            No \_\_\_\_\_

**Age:** \_\_\_\_\_            **Major:** \_\_\_\_\_            **GPA:** \_\_\_\_\_

**Country of Origin:** \_\_\_\_\_

## **ADULT TEMPERAMENT QUESTIONNAIRE**

### **Directions**

On the following pages you will find a series of statements that individuals can use to describe themselves. There are no correct or incorrect responses. All people are unique and different, and it is these differences which we are trying to learn about. Please read each statement carefully and give your best estimate of how well it describes you. Circle the appropriate number below to indicate how well a given statement describes you.

| <u>circle #:</u> | <u>if the statement is:</u>   |
|------------------|-------------------------------|
| 1                | extremely untrue of you       |
| 2                | quite untrue of you           |
| 3                | slightly untrue of you        |
| 4                | neither true nor false of you |
| 5                | slightly true of you          |
| 6                | quite true of you             |
| 7                | extremely true of you         |

If one of the statements does not apply to you (for example, if it involves driving a car and you don't drive), then circle "X" (not applicable). Check to make sure that you have answered every item.

**Note:** The final page of this packet is a second questionnaire. Complete the first questionnaire before beginning the second questionnaire. Also, be sure to read the instructions on the last page before completing the second questionnaire.

|                                                                                    | 1<br>extremely<br>untrue | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------------------------------------------------------------------------------------|--------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 1. I become easily frightened.                                                     | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 2. I usually like to spend my free time with people.                               | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 3. I seldom become sad when I watch a sad movie.                                   | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 4. I rarely feel happy.                                                            | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 5. I usually fail to notice it when my muscles tense up slightly.                  | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 6. When I am trying to focus my attention, I am easily distracted.                 | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 7. I tend to notice emotional aspects of paintings and pictures.                   | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 8. Without planning it, I often find myself doing nice things for people.          | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 9. Sometimes I feel good during most of the day.                                   | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 10. I am rarely a patient person.                                                  | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 11. When people feel overwhelmed by things that need to be done, I often help out. | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 12. I usually notice visual details in the environment.                            | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 13. I have a strong conscience.                                                    | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 14. I rarely daydream.                                                             | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|     | 1<br>extremely<br>untrue                                                                                   | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----|------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 15. | I do not have a problem in controlling hostile impulses.                                                   |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 16. | Foul odors seem to bother me more than other people.                                                       |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 17. | Sometimes I feel angry at people for no apparent reason.                                                   |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 18. | I rarely notice the color of people's eyes.                                                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 19. | There have been numerous moments in my life that felt so good that I could not imagine feeling any better. |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 20. | I like to be around people who have a spontaneous sense of humor.                                          |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 21. | Looking down at the ground from an extremely high place would make me feel uneasy.                         |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 22. | I usually enjoy being with people.                                                                         |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 23. | I sometimes feel sad for longer than an hour.                                                              |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 24. | There are some people that I feel very close to.                                                           |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 25. | I often get irritated when I'm trying to make an important phone call and get a busy signal.               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 26. | I am rarely aware of the moods of people around me.                                                        |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 27. | When I feel happy, it usually does not last very long.                                                     |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|     | 1<br>extremely<br>untrue                                                                                   | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----|------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 28. | It is easy for me to hold back my laughter in a situation where it is not appropriate.                     |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 29. | I often enjoy singing with abandon when in a car or walking.                                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 30. | It doesn't take very much to make me feel angry at someone.                                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 31. | I'm often aware of the sounds of birds in my vicinity.                                                     |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 32. | I usually finish doing things before they are actually due (e.g., paying bills, finishing homework, etc.). |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 33. | I don't have to think very hard to generate unique or creative ideas.                                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 34. | Sometimes minor events or activities cause me to feel intense pleasure.                                    |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 35. | If I offended a stranger, I would feel guilty.                                                             |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 36. | When I am listening to music, I am usually aware of subtle emotional tones.                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 37. | I rarely enjoy behaving in a silly manner.                                                                 |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 38. | There are a lot of different food dishes that I find to taste very unpleasant.                             |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 39. | Sometimes I feel anger toward people I don't know very well.                                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 40. | Sometimes I notice sad eyes hidden behind a smile.                                                         |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 41. | When I see an attractive item in a store, it's usually very hard for me to resist buying it.               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                          | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|     | 1<br>extremely<br>untrue                                                                         | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----|--------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 42. | I'm often bothered by light that is too bright.                                                  |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 43. | I often become irritated in response to what a person says.                                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 44. | I'm often sensitive to the smoothness or roughness of objects that I touch.                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 45. | I seldom become sad when I hear of an unhappy event.                                             |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 46. | I would enjoy a job that involves a lot of social interaction.                                   |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 47. | I rarely become annoyed when I have to wait in a slow moving line.                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 48. | My sleep dreams sometimes include elaborate and detailed plots.                                  |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 49. | If I were to steal from someone, I would feel very bad about it for a very long time.            |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 50. | I am often late for appointments.                                                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 51. | I would not enjoy listening to loud music with a laser light show.                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 52. | I rarely have rich fantasies that include intricate details.                                     |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 53. | When trying to study something, I have difficulty tuning out background noise and concentrating. |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 54. | When I see a happy animal such as a playful dog or a purring cat, it makes me feel happy.        |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|     | 1<br>extremely<br>untrue                                                                                  | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----|-----------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 55. | I can easily resist talking out of turn, even when I'm excited and want to express an idea.               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 56. | I can detect even the slightest changes in food flavoring.                                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 57. | I find certain scratchy sounds very irritating.                                                           |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 58. | Sometimes when I hear a song I have not heard in a long time, I experience memories charged with emotion. |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 59. | I rarely enjoy being with people.                                                                         |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 60. | I often worry about things that turn out to be unimportant.                                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 61. | Relationships with family members seem to be especially important to me.                                  |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 62. | I often make plans that I do not follow through with.                                                     |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 63. | I sometimes seem to be unable to feel pleasure from events and activities that I should enjoy.            |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 64. | If I were to impulsively take advantage of someone, I would later regret my behavior.                     |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 65. | I feel sad when saying goodbye to friends or relatives whom I know I will not see for a long time.        |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 66. | It is difficult for me to inhibit the impulse to say angry things that will hurt someone's feelings.      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                         | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|     | 1<br>extremely<br>untrue                                                                                                | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----|-------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 67. | I would not enjoy a job that involves socializing with the public.                                                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 68. | I am usually pretty good at keeping track of several things that are happening around me.                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 69. | When I am around someone who feels happy, it often causes me to feel happy too.                                         |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 70. | If I want to, I can conceal my dislike for a person.                                                                    |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 71. | When I am anxious about the outcome of something, I have a hard time keeping my attention focused on a task.            |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 72. | During my free time, I often find myself doing things I did not plan.                                                   |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 73. | When I watch a movie, I often notice how rain, snow, wind, sunshine, etc. is used to convey the mood of the characters. |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 74. | Sometimes minor events cause me to feel intense sadness.                                                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 75. | Sometimes my mind is full of thoughts, ideas, or images.                                                                |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 76. | I often feel sad.                                                                                                       |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 77. | Sometimes I become so close to another person that I want to do almost everything with them.                            |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 78. | I seldom become annoyed when I'm driving somewhere and hit successive red lights.                                       |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                       | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|     | 1<br>extremely<br>untrue                                                                                                 | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----|--------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 79. | When I believe that I have hurt someone's feelings, I feel guilty.                                                       |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 80. | I rarely enjoy talking.                                                                                                  |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 81. | When waiting to fall asleep, I sometimes experience thoughts or sounds that I did not consciously produce.               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 82. | When I am enclosed in small places such as an elevator, I feel uneasy.                                                   |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 83. | I am rarely aware of it when my heart speeds up.                                                                         |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 84. | As soon as I have decided upon a difficult plan of action, I begin to carry it out.                                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 85. | If I think of something rude to say, I am usually able to resist the temptation to say it.                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 86. | When I'm excited about something, it's hard for me to resist jumping right into it.                                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 87. | I sometimes seem to understand things intuitively.                                                                       |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 88. | I rarely ever feel depressed for more than an hour or two.                                                               |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 89. | When I am very happy, it is hard for me to concentrate on tasks that require me to keep track of several things at once. |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 90. | When I don't feel unhappy, I usually feel happy instead of neutral.                                                      |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 91. | I like to watch people.                                                                                                  |                      |                         |                          |                       |                    |                        |                        |
|     | 1                                                                                                                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
|------|--------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|---------------------|------------------|---------------|-------------------|-------------------|
|      | extremely<br>untrue                                                                                                | quite<br>untrue | slightly<br>untrue | neither<br>true nor | slightly<br>true | quite<br>true | extremely<br>true | not<br>applicable |
| 92.  | Even when I am waiting to fall asleep, my mind is still quite active.                                              |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 93.  | If I were too busy to help out a friend who needs my help, I would feel guilty.                                    |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 94.  | I am rarely aware of how the interior design of a room (e.g., colors, windows, etc.) affects my mood.              |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 95.  | I rarely feel angry at people.                                                                                     |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 96.  | If I think of something that needs to be done, I usually get right to work on it.                                  |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 97.  | Looking into a person's eyes sometimes gives me a pretty good idea of whether or not someone is telling the truth. |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 98.  | When I am around someone who feels depressed, it often makes me feel down, too.                                    |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 99.  | I rarely worry.                                                                                                    |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 100. | I sometimes notice the designs in the grain of wood in a piece of furniture.                                       |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 101. | I often enjoy conversations that last for hours.                                                                   |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 102. | Barely noticeable visual details rarely catch my attention.                                                        |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 103. | Although I may regret it later, sometimes when I am angry, I throw, tear, or destroy things.                       |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 104. | It doesn't take much to evoke a happy response in me.                                                              |                 |                    |                     |                  |               |                   |                   |
|      | 1                                                                                                                  | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |

|      | 1<br>extremely<br>untrue                                                                                           | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------|--------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 105. | When people complain of physical ailments or pain, it does not seem very real to me.                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 106. | When I hear of an unhappy event, I immediately feel sad.                                                           |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 107. | Even when I feel energized, I can usually sit still without much trouble if it's necessary.                        |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 108. | Having close friendships is not especially important to me.                                                        |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 109. | If I am angry with a friend, I am usually able to talk to him/her in a way that will not evoke a hostile response. |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 110. | I seldom become irritated when someone is late.                                                                    |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 111. | I usually notice when the environment is quiet.                                                                    |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 112. | It is very hard for me to focus my attention when I am distressed.                                                 |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 113. | Whenever I hear a baby cry, I feel as though I can feel the child's pain.                                          |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 114. | Sometimes I find it irritating when something lightly touches my skin unexpectedly.                                |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 115. | I often have a hard time resisting the impulse to be insulting to another person.                                  |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 116. | Loud noises sometimes scare me.                                                                                    |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 117. | If I were to steal from someone, I would not feel very bad about it.                                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|                                                                                                                     | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
|---------------------------------------------------------------------------------------------------------------------|---------------------|-----------------|--------------------|---------------------|------------------|---------------|-------------------|-------------------|
|                                                                                                                     | extremely<br>untrue | quite<br>untrue | slightly<br>untrue | neither<br>true nor | slightly<br>true | quite<br>true | extremely<br>true | not<br>applicable |
| 118. I sometimes dream of vivid, detailed settings that are unlike anything I have experienced when awake.          | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 119. In comparison to other people, I seem to experience longer periods of sadness or depression.                   | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 120. Whenever I am around someone who is happy and excited, it often doesn't feel very real to me.                  | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 121. I rarely have several dreams during the same night.                                                            | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 122. Very bright colors sometimes bother me.                                                                        | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 123. I am rarely aware of the texture of things that I hold.                                                        | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 124. Even when I have enough time to complete an activity today, I often tell myself that I will do it tomorrow.    | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 125. Even when engaging in fun activities that do not allow for much social interaction, I like to be with friends. | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 126. When people don't live up to my expectations, I become frustrated and angry with them.                         | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 127. When listening to music, I usually like turn up the volume more than other people.                             | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 128. I often avoid taking care of my responsibilities by indulging in pleasurable activities.                       | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 129. I am rarely aware of how my physical environment affects my mood.                                              | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |

|                                                                                                                                                    | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------|--------------------|---------------------|------------------|---------------|-------------------|-------------------|
|                                                                                                                                                    | extremely<br>untrue | quite<br>untrue | slightly<br>untrue | neither<br>true nor | slightly<br>true | quite<br>true | extremely<br>true | not<br>applicable |
| 130. I would not enjoy fast dancing.                                                                                                               | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 131. When I hear good news, my ability to concentrate on taking care of my responsibilities goes out the window.                                   | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 132. I enjoy listening to other people talk about themselves.                                                                                      | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 133. I rarely notice when another person's tone of voice doesn't match their words.                                                                | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 134. I find loud noises to be very irritating.                                                                                                     | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 135. I have a hard time not becoming verbally hostile to someone who I believe has treated me unjustly, even if it might be damaging to my future. | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 136. I often notice mild odors and fragrances.                                                                                                     | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 137. It does not frighten me if I think that I am alone and suddenly discover someone close by.                                                    | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 138. If I notice I need to clean or wash something (e.g., car, apartment, laundry, etc.), I often put it off until tomorrow.                       | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 139. I find it very annoying when a store does not stock an item that I wish to buy.                                                               | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 140. At times, it seems the more I try to restrain a pleasurable impulse (e.g., eating candy), the more likely I am to act on it.                  | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 141. I sometimes feel remorseful about the way that I have treated a person.                                                                       | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |

|                                                                                                  | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
|--------------------------------------------------------------------------------------------------|---------------------|-----------------|--------------------|---------------------|------------------|---------------|-------------------|-------------------|
|                                                                                                  | extremely<br>untrue | quite<br>untrue | slightly<br>untrue | neither<br>true nor | slightly<br>true | quite<br>true | extremely<br>true | not<br>applicable |
| 142. I usually feel weepy while reading the sad part of a story.                                 | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 143. I sometimes experience sudden intuitive insights before I have actually thought things out. | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 144. I especially enjoy conversations where I am able to say things without thinking first.      | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 145. When I am resting with my eyes closed, I sometimes see visual images.                       | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 146. I rarely find it irritating when something touches my skin.                                 | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 147. I rarely stay angry at someone for a prolonged period of time.                              | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 148. I usually like to talk a lot.                                                               | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 149. It is sometimes hard for me to keep from saying something mean.                             | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 150. I am always worried about something.                                                        | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 151. It doesn't take very much to make feel frustrated or irritated.                             | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 152. Without mind altering substances, I have sometimes felt incredibly intense pleasure.        | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 153. Seeing an animal in pain would be very distressing to me.                                   | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 154. I would probably not enjoy a fast, wild carnival ride.                                      | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |

|                                                                                                                              | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
|------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------|--------------------|---------------------|------------------|---------------|-------------------|-------------------|
|                                                                                                                              | extremely<br>untrue | quite<br>untrue | slightly<br>untrue | neither<br>true nor | slightly<br>true | quite<br>true | extremely<br>true | not<br>applicable |
| 155. If a friend were to complain of having an especially bad headache, I would feel distressed and concerned.               | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 156. When I am afraid of how a situation might turn out, I usually avoid dealing with it.                                    | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 157. I usually notice when people are trying to pretend that they are not afraid.                                            | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 158. I sometimes feel intensely happy when I am in a unfamiliar environment (e.g., in a foreign country or new environment). | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 159. If I am angry because I suspect that I have been treated unfairly, I calm down and try to think things out.             | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 160. Relationships seem to be especially important to me.                                                                    | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 161. Once I have become angry, my anger sometimes feeds on itself and becomes more and more difficult to manage.             | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 162. When I am relaxing, my mind is still quite active.                                                                      | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 163. I am rarely bothered by the apparent suffering of strangers.                                                            | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 164. Sometimes relatively small disappointments cause me to feel down for several hours.                                     | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 165. People have told me that they wonder whether or not I have a conscience.                                                | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |
| 166. Sometimes, I feel a sense of panic or terror for no apparent reason.                                                    | 1                   | 2               | 3                  | 4                   | 5                | 6             | 7                 | X                 |

| Appendix A |                                                                                                                    |              |                 |                  |               | Temperament Ethics Model |                | 162            |
|------------|--------------------------------------------------------------------------------------------------------------------|--------------|-----------------|------------------|---------------|--------------------------|----------------|----------------|
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
|            | extremely untrue                                                                                                   | quite untrue | slightly untrue | neither true nor | slightly true | quite true               | extremely true | not applicable |
| 167.       | I am usually aware of emotions portrayed in artistic expression (e.g., painting, photography, music, dance, etc.). |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 168.       | I enjoy being around people who talk a lot.                                                                        |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 169.       | I value having long-term, close relationships with people.                                                         |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 170.       | I find it quite annoying to have to wait a few minutes for a phone connection.                                     |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 171.       | In order to help people I care about, I am willing to make personal sacrifices.                                    |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 172.       | It is easy for me to inhibit fun behavior that would be inappropriate.                                             |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 173.       | I find many strong aromas/fragrances to be unpleasant.                                                             |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 174.       | If I were to see someone sleeping on the streets, it would upset me.                                               |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 175.       | It's usually hard for me to alternate between two different tasks.                                                 |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 176.       | I have an intense, boisterous laugh.                                                                               |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 177.       | I sometimes feel quite jealous of other people's situations.                                                       |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 178.       | I rarely ever have days where I don't at least experience brief moments of intense happiness.                      |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 179.       | I can keep performing a task even when I would rather not do it.                                                   |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |
| 180.       | I rarely feel sad after saying goodbye to friends or relatives.                                                    |              |                 |                  |               |                          |                |                |
|            | 1                                                                                                                  | 2            | 3               | 4                | 5             | 6                        | 7              | X              |

|      | 1<br>extremely<br>untrue                                                                                         | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------|------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 181. | Even if I am extremely angry at someone, I am usually able to act in a civil manner to them.                     |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 182. | I often enjoy talking to strangers.                                                                              |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 183. | Without applying effort, creative ideas sometimes present themselves to me.                                      |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 184. | I like looking at other people's photographs.                                                                    |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 185. | Colorful flashing lights bother me.                                                                              |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 186. | If I want to, it is usually easy for me to keep a secret.                                                        |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 187. | I sometimes seem to lack remorse for treating people badly.                                                      |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 188. | I rarely become angry at my friends.                                                                             |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 189. | When I am sad about something, it is hard for me to keep my attention focused on a task.                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 190. | I would enjoy watching a laser show with lots of bright, colorful flashing lights.                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 191. | When I look at paintings or pictures, I am sometimes aware of how an artist uses light and color to convey mood. |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 192. | Loud music is unpleasant to me.                                                                                  |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 193. | I seldom see images (e.g. a face) when looking at the moon, cloud formations, etc.                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 194. | It takes a lot to make me feel truly happy.                                                                      |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|      | 1<br>extremely<br>untrue                                                                                       | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------|----------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 195. | When I interact with a group of people, there is often at least one person who bothers me.                     |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 196. | I get very annoyed when poor weather interferes with my plans for an outdoor activity.                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 197. | I rarely feel jealous of other people's relationships.                                                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 198. | I rarely enjoy socializing with large groups of people.                                                        |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 199. | I usually get my responsibilities taken care of as soon as possible.                                           |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 200. | Sometimes I feel very depressed.                                                                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 201. | I'm seldom aware of internal sensations within my body.                                                        |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 202. | I am a quite warm and friendly person.                                                                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 203. | I often think about the possibility of negative outcomes that are not likely to occur.                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 204. | Sometimes my mind is full of a diverse array of loosely connected thoughts and images.                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 205. | When I decide to quit a habitual behavioral pattern that I believe to be undesirable, I am usually successful. |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 206. | When I wear a tight collar or turtleneck, it makes me uncomfortable.                                           |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 207. | I sometimes smell things that evoke memories charged with emotion.                                             |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 208. | I rarely enjoy dancing in a spontaneous manner.                                                                |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                              | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|      | 1<br>extremely<br>untrue                                                                                                           | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------|------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 209. | When I am around someone who is excited and happy, it rarely causes me to feel happy too.                                          |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 210. | I like to be around people who are different from me.                                                                              |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 211. | When I am barefoot, I am often aware of the different textures of the surfaces that my feet touch.                                 |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 212. | I rarely enjoy listening to people tell stories about events that have happened in their lives.                                    |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 213. | When I am happy and excited about an upcoming event, I have a hard time focusing my attention on tasks that require concentration. |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 214. | Whenever I see a distressed look on a child's face, I feel uneasy and concerned.                                                   |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 215. | I hardly ever finish things on time.                                                                                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 216. | I like conversations that include several people.                                                                                  |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 217. | I am often aware how the color and lighting of a room affects my mood.                                                             |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 218. | When everything seems to be going wrong, I usually work on improving things instead of getting frustrated.                         |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 219. | I rarely dream (sleep dreams).                                                                                                     |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 220. | I sometimes explode into an angry outburst before I understand what is really happening.                                           |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                                                                  | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|                                                                                                                                    | 1<br>extremely<br>untrue | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 221. I am usually interested in hearing what people have to say.                                                                   | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 222. I would not enjoy the feeling that comes from yelling as loud as I can.                                                       | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 223. I usually have trouble resisting my cravings for food drink, etc.                                                             | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 224. If I were to lose my temper and threaten someone, I would later feel guilty.                                                  | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 225. When I try something new, I am rarely concerned about the possibility of failing.                                             | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 226. When trying to focus my attention on something, I have difficulty blocking out distracting thoughts.                          | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 227. I can usually tell when someone is masking their emotions with a pleasant smile.                                              | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 228. Sometimes I feel good throughout most of the day.                                                                             | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 229. I rarely notice the details of the clothing that someone is wearing.                                                          | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 230. I can make myself work on a difficult task even when I don't feel like trying.                                                | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 231. If I were to see people on the news who are suffering as a result of war or starvation, I would not feel uneasy or disturbed. | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 232. Whenever I have to sit and wait for something (e.g., a waiting room), I become agitated.                                      | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 233. I usually don't notice things like a refrigerator starting up.                                                                | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|                                                                                                                                               | 1<br>extremely<br>untrue | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 234. I am usually a patient person.                                                                                                           | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 235. When I watch a movie, I usually don't notice how the setting is used to convey the mood of the characters.                               | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 236. Foul odors don't bother me very much.                                                                                                    | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 237. It is not very hard for me to put aside pleasant activities when I have work to do.                                                      | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 238. In comparison to other people, I seem to derive less enjoyment from interacting with people.                                             | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 239. When I am angry, I lose the ability to think things out rationally.                                                                      | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 240. On some days, I have felt so depressed that simple activities like talking required a lot of effort.                                     | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 241. When interrupted or distracted, I usually can easily shift my attention back to whatever I was doing before.                             | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 242. I sometimes find my friends to be irritating.                                                                                            | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 243. If I were engaged in a creative activity, it would take little effort for my mind to generate spontaneous ideas.                         | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 244. I am usually unaware of mild odors and fragrances.                                                                                       | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 245. I would probably enjoy playing a challenging and fast paced video-game that makes lots of noise and has lots of flashing, bright lights. | 1                        | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

|      | 1<br>extremely<br>untrue                                                                    | 2<br>quite<br>untrue | 3<br>slightly<br>untrue | 4<br>neither<br>true nor | 5<br>slightly<br>true | 6<br>quite<br>true | 7<br>extremely<br>true | X<br>not<br>applicable |
|------|---------------------------------------------------------------------------------------------|----------------------|-------------------------|--------------------------|-----------------------|--------------------|------------------------|------------------------|
| 246. | Even if I disliked a person, I would feel guilty about hurting that person's feelings.      |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                           | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 247. | I usually remain calm without getting frustrated when things are not going smoothly for me. |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                           | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 248. | I often enjoy telling jokes or behaving in a humorous manner.                               |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                           | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 249. | I am often consciously aware of how the weather seems to affect my mood.                    |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                           | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |
| 250. | I like to do kind things for people.                                                        |                      |                         |                          |                       |                    |                        |                        |
|      | 1                                                                                           | 2                    | 3                       | 4                        | 5                     | 6                  | 7                      | X                      |

### How Accurately Can You Describe Yourself?

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

| 1                   | 2              | 3                    | 4                  | 5                             | 6                | 7                  | 8              | 9                 |
|---------------------|----------------|----------------------|--------------------|-------------------------------|------------------|--------------------|----------------|-------------------|
| extremely<br>untrue | very<br>untrue | moderately<br>untrue | slightly<br>untrue | neither<br>true nor<br>untrue | slightly<br>true | moderately<br>true | very<br>true   | extremely<br>true |
| _____               | Bashful        |                      | _____              | Harsh                         |                  | _____              | Shy            |                   |
| _____               | Bold           |                      | _____              | Imaginative                   |                  | _____              | Sloppy         |                   |
| _____               | Careless       |                      | _____              | Inefficient                   |                  | _____              | Sympathetic    |                   |
| _____               | Cold           |                      | _____              | Intellectual                  |                  | _____              | Systematic     |                   |
| _____               | Complex        |                      | _____              | Jealous                       |                  | _____              | Talkative      |                   |
| _____               | Cooperative    |                      | _____              | Kind                          |                  | _____              | Temperamental  |                   |
| _____               | Creative       |                      | _____              | Moody                         |                  | _____              | Touchy         |                   |
| _____               | Deep           |                      | _____              | Organized                     |                  | _____              | Uncreative     |                   |
| _____               | Disorganized   |                      | _____              | Philosophical                 |                  | _____              | Unenvious      |                   |
| _____               | Efficient      |                      | _____              | Practical                     |                  | _____              | Unintellectual |                   |
| _____               | Energetic      |                      | _____              | Quiet                         |                  | _____              | Unsympathetic  |                   |
| _____               | Envious        |                      | _____              | Relaxed                       |                  | _____              | Warm           |                   |
| _____               | Extraverted    |                      | _____              | Rude                          |                  | _____              | Withdrawn      |                   |
| _____               | Fretful        |                      |                    |                               |                  |                    |                |                   |