

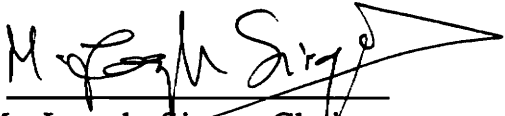
**An Investigation into the Effect of Cognitive Moral Development
on Ethical Judgments, Intentions, and Behavior**


by
Dennis Cole

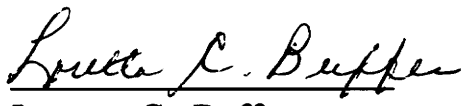
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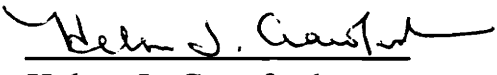
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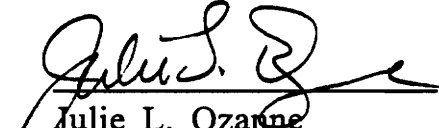
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An Investigation into the Effect of Cognitive Moral Development
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Dennis Cole

(Abstract)

The purpose of this research is to investigate the effect of cognitive moral development on ethical judgments, intentions, and behavior. In particular, the question is addressed as to whether cognitive moral development plays a moderating role in the Hunt-Vitell (1986, 1991) model between the situational factors and teleological evaluation. A 2 x 2 x 2 factorial experimental design involving cognitive moral development, desirability of perceived consequences to self, and desirability of perceived consequences to other, was operationalized through the use of specific scenarios designed to elicit ethical decision making. The population used in this study were a sample of purchasing managers from the Carolinas-Virginia chapter of the National Association of Purchasing Managers. Pretesting was conducted to refine the scenarios used in the final study, and to assess subject reactions.

The results provided some support to several of the links proposed by Hunt and Vitell. However, the central role of cognitive moral development in the model was not strongly supported. Limitations of the study, future research, and managerial implications of the findings are discussed.

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I would like to extend my sincerest thanks to the members of my doctoral committee without whom this work would never have been possible. Over the years that this work took, Professors Monroe Murphy Bird, Julie Ozanne, Lorretta Buffer and Helen Crawford have become friends whose input was greatly needed and gratefully received. My special thanks to Joe Sirgy who knows the trials and tribulations involved in finishing this work and who deserves my deepest and humblest gratitude.

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Chapter 1

Introduction

Ethics in marketing is a topic about which much has been written. Indeed, in the world of business where the law is generally seen as representing the minimally acceptable ethical requirements, business practitioners often complain of the perceived gap between their own personal ethics and that level represented by the law. Personal ethics are usually felt to be set at a higher level. With such a gap existing between two standards which many practitioners must deal with on a daily basis, it is little wonder that ethics have captured the attention of a large number of writers within the discipline of marketing. Indeed, the subject of ethics in the discipline of marketing is very much to the forefront following Jacoby's recent address to the Association for Consumer Research (Jacoby 1995). In this address it was pointed out that paramount importance needs to be given to the establishment of a written code of ethics if an association of professionals desires to be treated with respect. Since Jacoby's speech is so timely, both with respect to the present work and to the need for written codes of ethics, more will be said about it later.

Until recently however, much of the literature on marketing ethics was the work of individuals acting on an independent basis. Since there was no underlying theory in the field, writers would typically resort to

expressing their own personal opinions about what marketers ought to do when confronted with ethically challenging situations. While the work that was thus produced could be said to be helpful to certain practitioners at certain times, the overall study of marketing ethics was not advanced very far.

Beginning in the mid 1980's, a small number of theories of marketing ethics emerged which had the goal of formulating a more encompassing network than had existed previously. One of these theories, that originated by Hunt and Vitell (1986), is the major focus of this dissertation.

One of the problems in attempting to develop a theory that tries to explain human behavior is that human behavior is all too changeable. As well as the day-to-day, sometimes even moment-to-moment, changes there are also those changes which take place over longer periods of time and are much more stable than mere variations of mood. Few middle-aged adults would claim to be just the same as they were during their teen years. We all undergo differences in outlook, attitudes and temperament. A number of theories have arisen which try to account for how and why such changes occur. Most such theories propose that humans progress through a sequence of definite developmental stages.

In trying to apply the insights of the Hunt-Vitell model, it is reasonable to suggest that the way in which people view a situation having ethical dimensions will depend, at least to some extent, upon the

developmental stage which they are presently in. The purpose of this dissertation is to bring together one of the developmental stage theories, specifically Kohlberg's (1969) theory of Cognitive Moral Development (CMD), with the Hunt-Vitell model, in order to show that CMD plays an important role in improving the predictive ability of that particular model of ethics.

As has been mentioned above, the importance of the subject of marketing ethics has been recently highlighted by a call for the introduction of a formal Code of Ethics for the Association of Consumer Research (Jacoby 1995). In his address to the members of the ACR, Jacoby emphasised that “organizations purporting to represent scholarly disciplines develop a focus on the ethical issues surrounding their discipline”. But, Jacoby continued, simply having a code of ethics is just the beginning. Members of an association have the obligation to protect their rights and freedoms by vigorously following up and enforcing violations of such a code. The first step to enforcement is understanding what it is that is being enforced. This dissertation is positioned as another brick in the pathway leading us to an enlarged and more encompassing understanding of the part played by ethics not only in our professional lives, but also in our day-to-day personal and organizational dealings.

Having laid out the basic rationale for this study, and the importance of such investigations at the present time in the evolution of the

discipline of marketing, the remainder of this chapter serves to lay out the organization and content of the present study.

Overview of Chapter 2

Chapter 2 reviews two streams of literature: the literature pertaining to ethics in the field of marketing; and also that related to Kohlberg's theory of Cognitive Moral Development. Ethical research in marketing encompasses many areas. Chapter 2 begins with an overview of current thinking in the field of ethics, specifically with the contrast between deontological ethics and teleological ethics. Marketing models which have tried to incorporate ethical thinking from a normative point of view are then covered in the literature review. These include models proposed by Clasen (1967), Bartels (1967), Pruden (1971), Cavanaugh et al (1981), and Laczniak (1983). Issues that are associated with the conceptual and substantive ways in which marketers have approached the area of ethics are discussed here.

Literature in the areas of both marketing process and marketing content are reviewed in Chapter 2. From the perspective of marketing process, the ethics of marketing research have attracted many writers over the years. The rights of subjects, professional attitudes towards ethics, and codes of ethics are reviewed. Those writings concerned with specific areas of marketing content, namely advertising, product development, sales, purchasing, pricing, and international marketing, are

reviewed in this section.

As well as taking the normative view of marketing ethics, more and more researchers have begun to look at the field from a positive (or descriptive) point of view. Indeed, it is toward a descriptive global theory of marketing ethics that research in this area is heading. Chapter 2 traces the evolution of this movement and presents the two models that represent the greatest growth in this direction. These two models are those of Ferrell and Gresham (1985), and Hunt and Vitell's General Theory of Marketing Ethics (1986).

Since this dissertation is also concerned with another literature stream, that concerning Kohlberg's (1969) Theory of Cognitive Moral Development, Chapter 2 finishes with a look at the research that has taken place in this area. The different stages of Kohlberg's theory are described, followed by research that has validated the reliability of stage theories in general. With this review of the literature complete, the next step is to present the proposed model.

Overview of Chapter 3: The Model

The goal of the third chapter is to present the proposed modifications to Hunt and Vitell's General Theory of Marketing Ethics that is the overall purpose of this dissertation. In order to do this, it is necessary first to take a more in-depth look at the Hunt-Vitell model. Chapter 3 takes the model apart and examines the reasons behind why each part of it is placed

where it is in the overall framework of the model, and how the different parts relate to each other.

After this dissection, the rationale is given for why cognitive moral development (CMD), the building block of Kohlberg's theory, should play a more central role in the General Theory of Marketing Ethics than the role that is assigned to it by Hunt and Vitell. Four hypotheses are proposed, each of which is aimed at expanding our understanding of the cognitive processes involved in reaching a decision concerning a situation with an ethical content. Next, the methods used in the study are presented.

Overview of Chapter 4: Methods

Chapter 4 outlines the proposed research design and method to be used in assessing the impact of cognitive moral development when positioned as a more central element of the Hunt-Vitell model than originally presented. Sampling issues, experimental design and treatment, and the various dependent and independent measures of the study are outlined and explained.

In order to measure the stage of cognitive moral development that each subject is at, an instrument called the Defining Issues Test (DIT) has been developed by colleagues of Kohlberg, and periodically updated (Rest 1986). Therefore, Chapter 4 concludes with a discussion of the reliability of the DIT, and the unique features that have been built into this test to ensure that the answers indicated by respondents are a true indication of their

level of CMD.

Having outlined the proposed plan of execution for this research, the next chapter addresses the findings.

Overview of Chapter 5: Results

The results chapter begins with a review of the pre-test results and what changes were made in the final survey instrument as a result of what these findings turned up.

Chapter 5 then goes on to describe the sampling process and the sending of the letters to the prospective subjects. Response rates are discussed, as are the methods used for eliminating some of the returned surveys based on the very stringent criteria set out by Rest (1986). Finally, each hypothesis is examined in turn, and the statistical analysis that was performed is described.

The purpose of Chapter 5 is solely to present the results of the analysis performed. For a discussion of the meaning behind the results, we then turn to Chapter 6.

Overview of Chapter 6: Discussion of Results

The purpose of this chapter is to examine the results reported in Chapter 5 and to offer explanations for why they turned out as they did. The results for each of the hypotheses are discussed and interpreted in turn. On the basis of these results, an explanation is offered as to how

the obtained result adds to the growing body of knowledge that is being accumulated about the General Theory of Marketing Ethics.

Finally, the managerial implications and the limitations of the study are discussed and proposals for future research into this area are offered.

Chapter 2

Review of the Literature

Overview of the Chapter

Since the purpose of this dissertation is to integrate the theory of Cognitive Moral Development (Kohlberg 1969) with the General Theory of Marketing Ethics (Hunt and Vitell 1986), it will be necessary in this chapter to review two separate literature streams. The first part of this chapter will examine the literature in the area of marketing ethics. Historically, the practice of marketing has not led marketing moral philosophers to formulate any radically new ethical theory which sprung directly from marketing per se: rather, investigators in this area have borrowed already existing moral philosophies and applied them to the marketing process. Therefore part of this section will review the various theories of ethics which marketers have used. However, the bulk of this part of the chapter will be an examination of how ethics have actually been applied to the field of marketing.

The second part of this chapter is a review of the psychological tenets upon which Kohlberg based his theory of Cognitive Moral Development. The empirical work done by Kohlberg and his colleagues forms the basis for this theory. Since the theory includes several controversial tenets, such as a universal and invariant sequence through which all individuals must pass, this section will be a review of the work which led Kohlberg to the conclusions he reached.

Introduction

Concomitant with the growth that has taken place in the field of marketing, there has arisen alongside it a general concern with the subject of marketing ethics. If one considers the point of view of the general public, it is understandable that marketing should attract the scrutiny it does. Marketing performs a boundary-spanning role in that it functions as a form of communication between the seller of a product and the potential buyer of that product (Tsalikis and Fritzsche 1989). In this role, it is the aspect of business that is most visible to the public eye. Both for this reason, and because consumers have become wary of marketing practices that are perceived as being somewhat less than honest (such as deceptive advertising), marketing (and marketers) may have acquired a reputation for being less ethical than professionals in other areas of expertise. For example, Neill (1965) found that the general public placed advertising executives lower than the categories "professionals, small businessmen, average workers and federal workers" in a survey of ethical reputation. Sturdivant and Cocanougher (1973) found that business executives, when asked to give their responses to certain marketing practices, indicated that marketers are less ethical than housewives, blue-collar workers, and students.

Turning to the academic side of the question of marketing ethics, it would seem that there has been an abundance of work done in this area. The often-cited review of the marketing ethics literature done by Murphy and Laczniak (1981), coupled with a more recent review, by Tsalikis and Fritzsche (1989), reveals that this is a much-researched topic. Yet in

spite of the volume of work, the lack of a theory in the area (until recently) has impeded significant progress on the topic of marketing ethics.

Tsalikis and Fritzsche (1989) have pointed out that work on marketing ethics has tended to follow either a normative path or a positive one. Therefore the present review will examine each of these literature streams in turn. As a result of this earlier literature stream, there emerged a number of attempts in the mid 1980's to articulate a theoretical model concerning ethics in the field of marketing. Foremost among these was the General Theory of Marketing Ethics, or the Hunt-Vitell model (Hunt and Vitell 1986), which is the main concern of this dissertation. Therefore, after a general review of ethics in marketing, the discussion in the following section will address those papers published recently which deal directly with the Hunt-Vitell model. However, at the outset it is necessary to look at how marketers have adopted existing theories of ethics from philosophy and adapted them to marketing situations.

Commonly Used Ethical Theories or Theoretical Frameworks in the Field of Marketing Ethics

There are two main categories of ethical theories which have been borrowed by marketers from philosophy: deontological theories and teleological theories (Murphy and Laczniak 1981; Beauchamp and Bowie 1983; Hunt and Vitell 1986). It should be noted from the outset that these two categories do not make up the total set of existing theories of

ethics. Other existing theories not incorporated in marketing studies of ethics include “relativism”, “egoism” and “justice” (Tsalikis and Fritzsche 1989). While the use of deontological and teleological theories is traced as far back as Ross (1930), it is likely that this use is based on convenience as much as tradition (Ferrell, Gresham and Fraedrich 1989). As Tsalikis and Fritzsche point out, there are theories in ethics which directly contradict one another, pose conflicting ideas, and lead to differing conclusions as to what is ethical or unethical behavior. On the other hand the distinctions between deontological and teleological theories are easily understandable, and the contradictions between these two theories are straightforward and seldom confusing (even though there still are contradictions). While deontological and teleological theories may not contain all of the philosophical thinking on ethics, it is probably fair to say that the most prominent ideas are contained within these two categories of ethical thinking (ideas such as utilitarianism and Kant's categorical imperative). Since almost all of the work done in marketing ethics has made use of one or other of these types of theories, it is necessary to provide the reader with an overview of each.

Deontological theories focus on the specific action which an individual is considering. It is argued that an action can be judged right or wrong based solely on what that action is. The individual refers to a pre-existing set of "rules" which inform him or her whether a specific behavior is right or wrong, ethical or unethical. For example, "murder is always wrong" is a deontological evaluation. Probably the best examples of deontological theories with which most people are familiar are the

"golden rule" and Kant's categorical imperative. The golden rule establishes as its tenet that one should "do unto others as you would have them do unto you", while Kant's categorical imperative urges people to act in such a way that they could accept their actions as being the basis of a universal rule. While each of these "rules" imply that one should be considerate of the interests of others, it can also be seen that the emphasis of both the golden rule and Kant's categorical imperative is on the action which is taken.

In contrast, teleological theories focus on the consequences of an action. While a deontological view would maintain that telling a lie is always wrong (rule), a teleological perspective would point out that, in certain circumstances, telling a lie could be considered the more ethical course of action. This would be so, for example, if the consequences of telling a lie were more desirable, from an ethical point of view, than those of telling the truth (as in the case of the so-called "white lie"). The teleological perspective would advocate that the individual needs to ascertain both the negative and the positive consequences of the action before deciding what to do.

There are two main streams of teleological thought: ethical egoism and utilitarianism. Ethical egoism urges individuals to act in ways that promote their own long term interest. Utilitarianism on the other hand has come to be associated with the phrase, "the greatest good for the greatest number". In both cases one judges the results of the actions one takes, not the action itself. In other words, the main difference between deontological and teleological theories is that deontological theory

focuses on the specific actions or behaviors of an individual, whereas teleological theory focuses on the consequences of the actions or behaviors.

A number of marketing researchers have raised the question of whether deontological or teleological considerations play the greatest part in making an ethical evaluation, and the role of environmental factors in ethical judgment. For example, Bartels (1967) has pointed out that a number of environmental factors may be significant, such as culture, organizational setting, and the possible effects on concerned publics such as stockholders, employees and customers.

As will be discussed further below, marketers have used the deontological and teleological perspectives in the context of such environmental inputs as culture, organizational and professional ethics, and personal experiences, in their attempt to show how ethical decisions are made in marketing situations. Tsalikis and Fritzsche (1989) categorize this literature as being either normative or positive. Normative refers to what marketers "ought to do", and positive refers to what actually happens. Since this division appears useful, it will be followed in the next section of this review.

Normative Studies in Marketing Ethics

Much of the earliest work in the area of marketing ethics was concerned with the offering of prescriptions to managers as to what courses of action they should take when confronted with certain situations having an ethical content. Probably the first normative model

of ethics in business can be traced to Adam Smith and *The Wealth of Nations*. Dixon (1982) points out that while Smith's "invisible hand" theory is nowadays usually interpreted mainly in terms of a self-regulating economic system, there was also an important ethical component (the "man within the breast" in Smith's terms) which played a vital part in keeping the economic system working smoothly. One important fact pointed out by Dixon which really highlights the practical importance of ethics in business is that the existence of a working ethical framework tends to preclude government intervention.

In this the normative literature will be divided into the following three sections: A) normative models, B) marketing research ethics, and C) the normative literature that has been concerned with other specific areas of marketing. While marketing research ethics (section B) can certainly be considered a subsection of section C, the decision to treat it here separately is due to the large volume of work which has been done in the area of marketing research ethics.

Normative Models

Some of the normative models which have been proposed in the area of ethical decision making may be classified as decision models. The Cavanagh, Moberg and Velasquez model (which is dealt with below) is the best example of such a model: decision makers need only answer "yes" or "no" to a decision tree framework of questions and the model will lead them to discover the prescribed appropriate action. However, most of the models which are described in the following section are not quite so

precise; to some extent this illustrates the relative lack of sophistication that the study of ethical issues in marketing represents in comparison to other areas of social science (Tsalikis and Fritzsche 1989). Nonetheless, the following models represent the first steps that marketers have taken in formulating models of ethical decision making in our discipline.

1. The Clasen Model: Clasen (1967), based on an analysis of his own daily decision making in business, set out to more precisely define the principles behind marketing decisions that were both ethical and in the interest of the welfare of the general public. Six sources were proposed as important contributors to ethical decision making in marketing. These were: personal conscience, law, organizational culture, the market, professional expertise, and consumer acceptance. While Clasen acknowledged that all six sources had input into the ethical decisions made by marketers, he hypothesized that two, professional expertise and consumer acceptance, were more important than the rest. Professional expertise was defined as, "technical expertise which allows one to know what is good for someone else even when the other is unaware of the factors and the ethics involved" (Clasen 1967, p. 84). This definition is based on an underlying trust which customers must have towards the business people who make such decisions. Providing that such a trust is both justified and takes into consideration the expressed desires of customers, then consumer acceptance is established. While Clasen offers no diagrammatic model of the process he advocates, he does see the

ongoing dialogue between seller and buyer as being the starting point of ethical decision making in marketing. According to Clasen, business people have "a moral responsibility to cherish, develop, and improve" the ongoing ethical dialogue between the two (p. 85). In such a relationship, violations of marketing ethics would occur due to any conscious or willful distortion in the two way communication process between professional expertise and consumer acceptance. As examples of such distortions in communication, Clasen names inaccurate labeling, deceptive packaging and false or misleading advertising.

2. The Bartels Model: Bartels (1967) suggested a model for marketing ethics that consisted of a series of matrices showing the complicated relationship among the factors that impinge on ethical decision making. While the initial exposition of the Bartels model, i.e., the first three matrices, are of a positive nature rather than a normative one, the Bartels model is included in this section because the fourth and final matrix can be considered prescriptive.

Starting with the question, "How are ethical decisions made?", Bartels outlines seven major social institutions (family, church, school, economy, government, military, and leisure), each of which is impacted in some way by the cultural influences of a particular society. This is Matrix 1. Cultural influences would include factors such as "respect for individuality, nature of power and authority, rights of property, concept of deity, relation of the individual to the state, national identity and loyalty, values, customs, and mores, state of the arts, etc." (p. 22). Of

course culture would vary not only from place to place and from people to people, but also from time to time.

The results of this matrix are then applied to a second matrix. Bartels outlines ten economic roles (including managers, employees, owners, consumers and competitors) and matches each of these up with the cultural characteristics of the social institutions arrived at in Matrix 1. This is reasonable since it can be expected that the values and ethical standards which each individual forms are likely to carry over into other areas of their lives, including their participation in economic roles. Matrix 2 represents the noneconomic influence which takes place upon economic behavior.

Matrix 3 , which looks at all the interactions among players in the economic arena, is formed by taking the ten separate economic roles from Matrix 2, and looking at how the cultural influences of each person affects their relationships with individuals in another of the economic roles. Thus, the effect of Bartels' first three matrices has been to take us from the cultural influences that affect each of us, to our individual reactions to other participants in the business arena.

At this point Bartels switches from the presentation of a purely positive model of ethical decision making, and introduces a normative element. In his own words;

"Knowledge of the problems of ethics however does not provide the solution to ethical problems. This poses a second requirement of a model for ethics, namely, a guide to action presuming that the standards of action are known" (p. 24).

In the fourth and final matrix, Bartels offers a number of common approaches that have been taken toward ethical decision making (ranging from self-interest to the balancing of multiple claims). While he does advocate that the most ethical behavior is the fullest possible satisfaction of the expectations of all parties involved, ethical decision making is still recognized as relying on the judgment and skill of the individual.

While Murphy and Laczniak (1981) applaud Bartels' effort to come up with such a model, they also note that it was "rudimentary" and that Bartels "succeeded only in clarifying a few assumptions about the marketing climate in which decisions holding ethical implications are made" (Murphy and Laczniak 1981, p. 252). As a result not many practitioners or academics have made much use of the Bartels model. Marketers' reluctance to employ Bartels' model may also be attributed to the difficulty inherent in delineating all the boxes of each matrix, and then translating the results to each subsequent matrix.

3. The Pruden Model: Pruden (1971) addresses what he sees as the common dilemma that many marketers face when their individual ethics and the prevalent ethics of the organization for which they work are in conflict. The aims of the organization typically revolve around profit goals, growth, and survival, while the goals of the individual would include independence of action, freedom of expression, and self-realization. In any clash between the goals of the organization and those of the individual, individual goals are likely to be pushed into the

background so long as the individual wishes to remain within the organizational world.

As a third and balancing force, Pruden suggests the professional ethic. Thus, the model presents three powers which balance each other when taken together (see Figure 2-1). Professional ethics should be a stated framework which serves to guide the actions of marketers. Since there will be conflicts among all three, but especially between individual and organizational ethics, Pruden argues both that professional ethics serve as an important balance for the individual in the integration of the different ethical forces, and that the development of professional ethics should be the responsibility of the American Marketing Association.

4. The Cavanagh, Moberg and Velasquez Model: Probably one of the best known normative models for ethical decision making which has emerged from the business literature is that proposed by Cavanagh, Moberg and Velasquez (1981). They contend that the field of normative ethics has concentrated on three fundamental theories: a) utilitarianism, which is usually defined as the greatest good for the greatest number; b) the theory of rights, which maintains that human beings have certain basic rights including the rights of free consent, privacy, freedom of conscience, free speech, and due process; and c) the theory of justice, which calls for equity, fairness and impartiality in dealing with others.

Each of these theories when applied to ethical situations has been found to contain a number of weaknesses (cf. Cavanagh et al 1981, p. 367). The requirement of measuring the good that accrues to each

individual has always been a practical problem in the application of utilitarianism. The theory of rights is weakened by the fact that it has been found to encourage selfishness and that conflicts often occur between some of the rights (e.g., conflicts between the right to privacy and that of free speech are all too common). With the theory of justice, a major flaw has been that it tends to encourage of sense of entitlement, resulting in less motivation toward innovation and productivity.

Therefore the purpose of the Cavanagh et al model is to eliminate the individual weaknesses of each theory by combining all three into a decision tree (see Figure 2-2). The model begins with a question aimed at satisfying the utilitarian requirements of the situation: "Does the decision result in the efficient optimization of the satisfactions of interests inside and outside of the organization?". A positive response leads one first to a questioning of whether the theory of rights is being upheld ("Does the decision respect the rights of all the affected parties?"), and then to a question regarding the theory of justice ("Does the decision respect the canons of justice?"). A negative response to any of these three questions may be overridden in the event that "overwhelming" factors justify that a particular criterion be set aside. Such "overwhelming" factors would be conflicts between criteria, conflicts within criteria, or the lack of sufficient capacity or ability to use one of the criteria.

If an act cannot meet all three criteria, and there is no "overwhelming" factor, then an act is decided to be unethical. Cavanagh et al arrived at their model through an examination of public cases in the

business environment which had an ethical content. A modification of this model has been used by Fritzsche (1985) in the area of international marketing.

5. The Laczniak Model: Laczniak (1983) recognizes that the existing literature in this area is guilty of being limited to the repetition of simple ethical maxims. These include the golden rule (act toward others the way you want them to act toward you), the utilitarian principle (the greatest good for the greatest number), and Kant's categorical imperative. Arguing that there is a lack of theoretical rigor in such maxims, Laczniak issues a call for marketing to come up with a more comprehensive framework. While his work does not itself constitute such a framework, he does present three normative theories which he strongly urges ought to be considered in the construction of a descriptive framework. The three theories he advocates are those of Ross (1930), Garrett (1966), and Rawls (1971).

Ross claimed that as humans we have six prima facie (literally, 'at first sight'; therefore obvious or self-evident) duties. These six are the duties of fidelity, gratitude, justice, beneficence, self-improvement and nonmaleficence. Occasionally conflicts will occur between two or more of these prime duties. In these cases, Ross concludes that each individual needs to diligently assess the situation and make the best and most informed possible decision in the circumstances. In other words, there is no decision rule offered beyond that of one's own best judgment.

Garrett's model was specifically formulated for the business world. Simply put, he maintained that there were three crucial components to an ethical decision; intention, means, and ends. As long as each one of these components is approached in an honest and forthright manner, the subsequent action that is taken can be considered ethical, even should the outcome prove to be bad. This is so as long as the actor has taken care to consider other alternatives.

The third model, that of Rawls (1971), seems to owe much to Kant and his categorical imperative. Rawls' position was that while society inevitably would have people who were more privileged than others (both socially and economically), no actions by society should be taken which would result in the less privileged becoming even more disadvantaged. In fact, given a choice between two actions, the more ethical action is that which would tend to bring the level of the disadvantaged section of society closer to the advantaged. This is similar to Kant's imperative in that Rawls used the analogy of a game where the rules must be agreed upon before any of the players know their roles. Therefore, without knowing what your economic status is, you are asked to make the rules of, for example, wealth distribution. Rawls maintained that only under such a hypothetical situation could we truly come up with the fairest and most just system.

What Laczniak does with these three theories is to combine them to form a more comprehensive framework. He comes up with a series of questions based on the writings of Ross, Garrett, and Rawls which are aimed at getting marketing practitioners to consider their personal

stance on ethical issues. However, he admits that, just like earlier models, his frame cannot either predict or explain unethical behavior and that it mainly serves as a normative tool that brings attention to ethical issues. What is important to note is that Laczniak's work does highlight the importance that needs to be given to developing a theory of marketing ethics.

Marketing Research Ethics

In the area of marketing research, there are three main areas on which attention has been focused: 1) the rights of researchers, subjects and clients; 2) professional attitudes toward research ethics; and 3) codes of ethics. The questions that arise from each of these aspects of the ethics of marketing research will be dealt with in this section.

1. Rights of Researchers and Subjects: It is noteworthy that the questions of rights in regard to researchers and subjects which Murphy and Laczniak point to in their 1981 review are still with us today. Indeed, it is difficult in certain cases to see how marketing could eradicate some of the problems. For example, there is the issue of the manipulation of research techniques so that hypothesized results are more likely to occur. Peters (1986) points out that a knowledge of research methods could conceivably allow researchers to "orchestrate" designs to provide support for their hypotheses. Yet Bogart was writing about this very same problem as early as 1962, over thirty years ago. Blankenship (1964) saw it as a question of researcher integrity. At that

time a number of associations concerned with research in the area of marketing were beginning to develop their own professional codes of ethics. While such codes could be expected to encourage practitioners to at least consider, and hopefully engage in, ethical behavior, Blankenship nonetheless concluded, "(t)he codes can never legislate integrity."

The question of the rights of subjects has been raised, most notably by Tybout and Zaltman (1974). They liken the rights of subjects to the consumers' "Bill of Rights" proposed by President Kennedy in the 1960's. The suggested subject's Bill of Rights would give subjects the right to choose to participate in a study, the right to safety (including confidentiality), and the right to be informed. The last of these rights deals with the debriefing process, especially in those situations where the experimenter did not make subjects fully aware of the purpose of the research so as to avoid the possibility of demand characteristics.

Baumrind (1985) has brought attention to some of the negative aspects of deliberate deception, such as damaged self-image of subjects and their reluctance to trust authority figures after discovering that they were not told the full truth as to the purposes of the study in which they participated. While Geller (1982) has suggested several techniques aimed at eliminating deception from the laboratory (for example, simulations and role playing) few researchers consider his alternatives to be as effective as the methods which they are intended to replace. Again, it is apparent that this is an issue which has yet to be resolved by marketing researchers.

2. Professional Attitudes Toward Research Ethics: The second area of concern related to marketing research is that of professional attitudes toward research ethics. Coney and Murphy (1976) claim that respondents in a sample of 400 American Marketing Association members "perceived a significant gap between the ideal of ethical/professional marketing research behavior and what is now common practice" (as reported by Murphy and Laczniak, p. 254). This finding was replicated by McGown (1979) on a sample of marketing research firms in Canada. What are the implications of findings such as these? One possibility is that professional codes of ethics may need to receive wider publicity and/or more stringent reinforcement. However, the investigation into why such a gap exists is just one of the reasons that the emergence of a widely accepted positive theory of ethics in marketing is long overdue.

3. Codes of Ethics: The third issue to be dealt with in this section concerns the emergence of ethical codes of conduct. This can be seen as an attempt to deal with the previous two issues by making explicit just what kind of behavior is expected of professionals in the field. Codes of ethics also serve as a court of appeal in determining whether one has acted ethically or not. In 1962 the American Marketing Association approved the Marketing Research Code of Ethics. However, Coney and Murphy (in the study mentioned previously) find that more than 60 percent of the A.M.A. members sampled are not familiar with this code. Murphy and Laczniak suggest that marketers need to be particularly cognizant of a public perception that they conduct research in an

unethical manner. The consequences of such a perception, they warn, could be restrictive government regulation. Some of the acts of questionable ethics that have been associated with marketing research include misleading or false presentations, the use of unqualified researchers, and engaging in unnecessary research. One practice which has become more common among salespeople is to misrepresent themselves as market researchers in order to gain access to people's homes so that they can give their salespitch. Although this practice (called 'sugging', probably a mixture of the words selling and mugging) is not used by marketing researchers, it nevertheless becomes associated in the minds of the public with marketing research as people become more wary of accepting the phrase 'market research' at face value.

Coe and Coe (1976) rightfully point out that in order to be effective, codes of ethics need to include some type of punishment for those who violate them. Similarly, Weaver and Ferrell (1977) cast doubt upon the usefulness of codes that include no system for enforcement. There is no such mechanism currently in place concerning the A.M.A.'s guidelines. This makes it especially incumbent upon marketing practitioners to enforce some kind of self regulation. Otherwise the unethical acts of the few will tend to reflect upon the whole profession. It is likely that much of the discontentment with marketing practices springs from the inability of professionals within the field to take disciplinary action.

Jacoby (1995) has issued a call for stringent and explicit codes of ethics within the professional associations in the marketing domain. Specifically, he has pointed out that the lack of a written code for the

Association of Consumer Research has led to several behaviors which he has interpreted as being unethical. Jacoby also points out that while academics feel comfortable that their ethics are far and above those of their colleagues in the business world, there may be evidence to suggest that such a smug attitude is without foundation. In fact, Jacoby suggests, there is very little difference in the level of ethical behavior of these two populations. Written codes of ethics are an important step in the evolution of any professional association, such as the ACR.

Specific Areas of Marketing: Marketing managers are likely to be faced almost daily with situations that involve an ethical dimension. Researchers have looked into several different areas of concern to marketers. Advertising, as the most visible aspect of marketing, naturally has come in for much examination. Other areas into which researchers have delved include product development, sales, purchasing, pricing, and international marketing. This section will look at the literature in each of these areas.

1. Advertising: Pollay (1986) sums up much of the criticism of advertising. The negative effects of advertising can be classified into three categories as: i) the intrusive and dominating nature of advertising; ii) advertising's encouragement of materialism, cynicism, greed; iii) its promotion of stereotypes, conformity, anxieties and disrespect. In response to Pollay, Holbrook (1987) argues that Pollay's indictment presents advertising as a "monolithic" structure, a conclusion for which there is insufficient evidence. A previous defense of advertising by

Levitt (1970) maintained that while ads were attempts at persuasion, the manipulation inherent in them was no worse, and certainly less important, than the persuasive efforts of politicians, artists and editorialists.

Williamson (1978) offers the thought provoking suggestion that in modern society advertising has come to replace religion. She points out that through the ages a major function of traditional religion was to give humanity a sense of security, a place to turn to when in doubt as to what the ideal human being was like. In an increasingly secular age, when many people were no longer finding satisfying answers through religion, Williamson postulates that advertising has jumped into the resultant void as it offers people the information as to how to become the "ideal person." Of course this ideal is reached through the purchase of material goods in contrast to the spiritual attainment proposed by religion.

Burke et al (1988) attempt to measure the deceptive effects of claims made in advertisements. Their study was done using a sample of 80 undergraduates who gave their reactions to claims made about analgesic pain relievers. Since brands in this product category, according to the researchers, are very similar, advertisers "often rely on exaggerated and ambiguous advertising claims to differentiate brands in the minds of consumers." The results of this study strongly indicate that inflated claims for the product lead to significantly higher false beliefs about how the product performed.

While defenses of advertising such as those of Levitt and Holbrook may be able to successfully address those points raised by advertising's

opponents, nonetheless this issue has proved to be one that seems to defy resolution. In spite of the fact that there were codes of advertising ethics in existence as far back as the 1920's, the issue is still with us today. As advertisers become more knowledgeable in methods of persuasion, it is an issue that is unlikely to fade away soon.

2. Product Development: Some of the more notable instances of unethical practices that have come to public attention concern product related issues. Perhaps the best known example of a faulty product which reached the marketplace is the Ford Pinto. The Pinto was a car which the Ford Motor Company allowed to be sold to consumers even though the company was aware that it contained a potentially lethal engineering problem (the fuel tank was mounted in such a way that there was an unacceptably high chance of it causing a fire upon impact). Cigarettes and silicon implants are among the other products which are widely regarded as unsafe. In response to the growing number of product crises, Mitroff, Shrivastava and Udwadia (1987) proposed a four stage model of crisis management (detection- crises- repair- assessment). They suggest that the occurrence of such incidents is increasing and likely to continue to do so.

Other writers have also highlighted certain product-related ethical issues. Tsalikis and Fritsche (1989), in their review, mention the proliferation of nonfunctional packaging (Hartley 1976), planned obsolescence (Gwinner et al 1977), and arbitrary product elimination (Hise and McGinnis 1976) as practices that were "ethically suspect."

3. Sales: Just as marketing can be said to be the most visible bridge between business and the consumer, so it is that salespeople are the company employees who must work at this interface. This fact means that for most consumers salespeople are the main (or only) representatives of a company that they encounter. Dubinsky, Berkowitz and Rudelius (1980) point out that as they are the link between an organization and its public, salespeople will be faced with ethical dilemmas in situations where they must choose between management pressure to meet sales quotas and ongoing relations of trust and confidence with customers. Poor sales performance, stress, and unhappy customers may be the end result of being the people working at this interface.

4. Purchasing: Cummings (1979) reports that, for most purchasing managers, certain smaller items such as lunches, dinners and tickets are viewed as acceptable gifts, but that larger items, including liquor and personal discounts are deemed unacceptable. The same year, Rudelius and Buchholz (1979) found that ethically sensitive areas include the acceptance of gifts, giving vendors information on competitors' quotations and then allowing a requotation, and certain volume incentives.

Forker and Janson (1990) did a nationwide survey of buyers and purchasing managers from a number of different industries. They found that only two types of favors from suppliers were generally considered acceptable; small advertising souvenirs such as pens or other items with the supply company's name, and lunches. In making comparisons with a

previous study, Forker and Janson found evidence that, “buyers indicated an increased *willingness* to accept vendor supplied gifts, but actually accepted gifts less frequently in 1987 (the year of the present study) than they did in 1975. For those favors actually accepted in 1987, the average annual value of the gift increased as the individual's position title and salary increased.”

Since purchasing managers are the population of interest in this study, it is important to take a closer look at their behavior, particularly in the area of ethical actions. Forker and Janson (1990) report that a 1975 survey conducted by Ernst and Whinney concluded that “the vast majority of purchasing personnel adhered to higher ethical standards and practices” than the general population. Even so, a company’s written ethics policy led to yet higher levels of adherence to ethical practice. The National Association of Purchasing Managers sponsored a 1978 survey in which “a substantial minority of those surveyed reported ethics problems or purchasing practices which might be considered questionable.” Forker and Janson’s (1990) findings were that purchasing managers had become especially aware of the possible ethical problems associated with the acceptance of gifts from vendors. Most respondents only considered two types of gifts to be appropriate: advertising novelties (said to be acceptable by 72% of respondents) and lunches (68%). However, Forker and Janson report that the actual acceptance of gifts is down from the level reported in 1975. This can be seen as evidence that purchasing managers have become especially sensitive to the perception of outsiders that they might be influenced by accepting

favours. Because of this heightened sensitivity it is not unreasonable to conclude, as was found in the above mentioned 1975 survey, that those people in the position of purchasing manager may indeed behave more ethically than the average business person.

5. Pricing: In the area of pricing, Murphy and Laczniak (1981) argue that the very decision on how a product is to be priced raises ethical questions. Firms at each stage in the channel of distribution, from manufacturers to wholesalers to retailers, need to set fair prices that achieve company goals without "gouging" customers. Another ethical question, according to Murphy and Laczniak, concerns the lowering of quality or quantity by manufacturers so that prices can be maintained at the same level. Other than raising these issues, the authors offer no advice to manufacturers as to how such dilemmas might be resolved.

Sonnefeld and Lawrence (1978) address the problem of price fixing. They report that ethical codes concerned with pricing generally are seen only at higher levels of management and seldom are passed down the line. Those which did circulate to lower levels are described as "toothless" versions of the golden rule. Sonnefeld and Lawrence present their own code of ethics for pricing which they claim has substantial specificity.

6. International Marketing: One of the reasons that international marketing has attracted the attention of marketing ethics researchers is that the differences in ethical codes from country to country are sometimes so wide that ample opportunities exist to exploit them. Multinational corporations come in for much of this criticism (Donaldson 1985; Fritzsche 1985; Rosenberg 1987). Tsalikis and Fritzsche (1989) and

Murphy and Laczniak (1981) both point to the offering abroad of products that have been banned at home ("dumping") as a highly questionable practice. According to Tsalikis and Fritzsche, laws such as the Foreign Corrupt Practices Act (1977) are difficult to enforce in practice.

Schollhammer (1979) examines a number of multinational corporations. He finds that their positions lead them to hold an inordinate amount of power, which in turn leads to their close scrutiny. While certain unethical practices, such as bribery, are found to exist, Schollhammer concludes that bribes are more often asked of than offered by multinational corporations.

As can be seen from the studies cited above, much of the research that has been published in the area of marketing ethics has been based on personal observations, which in turn have their foundations in one or another philosophical theory of right and wrong. From such personal observations the authors have offered their prescriptions of what actions marketers ought to take when faced with situations having ethical content. In the next section of this review the focus will be on studies which are more positive in nature, studies which aim to describe how people actually do act in ethical crises.

Positive Studies

In this section, those studies which have attempted to describe ethical behavior in marketing situations will be looked at. This will be

done under two main headings; 1) causes of unethical behavior, and 2) surveys of various publics.

1.Causes of Unethical Behavior: Tsalikis and Fritzsche (1989) cite a 1977 survey by Pitney-Bowes that showed 95 percent of Pitney-Bowes managers had felt pressure at some time to compromise personal standards of ethics in order to achieve corporate goals. A similar survey undertaken by Uniroyal found that 70 percent of managers admitted to such pressure. Carroll (1975) reports in a survey of young managers that there exists a sentiment that they would strongly tend to show loyalty to their bosses: referring to Watergate, just under 60 percent report that had they been in that position, they would have "done just what junior members of Nixon's re-election committee had done".

An earlier survey of over 1700 businessmen by Baumhart (1961) finds 80 percent of respondents agreeing that unethical practices did take place in business. Respondents indicate that the suspect practices which they would most like to see ended are in the areas of promotion and pricing, i.e., two areas that fall within the marketing domain. In this same study Baumhart finds that the opinion held by business people as to the standard of their own ethics is significantly higher than the opinion students have of business ethics. This study is replicated by Brenner and Molander (1977) who find 67 percent of a sample of 1,227 reporting that unethical practices take place in business. Baumhart ranks the factors that his respondents feel influence one's ethical behavior. The top five factors are; 1) personal codes of behavior, 2) behavior of supervisors, 3)

formal company policy, 4) industry ethical climate, and 5) behavior of peers. In a more recent study, Arlow and Ulrich (1988) discover a set of criteria which very closely parallels the Baumhart rankings.

Carr (1968) suggests that the ethics of business people are, in fact, different from those not working in business, and that it was a favorable state of affairs. According to Carr, as long as business people realize that their ethics were different, and do not carry business-type ethics into the rest of their lives, the situation is quite satisfactory. The basis of Carr's observation is that in certain situations (for example, playing poker) practices such as bluffing are not only acceptable but are expected. This is so even though such practices (i.e., lying) would normally be considered unethical. Therefore so long as all the players (or business people) understand that this is how the game is played, no one ends up suffering any harm. That personal standards of ethics differ from those one encounters on the job was confirmed by Carroll (1975) and Bowman (1976). They both concur that personal standards are usually stricter than corporate policies, and that people report feeling pressured to compromise their standards to the company's more lenient guidelines.

A survey by Newstrom and Ruch (1975) report the following : 1) the idiosyncratic nature of ethics - what is seen as highly unethical by some respondents is not considered unethical at all by others; 2) managers will tend to take advantage of unethical situations when it is to their advantage to do so; and 3) most managers feel that their peers are more unethical than they themselves are.

It is apparent from the above literature that one of the most important factors in establishing an ethical corporate environment is the attitude of upper management toward ethics. Employees have their own set of ethical standards, but the most telling finding from these studies is that the ethical outlooks of organizations tend to filter down from above.

2. Surveys of Various Publics: As well as the surveys of business people mentioned in the previous section (e.g., Baumhart 1961; Carroll 1975; Brenner and Molander 1977), other groups have been surveyed to get their reactions as to what is considered ethical and what is not. Among these groups are students, housewives, advertising professionals, and marketing educators. To finish off this section, those studies which look at ethical differences between males and females will be examined.

Sturdivant and Cocanougher (1973) asked business school students, housewives, blue collar workers and corporate executives to evaluate whether certain business practices are ethical or not. Not surprisingly they found the biggest gap among these groups was between corporate executives and housewives. In this study, business students turn out to have ethical perspectives that are not unlike those of the corporate executives.

Using a sample of people employed in advertising, Krugman and Ferrell (1981) found that respondents emphatically felt that they had higher ethical values than their peers. Superiors were seen to have either similar or higher ethical values than the respondents themselves. These

results are similar to the findings of Newstrom and Ruch (1975) presented previously.

Trawick and Darden (1980) find that marketing practitioners felt that their ethical standards are as high as those of professionals in other disciplines. Both academic and business practitioners are included in this survey. Marketing educators are somewhat more worried about ethical standards in marketing than are business practitioners, however.

Dubinsky, Berkowitz and Rudelius (1980) find that there are significant differences between the perceptions of business students and industrial salespeople as to the ethical issues involved in selling. Salespeople tend to see fewer ethical problems than do students. For example, while salespeople do not have many problems with the giving of gift items, students see this as an area of ethical concern. Bellizzi and Murdock (1981) side with the students and call for more explicit codes of conduct that would tell salespeople which kinds of gifts are acceptable, and which are not.

Tsalikis and Fritzsche (1989) point out that since it is only relatively recently that women have come to occupy top positions in management, almost all of the early ethical surveys consider only the male point of view. More recently, attention has come to be focused on whether there are gender differences in ethical perceptions among business people. Kidwell, Stevens and Bethke (1987) report little or no differences between the sexes in terms of ethical perceptions. What they do find is that men tend to view women as less ethical than themselves, and vice versa. A study conducted by McNichols and Zimmerer (1985) came to the

same conclusion. In spite of this evidence, there is still the perception that women tend to be more ethical. Jones and Gaultschi (1988) argue both that women are more aware of ethical issues than are men, and that they are more likely to take corrective action. While more research is called for in this area, it is likely that the ethical sensitivities of men and women may be related to the specific nature of the ethical issue. For example, it is highly likely that women are more aware of areas such as sexual abuse in the workplace.

Yet in spite of the volume of research, as part of their conclusion Murphy and Laczniak state (p. 261);

The preceding review of writings concerned with marketing ethics makes it abundantly clear that there has been no "evolution" of research in this area of marketing.

Further, they conclude that 'the approach taken ... (to) researching questions related to marketing ethics has been less than innovative and systematic.' Finally, these two reviewers offer the following:

In terms of future research in the area of marketing ethics, substantially more needs to be done regarding the application of philosophical theory to marketing problems. ... (T)he field of marketing is without a global theory of ethics, despite some very limited efforts along these lines.

It would seem to be a reasonable conclusion from above that the next step to be taken if research on marketing ethics is to "evolve" is the development of some sort of global theory of marketing ethics. Murphy and Laczniak's use of the word 'evolution' in this context refers to their

observation that the overwhelming majority of work previously published in the area of marketing ethics followed a pretty rigid pattern, with little deviation from one set formula. This pattern typically sees a researcher presenting a marketing situation or situations where ethical abuses have been documented, are perceived to exist, or have the strong potential to arise, followed by a call to marketers to engage in more ethically acceptable practices based on the accompanying guidelines which the researcher has arrived at by following one or other of the existing philosophical theories of ethics. While this practice does have the merit of highlighting marketing questions that are of ethical concern (and, indeed, of suggesting solutions to them), the reliance on it as the major method of inquiry is seen by Murphy and Laczniak as slowing the progress of research in the field. Therefore, their call for the development of a global theory of marketing ethics comes because they feel that such a theory is needed to provide a foundation upon which further work in the field can be based. This is seen by them to be the next stage in the evolution of research into marketing ethics.

Thus, an examination of the literature in the field of marketing ethics shows a shift from the production of normative guidelines to the emergence of positive frameworks to guide researchers. This "evolution" highlights the fact that there are several aspects which ought to be included in any such positivistic (or descriptive) theory. Some attention needs to be paid to the existing theories of moral philosophy, the teleological and the deontological approaches. There is also a need in marketing ethics to include personal characteristics such as cognitive

moral development. Some kind of mention needs to be made of the effects of recognizing the possible alternatives, the chance of each one occurring and the desirability of each. There has to be some kind of link between the ethical judgment formed and actual behavior. Usually this link is made through the construct of intention. Finally there is the need for some kind of feedback mechanism whereby the actual consequences the behavior taken can then become a reference in one's personal history.

Toward a Positivistic Global Theory of Marketing Ethics

Soon after Murphy and Laczniak's call for a global theory of marketing ethics, Ferrell and Gresham (1985), and Hunt and Vitell (1986) both proposed models of marketing ethics. Whereas most of the work done up to this stage had ended with prescriptive guidelines to marketing managers, little insight had been offered into how an individual arrived at a certain ethical judgment. Since both the Ferrell and Gresham and the Hunt and Vitell models were descriptive models, it can fairly be said that they represented the first attempts to establish a global theory of marketing ethics.

1. The Ferrell and Gresham Model: The model proposed by Ferrell and Gresham postulated that three main factors impinged on an individual's behavior when faced with an ethical dilemma. Firstly, individual factors such as one's personal knowledge, values and attitudes will affect how the ethical problem is perceived. These factors are generally acquired

through socialization, especially through (but not limited to) interactions with family, social groupings, and educational settings. Cultural factors were also treated as individual factors.

Secondly, it is proposed that significant others play an important role in an individual's ethical judgment. Based on differential association theory (Sutherland and Cressey 1970), and on role-set theory (Merton 1957), Ferrell and Gresham reason that the amount of association a person has with others, and the distance between them in the organization (or between different organizations) are important factors in determining how influenced the focal person is by someone else. Differential association theory states that one's behavior in the area of ethics is acquired in accordance with the ratio of associations an individual has with ethical persons/acts to associations with unethical persons/acts. Role-set theory deals with the relationships between pairs of actors as a result of their differing hierarchical positions in an organization.

The third factor which the Ferrell and Gresham model points to as playing an important role in how an individual resolves an ethical dilemma is opportunity. However, this variable is not simply defined as the chance available for someone to become involved in an ethical or unethical practice. In the opportunity factor, Ferrell and Gresham also include the professional codes of ethics which exist in an organization, corporate policy which may or may not be included in an explicit code of ethics, and the rewards or punishments that could be expected to accompany a particular action.

While the Ferrell & Gresham model concentrates on social learning aspects, it does not provide a component analysis of the moral evaluation process. Also, it would seem that the significant others and opportunity components in this framework could be considered part of the organizational culture.

2. Hunt and Vitell's General Theory of Marketing Ethics: The main tenet of the Hunt-Vitell model is that an individual's ethical judgment is formed through the combination of two separate moral evaluations - a deontological and a teleological evaluation.

The basic difference between deontological and teleological evaluations centers on whether the actor focuses on the *action* to be taken, or the *consequences* of that action. Deontological evaluation looks at whether an action is good in and of itself, while teleological evaluation deals with whether the results of the action, as opposed to the action, have an overall beneficial result. Deontological evaluation involves a judgment about the rightness or wrongness of an act in and of itself. For example, the opinion that lying is always wrong is an expression of a deontological view of lying. A teleological view on the other hand is one which looks to the consequences of an action rather than the action itself. There are certain cases in which the consequences of telling a lie (the so-called white lie for instance) warrant doing so.

Hunt and Vitell's model has as its main tenet that a person arrives at an ethical judgment through a combination of their deontological and

their teleological evaluations. They arrive at this reasoning by noting that teleological or deontological arguments in and of themselves alone may not cover all the bases; both are somewhat flawed in certain circumstances. Also, they do not describe well the way that people in the real world make ethical judgments. What actually seems to happen is that people use a mixture of these two types of evaluation models in arriving at ethical decisions.

While the impact of teleological and deontological evaluations on the ethical judgment of an individual is the central part of this model, there are a number of important factors that lead up to the deontological or teleological evaluations. What starts the whole process off is the realization that a scenario contains an element which makes it an ethical problem. The actor will then generate a number of possible alternative ways to react to the situation. Some of the alternatives may be evaluated immediately in terms of the deontological norms. To make a teleological evaluation however, it is necessary to generate a set of perceived consequences for each alternative action considered. Each perceived consequence is, in turn, a direct function of the interaction of three psychological elements. These are: 1) the probability of the consequences actually occurring, 2) the desirability of the consequence, and 3) the importance of the consequence.

At this stage, Hunt and Vitell propose that the teleological and the deontological evaluations are combined in some way to form an ethical judgment. They also postulate that the ethical evaluation would be affected by the personal beliefs and outlook of the particular individual.

Hunt and Vitell go further and issue a call for empirical testing of the propositions within their model.

In response to this a number of empirical studies have set out to try and establish whether the connections postulated by the Hunt/Vitell model are valid. The first of these was performed by Mayo and Marks (1990). This study used the scenario of a marketing research dilemma as responded to by a sample of marketing researchers across the United States. The study was interested in examining whether the "core" section of the Hunt-Vitell model successfully captured the decision making process (i.e., whether both teleological and deontological evaluations each contributed to ethical judgments, which in turn led to intentions). The results found by Mayo and Marks offered support for this part of the model.

Using a sample of American Marketing Association members (N = 483), Singhapakdi and Vitell (1991) looked at some of the factors which affected specifically the deontological norm factor. They hypothesized that people high in Machiavellianism and those with an external locus of control would tend to have deontological norms that were "less ethical" than subjects not displaying these characteristics. Machiavellianism, as defined by Robinson and Shaver (1973), refers to " a person's general strategy for dealing with people, especially the degree to which he feels other people are manipulable in interpersonal situations." Locus of control (Rotter 1966) is a personality trait where one either feels that things happen to them because of their own actions (internal locus of control) or due to circumstances which they cannot affect (external locus

of control). Their results supported these hypotheses. However, a further hypothesis that attempted to confirm the link between organizational culture and deontological norms as shown in the Hunt-Vitell model did not receive any support.

In a study which used the same sample as above, Singhapakdi and Vitell (1990) found that individuals who were scored as high on the Machiavellianism scale were less likely to perceive a situation as having ethical content.

Hunt and Vasquez-Parraga (1992) used an experimental design to examine how 747 sales and marketing managers would handle ethical problems relating to their salespeople. Since previous studies had employed cross-sectional designs, this work represented a stronger test of the model than had so far been made. The results indicated strong support for the model. One important result that merits special consideration is that it was found that marketers relied primarily on their deontological evaluation (as opposed to their teleological evaluation) when arriving at an ethical judgment.

Goolsby and Hunt (1992) used the theory of cognitive moral development (CMD) as propounded by Kohlberg (1969) to compare the moral development of professional marketing practitioners with that of other groups. Their finding that marketers show no significant differences in moral development as compared to other groups serves as an answer to those who would charge marketing in general with having lower moral values than other social groups. Significantly, from the point of view of this proposal, the Goolsby and Hunt article ends with a

call for research to integrate cognitive moral development into positivistic models of marketing ethics such as the Hunt-Vitell model.

Kohlberg's Theory of Cognitive Moral Development

Kohlberg (1969) has presented a us with a theory of cognitive moral development. This theory states that as individuals we pass through a sequence of six stages of moral development, each of which allows us to accommodate a greater understanding of the issues involved in a situation which has moral dimensions. His ideas build on the stage theory of childhood development of Piaget (see Flavell 1985), and that of continuing ego development into adulthood of Loevinger (1976). Kohlberg argues that the ability to reason about a moral dilemma is dependent upon the level of logical reasoning that an individual has attained. Logical reasoning in turn depends upon the cognitive structure that an individual possesses. Further, in common with most other stage theories of human development (including those of Piaget and Loevinger), Kohlberg claims that cognitive structures evolve in; 1) an invariant sequence which is, 2) common across all cultures. This means that all individuals would experience the same series of stages in the same order regardless of any other factors. The main inter-individual difference would be in the rate at which any particular person would evolve through to the highest stage.

Piaget had done some work on moral development, the main result of which was that he found a series of changes occurring just about the time that the child was entering the stage of formal operations. Kohlberg

expanded upon this formulation by presenting children aged 10, 13, and 16 with a series of moral dilemmas and asking them what they thought was right. What was important was not the answer they gave per se, but the reasoning behind it. From such interviews, Kohlberg formulated the following steps of moral development.

Preconventional Morality

Stage One: Obedience and Punishment Orientation

Authorities hand down a fixed set of rules which are to be obeyed without question. The reason for this is that breaking rules may lead to punishment and punishment must be avoided. At this stage one has only an egocentric view of the world: the interests of others are not considered or recognized.

Stage Two: Relativistic Hedonism

The realization emerges that rules are not fixed and absolute; there may be more than one side to any issue. Thus things become more relative, but deciding on one's viewpoint is determined by one's needs and pleasures. While one can separate his own interests from those of an authority figure, personal interests are of greater importance.

Conventional Morality

Stage Three: Mutual Interpersonal Expectations

What is right at this stage is acting as a "good" person ought, being concerned with others, being loyal and trustworthy. Others, as well as self, are seen as being influenced by motives. These motives and

intentions are judged as more important than outcomes, even if good intentions result in bad outcomes. Shared feelings, agreements and expectations are placed above an individual's own interests.

Stage Four: Social Conscience

At this stage the emphasis moves from interpersonal agreement to the good of society as a whole. Laws are to be upheld because it is important for the social order that they be. Individuals at this stage become aware that they are a part of an overall system and that they have a duty to play a role in the maintenance of that system. The upkeep of law and order is important.

Postconventional Morality

Stage Five: Social Contract

The important realization at stage five is that laws are made by society and that they can be changed by society. While the individual still has a strong sense that one must obey the laws, there is also a recognition that the moral and the legal points of view may sometimes clash. The resolution of this is to try and change laws through mutual agreement and democratic procedures.

Stage Six: Universal Ethical Principles

There is an awareness that certain principles transcend the law. These would include justice, human rights, equality and dignity. It is to be hoped that society is ordered along these principles, but in instances

where there is a conflict with law, the principles win out. Not many people truly reach this stage of moral thinking.

Kohlberg's theory in fact was developed mainly using adolescents, and while he maintained that moral development continued into adult life and that it was very rare to find teenagers at Stage 6, it seems to be nonetheless possible.

Graham (1995) points out that while developmental psychologists have identified several levels of moral reasoning, all of these have limitations. The most serious of these is that an individual at one stage of reasoning is not able to understand those at higher stages. While this seems to be a self-evident statement, the implications are far reaching. For example, in the area of policy making, if those who formulate the rules (whether in government, work, or any other arena), are too many stages ahead of those who have to follow them, the potential for unrest is high. People feel more comfortable when following leaders with whom they agree, and therefore, by implication, understand.

However in order to be more than simply neat little typologies, there are certain standards that need to be met by stage theories. Crain (1980) lists these as;

- 1). each stage must describe general issues taking place within it;
- 2). they must refer to qualitatively different conflicts;
- 3). the stages must form an invariant sequence; and
- 4). they must be culturally universal.

The methods used by Kohlberg center around a series of in-depth interviews using a technique called 'Modal Moral Reasoning'. Critics of stage theories find that the criteria of invariant sequences, and especially that of cultural universality, are difficult to accept. Yet the theorists appear adamant that these two factors are necessarily true. It could also be said that in the case of Kohlberg each successive stage represents an increasingly abstract way of judging moral matters. Nonetheless, for all theories of this kind, it has been argued by critics that the skipping of stages is possible. Longitudinal studies, including one by Kohlberg, have suggested that the rule of invariant sequence does apply, but these studies have by no means been conclusive.

At first the claim that stages are the same in all cultures seems intuitively naive. Yet Kohlberg (with several cultures, including Mexicans, Taiwanese and Turks) has found evidence that applying his formulations to other, diverse, societies still show that these theories hold up. Loevinger (1976) mentions that there is some evidence that her scheme (similar to Kohlberg's, but dealing with ego development rather than moral development) holds up in Japan and Curaçao. Why should all cultures pass through the same stages? Erikson, another stage theorist, explains it by stating that the underlying problems dealt with at each stage are the same, even though societal value systems may differ. Kohlberg cites the same argument and gives the example of two different cultures, one discouraging fighting, the other encouraging it. The children from each of these cultures will have different beliefs about fighting, but will still reason about it in the same way at the same stage.

For example, at stage 1 one child might say that it is wrong to fight when insulted, because you will get punished for it, while another says that it is all right and no punishment will follow. The beliefs differ but both children reason about them in the same underlying way, in terms of the physical consequences (punishment).

Though by no means the final word on stage theories, the following quotation helps to sum up many of the problems critics have with such theories;

"Every classification is an injustice. The injustice is compounded in lining up the stages of one psychologist's system with those of another. There is no way to say exactly what stage or type in one system corresponds with that of another, for the same reasons that it is impossible to say exactly what are the characteristics of each stage or type."

Loevinger, 1976.

Chapter 3

The Model

Overview of the Chapter

The model that is presented in this chapter is based on that presented by Hunt and Vitell (1986) as the General Theory of Marketing Ethics. Therefore, the purpose of this chapter is to outline: a) the original model as proposed by Hunt and Vitell (1986), and to include their later (1991) revisions; and b) add the specific modifications which are the focus of this dissertation.

The General Theory of Marketing Ethics, Hunt and Vitell (1986,1991)

Hunt and Vitell (1986) maintain that the starting point for this model is with a perceived ethical problem (see Figure 2-3). If an individual does not see a situation as having ethical content, then the model cannot be applicable in that specific case. Though this statement appears somewhat self-evident on the surface, it points to the findings of Newstrom and Ruch (1975) mentioned previously - actions seen as being highly unethical by certain managers were not considered to be in any way unethical by some of their colleagues.

Given that the situation or scenario presented to the subject is accepted as having an ethical content, the individual will begin to search for ways in which the dilemma might be resolved. The results of this search are indicated in the model as the set of perceived alternatives. Individuals will of course vary in their ability to evoke a set of

perceived alternatives. Hunt and Vitell suggest that it is unlikely that the complete set of all possible alternatives will be conjured up by any single individual. Since no one person is initially aware of every possible action that they could conceivably take, this is likely to ultimately show up in behavioral differences between people responding to the exact same situation. As a person's awareness of the different possible courses of action is expanded, so too will the repertoire of their possible responses be enlarged.

The focal point of the model is the way in which the deontological and teleological evaluation of the situation come together to produce the final ethical judgment. Taking the set of perceived alternatives which one has generated, both the inherent rightness or wrongness of each alternative in and of itself, i.e., the deontological aspect, is examined. It has been suggested that we all have pre-existing deontological norms. These norms are formed and accumulated through our individual experiences of diverse influences of such things as background, religion, culture, politics and values, to name a few. A comparison between one's deontological norms and the projected alternatives is made in order to determine whether any of these norms is likely to be violated in the case of following through on a particular action. The result of this comparison is indicated as the deontological evaluation.

Similarly an evaluation is made of each of the perceived alternatives in terms of teleological measures (i.e., the consequences of each action). The model indicates that there are four constructs which influence the teleological evaluation. The first of these is labeled as perceived

consequences. Since there are a number of stakeholders to be considered in arriving at a teleological evaluation, this construct refers to the perceived consequences of each of the perceived alternative actions on each stakeholder (or group of stakeholders) in turn. As was pointed out previously, one of the main problems with teleological theories, such as utilitarianism, is the question of how one actually measures the good or bad accruing to each stakeholder so that one can arrive at the optimal decision (the greatest good for the greatest number) by some process of addition of positives and negatives. Since it is impossible to expect human beings to be able to calculate all of the positives and negatives of any given decision, the teleological evaluation is affected by the ability with which the individual performs an efficient mental accounting of the pros and cons of each action on the respective stakeholders. Different people can be expected therefore to arrive at different conclusions.

The second construct, probabilities of consequences, was included by Hunt and Vitell based on the work of Dayton (1979). Dayton postulated that, in ethical situations, people will tend to prefer options in proportion to the chances of such options leading to the realization of their aims. As with some of the other constructs in the model, it must be noted that since the probabilities of consequences are arrived at through a mental extrapolation based on previous experiences, individuals will necessarily vary as to the probability that they attach to specific actions. Thus one person, for example, may attach a high probability of getting caught to a specific action, whereas another may

calculate that the chances of being caught are small, even though these same two individuals are engaging in the same action.

Likewise, desirability of consequences, the third construct related to teleological evaluation, is also idiosyncratic. Hunt and Vitell point out that while probability and desirability of consequences both influence teleological evaluation, "no specific information-processing rule (such as a lexicographic process) is postulated. The overall result of the teleological evaluation will be beliefs about the relative goodness versus badness brought about by each alternative as perceived by the individual" (Hunt and Vitell 1986, p. 9).

The fourth of the constructs leading to teleological evaluation is the importance of the stakeholder. A number of researchers have discovered that who the stakeholders are, and what their importance is, differs according to individuals and situations. Brenner and Molander (1977) found that business executives reported customers were the most important group to them, followed by stockholders and then employees. It stands to reason that this ordering is subject to change according to the situation. For example, at a stockholders' meeting it is likely that their importance to management will be magnified. Zey-Ferrell and Ferrell (1982) pointed out that an important factor in the formation of ethical beliefs and actions between an individual and various stakeholders was the "organizational distance" between them.

Taking all four of these constructs that lead toward the formation of a teleological evaluation (i.e., perceived consequences, probabilities of consequences, desirability of consequences and importance of

stakeholders), it is clear that the individual will arrive at his or her own individual assessment of what the outcome of each of the evoked sets of perceived alternatives is likely to be. Two people presented with the same ethical dilemma are likely to come to different conclusions, because the differences in their past personal experiences or their abilities to process the inputs or to generate different possible courses of action will cause them to assess the situation in different ways.

Once an individual has arrived at both a deontological evaluation and a teleological evaluation of the alternative courses of action which occurred to them, the model postulates that these two evaluations are combined *in some way* to arrive at an overall ethical judgment. Once again, there is no rule offered as to how exactly such a combination of the two separate evaluations takes place. Certain people will be more prone to a deontological view and thus put more weight in that evaluation, while others will likewise favor a teleological outlook. While it is possible that any given individual may make use solely of either deontological or teleological thinking in some situations Hunt and Vitell suggest that it is not likely that a person will rely exclusively on one or other of these forms for many different situations over an extensive period of time.

Following the Fishbein and Ajzen model (1975), Hunt and Vitell note that ethical judgments do not lead directly to behavior. The mediating variable of intentions is postulated instead. The intentions construct is conceptualized as "the likelihood that any particular alternative will be

chosen" (Hunt and Vitell 1986, p. 9). Also, the authors note that the teleological evaluation will feed into the intentions construct, acting as a moderator. The rationale behind this is that while one may conclude that a particular action is the most ethical behavior possible in a certain situation, one may nevertheless decide upon an alternative course because it has consequences that are more desirable. Hunt and Vitell write (1986, p. 10);

"The model suggests that when behavior and intentions are inconsistent with ethical judgments, one of the consequences will be feelings of guilt. Therefore, two individuals may engage in the same behavior, yet only one may feel guilty since the other's behavior was consistent with his or her ethical beliefs."

In their original formulation of the model, Hunt and Vitell proposed that behavior could be acted upon by situational constraints. An example of a situational constraint would be the presence or absence of the opportunity to engage in a specific alternative. However, in an updated version of the model (Hunt and Vitell 1991), situational constraints are respecified as action control. Action control is defined as "the extent to which an individual actually exerts control in the enactment of an intention in a particular situation" (Hunt and Vitell 1991, p. 6). The updated, 1991 version of the Hunt-Vitell model is shown in Figure 3-1.

The feedback mechanism built into the model is that after the actual behavior has taken place, there is an assessment of the consequences of that action, which in turn is filed away with the personal experiences of the individual. A study by Hegarty and Sims (1978) provided support that people could be conditioned to change their behavior in a situation involving ethical decision making. This study involved a set of perceived

rewards and punishments, and subjects demonstrated that learning from the results of previous exposure to ethically challenging situations did influence their subsequent decisions in similar situations. Thus, support for a feedback mechanism in a model of ethics is supported.

Other than the change from situational constraints to action control, the only other revision made by Hunt and Vitell (1991) from the original model is in the constructs that feed into perceived ethical problems and begin the whole process. Originally just four were proposed (cultural environment, industry environment, organizational environment, and personal experiences). In the revision, a fifth construct (professional environment) was added, and more attention was given to the explanation of each of these constructs.

The main, though not the only, elements to be considered under the heading of cultural environment are religion, legal system, and political system. Deontological norms may vary across countries, especially when the predominant religions in those countries are different. For example, attitudes toward women in Moslem countries are unacceptable in most Western countries, yet both Moslem and Western attitudes represent deontological norms. Similar differences could be pointed out between the legal and political systems of these two sets of countries. It is reasonable to suggest that such different political and legal systems would be expected to play a significant part in assisting people to arrive at their ethical judgments.

When Hunt and Vitell originally presented their model in 1986, one of the criticisms of it was that it was equally applicable to all situations,

and not just marketing. The authors readily acknowledged that fact, and in the 1991 revision, the constructs within the dashed lines are proposed as that part of the model which applies directly to business situations. These include the environments of the profession (e.g., marketing), the industry, and the specific organization. Within each of these, the three elements of informal norms, formal codes of ethics, and the enforcement of those codes are considered important in the process that leads to the formation of an ethical judgment. The importance of codes of ethics and their enforcement has already been covered in the literature review of the previous chapter. To recap briefly, several researchers (e.g., Coe and Coe 1976; Weaver and Ferrell 1977) have found that codes of ethics are successful only when it is perceived that some non-trivial punishment will accompany the breaking of such codes. Informal norms can be considered a cultural type of environment and as such they are an important input to ethical situations which occur in business settings.

Though in their original exposition of the model Hunt and Vitell did not list the elements that were important to the construct of personal characteristics, in their revised version, however, this oversight is corrected. Six elements are suggested (religion, value system, belief system, strength of moral character, cognitive moral development, and ethical sensitivity). Of these, the one that most directly concerns the present dissertation is cognitive moral development. While this concept has been dealt with at greater length in the literature review, it is worth noting at this point that "(s)ince stage of cognitive moral

development implies a high capacity to reason through complex ethical situations, it would seem that individuals high in cognitive moral development would, among other things, bring in more deontological norms in any situation and would consider the interests of more stakeholders in their decision making" (Hunt and Vitell 1991, p. 8).

The purpose of this section has been to present the Hunt-Vitell model as the authors have envisioned it. In the next section, the suggested revisions with which this dissertation is concerned are dealt with.

Modifications to the Hunt-Vitell model

Although cognitive moral development (CMD) has recently been proposed as a very important component of this model, no test of the model which has been done so far has included a measure of CMD. Therefore its position in the model as a precursor to the perception of the ethical problem (i.e., the construct which sets the whole process in motion) is still somewhat speculative. Indeed, Goolsby and Hunt (1992) issue a call to marketers to integrate CMD into research studies of positive models in marketing, including the Hunt-Vitell model.

The question that is to be addressed here then is where in the Hunt-Vitell model can the construct of cognitive moral development be most explanatory, or in other words, where does it explain variance? Hunt and Vitell advocated that CMD may be one of the variables that contribute to the personal characteristics construct. Occupying such a position in the model suggests that the higher one's level of CMD the more likely one is to both perceive the existence of an ethical problem and to be able to

generate a larger number of alternative courses of action. Researchers are almost totally in agreement that cognitive moral development plays a very significant role in coming to an ethical judgment (Hunt and Vitell 1986; Trevino 1986; Ferrell, Gresham and Fraedrich 1989; Goolsby and Hunt 1992). If this is the case then it stands to reason that CMD should occupy a more important position in a model such as Hunt and Vitell's than the peripheral one that it is presently assigned to.

It is proposed here that, in addition to its present position in the model, CMD may act as a moderator in other areas, specifically in the relationship between teleological evaluation and the interaction among probability, desirability, and importance of consequences. The interrelationship that is being proposed is shown in Figure 3-2.

Rest (1986) has written that cognitive moral development is a psychological construct. As each person approaches a setting that has ethical implications they will come with their own individual personality characteristics, including a certain level of cognitive moral development. However, the level of CMD at which an individual operates at any given time is not in itself going to be predictive of either teleological evaluations or of ethical judgment. What needs to be added to this equation is an element reflective of the situational context in which one finds oneself. Trevino (1986) notes, "ethical/unethical behavior in practical situations is not simply a product of fixed individual characteristics, but results from an interaction between the individual and the situation" (cf. Higgins, Power and Kohlberg 1984).

In the Hunt-Vitell model there is no construct which is explicitly labeled "situation." However, this is not to say that situational variables have not been included in the model. For example, the three constructs that were specifically added to define the business environment (i.e., professional, industry and business environments) can be considered situational variables. The effect of each of these on the individual will vary according to the specific professional, industrial, or organizational setting.

However, these are not the only situational variables in the model. Hunt and Vitell (1986, p. 9) postulate that four constructs make up the teleological evaluation: perceived consequences, probabilities of consequences, desirability of consequences, and importance of stakeholders. Each of these variables is capable of being considered a situational variable. For the person faced with making a decision on an ethical dilemma, the perceived consequences of his/her actions are going to change the environment in which that decision is made. If, for example the perceived consequences of pursuing a certain action are good for the individual involved, the chances of them following through with that action are higher than if the perceived consequences are bad. Similarly with probabilities of consequences, desirability of consequences and the importance of stakeholders: the more probable, and desirable the consequences, and the more important the people involved (the stakeholders) are to the decision maker, the more likely they are to try and maximize favorable outcomes by undertaking actions which they deem appropriate.

These four constructs (i.e., perceived consequences, probabilities of consequences, desirability of consequences and the importance of stakeholders) can be seen to be separate aspects which, when taken together, go in to forming the situation in which the individual has to arrive at a decision. Each of these is taken into consideration in some way by the decision maker, and the division into four distinct aspects of the situation is useful for purposes of delineating the model. Since each of the four is an important aspect of the situation in which an ethical decision is made, the alteration (or manipulation) of any one of them can be seen to be affecting the whole situation. By manipulating any one of these constructs while controlling the other three, an experimenter can vary the situation in which an ethical decision has to be made. Therefore, above and beyond the relationships outlined by Hunt and Vitell, an investigation into this model can yield some important insights into how situational variables affect ethical judgments.

If we do define "situation" to consist of the interaction of these four constructs, then we are saying that teleological evaluation is dependent upon the situation in which that evaluation has to be made. It is readily apparent that the situation will explain a large part of the variance in responses. However, the argument which will be advanced here is that CMD interacts with the situation in influencing ethical response. That is, CMD is postulated to moderate the extent to which the situation (perceived consequence X probability of consequence X desirability of consequence X importance of stakeholders) determines ethical

responses. The next section goes into more detail about why CMD would be expected to be a moderator in this relationship.

Rationale for the Proposed Model

Since teleological decisions are based upon what the expected consequences of an action would be, a measure for CMD can be expected to distinguish between individuals at the various stages of moral development (as proposed by Kohlberg) since people at the different levels focus on the importance of different outcomes. For example, at the preconventional level (stages one and two) the overriding concern is with external reward and punishment. At the conventional level (stages three and four), what is correct depends on the expectations of relevant others, such as family, peers or social group. People who are in the principled level of CMD (stages five and six) are guided by their own set of "universal" principles (Kohlberg and Candee 1984; Trevino 1986). Therefore, knowing the stage of CMD of a particular individual should allow us to more accurately predict his or her teleological evaluation in a certain situation with known (i.e., controlled for) consequences. As a person advances in cognitive moral development, they move from a position where only those events that happen to the self are important (stage 1) to a position where all individuals are equally respected (stage 6). A break-down of Kohlberg's stages on the basis of whose experience is of most importance can be conceptualized as follows:

Preconventional - satisfying one's own interests is of utmost importance. An act is defined as right or wrong based on the likelihood of being caught.

Conventional - Right and wrong are defined by living up to the expectations of others. Therefore other points of view are being considered, but only insofar as they relate to the self.

Postconventional - One comes to hold one's own personal beliefs based on principles, but others are seen to have opinions which may be equally valid. The self is not taken to be more important than the other.

That an interaction between CMD and situation can be expected to take place is illustrated by looking at what the reaction of individuals high or low in CMD will be to the same situation. All people, regardless of level of CMD are going to prefer the situation where both they, and all other parties involved, benefit from a certain behavior (win-win). Similarly everyone can be expected to least prefer the situation where all involved parties suffer from the action that is taken (lose-lose). However, the difference between a subject measured as high in CMD and a subject measured as low in CMD is expected in the intermediate situations where either; a) the individual himself suffers, but others may benefit (lose-win), or b) the individual benefits, but others suffer (win-lose). In situation a) the person high in CMD is likely to have a more positive attitude toward the lose-win situation than someone low

in CMD. Conversely, in situation b), a person rated low in CMD is likely to have a much more positive attitude toward the win-lose situation than the high CMD individual. In the same situation, level of CMD is an important factor in explaining why people act in different ways. This interaction is shown in Figure 3-3.

Based on this interpretation of the levels of CMD as representing a progression from the totally egocentric outlook on the world of stage 1, to the self-less outlook of stage 6, we can see that stage 6 individuals will give more consideration to the affect of consequences on others than will people at the lower CMD levels.

Before the formulation of an explicit hypothesis, we need to consider the four constructs which Hunt and Vitell propose lead directly into teleological evaluations. These are: 1) perceived consequences, 2) probability of consequences, 3) desirability of consequences, and 4) the importance of stakeholders. Although CMD does represent different ways of seeing the world, no claim is being made here that we can predict either a person's attitude or their behavior given their measured level of CMD. The other important factor that must be taken into account is the specific situation in which the evaluation is to be made. As has been pointed out previously, the constructs just mentioned can be said to form the situation. Since each of these four is subject to experimental manipulation, knowing the level of CMD of individuals who are asked to respond to the same situation is likely to be predictive of the teleological evaluations that are formed. As Hunt and Vitell (1986) point out, individuals at the same CMD level need not always arrive at

the same decision, while people who are at different levels will often decide to perform the exact same action (though their reasoning as to why they are doing it will differ). One of the external factors which will lead to this difference in behavior among people measured at the same CMD level is the differences in the situations in which they make their choices of action. Since perceived consequences, probabilities of consequences, desirability of consequences and importance of stakeholders are all internal factors (i.e., their perception and an understanding of it are internal to the individual) and can be expected to be different for everyone, even those who share a common level of CMD and find themselves side by side in the exact same external situation, need not arrive at the same decision as to the best course of action. Therefore, any one of the four situational variables just outlined is capable of altering the whole evaluation of the situation for the decision maker. In order to exert greater control over the experimental manipulation it is proposed that only one of these situational variables (rather than all four) be varied. The experimental manipulation will be done using the desirability of consequences construct.

Desirability of consequences was chosen as the variable to be manipulated because it allowed us to set up scenarios which emphasized the desirability of consequences to self as well as to others. As has been pointed out in the argument above, the level of cognitive moral development that an individual has attained is likely to be related to the way in which they view themselves in relation to others. A person measured as high in CMD is more likely to see another person and their

well-being as being at least as important as themselves than is someone with a low CMD score. Desirability of consequences, it was felt, allowed us to perform this manipulation better than any of the other three variables.

However, in the sense that Hunt and Vitell originally proposed it, desirability of consequences refers to the degree to which a specific outcome is seen as being positive or negative. Although making use of the construct in this exact way would be possible within the frame of this present research, the ideas behind the cognitive moral development construct suggested an alternative definition for desirability of consequences that actually was an extension of that construct. Since cognitive moral development, as has been pointed out previously, can be seen as a continuum with the lower stages representing an orientation toward the self and the higher stages reflecting a progressively greater consideration of the other, it was proposed that the operationalization of desirability of consequences should involve choices between outcomes which favor either the self over the other, or the other over the self. While this definition for desirability of consequences may differ somewhat from that originally proposed by Hunt and Vitell, it was felt that it was much more in keeping with a test of cognitive moral development.

While more complete details of the methods used are contained in the following chapter, it should be noted here that subjects were presented with scenarios which outlined the expected consequences of an action both to oneself and to others. Before going on to the method used

however, the following section articulates the specific formal hypotheses that are the focus of this research.

Hypotheses

As discussed above, the situation in which an individual is faced with an ethical dilemma had to be manipulated. More specifically, this was done by manipulating the desirability of consequences element of the situation. This led to the following hypothesis:

H₁: Desirability of consequences will significantly affect teleological evaluations. Specifically, the more desirable the consequences of a particular action are to the individual, the more likely they are to positively evaluate that action.

The desirability of consequence was operationalized as the desirability of consequence to a) self and b) others. Therefore, H₁ can be reduced to:

H_{1a}: The more positively an individual assesses the desirability to self in a specific situation, the more positively they will assess the teleological evaluation of that same situation.

H_{1b}: The more positively an individual assesses the desirability to other in a specific situation, the more positively they will assess the teleological evaluation of that same situation.

Although a number of studies have examined the "core" relationships in the Hunt-Vitell model (Mayo and Marks 1990, Vitell and Hunt 1990), the model is still in the testing stage. Therefore, in order to add to the cumulation of knowledge about the model, the following two hypotheses were offered:

H₂: Teleological evaluations will significantly affect ethical judgments. The more positive a teleological judgment concerning a specific course of action is, the more likely one is to judge that action ethical.

H₃: Intentions will be significantly influenced both by ethical judgments and by teleological evaluations.

Finally, while the Hunt-Vitell model, as presented above, appeared to be well constructed and to reflect ethical decision making as we know it, it also seemed probable from the above discussion that cognitive moral development was likely to play a much greater explanatory role in the model than was so far assigned to it. The question that then arose was where CMD might best be placed in the model so as to explain the greatest amount of variance. It was proposed that the level of one's cognitive moral development was going to make a difference in both the deontological and teleological evaluations that an individual made. Since the investigation of the impact of CMD on deontological evaluation was beyond the scope of the present work (though it does constitute part of an ongoing stream of study) only the following hypothesis was offered:

H₄: Cognitive Moral Development moderates the relationship between the situation (consisting of desirability of consequences of self versus others) and teleological evaluation.

While it was expected that there would be a main effect for desirability of consequences, in that subjects would tend to prefer

positive consequences for the self over negative consequences for the self, this main effect was expected to be greater for individuals measured at low stages of CMD than it was for those found to be at higher stages. Thus, even while there was a main effect, people high in CMD were be more likely than those low in CMD to choose actions in which the self endured somewhat negative consequences so that the other might enjoy positive consequences. Similarly, those low in CMD were expected to favor positive consequences to the self, regardless of whether consequences to the other were negative or positive, whereas those high in CMD were expected to be more likely to consider both what happened to the self and what happened to the other.

Chapter 4

Methods

Overview of the Chapter

The purpose of this chapter is to outline the proposed research design and method that were used in assessing the impact of cognitive moral development as a moderator on the Hunt-Vitell model of ethics. The purpose of this research is to examine the hypothesis that more of the variance in teleological evaluations, ethical judgment, and behavioral intention can be explained when CMD is positioned as a moderator between the situation and teleological evaluation, than has so far been explained (i.e., without using CMD in a role that is central to the model). The situation (defined to include the four constructs of perceived consequences, probability of consequences, desirability of consequences, and the importance of stakeholders) can, in effect, be varied by manipulating any one of its constituent constructs. As has been outlined in the previous chapter, in this study it was proposed that desirability of consequences to self and the desirability of consequences to other serve as the independent variables.

Sample

In order to test this hypothesis, a sample of purchasing agents was used. Sampling of purchasing agents took place by obtaining the membership roll of the Carolinas-Virginia chapter of the National Association of Purchasing Managers (NAPM). All of the names on this

roster were sent the following items: a letter of introduction from Professor Monroe Murphy Bird who is a well known researcher in the area of purchasing and is also the holder of an endowed chair from this chapter; a letter of introduction from the author of this dissertation requesting the help of chapter members by asking for their time in filling out the enclosed survey; the shortened form of the Defining Issues Test; a final scenario which laid out an ethical dilemma that has been shown to be an issue of concern among purchasing managers; and a list of demographic questions. These items are contained in Appendix A. Based on past research in this area (see Mayo and Marks 1990), it was felt that a usable sample size of 200 could be considered adequate. Rest (1986) has pointed out that, due to the fact that ethics and morality are sensitive subject areas, a number of reliability and consistency checks had to be built into the instrument used to measure cognitive moral development. A researcher can expect to lose between 5 and 15% of a sample due to subjects failing to meet the criteria suggested for passing these checks. Given a safety margin of another 10% for incomplete responses, it was projected that an initial sample size of 250 should be sought. This mail survey was sent out during the spring of 1994.

While the final sample was made up of purchasing agents, there was also the need to do some quite extensive pretesting. For the purposes of pretesting, a sample of M.B.A. students from a large mid-Atlantic state university was used. Ferber (1977) has criticized the use of students in marketing research due to the question of whether generalizations can be made from such samples to larger populations. The aim of this pretesting

was to establish whether the scenario that was to be used in the actual experiment did in fact represent a situation with ethical dimensions. Students at the M.B.A. level were judged to be quite capable of deciding on such an issue because of their previous exposure to marketing issues. Therefore their use as pretest subjects in this study was deemed to be quite appropriate. A complete discussion of the pre-test results is contained in Chapter 5.

Demographic characteristics of the final sample of purchasing agents are presented in Tables 4-4 to 4-9. Table 4-4 shows the age distribution. No subject who took part in the survey was less than 26 years old, and the oldest respondent was 65 (see also Table 4-9). As could be expected, most respondents fell into the middle age range of between 30 and 55. About two-thirds of the subjects were male (67.1%), as is shown in Table 4-5. Table 4-6 shows that most subjects were married (85.2%), with divorced (7.8%) and single (5.3%) being the next closest categories. Less than one percent of respondents reported that they were either widowed or separated.

Table 4-7 reports that 93.0% of those who returned the survey were white. Blacks were the second most numerous race, with 5.0%, followed by Hispanic and Asian respectively, although neither of these two latter categories formed over 1% of respondents. The results of the demographic question on educational levels are shown in Table 4-8. Over half of all respondents reported having attended and completed a four-year college program (51.9%). About one fifth had gone on to graduate school (20.1%), followed by the 17.7% who had gone to a two-year college

and the 9.1% who had finished high school. A small number of respondents reported that trade school was the highest educational level which they had reached (1.2%).

Descriptive statistics for experience (measured as "years in purchasing") and age are reported in Table 4-9. The average amount of time that subjects who took part in the study had spent in the field of purchasing was just under 15 years. This strongly suggests that the final sample represented a lot of experience in the area of purchasing. The average age of respondents was 44.6 years old.

Experimental Design

This research is concerned with investigating whether cognitive moral development acts as a moderator between the situation (as defined above) and teleological evaluation (and ethical judgment and behavioral intention). Therefore the dependent variable in this case is teleological evaluation (and ethical judgment and behavioral intention), and the constructs which constitute the situation are to be considered the independent variables. However, in order to test the hypothesis that CMD acts as a moderator, it was proposed that only one of these four possible independent variables be manipulated. The reason for this is that the manipulation of only one of these constructs allowed for a much clearer interpretation of just what was taking place. Such clarity of interpretation was especially necessary in a case like this where an untested model was being studied. The situational construct which was varied (i.e., which served as the independent variable) was that of

desirability of consequences. While the manipulation of any of these four constructs would have allowed us to study the effect of the situation, desirability of consequences was chosen because it was felt that writing a scenario which manipulated this variable could be achieved more easily than writing a scenario in which one of the other three variables was manipulated.

Past research in this area has used the technique of presenting subjects with a scenario that contained an ethical dilemma, followed by asking them to indicate how they would act if confronted with such a predicament (Mayo and Marks 1990; Vitell and Hunt 1990). Indeed, this is the suggested method of investigation that was advocated by Hunt and Vitell (1986) when they first proposed the general theory of marketing ethics. Subjects in this study were presented with such a scenario, which had been found in pretesting to pose an ethical dilemma. Past research strongly indicated that subjects were not willing to deal with more than one complex scenario (Vitell and Hunt, 1990). Therefore subjects were asked to respond to only one such scenario. After being asked to read this scenario the subjects were asked questions about what response to the ethical dilemma they deemed appropriate. Since the possible alternative courses of action were constrained only by the imaginative abilities of each respondent, Hunt and Vitell (1986) suggested that it would be best to constrain the evoked set of perceived alternatives that subjects could possibly generate by providing them with a small number of specific alternatives. "(A)n unconstrained "evoked set" would prove to be a nontractable design" (Vitell and Hunt

1990, p. 243-44). Typically three alternative courses of action have been presented to subjects, along with the likely consequences that corresponded to each. In this study subjects were presented with four possible alternatives. (The reason for using four alternatives will be examined in more depth in the section below entitled "The Experimental Treatments - The Moral Situations"). In the present study it was important to keep constant the perceived consequences, the probabilities of the consequences, and the importance of the stakeholders. The desirability of consequences (for self and for others) were manipulated.

In order to manipulate the desirability of consequences, the scenario needed to be set up so that both 'self' and 'others' were given varying importance in the selected alternative courses of action that were offered to respondents. Since the experiment used two different aspects of the construct desirability of consequences (i.e., conditions in regards to both oneself and to others) we considered them to be two independent variables. We used a Within-Subject design as each subject was presented with all four alternative courses of action and was asked to rate each of them. The different stakeholders that were used were simply the "self" and the "other".

Teleological evaluation was measured by asking subjects to rate how they viewed each of the three alternative courses of action that were suggested. However, in trying to tap the process of teleological evaluation, the wording of the question needed to emphasize that each alternative was being rated bearing in mind the desirability of the consequences. This differed from the measurement of ethical judgment

which asked for subjects to rate the same four alternatives, but this time in the light of how ethical an action they took each alternative to be. These questions can be seen in Appendix A.

To conclude this section then, the proposed experimental design was a 2 (level of CMD - high or low) X 2 (desirability of consequences for self - negative versus positive) X 2 (desirability of consequences for others - negative versus positive) within-subjects design.

In the sections that follow, more detail is given of the actual measures that were used in this research. There were two main measures. The first of these was a measure of the level of cognitive moral development of each individual subject. We also needed to have an instrument that measured the teleological evaluations made by subjects. Each of these measures is discussed in more detail below.

The Experimental Treatments - The Moral Situations

The situation was defined as consisting of the two constructs of the desirability of consequences for self and the desirability of consequences for others. An important aspect of the scenarios that were used is that any reference to terms which might trigger a deontological evaluation be avoided. Since we were only examining the teleological evaluation in this study, the use of words such as "bribe" or "illegal" would quite possibly give rise to deontological evaluations and therefore make the assessment of the teleological evaluation even more difficult.

The scenario which was eventually used in the study is included in Appendix A. This scenario was written based on a review of the

literature in the area of purchasing. Purchasing managers had indicated several areas of ethical concern in their jobs. After some review, it was decided that a scenario based on a possible personal conflict with the agent from another company could best present purchasing managers with a situation containing real-world ethical subject matter, but which would avoid any of the triggers that might tend toward the use of a deontological rather than a teleological evaluation.

The alternatives that follow after the scenario are meant to represent each of the conditions of the experiment. Alternative A is the self positive, other positive condition. Similarly B represents self positive, other negative; C represents self negative, other positive; and D is the self negative, other negative condition. A number of scenarios were considered before it was decided to pretest this one.

Measures

At the end of reading the scenarios, each subject was asked to respond to a number of questions which were aimed at measuring the dependent variables of teleological evaluation, ethical judgment, and intentions. More specifically:

Teleological Evaluations: After each of the alternatives subjects were asked to respond to the statement, "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it". There was a seven-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Ethical Judgments: Again on a seven-point scale ranging from "Very Unethical" (1) to "Very Ethical" (7), subjects were asked the following question, "Please rate this alternative as to how ethical an action you believe it to be." This statement purposely did not point the subject in the direction of using either deontological or teleological evaluations, but rather allowed them to come to a decision based on their own predispositions.

Intentions: For the measurement of intentions it was proposed to follow the method used by Mayo and Marks (1990) and ask subjects how likely they thought it was that they would actually adopt each of the alternatives on a scale ranging from 0% (I would definitely NOT choose this alternative) to 100% (I would definitely choose this alternative).

Due to the concern about how much time a busy purchasing agent was likely to give to filling out what seemed to be an already long questionnaire, only single measures were included for each of the variables teleological evaluation, ethical judgments and behavioral intentions (each of these variables had four different alternatives attached to them however). The possible problems that resulted from this will be discussed in Chapter 6.

Once an acceptable scenario had been established through pretesting, the following alternative courses of action which were presented to the subject were aimed at setting up a situation in which the following four situations held true: i) the consequences of the suggested action were positive toward both the other person involved and toward the self; ii) consequences were positive toward the self but negative toward the

other; iii) consequences were negative toward the self but positive toward the other; and iv) consequences toward both the self and the other were negative. By responding to the four possible results that stem from the same scenario, respondents were in effect rating the alternative that they most preferred. Respondents replied to each of the four alternatives on a seven point scale, thus allowing us to assess the degree to which they preferred one alternative over another, as well as the order of preference of the alternatives.

It should be noted here that the use of four alternatives was a departure from the studies that previously had used scenarios to examine the Hunt-Vitell model (Mayo and Marks 1990; Vitell and Hunt 1990). In those studies only three alternatives were used. However, since the idea of restricting the number of alternatives suggested to respondents is to put a limit on the possibilities that they consider (Hunt and Vitell 1986), it was felt that adding one extra alternative did not violate the reasoning behind constraining the choice. The addition of the extra alternative allowed us to examine all four of the possibilities of positives and negatives accruing to self and other, and therefore was felt to be justified.

The means and standard deviations obtained in the study for the measures of Cognitive Moral Development, Teleological Evaluations, Ethical Judgment, Desirability of Consequences, and Behavioral Intentions are reported in Table 4-10. For the CMD measure, the average score of respondents was 36.5. As a comparison, Goolsby and Hunt (1992) report that a study which averaged DIT scores over several studies found an

average adult composite score of 40.0. The total number of subjects considered in this composite was 1149. It also should be noted that a wide range of CMD scores resulted from the current study. Table 4-10 reports a range from as low as 3.33 to a high of 76.67. Both of these scores are off of the chart reported by Goolsby and Hunt of the average scores found in previous studies. Their lowest average score was 31.2 among prison inmates, and their highest reported average was 65.2 for a study that used PhD students in moral philosophy. The actual distribution of the P-scores obtained in the study is shown in Table 4-11.

The Cognitive Moral Development Measure

Subjects were given the Defining Issues Test in order to determine their level of cognitive moral development. They were then administered the scenario that was related strictly to an ethical situation that purchasing managers might very possibly encounter in the course of their jobs. This order was reversed for some subjects, i.e., some were given the main scenario first, followed by the Defining Issues Test. The order was varied to ensure that there was no order effect. Pre-test results had revealed that taking the DIT alerted subjects to the fact that the survey concerned ethical behavior.

When Kohlberg theorized his six stages of cognitive moral development, he also presented researchers with an instrument for measuring it - the Standard Issue Scoring Test. This test consisted of a number of open ended interview type questions to which the individual responded. Based on the responses, each subject was assigned to a

certain level of CMD. However, one of the major reasons that few researchers outside of Kohlberg's immediate retinue made use of the theory of cognitive moral development was that the Standard Issue Scoring Test was a projective type assessment which required that the administrator spend some considerable time learning the techniques of categorizing different responses. A later version of the test, the Social Reflection Questionnaire (Gibbs and Widaman 1982), was only somewhat less time consuming to administer and subjective to evaluate.

Beginning in 1972, a former student of Kohlberg, James Rest, began work on a paper and pencil type instrument that has gained in popularity since then as the preferred way to measure which of Kohlberg's stages of moral development a subject may be at. Rest's Defining Issues Test presents the subject with a number of scenarios that have been found to be ethically challenging - i.e., there is no simple universal action that all people would agree is the best thing to do. These scenarios have been found to be able to distinguish between people at different levels of cognitive moral development. Indeed, the Defining Issues Test has become the main instrument for the measurement of CMD among researchers in the field of marketing (cf. Goolsby and Hunt 1992). The actual version of the DIT that has been obtained for the present study is the revised third edition of the test (Rest 1990).

After reading a short scenario, respondents come to a decision about the course of action that they deem appropriate. Using a 5-point scale they are asked to indicate the importance which a number of possible criteria played in making their final decision. There are 12 different

statements to which they have to respond, indicating that the criterion in question was of either great, much, some, little or no importance in arriving at their decision. These 12 statements represent prototypical statements which would be made by individuals at the various levels of cognitive moral development. What is important to the researcher is not the final course of action which the subject comes to advocate, but why they chose that action. The shortened, three-scenario version of the DIT which was used in this study is included in Appendix A.

The index used to ascertain level of CMD is the P% score. Two other scores, the "D" score and the "U" index are available, but they necessitate the use of a computer program at the University of Minnesota, and were not made use of in this study. P% scores are the most common way of calculating CMD scores, and are the most frequently reported scores in marketing literature (Goolsby and Hunt 1992). In effect, the P-score indicates the relative importance given by the individual to responses which would be given by a person at the principled stage of CMD (i.e., stages 5 or 6). Higher scores are obtained by those with higher levels of cognitive moral development. Descriptive statistics and the distribution of the P-scores that were obtained in this study are shown in Tables 4-10 and 4-11.

Since the Defining Issues Test was first developed there have been greater than five hundred studies done which have involved its use (Rest 1986). Therefore, researchers have accumulated quite a large body of evidence that attests to its reliability and validity. Berndt (1985) has noted that the extent of the existing evidence has led researchers to

accept that the DIT has adequate reliability and validity, and has allowed them instead to go on to pursue other research questions. While the amount of evidence which allows us to place trust in the DIT is overwhelming, one relevant point ought to be made here. The DIT is not equivalent to the Kohlberg scoring system, although the two are "closely related" (Rest 1986, p. xiv). Generally the correlation between the two tests has been in the range of 0.3 to 0.7, though this has depended on factors such as the version of the Kohlberg test used and the homogeneity of the samples.

In the DIT Manual accompanying the 1990 version of the test (which was the version used in the present study), Rest reports some of the findings on the reliability and validity of the DIT. Some of those findings bear relevance to this study, and are worth repeating here.

Davison and Robbins (1978) addressed the question of reliability and concluded that test-retest reliabilities for the Defining Issues Test were "generally in the high .70s or .80s." They further reported that Cronbach's Alpha index of internal consistency is generally in the high .70s also. However, these figures relate to the six-story form of the DIT. Rest (1990) reports the test-retest correlations for the samples used in the Davison and Robbins study. As can be expected, these are slightly lower than for the full six-story version, ranging from .58 to .77. A comparison of these results can be seen in Table 4-1. Rest also reports that Cronbach's Alpha for the P-index (which was the measure used in this study) was .77 for a sample of 1,080. For the three-story version, Cronbach's Alpha was .76 for the same sample.

The 1990 DIT Manual also reports evidence in support of the criterion group validity, longitudinal validity, and convergent-divergent correlations of the Defining Issues Test (Rest 1990). Finally, it should be noted that Rest reports that the P-scores from the three-story version of the DIT correlate .91 with the P-scores from the longer six-story version in the study which used 1,080 subjects. This correlation was .93 in another study, this time with 160 subjects. The three stories which make up the shortened form of the DIT were chosen because these three had the highest correlation of any subset of three with the full six-story version.

Rest (1990, p.4.4) advises against trying to use the P% score as an index of which of the six Kolbergian stages a subject falls into. He states, "The research to date on stage typing algorithms ... has shown these methods of grouping subjects are inappropriate for DIT data." Instead he suggests that researchers create groups based on cutoff points that have in the past been found to be significant. These cutoffs, for both quartiles and thirds, are shown in Table 4-2

For the present study, subjects were divided into high or low categories based on the level of CMD at which they were measured. Both median and tercile splits were employed. The distribution of P scores that were obtained corresponded closely to the cutoff points suggested in Table 4-2. Therefore the basic design was a 2 (level of CMD - high or low) X 2 (desirability of consequences to self - positive or negative) X 2 (desirability of consequences to other - positive or negative) manova. Since subjects were responding to all four sets of alternatives and to all

of their respective consequences, the design used was a within-subjects design.

Manipulation Checks

In order to measure the extent to which the experimental treatment was successful, it was necessary to include a manipulation check in the study. We needed to know that subjects recognized the scenario presented to them as being one which evoked the intended response of desirability of consequence. To this end, the question, "To what extent do you find this alternative desirable for you?" (Question 1), and a similar question, "To what extent do you find this alternative desirable for others?" (Question 2) needed to be included as a manipulation check. These questions were measured on a seven-point scale going from "Very Undesirable" (1) to "Very Desirable" (7). Each of the alternatives were compared, i.e., Question 1 was compared to Question 2 for each of the four alternative courses of action (A, B, C, and D) that subjects had to decide upon. The results of a t-test done on each set of pairs was as follows:

Alternative A - the significance of the F-value was .913

Alternative B - the significance of the F-value was .109

Alternative C - the significance of the F-value was .843

Alternative D - the significance of the F-value was .121.

While the significance of the F-values for Alternative B and for Alternative D approached significance, neither quite made it. Therefore

the manipulation check showed that there were no significant differences in the answers that respondents gave to these two questions.

Other Checks

Since all individuals differ in cognitive development we can expect that, even in a situation where an overwhelming majority of respondents feel that there is an ethical content, some people will fail to recognize that ethical content. Faced with this situation, Vitell and Hunt (1990) suggest that the responses of such subjects be discarded since they do not meet even the initial criterion of the model, i.e., the perception of an ethical problem.

A question was included in the survey to check whether or not respondents perceived ethical content in the main scenario that was presented to them. The question asked was, "To what extent do you believe that the scenario which you have just read presents an ethical dilemma?" Subjects indicated their answer on a 7-point scale ranging from (1) "Not at all" to (7) "Definitely". A seven point scale was used rather than a Yes-No type question since respondents were thought to be likely to view the ethicality of any situation as a matter of degrees rather than a black and white issue. Any subject answering "Not at all" to this question was dropped from further analysis, as was suggested by Hunt and Vitell. Since all other subjects had indicated that they considered the scenario to contain at least some element of ethical meaning, their responses were considered valid and therefore included in the study. The distribution of results to this question are shown in Table

4-3. As a result of the responses given by subjects, 19 responses were dropped from further analysis.

Since the DIT has been around since 1972, and has undergone several revisions based on empirical results, we felt assured that its content could generally be regarded as posing ethically challenging situations to respondents. What we had to be sure of in the case of the DIT was that subjects were paying close enough attention to the scenarios that we could accept their responses as valid. One of the problems inherent in research such as this which aims to investigate topics which might be regarded as sensitive is that respondents may not answer in total honesty. There is likely to be a tendency to appear in a socially acceptable light. To compensate for this, Rest has included in the DIT an index which tests for meaninglessness of responses. This M-index (for meaninglessness) is a reliability check aimed at discarding those answers which do not appear to have been given much thought, but rather were arrived at in some meaningless way. M-index items have been written "to sound lofty and pretentious but not to mean anything" (Rest 1990). Such items were included not because they were representative of any particular stage, but rather because their very pretentiousness could attract the careless respondent who was more interested in how a response sounded than whether it made sense or not. Rest (1990) states, "If subjects consistently rate and rank the M items high, then we cannot be sure that the subject has the right test taking set, and the protocol must be discarded." An example of an item that has been included as a

meaningless statement is the following (taken from the scenario, "Heinz and the Drug"):

Whether the essence of living is more encompassing than the termination of dying, socially and individually.

This statement cannot be understood even apart from the scenario it is attached to. It certainly does not have any connection to the scenario that would allow it to have any real meaning. Therefore, a respondent who selected this answer as one of the important reasons for arriving at a conclusion as to what the best course of action to be taken in this particular situation would be, could be considered to have given a meaningless answer. Rest has allowed for a certain degree of meaninglessness to be acceptable (see the 1990 DIT Manual for details), but too many answers given in a thoughtless manner will invalidate all of a subject's responses. The results of using the M-index to eliminate meaningless responses is reported in Chapter 5.

The DIT includes another check on subject reliability, this one for consistency. After each story, or scenario, the subject is immediately asked what course of action they would take in such a situation. They are then presented with twelve statements which represent ideas that may or may not have been important to the subject in assessing what action to take. Subjects rate each statement on a 5-point scale. Then they are asked to rank the four statements which they considered to be the most important in their decision making (see Appendix A for the three-story

version of the DIT). It is therefore possible for a subject to be inconsistent by, for example, scoring one statement highest on the 5-point scale, but then ranking another statement as being the most important. Once again, Rest makes a slight allowance for some degree of inconsistency, but too many inconsistent answers will cause a subject's entire protocol to be dropped from the study. The rationale for this is that since inconsistency raises doubts about the seriousness with which the respondent approached the survey, it is better to discard that subject's data than allow them in. The results of this check for inconsistency as reported in Chapter 5.

Summary

In this chapter the experimental treatment has been set out, as well as the methods and measures that were used in the study. A 2 X 2 X 2 one-way anova within subjects design was proposed to examine the moderating effect of cognitive moral development in the Hunt-Vitell theory of ethics. The main measures used included the Defining Issues Test, which is a well established measure having been used in hundreds of previous studies, and a specific scenario which was proposed to tap into the teleological evaluations being made by the subjects in this study, namely purchasing agents. As such, the reliability and validity of the DIT have been accepted based on the extensiveness of past studies which have used it. Evidence for the robustness of the DIT has been offered in this chapter.

Chapter 5

Results

Overview of the Chapter

The bulk of this chapter will be dedicated to the analysis and interpretation of the results obtained from this study. However, to begin this chapter, the results obtained from pretesting the survey instrument that was used will be discussed. Following that, the actual results of the study will be presented. In order to facilitate the reading of the results of the study, they will be reported separately, by hypothesis.

Pre-test

Ferber (1977) has been critical of the widespread use of students in marketing research. Nonetheless, it was decided that for the purposes of pre-testing the proposed survey instrument to be used in this study, a sample of M.B.A. students from a large Mid-Atlantic university was an appropriate population. The reason for deciding that using M.B.A. students was appropriate was that the purpose of the pre-test was to establish whether, and to what extent, the main scenario that was to be used represented an ethical dilemma. In order to make this judgment it was not necessary that the pre-test sample be part of the proposed study sample. It was also felt that to use a subsection of the proposed final sample of purchasing agents in order to do the pre-test would reduce the chance of obtaining a final usable sample of at least 200 subjects.

The pre-test sample consisted of 19 M.B.A. students from an upper level marketing course. The instrument which was given to them consisted of two types of scenarios. First was the shortened form of the Defining Issues Test consisting only of three very short scenarios followed by a series of questions. Then came the longer scenario which represented an ethical situation in which a purchasing manager might find him/her self, followed by a number of questions aimed at measuring the dependent variables of teleological evaluation, ethical judgment, and behavioral intention. A manipulation check was also included to make sure that respondents recognized that the longer scenario evoked the intended response of desirability of consequence. No demographic questions were included in the pre-test. However, it was noted that the class was about evenly divided between males and females. It was emphasized that participation was entirely voluntary. Two points of class credit were given to those who took part as an incentive.

While all students who took part in the test were familiar with marketing terms, the following notice was read before the survey was handed out:

"You are being asked to take part in a pre-test for a survey that is to be used with purchasing agents. Therefore, where appropriate, please put yourself in the position of a purchasing agent for a large firm. (A purchasing agent is the person who contacts suppliers from other companies and tries to locate the most advantageous buys for components that are needed in the manufacture of a company's product.)"

When students had finished the questionnaire, they were asked to write answers to the following two questions:

1. What do you think the survey was about?

2. What were your impressions of the survey, both good and bad?

Finally, students were thanked for their participation in the pre-test and were dismissed. All of the students who were in class that day chose to take part.

Pre-test Results

Through the pre-test it was hoped to establish two main things. Firstly, whether the instrument could be held up as a true test of an ethical dilemma. Secondly, it was important to get from the pre-test an indication of how long it would take respondents to fill out the whole survey instrument.

Even before the pre-test stage, the main scenario had already gone through some drastic changes. Much work was done at the conceptual level to come up with a scenario that contained a situation that was likely to be perceived *by purchasing managers* as having an ethical content. The main scenario that was eventually presented to the pre-test subjects is included in Appendix A. This is the scenario that was used in the actual study. Pre-testing turned up no problem whatsoever with the main scenario or with the Defining Issues Test. Subjects were able to understand what was asked of them and to submit responses that could be used to calculate P-scores on the DIT and to generate the various dependent and independent variables required by the study. The survey took the class an average of 25 minutes to complete. Since the pre-test subjects were students who were used to taking pencil and paper type

tests, it was felt that 30 minutes might be a reasonable average time that could be expected from the population as a whole.

The open-ended questions revealed that it was very obvious from the survey instrument that this was a study about ethics. After some discussion, it was decided not to try and disguise the purpose of the study. This is because it was felt that doing so would necessarily add to the length of time that respondents would have to take to fill out the questionnaire. Time was felt to be a valuable commodity to the population that was to be sampled and it was therefore important not to impose on them too much. What was done in order to try and control this problem was to vary the order in which a respondent read the different scenarios. Since the pre-test subjects read the DIT first, followed by the purchasing dilemma (the main scenario), it was easy to realize that one was being asked to make explicitly ethical decisions. However, it was not so clear from the main scenario that ethics were the subject of inquiry. Some subjects therefore received a survey instrument where the main scenario was positioned before the DIT, and some subjects received the opposite - the DIT came first. All subjects were asked demographic questions at the end.

Sampling

In the spring of 1994 a mailing of 1736 pieces was sent out to registered members of the National Association of Purchasing Managers who belonged to the Carolinas-Virginia chapter. The mailing included a letter of introduction from Professor Monroe Murphy Bird, who is a well-

respected and active member of this organization, a cover letter asking for participants' help, and the survey questionnaire itself (see Appendix A for the survey instrument). It was estimated that the questionnaire would take about 30 minutes to complete, and this was stated in the cover letter. However, one respondent wrote back that it had taken only 15 minutes. Nevertheless, based on both the pretest results and on previous studies which have used the short form of the Defined Issues Test, an estimate of 30 minutes does seem to be more probable.

Three hundred and twenty three responses were obtained. Three letters were returned as undeliverable. This resulted in an effective response rate of 18.64%. This response rate compares with an expected response rate of about 20%. When asking questions that concern ethical situations, respondents are understandably somewhat reluctant to risk appearing less than ethical. Hence response rates are often deflated. In comparison, Singhapakdi and Vitell (1991) obtained a response rate of 26.54% using the membership list of the American Marketing Association as a sampling frame. Hunt, Chonko, and Wilcox (1984) obtained a 25.1% response rate using a similar AMA membership list. However, the response rate is low relative to other response rates that have been achieved in the social sciences. Therefore it needs to be recognized that the results of this study may not be generalizable.

As has been outlined previously, there were some strict guidelines set out by Rest for the elimination of those questionnaires that failed to meet some rather rigid criteria. Thirty-three questionnaires were dropped due to failing to meet the consistency criteria outlined in an

earlier chapter. Based on the measures which Rest incorporated into the DIT in order to weed out those responses which could be considered meaningless, a further 44 questionnaires had to be dropped from the study. Another two questionnaires were deemed to have insufficient information to be included in the study. In the end 244 usable responses were used to make up the study.

Results

The results section is organized by hypothesis. Each part of this section will begin by stating the hypothesis that was proposed, followed by a brief discussion of the results that were obtained for that hypothesis. A more detailed discussion of the meaning of the results given in this chapter will be offered in Chapter 6.

(Note: in order to be consistent in the labeling of these variables, and to allow the reader to more easily follow the discussion, the following shorthand will be used: 'Tel' refers to the respondents' scores on the scales measuring Teleological Evaluation; 'Ej' refers to the Ethical Judgment measure; 'Doc' to the Desirability of Consequences measure; and 'Bi' refers to Behavioral Intentions. Thus Tel1 refers to the score obtained for Alternative A (S+ O+) on the Teleological Evaluation scale, Tel2 to Alternative B (S+ O-), Tel3 to Alternative C (S- O+), and Tel 4 to Alternative D (S- O-). This labeling will be consistent for all the variables in this study).

Hypothesis 1:

H1 states: "Desirability of consequences will significantly affect teleological evaluations. Specifically, the more desirable the consequences of a particular action are to the individual, the more likely they are to positively evaluate that action."

This was further subdivided into:

H1_a: "The more positively an individual assesses the desirability to self in a specific situation, the more positively they will assess the teleological evaluation of that same situation."

and

H1_b: "The more positively an individual assesses the desirability to other in a specific situation, the more positively they will assess the teleological evaluation of that same situation."

Hypothesis 1 was examined by looking at the choices respondents made to the set of alternatives presented after the main scenario involving the purchasing management dilemma. In order to test this hypothesis, a comparison had to be made between those alternatives in which the subjects were given a choice that was positive towards the self (Alternatives A and B as shown below), and those alternatives in which the choice was positive for the other (Alternatives A and C). The following is how the alternatives were set up:

Alternative A is positive self, positive other, S+ O+

Alternative B is positive self, negative other, S+ O-

Alternative C is negative self, positive other, S- O+

Alternative D is negative self, negative other, S- O-

Therefore, $H1_a$ was tested by comparing the average rating given to alternatives A and B in comparison to alternatives C and D in the section that dealt with teleological evaluations. It was expected that if the mean rating for the A-B composite was significantly greater than the mean rating for the C-D composite, then $H1_a$ would be supported. Hence, we are looking to find whether $(Tel1 + Tel2)/2$ (i.e., positive outcomes to self) is significantly different from $(Tel3 + Tel4)/2$ (i.e., negative outcomes to self).

A t-test which was done on the average of Tel1 and Tel2, as opposed to the average of Tel3 and Tel4, yielded a t-value of 17.16, which is significant at the .000 level. The results of this test can be seen in Table 5-1. As expected, respondents very much preferred the alternatives in which the results to self were positive over those alternatives in which results to self were negative.

A similar test was performed in order to test $H1_b$. In this case however, the t-test was done on the average of Tel1 and Tel3 versus the average of Tel2 and Tel4, since these pairings represent alternatives with positive outcomes to the other, and alternatives with negative outcomes to the other, respectively. Once again, the test showed that there were significant differences in the means of these pairings. In this case the t-value was 30.81, significant at the .000 level. This test is shown in Table 5-2. As hypothesized, those alternatives with a positive outcome for other were rated significantly higher than those alternatives with a negative outcome for other.

In sum, these results indicate that H1 was clearly supported. Further discussion of the meaning of this result will be taken up in Chapter 6.

Hypothesis 2:

H2 states: "Teleological evaluations will significantly affect ethical judgments. The more positive a teleological judgment concerning a specific course of action is, the more likely one is to judge that action ethical."

This hypothesis was tested in two ways: firstly through correlations between the teleological evaluations and the ethical judgments, and secondly through regression analysis. Specifically, we correlated teleological evaluations for S+ O+ with ethical judgments for S+ O+; teleological evaluations for S+ O- with ethical judgments for S+ O-; and similarly with both S- O+ and S- O-. The correlations are shown in Table 5-3.

As can be seen from Table 5-3, the values which concern us here (i.e., those on the diagonal where Tel1 is correlated with Ej1, Tel2 with Ej2, etc.) all turn out to be significant at the .01 level. Thus, we found Hypothesis 2 to be supported.

In addition to the correlations, a regression analysis was performed. In this case, Tel1 was regressed against Ej1, Tel2 against Ej2, Tel3 against Ej3 and Tel4 against Ej4. The results of this analysis are shown in Table 5-4. Once again Hypothesis 2 is strongly supported. Chapter 6 will discuss in more detail the significance of these findings.

Hypothesis 3:

H3 states: "Intentions will be significantly influenced both by ethical judgments and by teleological evaluations."

Just as with the previous hypothesis, H3 can be tested through correlations between the relevant variables and also by regression analysis. In this case we are looking at the correlation between the respective behavioral intentions and a) the teleological evaluations, and b) the ethical judgments. Once again it is necessary to compare like with like (S+ O+ with S+ O+, etc.). Table 5-5 shows the correlations for behavioral intentions with all of the values for teleological evaluations and ethical judgments. The values which are important for testing Hypothesis 3 are underlined.

All of the relevant correlations are significant at the .01 level, and therefore Hypothesis 3 is strongly supported. From the evidence gained here we can conclude that there is a strong relationship in the model between intentions and ethical judgments, and between intentions and teleological evaluations.

The results from the regression analysis are shown in Table 5-6. All of the F-values are significant at the .000 level. Therefore the regression analysis also supports Hypothesis 3.

Hypothesis 4:

H4 states: "Cognitive Moral Development moderates the relationship between the situation (consisting of desirability of consequences to self versus others) and teleological evaluation."

In order to investigate this hypothesis, a MANOVA was run between teleological evaluation and CMD. Using a median split of CMD, the results failed to confirm Hypothesis 4 (see Table 5-7). The test for significance of between-subjects effects yielded an F-value of just .91. The significance of this F-value is .340. Further statistics generated by the analysis are reported in Table 5-8. Cell means are reported in Table 5-9.

Since a median split had failed to confirm Hypothesis 4, a tercile split was run. While the use of a tercile split of CMD tended to push the results more in the expected direction, it too lacked any significance (see Table 5-10). In this case the F-value of 1.54 was significant at the .217 level. Other statistics generated by the tercile split are reported in Table 5-11, with cell means reported in Table 5-12.

Although the two analyses performed above, using first a median split and then a tercile split, were based on the distribution of P-scores found in this study (see Table 4-11 for the P-score distribution), Rest himself has made recommendations for cutoff points for all four quartiles based on the large number of studies which have used the DIT. These recommended cut offs have been presented in Table 4-2. As it turns out, the recommendations given by Rest for the P-score cutoffs for both a median and for a tercile split exactly match those used in the present study. The present cutoffs were based on the data distribution. As a comparison, a quartile split analysis was done using the cut offs recommended by Rest. Whereas he recommended a P-score of 22 or lower as representing the First Quartile, using the sample under study here would have suggested a P-score of 23.33 for the same quartile.

Similarly, Rest suggested scores of 47 or higher represent the Fourth Quartile. In the present study, a score of 44 or higher would be needed to put a respondent into the Fourth Quartile.

The results of this quartile analysis based solely on the Rest recommendations can be seen in Table 5-13. It should be noted that both of the cut offs recommended by Rest were close to those found in the distribution of our sample. The results of this analysis were non-significant. Table 5-14 gives the cell means and standard deviations for the analysis.

In order to investigate the possibility that Hypothesis 4 did not turn out to be significant due to the presence of a covariate, manova analyses were rerun using several of the demographic variables as covariates. Results were still non-significant when size of company, years in purchasing, age, gender, marital status, race, education or salary were used as covariates. All of the results from the covariate analysis are shown in Appendix B.

Qualitative Analysis

Although there was no provision made in the survey instrument for subjects to supply qualitative answers, a small number of respondents nevertheless wrote something at the end of the questionnaire. In all there were five subjects who did this. Three of the five comments referred to the subjects' uncertainty as to whether they had understood the instructions correctly. The other two comments, which are shown below in their entirety, dealt with codes of ethics.

"The company as a whole doesn't have a code of ethics, but Purchasing does."

"It is very easy to identify personnel that apply ethics. Most purchasing persons I've come in contact with feel that they are very ethical, but only a small fraction actually are. Dealing with an ethical person is far more pleasurable than the alternative."

It is not possible to make any generalization from the small number of qualitative responses received, especially given that they were unsolicited. While there may have been some confusion about the instructions for some of the subjects, the majority of respondents had no comments to make on this matter. Had there been a major problem in understanding the instructions it could be expected that a far greater number of comments would have been received. Similarly, no conclusions can be reached based on the personal observations of the subjects which have been shown above.

Summary

In order to better understand the results reported here, a set of descriptive statistics and tables showing the distribution of key variables have been included in the Tables section. A discussion of the results pertaining to all four hypotheses is offered in Chapter 6. That Hypotheses 1, 2, and 3 came in as highly significant is certainly a positive contribution made by this dissertation. However, the biggest contribution to the existing body of knowledge in this area was hoped to be made by Hypothesis 4. Chapter 6 will explore some of the possible reasons that H4 did not turn out as expected. Since Hypothesis 4 may be

extremely sensitive to situational aspects, future research into this topic might entail the use of in-depth personal interviews to try and tap into this relationship.

Chapter 6

Discussion of Results

Overview of the Chapter

This chapter will set out to offer some explanations for the results presented in the previous chapter. In particular it will attempt to offer possible reasons for the disappointing results obtained for Hypothesis 4. Finally, some of the limitations of the study will be discussed, as well as the implications from the study's findings. In keeping with the presentation of Results, the findings will be discussed by hypothesis, with a final section that draws together the overall implications of the study as a whole.

Discussion of Results

Hypothesis 1:

H1 states: "Desirability of consequences will significantly affect teleological evaluations. Specifically, the more desirable the consequences of a particular action are to the individual, the more likely they are to positively evaluate that action."

The clear purpose of Hypothesis 1 was to look at how the importance of the situation in which decision makers find themselves affects the teleological evaluations that they make. Desirability of consequences was taken to represent the situation in which a person would arrive at a teleological evaluation. More specifically, all four of the elements that make up the situation are; perceived consequences, probabilities of consequences, and importance of stakeholders as well as desirability of

consequences. In order to allow for a clear interpretation of the effect which the situation had on teleological evaluations, it was decided to manipulate the strongest element of the situation, namely the desirability of consequences, and hold the remaining three elements constant.

The results obtained from Hypothesis 1 (as reported in Chapter 5) indicate very strongly that situation (at least insofar as situation can be represented by desirability of consequences) plays a major role in teleological evaluation. This should come as no surprise since by definition a teleological decision entails taking the expected results of an action into account whenever one is deciding whether or not to engage in that action. Nonetheless, as self-evident as the results of Hypothesis 1 may be, this component of the Hunt-Vitell model had not been previously examined as thoroughly. Since the General Theory of Marketing Ethics is in the early stages of being investigated, any evidence that can be demonstrated to add to what is known about the links between components within the model is valuable.

Hypothesis 1 had been subdivided into:

H1_a: "The more positively an individual assesses the desirability to self in a specific situation, the more positively they will assess the teleological evaluation of that same situation."

and

H1_b: "The more positively an individual assesses the desirability to other in a specific situation, the more positively they will assess the teleological evaluation of that same situation."

Hypothesis 1_a dealt with subjects' evaluation of how important it was to them that they should benefit from the decision being made (i.e., the 'self positive' condition). As expected, this was a very important factor for the decision makers. While Hypothesis 1_b, the 'other positive' condition, was also significant (as expected), it was somewhat surprising to note that the relationship pertaining to others (H1_b) was more pronounced than that pertaining to the self (H1_a). The t-values were 17.16 for H1_a, versus 30.81 for H1_b. Since both results are significant at the .000 level, there is no need to put too much weight on this outcome. Nonetheless, it could be enlightening to postulate as to why these results indicate a greater emphasis being placed on the well-being of the other as opposed to that placed on the self.

One of the first answers that springs to mind is that subjects may have been aware that this survey was trying to examine questions of ethics. A natural reaction would then be to answer in such a way so as to be seen to be ethical. Even the promise of anonymity may not have been enough to prevent this effect from occurring.

A second possibility may be that purchasing managers in general have come to possess a heightened awareness of the ethical content of the situations in which they must do their job. This may be due to the fact that their job tends to put them in the public eye. Unlike many people working in business who do most of their work inside the relatively safe

environment of an office, purchasing managers are out there interacting with employees from other companies. The decisions they make can have impacts on many others, especially when large contracts are being negotiated. Much has been written on the ethical problems that purchasing managers must face. Some of the articles have been critical. Therefore this heightened awareness could be a response to outside criticism.

A final suggestion for this result may be that the sample of subjects who responded were those purchasing managers who were more interested in the ethical aspects of their jobs in the first place. It is likely that an interest in ethics will lead to more ethical behavior. In short, this sample may have been made up of people who were predominantly ethical to begin with.

Hypothesis 2:

H2 states: "Teleological evaluations will significantly affect ethical judgments. The more positive a teleological judgment concerning a specific course of action is, the more likely one is to judge that action ethical."

This hypothesis was offered in order to add to the growing knowledge of the Hunt-Vitell model. Other studies had also looked at the relationship between teleological evaluations and ethical judgments (Mayo and Marks 1990, Vitell and Hunt 1990). Since it was felt that research into the model was still in the growing stages, this hypothesis was included to further strengthen what we know about the core relationships in the General Model of Marketing Ethics.

The results, as shown on in Tables 5-3 and 5-4, strongly support Hypothesis 2. Correlations were made between all of the teleological evaluations (Tel1 - Tel4) and all of the values for ethical judgments (Ej1 - Ej4). These are shown in Table 5-3. We were looking to find whether the teleological evaluation and the ethical judgment for each specific scenario would correlate significantly. For example, the important correlation for Tel1 was that with Ej1. Similarly, Tel2 with Ej2, etc. The results show strong support for Hypothesis 2. All four of the correlations which concern us here were significant at the .01 level. These four were also positively correlated. While several of the other values in the correlation table were significant at either the .05 or the .01 level, no other correlations in the table were as high as these four.

Table 5-5 shows the results from the regression analysis, and these corroborate the correlations. In each case we find values of F that are significant at .000.

The interpretation of these results is that the relationship at the center of the Hunt-Vitell model is supported. That is, the teleological evaluation that one arrives at is an important input into the ethical judgment which a decision maker ultimately chooses.

Of course, it was not the intention of this study to look at the other important direct input into the ethical judgment, the deontological evaluation. In the Hunt-Vitell model, teleological and deontological evaluations play an equally important part in forming the ethical judgment. The nature of this study was such that only one side of this equation could be examined (due to the lengthy questionnaire that would

have otherwise been required), and it was decided to look at the teleological evaluation. Future studies will need to take into account not only the deontological evaluation, but also look at some of the factors which go into combining the deontological and the teleological. Hunt and Vitell have offered no suggestions as to how these two separate evaluations are combined. Indeed, there may not be an easy or straightforward combination rule. Nonetheless, it should be possible for future studies to look at some of the factors which will tend to push people toward using one over the other, or some combination of the two evaluations. Personality factors, situational factors, upbringing, personal beliefs and education are some of the factors which might be expected to play an important part at this stage of the model. For example, a strict religious upbringing in which a child is formally instructed that it is always wrong to engage in a particular behavior would theoretically predispose one to rely more heavily on deontological norms than on teleological norms, unless other environmental factors impinge on the individual. Culture can be seen to play a part too. Being brought up in a more liberal or free-thinking environment would suggest that one is less likely to feel comfortable with strictly following the letter of the law in regards to some deontological rule one was given as a youngster. The extent to which each of the factors outlined along the left- hand side of the Hunt-Vitell model (Figure 3-1) might predispose an individual towards the predominance of deontological or teleological reasoning is a promising area for future study.

Hypothesis 3:

H3 states: "Intentions will be significantly influenced both by ethical judgments and by teleological evaluations."

It will be remembered that in the Hunt-Vitell model, ethical judgments feed directly into behavioral intentions, while teleological evaluations act as a moderator in behavioral intentions (see Figure 3-1). Behavioral intentions are included in the model as a mediator between ethical judgments and actual behaviors, since, as Fishbein and Ajzen (1975) point out, judgments do not always lead directly to behaviors. One may fully intend to do something, yet fail to do it in the end.

Once again, this hypothesis was tested through both correlation and regression analysis. The correlations are shown in Table 5-5, and the results of the regression are shown in Table 5-6. In the case of the correlations, we are seeking to match up first of all the teleological evaluations with the appropriate behavioral intentions, and secondly, the ethical judgments with the corresponding behavioral intentions. So Tel1 is expected to correlate with Bi1, Tel2 with Bi2, etc., and Ej1 with Bi1 and so on.

The correlations were all positive and significant at the .01 level, as hypothesized. In fact, these results offer some very strong support for Hypothesis 3. While there are other correlations in the matrix that come out as significant, none appear as strong as do the eight with which we are concerned.

As with the previous hypothesis, we found that the regression results for Hypothesis 3 strongly backed up the correlations. All of the F-values were large enough to be significant at the .000 level.

These results offer support for the relationships as postulated by Hunt and Vitell. That ethical judgments should an impact on behavioral intentions is fairly straightforward. One can expect that having come to a decision as to what is the most ethical course of action to pursue in a given situation that one would use that decision as input in deciding how to act. But why should teleological evaluation, which has already fed into ethical judgment, serve as a predictor for behavioral intentions? The results from this study strongly point to this being what in fact does take place.

Even if a decision maker has arrived at a conclusion as to what the most ethical course of action in a particular situation may be, the model is saying at this point that this does not necessarily mean that they must commit themselves to such action. At this late point in the decision process one may still change one's mind and the mechanism for doing so is an evaluation of the consequences of following through on what appears to be the most ethical course of action. This in fact makes sense. People do not always act in the most ethical way that is available to them. In fact there are many examples of downright unethical behavior. But are we to presume that unethical behavior springs from a lack of knowledge of what is ethical? The Hunt-Vitell model allows that people may be fully cognizant of the most ethical behavior and yet choose

to disregard it. In fact this is what being unethical is really all about - making choices for behavior that one knows are not right.

Not only might one choose to ignore the ethical path for a motive such as personal gain, but one might also act unethically for the purpose of protecting someone else. Both of these courses of actions are allowed in the model through the mediating affect of teleological evaluations on behavioral intentions. But one might ask whether this mediating action should be included in the model since factors such as desirability of consequences, importance of stakeholders, perceived consequences, and probabilities of consequences have already been included at an earlier stage of the model. The reason for having teleological evaluation act as a predictor is that deontological evaluation plays an important part in forming ethical judgment. All of the considerations of consequences have been included in the lower half of the model, i.e., those inputs which lead to the teleological evaluation. Since there is no explicit combination rule for how teleological and deontological evaluation combine, the role of teleological evaluation as a predictor of behavioral intentions really serves as a fail-safe device. Otherwise deontological evaluations might outweigh other considerations and one might find oneself engaging in an activity which one really does not want to engage in. However, the main point in regard to this study is that the effect of teleological evaluation on behavioral intentions is given very strong support. Still, it is necessary to stand back from the model as examined in this study, and to look at the whole model, including the deontological element to see why

this relationship is important in the overall picture - it serves as a possible check against doing something against one's will.

Hypothesis 4:

H4 states: "Cognitive Moral Development moderates the relationship between the situation (consisting of desirability of consequences to self versus others) and teleological evaluation."

While it was heartening to obtain such strong support for all of the previous hypotheses, it was Hypothesis 4 that comprised the major contribution of this study. If cognitive moral development was to play a more central role in the Hunt-Vitell model, it was thought that it might serve as a moderator between the situation, as previously defined, and teleological evaluation. That is, there ought to be a significant difference in how those high in CMD respond to a situation with an ethical content, as opposed to how those low in CMD respond to that same situation. Since all people, regardless of level of CMD, could be expected to favor a situation where both self and other gain, and to dislike a situation where both self and other lose, the difference between the high CMD and low CMD conditions should be seen most clearly for those alternative scenarios where self and other do not share the same outcome. Specifically, this difference should be seen in how subjects responded to Alternative B, where the outcome to self is positive while the outcome to the other is negative, and also in their responses to Alternative C where the outcomes were set up to be negative to self and positive to the other.

However, as reported in Chapter 5, neither a median nor a tercile split of level of CMD was able to yield significant results (see Tables 5-7 and 5-10). Certainly there was a wide enough range of level of CMD p-scores to produce results (the lowest CMD score was 3.33 and the highest was 76.67).

So the question remains, why did Hypothesis 4 fail to get support?

One answer that springs to mind is that other factors can be expected to play a role here too. It is not likely that two people who are measured at the same level of CMD will always make the same decisions even in a case with an ethical element to it. As has been mentioned previously, culture, religion, personal experiences, background and many more factors go into making us who we are. It would seem, based on the results obtained in this study, that perhaps some other factor or factors may need to be considered along with CMD if it is to play such a central role in the General Theory of Marketing Ethics.

On the other hand, all of the factors that have just been mentioned are already accounted for in the Hunt-Vitell model. It has been the position of this dissertation that CMD plays a more central role in the model than that assigned to it by Hunt and Vitell. Another possible reason for the failure to achieve better results for Hypothesis 4 could be that the role Hunt and Vitell assign to CMD (see Figure 3-1) is more accurate. More study needs to be done on this issue in order to clarify it.

Another question that needs to be raised in the light of the poor results from H4 is whether or not the manipulation that was performed was strong enough. Certainly alternatives A and D of the purchasing manager

scenario performed as anticipated. Could it be that alternatives B and/or C did not evoke the expected result? Research that is being performed with scenarios such as the one used here does not yet have the standards of stringency that are attached to more traditional research (such as statistical methods) because the use of scenarios is still in its infancy. One suggestion that can be made here is to examine some of the scenarios used by other researchers (such as Mayo and Marks 1990) to see if the same results can be obtained as were obtained in the original studies. Just because work with scenarios has not yet reached the heights of scientific accuracy and reliability that other methods have reached is certainly no reason to abandon this method. The use of scenarios has much to offer in the area of the social sciences and ought to be encouraged. Also, the use of in-depth interviews to examine Hypothesis 4 could be a source of much information that was unavailable given the survey methods used here. As the stringency and knowledge of how in-depth interviews are conducted increases, they are becoming more widely made use of in marketing research.

A third possible reason for this disappointing result is the possibility that the sample tended to be somewhat homogeneous in terms of their level of awareness of ethical issues (as opposed to their level of CMD). The pretest results suggested that subjects could tell the purpose of the survey. If that was so, then we could expect that those members of the sample population who were less ethical than their colleagues would be loath to fill out the instrument and send it back. If the final sample did indeed consist of a group of individuals all of whom had a high level of

ethical awareness, then it could be expected that the groups would not differ much. The possibility that the sample with which we were dealing was one that may already be alert to ethical issues suggests that any potential subject who did not want to risk appearing to be unethical may have decided not to bother with responding to this survey.

Summary

This section deals with the overall implications that can be drawn from the results of this study. It also makes use of previous findings of studies that looked at the General Theory of Marketing Ethics and tries to tie them together.

The positive contribution of Hypotheses 1, 2 and 3 is that they add to the accumulating body of knowledge in relation to the Hunt-Vitell model. Two previous studies which attempted to take an empirical look at the General Theory of Marketing Ethics (Mayo and Marks 1990, Vitell and Hunt 1990) both end with calls for future researchers examine the relationships postulated in the model. An attempt to do so was made here. The findings of this research therefore add to the growing body of evidence that is accumulating in regards to the General Theory of Marketing Ethics. Hypotheses 1 through 3 are in agreement with the results obtained in previous empirical studies. Since the model is in the early stages of being researched, these hypotheses do add to marketers' understanding of the model.

Goolsby and Hunt (1992) were the first to introduce the idea of looking more closely at the role of cognitive moral development in the General Theory of Marketing Ethics. That Hypothesis 4 failed to turn up significant results does not mean that CMD's role in the model is not more central than Hunt and Vitell presently assign it to. Further conceptual and empirical work needs to be done to try and see if CMD is a factor at the center of the ethical decision making process.

Managerial Implications

One factor that this study has shown to be very important in the ethical decision making process is the situation. This has implications for those involved in management. The first point to make is that a manager needs to be aware that situations can influence employees' decisions. Education in the area of helping workers to discern potentially troubling situations, and once spotted how to deal with them, is important. Indeed, this is one of the possible reasons that has been given for the lack of significant findings in Hypothesis 4 - due to past experiences and even criticism from outside, purchasing managers may have become particularly able to spot issues of ethical concern and then to deal with them more appropriately than workers in other functional areas of a company.

A second possible implication for managers may be to more carefully screen potential employees for their sensitivity to ethical concerns than has been done in the past. Based on the accumulated evidence of many studies, Rest's Defining Issues Test could be accepted as an accurate test

of the ethical level of a potential employee. Nothing discovered in this dissertation could be said to undermine the reliability of the Rest instrument. However, very few interviewers are inclined to ask questions about a candidate's ethics, unless that industry has come in for public criticism in the not too distant past. But it is clear that the subject of holding business to higher ethical standards is very much with us and will not (and should not) go away. The fact that a company may become known for its policy of ethical screening could very well tend to attract the kind of candidate that the company is looking for in the first place. At the very least such a policy is likely to deter the more unethical.

Limitations

Several of the limitations of the study have already been mentioned in conjunction with why Hypothesis 4 did not turn out as expected. This section deals with those limitations which apply to the study as a whole and not just H4.

It seems very possible that there may have been some self-selection going on. That is, those people who were more likely to be interested in ethics may have been more likely to answer the survey. While the distribution of CMD scores suggests that this may not be the case, the point being made here is not that the respondents were high in CMD, but that they were interested in ethics. As has been stated previously, this is very feasible due to the public focus on possible unethical behavior in the job of purchasing.

The use of single item measures for desirability of consequences, ethical judgments and teleological evaluations is problematical. Certainly it would have been better to use multi-item measures. The issue of time (i.e., it was felt that busy purchasing managers would not have the time to fill in a long questionnaire) may have been exaggerated. In retrospect it would have been better to have sent out a stronger set of measures.

The use of the Defining Issues Test in a mail survey may differ from its use in a classroom type setting. Research needs to be done to determine if the same standards of validity and reliability would hold true. In the past most of the work done with the DIT has been on a face-to-face basis. While there is no evidence that subjects in this particular study had problems understanding how to fill in the instrument, this factor ought to be considered.

Future research in this area can address these limitations by using samples drawn from disparate areas of the business world and by ensuring that multi-item measures are used.

Conclusion

The strong support that was found for three hypotheses in this study suggests that our understanding of the Hunt-Vitell model has been somewhat furthered. In the early stages of coming to construct and understand a model such as the General Theory of Marketing Ethics, these kind of confirmations can be very useful. It is important that other links in the model also undergo examination to see if they hold up. While the

results obtained in regards to Hypothesis 4 are disappointing, they too add a little to the growing knowledge about the Hunt-Vitell model that is slowly accumulating.

Finally, in looking toward the future of research in this area, we can see that ethics plays an important part in the role of marketing in society. More and more companies who cross certain unethical lines are being called to answer for their actions by a public that is realizing it is they who possess the real power in the marketplace. For that reason alone, firms need to keep a sharp eye out on their business practices. Companies around the globe are learning that there is a market for good ethical practices

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TABLES

Table 4-1

Correlations of Stage Scores of the 3-story Form with the 6-story Form
of the Defining Issues Test.

Stage	2	3	4	5a	5b	6	M
Correlation	.75	.87	.82	.88	.57	.88	.78

NOTE: This table reads as follows - The correlation of the 3-story form with the 6-story form of the Defining Issues Test on Stage 2 is .75.

M denotes the Meaninglessness check.

(From Rest 1990)

Table 4-2

Recommended Cut Offs on the P score of the Defining Issues Test

	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
P-score	0 - 22	23 - 34	35 - 46	47 and up

	Low Third	Middle Third	High Third
P-score	0 - 27	28 - 41	42 and up

NOTE: These cut off scores are for both the 3-story and the 6-story versions of the Defining Issues Test.

Table 4-3

Distribution of Responses to the Following Question:

"To What Extent Do You Believe That The Scenario Which You Have Just Read Presents An Ethical Dilemma?"

Value	Frequency	Percent	Cum Percent
1	19	7.9	7.9
2	24	9.8	17.7
3	24	9.8	27.5
4	31	12.7	40.2
5	45	18.4	58.6
6	45	18.4	77.0
7	51	20.9	97.9
Missing	5	2.0	100.0
TOTAL	244	100	

Table 4-4

Distribution of Age

Age	Frequency	Percent	Cum Percent
<26	0	0.0	0.0
26-30	10	4.2	4.2
31-35	27	11.3	15.5
36-40	45	19.0	34.5
41-45	49	20.5	55.0
46-50	48	20.2	75.2
51-55	31	13.0	88.2
56-60	16	6.8	95.0
61-65	12	5.0	100.0

Table 4-5

Distribution of Sex

Sex	Frequency	Percent	Cum Percent
Male	163	67.1	67.1
Female	80	32.9	100.0

Table 4-6

Distribution of Marital Status

Status	Frequency	Percent	Cum Percent
Married	207	85.2	85.2
Single	13	5.3	90.5
Divorced	19	7.8	98.4
Widowed	2	.8	99.2
Separated	2	.8	100.0

Table 4-7

Distribution of Race

Race	Frequency	Percent	Cum Percent
White	227	93.0	93.8
Black	12	5.0	98.8
Hispanic	2	.8	99.6
Asian	1	.4	100.0

Table 4-8

Distribution of Education

Highest Level	Frequency	Percent	Cum Percent
High School	22	9.1	9.1
2 year College	43	17.7	26.8
Trade School	3	1.2	28.0
4 year College	126	51.9	79.9
Graduate School	49	20.1	100.0

Table 4-9

Experience and Age of the Sample Population:
(Descriptive Statistics)

	Mean	Standard Deviation	Min	Max
Years in Purchasing	14.959	8.228	0	41
Age	44.613	8.597	26	45

Table 4-10

Descriptive Statistics of the Variables

	Mean	Standard Deviation	Minimum	Maximum
CMD	36.503	15.834	3.33	76.67
Tel1 (S+O+)	6.272	.967	1	7
Tel2 (S+O-)	2.833	1.605	1	7
Tel3 (S-O+)	4.292	1.623	1	7
Tel4 (S-O-)	1.679	1.048	1	6
Ej1 (S+O+)	6.617	.748	2	7
Ej2 (S+O-)	2.996	1.912	1	7
Ej3 (S-O+)	5.590	1.458	1	7
Ej4 (S-O-)	2.339	1.719	1	7
Doc1 (S+O+)	6.364	1.006	1	7
Doc2 (S+O-)	2.479	1.634	1	7
Doc3 (S-O+)	4.357	1.779	1	7
Doc4 (S-O-)	1.722	1.208	1	7
Bi1 (S+O+)	88.253	20.219	0	100
Bi2 (S+O-)	25.046	28.673	0	100
Bi3 (S-O+)	56.953	31.783	0	100
Bi4 (S-O-)	10.758	19.384	0	100

NOTE:

Tel1 is the teleological evaluation for self positive, other positive
 Tel2 is the teleological evaluation for self positive, other negative
 Tel3 is the teleological evaluation for self negative, other positive
 Tel4 is the teleological evaluation for self negative, other negative
 Ej1 is the ethical judgment for self positive, other positive
 Ej2 is the ethical judgment for self positive, other negative
 Ej3 is the ethical judgment for self negative, other positive
 Ej4 is the ethical judgment for self negative, other negative
 Doc1 is the desirability of consequences for self positive, other positive
 Doc2 is the desirability of consequences for self positive, other negative
 Doc3 is the desirability of consequences for self negative, other positive
 Doc4 is the desirability of consequences for self negative, other negative
 Bi1 is the behavioral intention for self positive, other positive
 Bi2 is the behavioral intention for self positive, other negative
 Bi3 is the behavioral intention for self negative, other positive
 Bi4 is the behavioral intention for self negative, other negative

Table 4-11

Distribution of P-scores of the CMD Measure

Value	Frequency	Percent	Cum Percent
3.33	2	.8	.8
6.67	4	1.6	2.5
10.00	4	1.6	4.1
13.33	8	3.3	7.4
16.67	14	5.7	13.1
20.00	13	5.3	18.4
23.33	17	7.0	25.4
26.67	19	7.8	33.2
30.00	15	6.1	39.3
33.33	19	7.8	47.1
36.67	24	9.8	57.0
40.00	20	8.2	65.2
43.33	15	6.1	71.3
46.67	20	8.2	79.5
50.00	15	6.1	85.7
53.33	4	1.6	87.3
56.67	5	2.0	89.3
60.00	4	1.6	91.0
63.33	8	3.3	94.3
66.67	4	1.6	95.9
70.00	4	1.6	97.5
73.33	5	2.0	99.6
76.67	1	.4	100.0

NOTE: The P-score indicates the relative importance given by the individual to responses typical of a person at the Principled Stage of Cognitive Moral Development (i.e., stage 5 or 6 in Kohlberg's typology).

Table 5-1

Results Pertaining to Hypothesis 1_a

<u>Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>		
Tel A	240	4.5500	.919	.059		
Tel B	240	2.9854	.951	.061		
(Difference) <u>Mean</u>					<u>t-Value</u>	<u>2-tail Probability</u>
1.5646					17.16	.000

Note that Tel A represents the average of Tel1 and Tel2 (the positive outcomes to self), while Tel B represents the average of Tel3 and Tel4 (the negative outcomes to self).

NOTES: Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Table 5-2

Results Pertaining to Hypothesis 1_b

<u>Variable</u>	<u>Cases</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>
Tel C	240	5.2792	.905	.058
Tel D	240	2.2562	1.043	.067

<u>(Difference) Mean</u>	<u>Standard Deviation</u>	<u>Standard Error</u>	<u>t-Value</u>	<u>Degrees of Freedom</u>	<u>2-tail Probability</u>
3.0229	1.520	.098	30.81	239	.000

Note that Tel C represents the average of Tel1 and Tel3 (the positive outcomes to other), while Tel D represents the average of Tel2 and Tel4 (the negative outcomes to other).

NOTES: Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Table 5-3

Results Pertaining to Hypothesis 2 (Correlational Analysis)

	<u>Ej1</u>	<u>Ej2</u>	<u>Ej3</u>	<u>Ej4</u>
Tel1	<u>.5902**</u>	.0591	-.0225	.0730
Tel2	.0475	<u>.7028**</u>	.0088	.1187
Tel3	-.2237**	-.1926**	<u>.5149**</u>	-.1349*
Tel4	-.1623*	.1064	.0120	<u>.4635**</u>

NOTES:

* indicates significant at .05

** indicates significant at .01

The underlined values in the table are those which concern us here. As can be seen, all four correlations are significant at the .01 level.

Tel1 represents the teleological evaluation for self positive, other positive
 Tel2 represents the teleological evaluation for self positive, other negative
 Tel3 represents the teleological evaluation for self negative, other positive
 Tel4 represents the teleological evaluation for self negative, other negative

Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Ej1 represents the ethical judgment for self positive, other positive
 Ej2 represents the ethical judgment for self positive, other negative
 Ej3 represents the ethical judgment for self negative, other positive
 Ej4 represents the ethical judgment for self negative, other negative

Ethical judgments (Ej1, Ej2, Ej3, and Ej4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Please rate this alternative as to how ethical an action you believe it to be." Responses were recorded on a 7-point scale anchored at "Very Unethical" (1) and "Very Ethical" (7).

Table 5-4

Results Pertaining to Hypothesis 2 (Regression Analysis)

Dependent Variable	Independent Variable	Beta	R Square	F value	Signif. F
Ej1	Tel1	.567844	.32245	89.94501	.0000
Ej2	Tel2	.698988	.48858	180.56211	.0000
Ej3	Tel3	.481884	.23221	57.16163	.0000
Ej4	Tel4	.434134	.18847	42.89398	.0000

NOTES:

Tel1 represents the teleological evaluation for self positive, other positive
 Tel2 represents the teleological evaluation for self positive, other negative
 Tel3 represents the teleological evaluation for self negative, other positive
 Tel4 represents the teleological evaluation for self negative, other negative

Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Ej1 represents the ethical judgment for self positive, other positive
 Ej2 represents the ethical judgment for self positive, other negative
 Ej3 represents the ethical judgment for self negative, other positive
 Ej4 represents the ethical judgment for self negative, other negative

Ethical judgments (Ej1, Ej2, Ej3, and Ej4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Please rate this alternative as to how ethical an action you believe it to be." Responses were recorded on a 7-point scale anchored at "Very Unethical" (1) and "Very Ethical" (7).

Table 5-5

Results Pertaining to Hypothesis 3 (Correlational Analysis)

	Bi1	Bi2	Bi3	Bi4
Tel1	<u>.5262**</u>	-.0682	-.0419	-.0341
Tel2	-.0750	<u>.6605**</u>	-.1168	.0589
Tel3	-.2005**	-.1266	<u>.6469**</u>	-.0928
Tel4	-.0836	.0508	-.0209	<u>.5579**</u>
Ej1	<u>.5305**</u>	.0215	-.1972**	-.0947
Ej2	.0218	<u>.7074**</u>	-.1884**	.0673
Ej3	-.1358*	-.0010	<u>.4284**</u>	.0792
Ej4	.0164	.0848	-.0964	<u>.4788**</u>

NOTES:

* indicates significant at .05

** indicates significant at .01

Tel1 represents the teleological evaluation for self positive, other positive
 Tel2 represents the teleological evaluation for self positive, other negative
 Tel3 represents the teleological evaluation for self negative, other positive
 Tel4 represents the teleological evaluation for self negative, other negative
 Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Ej1 represents the ethical judgment for self positive, other positive
 Ej2 represents the ethical judgment for self positive, other negative
 Ej3 represents the ethical judgment for self negative, other positive
 Ej4 represents the ethical judgment for self negative, other negative
 Ethical judgments (Ej1, Ej2, Ej3, and Ej4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Please rate this alternative as to how ethical an action you believe it to be." Responses were recorded on a 7-point scale anchored at "Very Unethical" (1) and "Very Ethical" (7).

Bi1 represents the behavioral intention for self positive, other positive
 Bi2 represents the behavioral intention for self positive, other negative
 Bi3 represents the behavioral intention for self negative, other positive
 Bi4 represents the behavioral intention for self negative, other negative
 Behavioral intentions (Bi1, Bi2, Bi3, and Bi4) were measured by asking subjects to respond to the following statement after each alternative scenario: "How likely is it that you would adopt this alternative?." Responses were recorded on a scale ranging from 0% ("I would definitely NOT choose this alternative") to 100% (I would definitely choose this alternative).

Table 5-6

Results Pertaining to Hypothesis 3 (Regression Analysis)

Dependent Variable	Independent Variables	Beta	R Square	F value	Signif. F
Bi1	Tel1	.347057	.34463	49.43095	.0000
	Ej1	.315782			
Bi2	Tel2	.253504	.51106	98.25322	.0000
	Ej2	.514321			
Bi3	Tel3	.573146	.41291	66.11123	.0000
	Ej3	.124674			
Bi4	Tel4	.436384	.35927	52.70860	.0000
	Ej4	.263026			

NOTES:

Tel1 represents the teleological evaluation for self positive, other positive
 Tel2 represents the teleological evaluation for self positive, other negative
 Tel3 represents the teleological evaluation for self negative, other positive
 Tel4 represents the teleological evaluation for self negative, other negative
 Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Ej1 represents the ethical judgment for self positive, other positive
 Ej2 represents the ethical judgment for self positive, other negative
 Ej3 represents the ethical judgment for self negative, other positive
 Ej4 represents the ethical judgment for self negative, other negative
 Ethical judgments (Ej1, Ej2, Ej3, and Ej4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Please rate this alternative as to how ethical an action you believe it to be." Responses were recorded on a 7-point scale anchored at "Very Unethical" (1) and "Very Ethical" (7).

Bi1 represents the behavioral intention for self positive, other positive
 Bi2 represents the behavioral intention for self positive, other negative
 Bi3 represents the behavioral intention for self negative, other positive
 Bi4 represents the behavioral intention for self negative, other negative
 Behavioral intentions (Bi1, Bi2, Bi3, and Bi4) were measured by asking subjects to respond to the following statement after each alternative scenario: "How likely is it that you would adopt this alternative?." Responses were recorded on a scale ranging from 0% ("I would definitely NOT choose this alternative") to 100% (I would definitely choose this alternative).

Table 5-7

Results Pertaining to Hypothesis 4

(Manova Using a Median Split)

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development. In this case, the results are reported for a MEDIAN split.

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	334.83	216	1.55		
CONSTANT	12223.23	1	12223.23	7885.23	.000
CMD	1.42	1	1.42	.91	.340

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	1250.24	648	1.93		
TEL	2547.58	3	849.19	440.14	.000
CMD BY TEL	.20	3	.07	.03	.991

NOTES:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development. In this case, the results are reported for a MEDIAN split.

Table 5-8
Results Pertaining to Hypothesis 4
(Additional Statistics of MANOVA Using a Median Split)

Tests involving 'TEL' Within-subject Effect

Mauchly sphericity test, W = .76768
 Chi-square approx. = 56.76899 with 5 D.F.
 Significance = .000

Greenhouse-Geisser Epsilon = .83963
 Huynh-Feldt Epsilon = .85429
 Lower-bound Epsilon = .33333

EFFECT ... CMD BY TEL

Multivariate Tests of Significance (S = 1, M = 1/2, N = 106)

<u>Test Name</u>	<u>Value</u>	<u>Exact F</u>	<u>Hypoth. D.F.</u>
Pillais	.00060	.04258	3.00
Hotellings	.00060	.04258	3.00
Wilks	.99940	.04258	3.00
Roys	.00060		

Note . . . F statistics are exact.

EFFECT ... TEL

Multivariate Tests of Significance (S = 1, M = 1/2, N = 106)

<u>Test Name</u>	<u>Value</u>	<u>Exact F</u>	<u>Hypoth. D.F.</u>
Pillais	.89277	593.87747	3.00
Hotellings	8.32539	593.87747	3.00
Wilks	.10723	593.87747	3.00
Roys	.89277		

Note . . . F statistics are exact.

Table 5-9

Cell Means and Standard Deviations for Test of Hypothesis 4 Using Median Split

VARIABLE ...TEL1 (Self positive, Other positive)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	6.317	0.927	101
CMD	High	6.222	1.035	117
All		6.266	0.985	218

VARIABLE ...TEL2 (Self positive, Other negative)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	2.832	1.662	101
CMD	High	2.761	1.535	117
All		2.794	1.592	218

VARIABLE ...TEL3 (Self negative, Other positive)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	4.277	1.626	101
CMD	High	4.239	1.654	117
All		4.257	1.637	218

VARIABLE ...TEL4 (Self negative, Other negative)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	1.752	1.108	101
CMD	High	1.632	1.027	117
All		1.688	1.062	218

Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Table 5-10
Results pertaining to Hypothesis 4
(Manova Using a Tercile Split)

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	194.96	133	1.47		
CONSTANT	7719.41	1	7719.41	5266.05	.000
CMD	2.25	1	2.25	1.54	.217

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	713.33	399	1.79		
TEL	1650.01	3	550.00	307.64	.000
CMD BY TEL	2.18	3	.73	.41	.748

NOTES:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development. In this case, the results are reported for a TERCILE split.

Table 5-11
Results Pertaining to Hypothesis 4
(Additional Statistics of MANOVA Using a Tercile Split)

Tests involving 'TEL' Within-subject Effect

Mauchly sphericity test, W = .70868
 Chi-square approx. = 45.35810 with 5 D.F.
 Significance = .000

Greenhouse-Geisser Epsilon = .81667
 Huynh-Feldt Epsilon = .83940
 Lower-bound Epsilon = .33333

EFFECT ... CMD BY TEL

Multivariate Tests of Significance (S = 1, M = 1/2, N = 64 1/2)

<u>Test Name</u>	<u>Value</u>	<u>Exact F</u>	<u>Hypoth. D.F.</u>
Pillais	.01451	.64311	3.00
Hotellings	.01473	.64311	3.00
Wilks	.98549	.64311	3.00
Roys	.01451		

Note . . . F statistics are exact.

EFFECT ... TEL

Multivariate Tests of Significance (S = 1, M = 1/2, N = 64 1/2)

<u>Test Name</u>	<u>Value</u>	<u>Exact F</u>	<u>Hypoth. D.F.</u>
Pillais	.92892	570.67048	3.00
Hotellings	13.06879	570.67048	3.00
Wilks	.07108	570.67048	3.00
Roys	.928927		

Note . . . F statistics are exact.

Table 5-12

Cell Means and Standard Deviations for Test of Hypothesis 4 using Tercile Split

VARIABLE ...TEL1 (Self positive, Other positive)

			Standard	
<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Deviation</u>	<u>N</u>
CMD	Low	6.324	0.818	68
CMD	High	6.403	0.799	67
All		6.363	0.807	135

VARIABLE ...TEL2 (Self positive, Other negative)

			Standard	
<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Deviation</u>	<u>N</u>
CMD	Low	2.912	1.673	68
CMD	High	2.761	1.538	67
All		2.837	1.603	135

VARIABLE ...TEL3 (Self negative, Other positive)

			Standard	
<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Deviation</u>	<u>N</u>
CMD	Low	4.382	1.612	68
CMD	High	4.119	1.591	67
All		4.252	1.601	135

VARIABLE ...TEL4 (Self negative, Other negative)

			Standard	
<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Deviation</u>	<u>N</u>
CMD	Low	1.765	1.094	68
CMD	High	1.582	0.924	67
All		1.674	1.014	135

Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

Table 5-13
Results Pertaining to Hypothesis 4
(MANOVA Using a Quartile Split)

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig. of F</u>
WITHIN CELLS	26.86	28	0.96		
CONSTANT	1688.01	1	1688.01	1759.84	.000
CMD	1.61	1	1.61	1.68	.206

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig. of F</u>
WITHIN CELLS	130.89	84	1.56		
TEL	420.97	3	140.32	90.05	.000
CMD BY TEL	4.71	3	1.57	1.01	.394

NOTES:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development. In this case, the results are reported for a QUARTILE split using the norms reported by Rest (1990).

Table 5-14

Cell Means and Standard Deviations for Test of Hypothesis 4 using Quartile Split

VARIABLE ...TEL1 (Self positive, Other positive)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	6.563	0.629	16
CMD	High	6.571	0.646	14
All		6.567	0.626	30

VARIABLE ...TEL2 (Self positive, Other negative)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	2.938	1.879	16
CMD	High	2.929	1.328	14
All		2.933	1.617	30

VARIABLE ...TEL3 (Self negative, Other positive)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	4.563	1.548	16
CMD	High	3.643	1.277	14
All		4.133	1.479	30

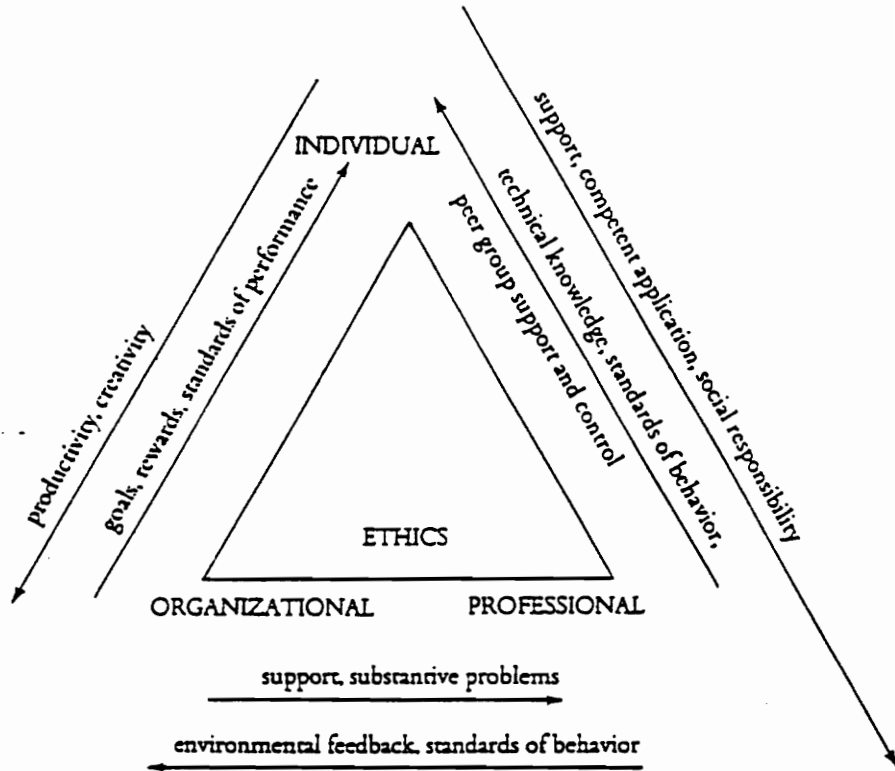
VARIABLE ...TEL4 (Self negative, Other negative)

<u>Factor</u>	<u>Category</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
CMD	Low	1.438	0.727	16
CMD	High	1.429	0.646	14
All		1.433	0.679	30

Teleological evaluations (Tel1, Tel2, Tel3 and Tel4) were measured by asking subjects to respond to the following statement after each alternative scenario: "Considering the desirability of the consequences, please rate this alternative in terms of how good or bad you view it." Responses were recorded on a 7-point scale anchored at "Very Bad" (1) and "Very Good" (7).

FIGURES

Pruden's Ethical Frames of Reference



Three ethical frames of reference for the marketer.

Figure 2-1

Cavanagh's Decision Tree

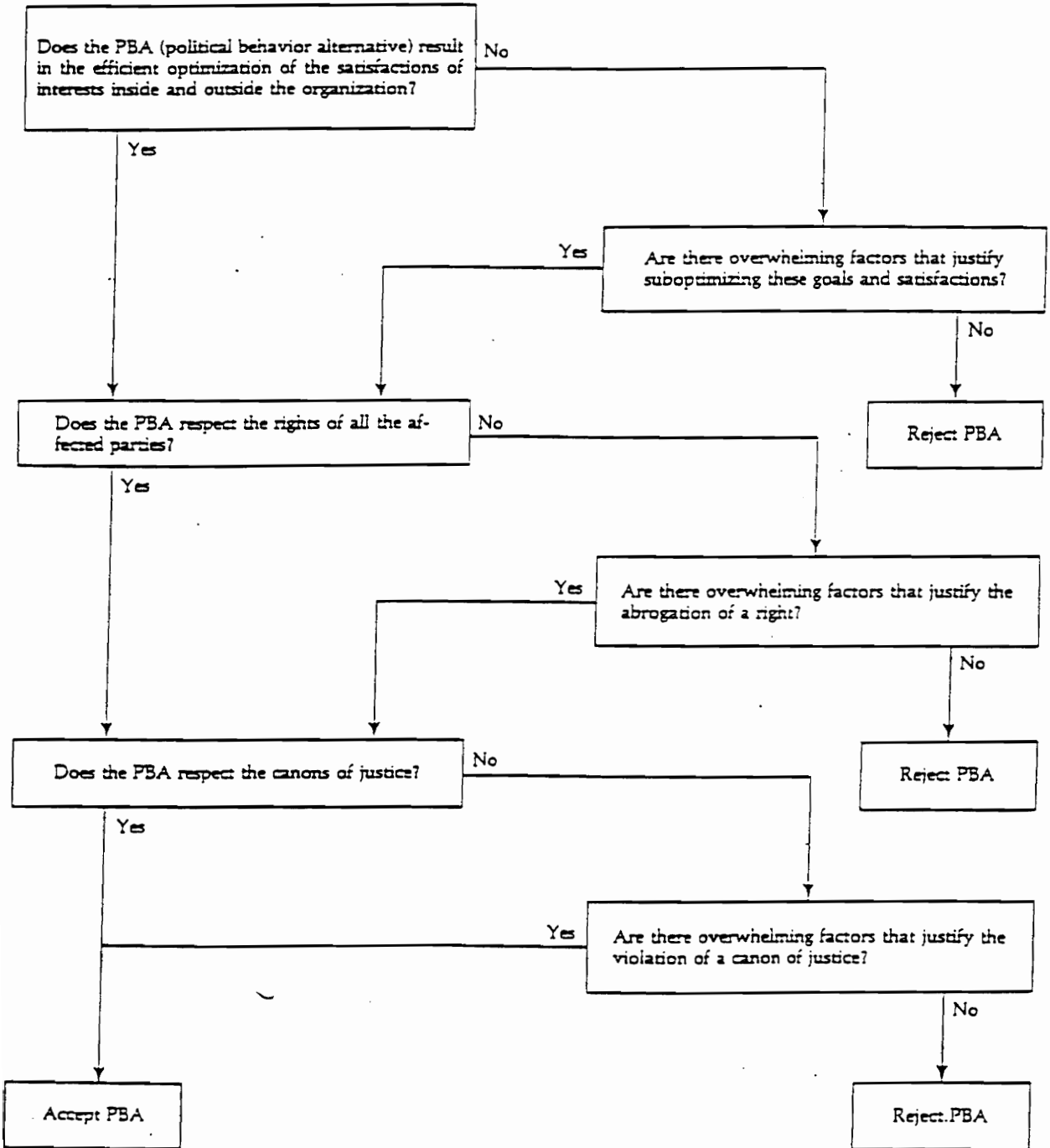


Figure 2-2
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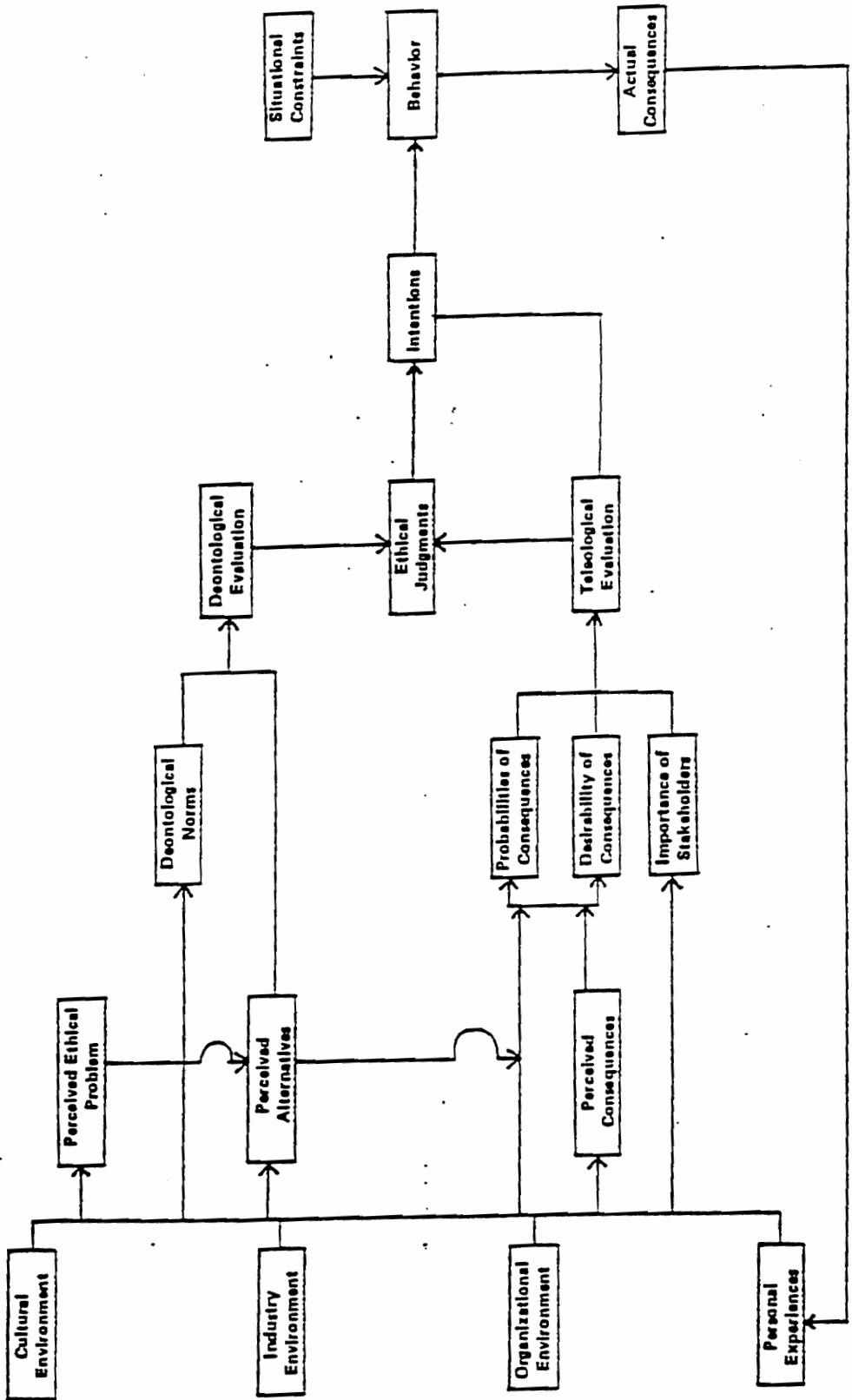
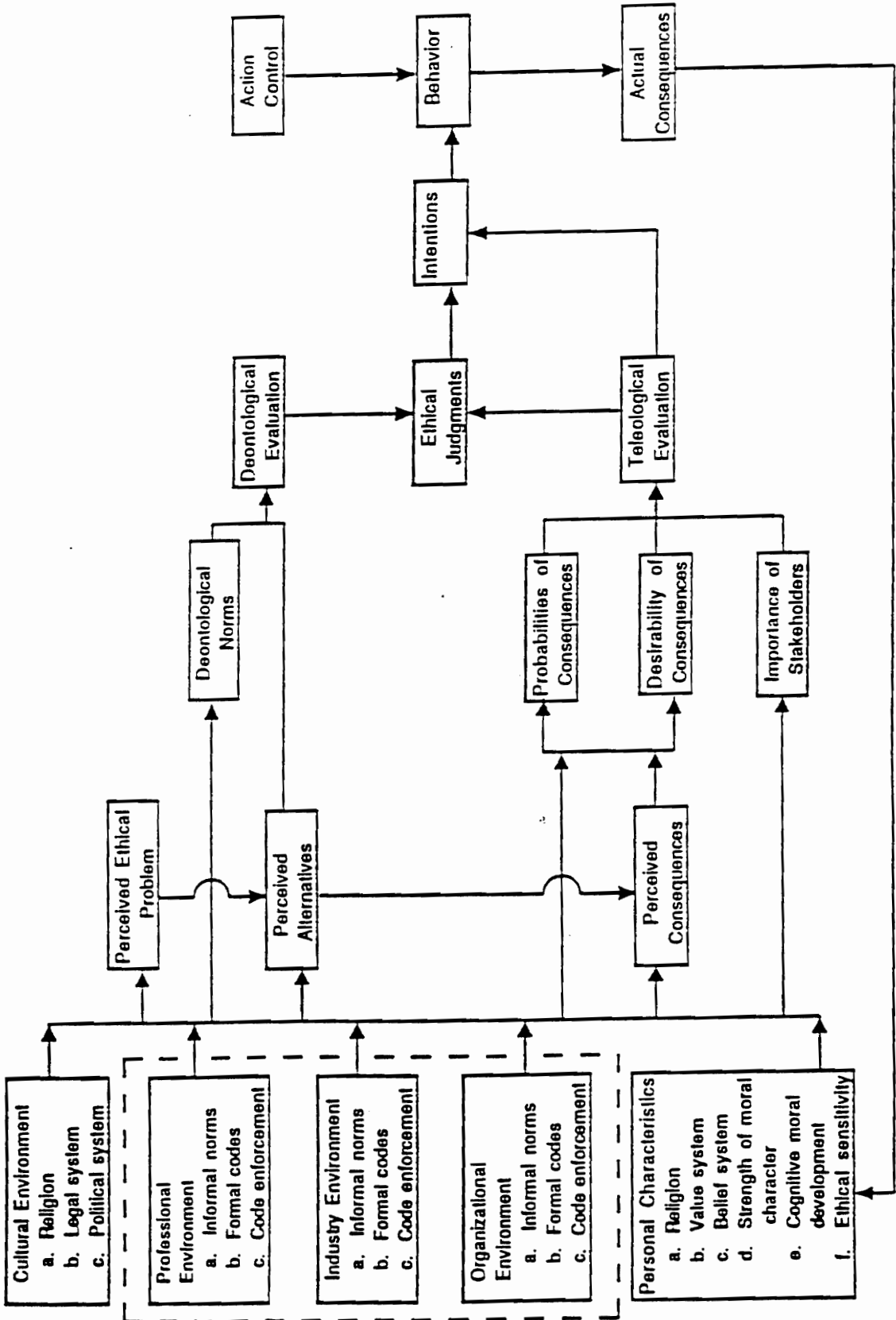
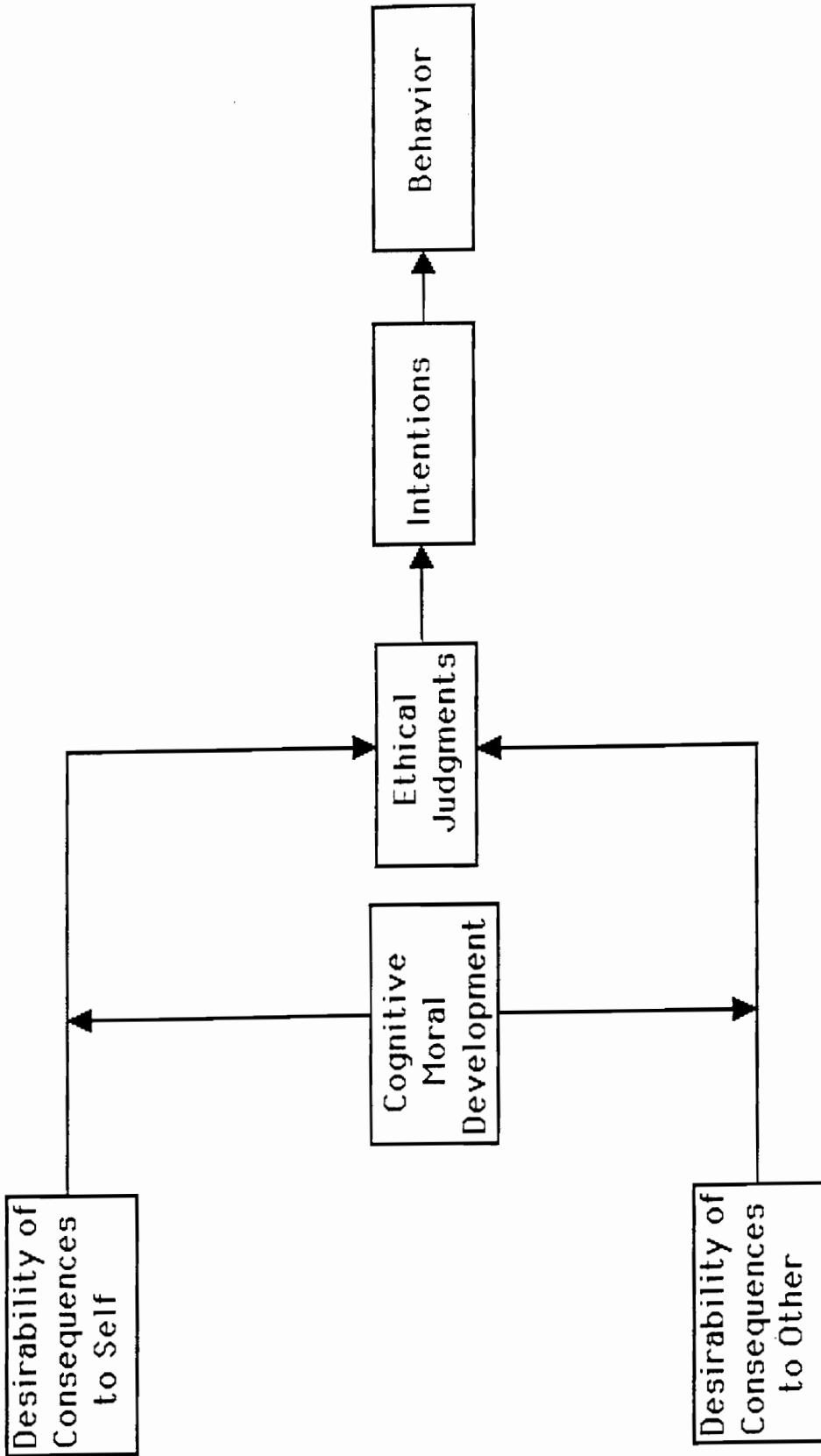


Figure 2-3



Source: Revised from Hunt and Vitell (1986). The portion of the model outside the dashed lines constitutes the general theory. The portion inside the dashed lines individuates the general model for professional and managerial contexts. Figure 3-1



The Model

Figure 3-2

Interactions

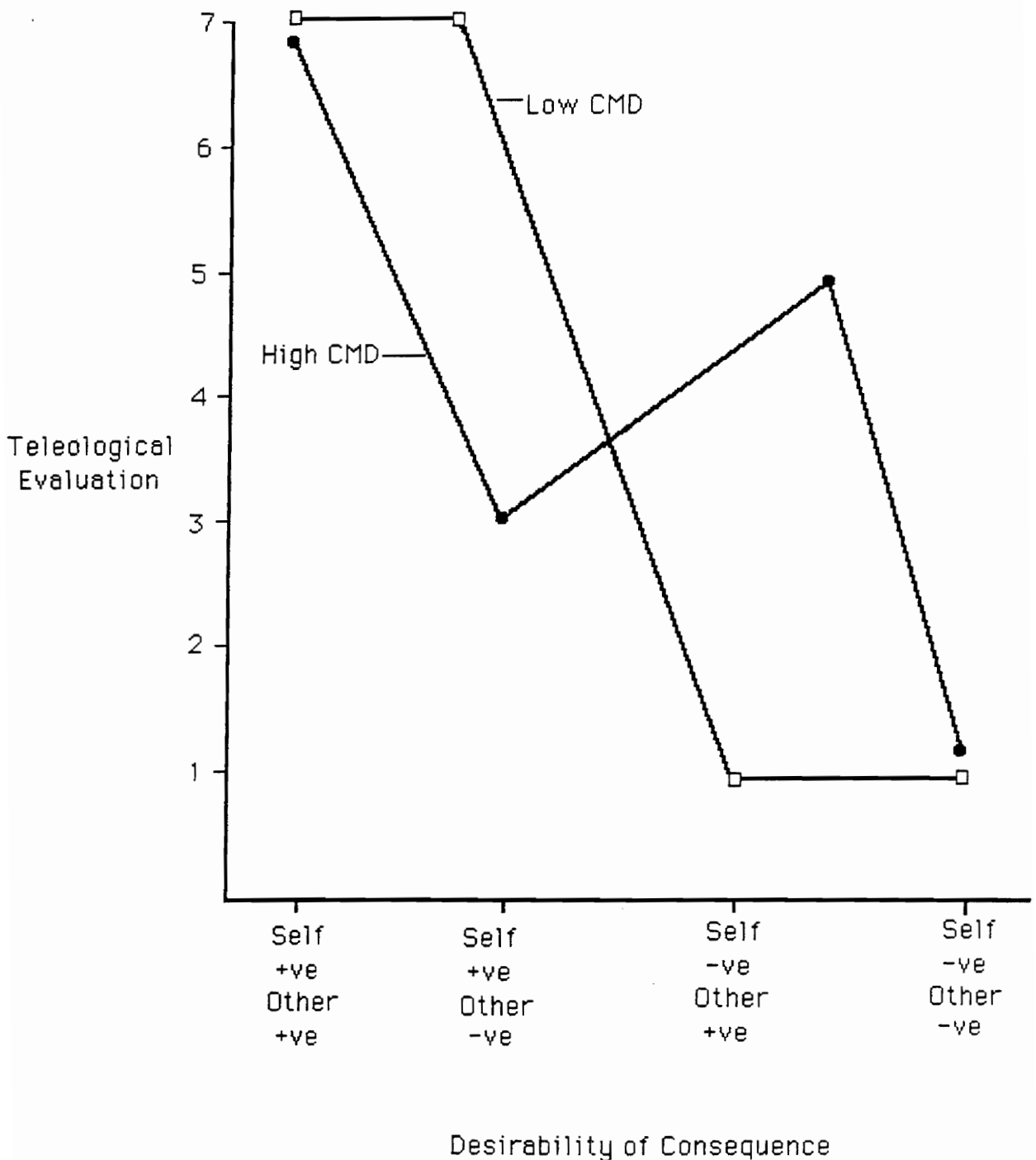


Figure 3-3

APPENDIX A
The Research Instrument



Department of Marketing

The R. B. Pamplin College of Business
Blacksburg, Virginia 24061-0236
(703) 231-6949 Fax: (703) 231-4487

TO: NAPM Carolinas-Virginia Members

FROM: Monroe Murphy Bird, Ph.D., C.P.M. *Murphy Bird*
NAPM Carolinas-Virginia Professor of Purchasing

Please let me introduce my Ph.D. student Dennis Cole. Dennis is writing his doctoral dissertation in purchasing ethics. He needs your help and I would be grateful if you would complete the form he has enclosed. We need young new professors like Dennis who are interested in our field and your cooperation will help ensure his success in completing his Ph.D.

MMB/jlb



Department of Marketing

The R. B. Pamplin College of Business
Blacksburg, Virginia 24061-0236
(703) 231-6949 Fax: (703) 231-4187

February 25, 1994

Dear NAPM Carolinas-Virginia Member,

The enclosed questionnaire is part of my doctoral dissertation research on issues of ethical concern to purchasing managers. I would greatly appreciate your taking some time to complete this questionnaire.

Since the questionnaire will take about 30 minutes to complete, I realize that this involves quite a substantial time commitment on your part. However, I have revised it several times so as to collect only the most vital data. Your assistance therefore is highly appreciated.

All responses will be anonymous. Neither you nor your company will be identified; only aggregate data will be analyzed and reported. If you would like a copy of the findings of the study, please include your business card with the questionnaire. I will separate business cards from questionnaires as soon as they are returned to ensure that all responses remain anonymous.

Your participation in this research is very important. The research is likely to make a significant contribution to the purchasing profession and be published in a purchasing or marketing journal. Please take the time to complete and return the enclosed questionnaire. I greatly appreciate your help.

Sincerely,

Dennis Cole

PLEASE READ THE FOLLOWING STANDARD SCENARIO THAT HAS BEEN USED TO EXPLORE COMPLEX SOCIAL ISSUES

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid \$200 for the radium and charged \$2000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Do you believe Heinz should steal the drug?

(Please check one) _____ Should steal it _____ Can't decide _____ Should not steal it.

PLEASE INDICATE THE EXTENT TO WHICH THE IDEA OR IDEAS IN EACH OF THE FOLLOWING TYPICAL STATEMENTS WERE (OR WERE NOT) IMPORTANT TO YOU IN MAKING YOUR DECISION.

	<u>LEVEL OF IMPORTANCE</u>				
	<u>NO</u>	<u>LITTLE</u>	<u>SOME</u>	<u>MUCH</u>	<u>GREAT</u>
1. Whether a community's laws are going to be upheld1	2	3	4	5	
2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?.....1	2	3	4	5	
3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?.....1	2	3	4	5	
4. Whether Heinz is a professional athlete, or has considerable influence with professional athletes?.....1	2	3	4	5	
5. Whether Heinz is stealing for himself or doing this solely to help someone else.....1	2	3	4	5	
6. Whether the druggist's rights to his invention have to be respected.....1	2	3	4	5	
7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.....1	2	3	4	5	
8. What values are going to be the basis for governing how people act toward each other.....1	2	3	4	5	
9. Whether the druggist is going to allowed to hide behind a worthless law which only protects the rich.....1	2	3	4	5	
10. Whether the law in this case is getting in the way of the most basic claim of any member of society.....1	2	3	4	5	
11. Whether the druggist deserves to be robbed for being so greedy and cruel.....1	2	3	4	5	
12. Whether stealing in such a case brings about more total good for society as a whole.....1	2	3	4	5	

Which of the above statements would you consider to be the MOST important? # _____

... the SECOND most important? # _____

... the THIRD most important? # _____

... the FOURTH most important? # _____

PLEASE READ THE FOLLOWING STANDARD SCENARIO THAT HAS BEEN USED TO EXPLORE COMPLEX SOCIAL ISSUES

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his profits to charity. The one day, Mrs. Brown, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and for whom the police had been looking.

Do you believe Mrs. Brown should report Mr. Thompson to the police and have him sent back to prison?
 (Please check one) Should report him Can't decide Should not report him

PLEASE INDICATE THE EXTENT TO WHICH THE IDEA OR IDEAS IN EACH OF THE FOLLOWING "TYPICAL" STATEMENTS WERE (OR WERE NOT) IMPORTANT TO YOU IN MAKING YOUR DECISION.

LEVEL OF IMPORTANCE
NO LITTLE SOME MUCH GREAT

1. Since Mr. Thompson has been a good person for such a long time, doesn't this prove he isn't a bad person?.....1	2	3	4	5
2. Every time someone escapes punishment for a crime, doesn't that just encourage more crime?.....1	2	3	4	5
3. Wouldn't we be better off without prisons and the oppression of the legal system?.....1	2	3	4	5
4. Has Mr. Thompson really paid his debt to society?.....1	2	3	4	5
5. Would society be failing to do what Mr. Thompson should fairly expect from it?.....1	2	3	4	5
6. Prisons are as American as apple pie1	2	3	4	5
7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?1	2	3	4	5
8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?1	2	3	4	5
9. Was Mrs. Brown a good friend of Mr. Thompson?.....1	2	3	4	5
10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?.....1	2	3	4	5
11. How would the will of the people and the public good be best served?.....1	2	3	4	5
12. Would going to prison do any good for Mr. Thompson or protect anybody?.....1	2	3	4	5

Which of the above statements would you consider to be the MOST important? # _____
 ... the SECOND most important? # _____
 ... the THIRD most important? # _____
 ... the FOURTH most important? # _____

PLEASE READ THE FOLLOWING STANDARD SCENARIO THAT HAS BEEN USED TO EXPLORE COMPLEX SOCIAL ISSUES

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the government's foreign policies and some of the school's rules, such as those related to dress codes.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if Fred would turn in all his articles for the principal's approval before every publication. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatnotic and should not be published. As a result of the growing attention, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

Do you believe that the principal should have stopped the publication of the paper?

(Please check one) Should have stopped it Can't decide Should not have stopped it

PLEASE INDICATE THE EXTENT TO WHICH THE IDEA OR IDEAS IN EACH OF THE FOLLOWING TYPICAL STATEMENTS WERE (OR WERE NOT) IMPORTANT TO YOU IN MAKING YOUR DECISION.

	<u>LEVEL OF IMPORTANCE</u>				
	<u>NO</u>	<u>LITTLE</u>	<u>SOME</u>	<u>MUCH</u>	<u>GREAT</u>
1. Is the principal more responsible to students or to parents?.....1	2	3	4	5	
2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?.....1	2	3	4	5	
3. Would the students start protesting even more if the principal stopped the newspaper?.....1	2	3	4	5	
4. When the welfare of the school is threatened, does the principal have the right to give orders to the students?.....1	2	3	4	5	
5. Does the principal have the freedom of speech to say "no" in this case?.....1	2	3	4	5	
6. If the principal stopped the newspaper would he be preventing full discussion of important problems?.....1	2	3	4	5	
7. Whether the principal's order would make Fred lose faith in the principal.....1	2	3	4	5	
8. Whether Fred was really loyal to his school and patriotic to his country.....1	2	3	4	5	
9. What effect would stopping the paper have on the students' education in critical thinking and judgments?.....1	2	3	4	5	
10. Whether Fred was in any way violating the rights of others in publishing his own opinions.....1	2	3	4	5	
11. Whether the principal should be influenced by some angry parents when its the principal that knows best what is going on in school.....1	2	3	4	5	
12. Whether Fred was using the newspaper to stir up hatred and discontent.....1	2	3	4	5	

Which of the above statements would you consider to be the MOST important? # _____

... the SECOND most important? # _____

... the THIRD most important? # _____

... the FOURTH most important? # _____

INSTRUCTIONS: Please read the following scenario which depicts a hypothetical situation in which a purchasing manager might find his or herself. At the end of the scenario a number of alternative courses of action and their possible consequences will be spelled out. You are being asked to indicate which of these alternative actions you are most likely to take.

You are the purchasing manager for a large industrial firm. At the present time you are looking for a supplier for a certain component part which is new to your company. Two companies in particular are being strongly considered; Company A, whose sales representative is Mr. Smith, and Company B, represented by Mr. Jones.

Both companies are quoting you the exact same price, and appear to offer equal quality and delivery guarantees. However, you are certain that Company B is willing to come down slightly in price if they get a long term contract. Company A appears to be inflexible over price.

After you have held a number of talks with Mr. Smith (from Company A) and Mr. Jones (from Company B) you have come to realize that there is a significant clash of personalities between yourself and Mr. Jones. The final decision as to which supplier you are going to use has come down to these two companies, and you have been asked to make your recommendation. You know that whichever company you recommend is certainly going to be chosen.

You must now decide which course of action to take in this situation. You are aware that your company is in favor of entering into a long term contract with whichever supplier you recommend, so that you will be in constant contact with the sales representative of that company. The main factor that you have to weigh is whether the apparent clash of personalities between yourself and Jones is sufficient and fair grounds for not recommending his company.

Specifically, you are asked to evaluate the following courses of action. These do not exhaust all of the possible courses of action which might be considered; however you need only consider those presented here. The possible consequences of these actions are also spelled out below. For each of these alternatives please consider that your own personal interests and those of your company are identical.

A. You recommend Company B as the supplier, but first you sit down with Jones and make it very clear to him what his role and your role will be in this relationship.

Consequences: Since Company B has agreed to slightly lower prices in exchange for a long term contract, it is to the advantage of your company to use them as suppliers. The purpose of talking to Jones and laying down certain ground rules is to try and arrange things so as to minimize any negative contact with him. In this way a benefit accrues to everyone.

B. You inform Company B that you will recommend them to your company, provided that they take Mr. Jones off of the job and replace him with someone else.

Consequences: Your company gets the lowest price, and you do not have to deal with Jones. Jones however does come off as looking bad towards his superiors. While this accomplishes the same result for your company as alternative A, Jones doesn't fare so well in this case.

C. Based solely on the negotiated lower cost, you recommend that your company do business with Company B.

Consequences: Financially, this is the best deal for your company. It is also beneficial to Jones and his company. However, based on your feelings about Jones, you are aware that in the course of your association with him the relationship between the two of you is likely to deteriorate. However, so long as Company B continues to keep its end of the agreement, they are not going to be negatively affected. The only negatives from this choice accrue to you personally.

D. You recommend that you company do business with Company A, thus avoiding any need to deal with Mr. Jones.

Consequences: When asked why you do not recommend the company with the lowest prices, you inform your superiors that you do not think that you and supplier from Company B would get along very well. Thus you take the risk that your bosses will see you as being at the mercy of the personalities of other people. Mr. Jones and his company are also seen as bad guys. In this case both your company and Jones' company may lose something in the process.

Please answer the following questions which pertain to the scenario and the possible alternative actions which you have just read.

Considering the desirability of the consequences, please rate each alternative course of action in terms of how good or bad a solution to the problem you think it is.

	Very Bad					Very Good	
Alternative A	1	2	3	4	5	6	7
Alternative B	1	2	3	4	5	6	7
Alternative C	1	2	3	4	5	6	7
Alternative D	1	2	3	4	5	6	7

Please rate each alternative as to how ethical an action you believe it to be.

	Very Unethical					Very Ethical	
Alternative A	1	2	3	4	5	6	7
Alternative B	1	2	3	4	5	6	7
Alternative C	1	2	3	4	5	6	7
Alternative D	1	2	3	4	5	6	7

To what extent do you find this alternative desirable as an action you would do?

	Very Undesirable					Very Desirable	
Alternative A	1	2	3	4	5	6	7
Alternative B	1	2	3	4	5	6	7
Alternative C	1	2	3	4	5	6	7
Alternative D	1	2	3	4	5	6	7

To what extent do you find this alternative desirable as an action for others to do?

	Very Undesirable					Very Desirable	
Alternative A	1	2	3	4	5	6	7
Alternative B	1	2	3	4	5	6	7
Alternative C	1	2	3	4	5	6	7
Alternative D	1	2	3	4	5	6	7

On a scale ranging from 0% to 100%, with 0% signifying "I would definitely NOT choose this alternative," and 100% signifying I definitely would choose this alternative, please indicate how likely it would be that you would adopt each of these actions.

Alternative A _____ % Alternative C _____ %
 Alternative B _____ % Alternative D _____ %

To what extent do you believe that the scenario which you have just read presents an ethical dilemma?

Not at all Definitely
 1 2 3 4 5 6 7

Would you please provide the following demographic information? Your responses will be held in strict confidence and will be summarized along with other respondents.

1. In what industry is your company? _____
2. How large is your company (# of employees)? _____
3. How many years have you worked in purchasing? _____
4. Age _____
5. Sex: Male _____ Female _____
6. Marital Status (check one)
_____ Married _____ Single _____ Divorced _____ Widowed
7. Race
_____ Asian _____ White _____ Black _____ Hispanic _____ Other
8. Education (Check highest level completed)
_____ grammar school _____ 4 year college
_____ high school _____ graduate school
_____ 2 year college _____ trade school
9. Which of the following categories best describes your total compensation from your employer last year?
_____ less than \$10,000 _____ \$60,000 to \$69,999
_____ \$10,000 to \$19,999 _____ \$60,000 to \$69,999
_____ \$20,000 to \$29,999 _____ \$70,000 to \$79,999
_____ \$30,000 to \$39,999 _____ \$80,000 to \$89,999
_____ \$40,000 to \$49,999 _____ \$90,000 to \$99,999
_____ \$50,000 to \$59,999 _____ over \$100,000
10. Have you ever taken a college course in ethics? _____ yes _____ no
11. Does your company have a formal written code of ethics? _____ yes _____ no

APPENDIX B

Covariate Analyses

Table Appendix B 1

Covariate Analysis:
Size of Company: Less than 100 employees

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	12.71	5	2.54		
CONSTANT	221.72	1	221.72	87.23	.000
CMD	0.72	1	0.72	0.28	.617

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	64.79	15	4.32		
TEL	33.92	3	11.31	2.62	.089
CMD BY TEL	13.21	3	4.40	1.02	.412

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Size of Company** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 2

Covariate Analysis:

Size of Company: More than 100 employees

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	186.53	136	1.37		
CONSTANT	7903.01	1	7903.01	5762.18	.000
CMD	1.60	1	1.60	1.16	.283

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	684.68	408	1.68		
TEL	1701.68	3	567.23	338.01	.000
CMD BY TEL	2.08	3	0.69	0.41	.744

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Size of Company** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 3

Covariate Analysis:

Size of Company: More than 1000 employees

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	102.77	76	1.35		
CONSTANT	4528.10	1	4528.10	3348.51	.000
CMD	9.19	1	9.19	6.80	.011

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	378.23	228	1.66		
TEL	970.15	3	323.38	194.94	.000
CMD BY TEL	3.17	3	1.06	0.64	.592

NOTE:

This table shows the results obtained from a MANOVA in which eleological evaluation was run against cognitive moral development using Size of Company as a covariate. In this case, the results are reported or a TERCILE split.

Table Appendix B 4

Covariate Analysis:

Years in Purchasing: Less than 5 years

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	12.71	5	2.54		
CONSTANT	221.72	1	221.72	87.23	.000
CMD	0.72	1	0.72	0.28	.617

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	64.79	15	4.32		
TEL	33.92	3	11.31	2.62	.089
CMD BY TEL	13.21	3	4.40	1.02	.412

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Years in Purchasing** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 5

Covariate Analysis:

Years in Purchasing: 5-15 years

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	86.55	72	1.20		
CONSTANT	4009.46	1	4009.46	3335.31	.000
CMD	1.89	1	1.89	1.57	.214

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	422.96	216	1.96		
TEL	775.62	3	258.54	132.03	.000
CMD BY TEL	6.00	3	2.00	1.02	.384

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Years in Purchasing** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 6

Covariate Analysis:

Years in Purchasing: 15-25 years

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	109.31	61	1.79		
CONSTANT	3424.60	1	3424.60	1911.00	.000
CMD	4.90	1	4.90	2.73	.103

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	317.54	183	1.74		
TEL	789.53	3	263.18	151.67	.000
CMD BY TEL	10.31	3	3.44	1.98	.118

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Years in Purchasing** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 7

Covariate Analysis:

Years in Purchasing: More than 26 years

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	14.50	11	1.32		
CONSTANT	763.27	1	763.27	579.03	.000
CMD	1.73	1	1.73	1.31	.276

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	50.95	33	1.54		
TEL	172.82	3	57.61	37.31	.000
CMD BY TEL	0.82	3	0.27	0.18	.911

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Years in Purchasing** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 8

Covariate Analysis:

Age: Under 30

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	5.13	4	1.28		
CONSTANT	310.08	1	310.08	242.02	.000
CMD	0.08	1	0.08	0.07	.811

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	32.88	12	2.74		
TEL	51.08	3	17.03	6.22	.009
CMD BY TEL	3.75	3	1.25	0.46	.718

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Years in Purchasing** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 9

Covariate Analysis:

Age: 30-50

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	164.05	107	1.53		
CONSTANT	6085.21	1	6085.21	3969.01	.000
CMD	0.00	1	0.00	0.00	.994

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	616.34	321	1.92		
TEL	1214.55	3	404.85	210.85	.000
CMD BY TEL	0.53	3	0.18	0.09	.964

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Age** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 10

Covariate Analysis:

Age: Older than 50

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	40.17	33	1.22		
CONSTANT	1982.51	1	1982.51	1628.62	.000
CMD	4.71	1	4.71	3.87	.058

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	121.81	99	1.23		
TEL	521.33	3	173.78	141.23	.000
CMD BY TEL	3.59	3	1.20	0.97	.409

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Age** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 11

Covariate Analysis:

Gender: Male

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	160.36	101	1.59		
CONSTANT	6041.34	1	6041.34	3805.01	.000
CMD	0.92	1	0.92	0.58	.449

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	564.45	303	1.86		
TEL	1229.61	3	409.87	220.02	.000
CMD BY TEL	1.14	3	0.38	0.20	.893

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Gender** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 12

Covariate Analysis:

Gender: Female

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	47.54	43	1.11		
CONSTANT	2427.20	1	2427.20	2195.41	.000
CMD	0.54	1	0.54	0.49	.489

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	230.46	129	1.79		
TEL	539.95	3	179.98	100.75	.000
CMD BY TEL	1.82	3	0.61	0.34	.797

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Gender** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 13

Covariate Analysis:
Marital Status: Married

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	174.32	122	1.43		
CONSTANT	6982.40	1	6982.40	4886.76	.000
CMD	1.17	1	1.17	0.82	.367

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	612.67	366	1.67		
TEL	1576.66	3	525.55	313.96	.000
CMD BY TEL	5.69	3	1.90	1.13	.335

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Marital Status** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 14

Covariate Analysis:
Marital Status: Single

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	7.13	8	0.89		
CONSTANT	384.40	1	221.72	87.23	.000
CMD	0.00	1	0.00	0.00	1.00

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	44.12	24	1.84		
TEL	77.25	3	25.75	14.01	.000
CMD BY TEL	1.25	3	0.42	0.23	.877

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Marital Status** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 15

Covariate Analysis:

Marital Status: Divorced

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	19.42	10	1.94		
CONSTANT	833.33	1	833.33	429.18	.000
CMD	0.75	1	0.75	0.39	.548

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	69.58	30	2.32		
TEL	104.17	3	34.72	2.62	.089
CMD BY TEL	10.75	3	3.58	1.54	.223

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Marital Status** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 16

Covariate Analysis:

Race: White

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	200.04	137	1.46		
CONSTANT	7944.40	1	7944.40	5440.88	.000
CMD	1.76	1	1.76	1.21	.617

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	740.61	411	1.80		
TEL	1636.23	3	545.41	302.67	.000
CMD BY TEL	2.35	3	0.78	0.43	.728

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Race** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 17

Covariate Analysis:

Race: Black

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	7.88	4	1.97		
CONSTANT	280.33	1	280.33	142.39	.000
CMD	0.00	1	0.00	0.00	1.000

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	23.62	12	1.97		
TEL	70.00	3	23.33	11.85	.001
CMD BY TEL	13.67	3	4.56	2.31	.128

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Race** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 18

Covariate Analysis:

Education: Highest level - High School

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	23.64	12	1.97		
CONSTANT	802.57	1	802.57	407.35	.000
CMD	1.79	1	1.79	0.91	.360

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	62.36	36	1.73		
TEL	205.71	3	68.57	39.59	.000
CMD BY TEL	1.93	3	0.64	0.37	.774

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Education** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 19

Covariate Analysis:

Education: Highest Level - Two Year College

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	40.47	27	1.50		
CONSTANT	1522.00	1	1522.00	1015.53	.000
CMD	1.34	1	1.34	0.90	.352

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	123.12	81	1.52		
TEL	361.72	3	120.57	79.33	.000
CMD BY TEL	8.45	3	2.82	1.85	.144

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Education** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 20

Covariate Analysis:

Education: Highest Level - Four Year College

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	98.76	72	1.37		
CONSTANT	4185.15	1	4185.15	3051.19	.000
CMD	6.96	1	6.96	5.08	.027

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	382.02	216	1.77		
TEL	892.76	3	297.59	168.26	.000
CMD BY TEL	4.84	3	1.61	0.91	.435

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Education** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 21

Covariate Analysis:

Salary: \$20,000 to \$29,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	7.53	12	0.63		
CONSTANT	588.35	1	588.35	938.23	.000
CMD	0.35	1	0.35	0.56	.469

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	94.48	36	2.62		
TEL	135.86	3	45.29	17.26	.000
CMD BY TEL	4.72	3	1.57	0.60	.619

Note:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 22

Covariate Analysis:

Salary: \$30,000 to \$39,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	26.12	23	1.14		
CONSTANT	1304.44	1	1304.44	1148.47	.000
CMD	3.32	1	3.32	2.92	.101

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	126.80	69	1.84		
TEL	293.12	3	97.71	53.17	.000
CMD BY TEL	4.48	3	1.49	0.81	.491

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 23

Covariate Analysis:

Salary: \$40,000 to \$49,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	50.99	30	1.70		
CONSTANT	1997.23	1	1997.23	1175.02	.000
CMD	0.73	1	0.73	0.43	.518

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	184.25	90	2.05		
TEL	342.09	3	114.03	55.70	.000
CMD BY TEL	1.34	3	0.45	0.22	.884

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 24

Covariate Analysis:

Salary: \$50,000 to \$59,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	44.04	33	1.33		
CONSTANT	1986.86	1	1986.86	1488.88	.000
CMD	1.21	1	1.21	0.90	.349

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	168.05	99	1.70		
TEL	419.57	3	139.86	82.39	.000
CMD BY TEL	6.71	3	2.24	1.32	.273

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 25

Covariate Analysis:

Salary: \$60,000 to \$69,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	15.42	14	1.10		
CONSTANT	645.33	1	645.33	586.03	.000
CMD	1.02	1	1.02	0.93	.352

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	57.58	42	1.37		
TEL	206.17	3	68.72	50.12	.000
CMD BY TEL	4.23	3	1.41	1.03	.390

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 26

Covariate Analysis:

Salary: \$70,000 to \$79,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	8.85	5	1.77		
CONSTANT	450.36	1	450.36	254.32	.000
CMD	0.50	1	0.50	0.28	.617

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	16.06	15	1.07		
TEL	85.58	3	28.53	26.64	.000
CMD BY TEL	8.58	3	2.86	2.67	.085

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split

Table Appendix B 27

Covariate Analysis:

Salary: \$80,000 to \$89,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	5.67	4	1.42		
CONSTANT	368.17	1	368.17	259.88	.000
CMD	0.17	1	0.17	0.12	.749

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	12.33	12	1.03		
TEL	104.83	3	34.94	34.00	.000
CMD BY TEL	0.83	3	0.28	0.27	.846

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 28

Covariate Analysis:

Salary: \$90,000 to \$99,999

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	8.67	3	2.89		
CONSTANT	294.53	1	294.53	101.95	.000
CMD	3.33	1	3.33	1.15	.361

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	16.00	9	1.78		
TEL	55.20	3	18.40	10.35	.003
CMD BY TEL	2.40	3	0.80	0.45	.723

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 29

Covariate Analysis:

Salary: Over \$100,000

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	14.29	3	4.76		
CONSTANT	238.01	1	238.01	49.96	.006
CMD	0.41	1	0.41	0.09	.789

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	19.54	9	2.17		
TEL	72.96	3	24.32	11.20	.002
CMD BY TEL	1.76	3	0.59	0.27	.846

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Salary** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 30

Covariate Analysis:

"Have you taken a college course in ethics?": Yes

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	58.41	43	1.36		
CONSTANT	2583.39	1	2583.39	1901.95	.000
CMD	2.57	1	2.57	1.89	.176

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	285.80	129	2.22		
TEL	584.26	3	194.75	87.90	.000
CMD BY TEL	2.33	3	0.78	0.35	.789

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Course in Ethics** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 31

Covariate Analysis:

"Have you taken a college course in ethics?": No

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	150.47	100	1.50		
CONSTANT	5824.11	1	5824.11	3870.61	.000
CMD	0.24	1	0.24	0.16	.693

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	503.26	300	1.68		
TEL	1160.65	3	386.88	230.63	.000
CMD BY TEL	1.54	3	0.51	0.31	.820

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Course in Ethics** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 32

Covariate Analysis

Formal Code of Ethics: Company DOES have one.

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	138.84	102	1.36		
CONSTANT	5910.38	1	5910.38	4342.23	.000
CMD	2.92	1	2.92	2.15	.146

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	524.11	306	1.71		
TEL	1328.96	3	442.99	258.64	.000
CMD BY TEL	3.11	3	1.04	0.61	.612

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Formal Company Code of Ethics** as a covariate. In this case, the results are reported for a TERCILE split.

Table Appendix B 33

Covariate Analysis

Formal Code of Ethics: Company DOES NOT have one

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	65.69	40	1.64		
CONSTANT	2387.72	1	2387.72	1453.83	.000
CMD	0.34	1	0.34	0.20	.654

<u>Source of Variation</u>	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>Sig of F</u>
WITHIN CELLS	221.19	120	1.84		
TEL	447.80	3	149.27	80.98	.000
CMD BY TEL	2.42	3	0.81	0.44	.727

NOTE:

This table shows the results obtained from a MANOVA in which teleological evaluation was run against cognitive moral development using **Formal Company Code of Ethics** as a covariate. In this case, the results are reported for a TERCILE split.

APPENDIX C

Correlation Analysis

For the following table of correlation coefficients, the following abbreviations have been used:

CMD- Cognitive Moral Development

Tel1 - Teleological Evaluation for Self positive, Other positive

Tel2 - Teleological Evaluation for Self positive, Other negative

Tel3 - Teleological Evaluation for Self negative, Other positive

Tel4 - Teleological Evaluation for Self negative, Other negative

Ej1 - Ethical Judgment for Self positive, Other positive

Ej2 - Ethical Judgment for Self positive, Other negative

Ej3 - Ethical Judgment for Self negative, Other positive

Ej4 - Ethical Judgment for Self negative, Other negative

DOC1 - Desirability of consequences for Self positive, Other positive

DOC2 - Desirability of consequences for Self positive, Other negative

DOC3 - Desirability of consequences for Self negative, Other positive

DOC4 - Desirability of consequences for Self negative, Other negative

V15 - Manipulation check for Self positive, Other positive

V16 - Manipulation check for Self positive, Other negative

V17 - Manipulation check for Self negative, Other positive

V18 - Manipulation check for Self negative, Other negative

BI1 - Behavioral Intention for Alternative A

BI2 - Behavioral Intention for Alternative B

BI3 - Behavioral Intention for Alternative C

BI4 - Behavioral Intention for Alternative D

Check - Does the above scenario represent an ethical dilemma?

V27 - Years in Purchasing

Age - Age

Sex - Sex

V30 - Marital Status

V31 - Race

V32 - Education

V33 - Salary

V34 - College Ethics course

V35 - Company has written code of ethics

"." is printed if a coefficient cannot be computed

* = Significant at .05

** = Significant at .01

PEARSON CORRELATION COEFFICIENTS

	CMD	TEL1	TEL2	TEL3	TELA	EJ1	EJ2	EJ3	EJ4	DOC1	DOC2
CMD	1.0000 (244) P = .	-.1158 (243) P = .	-.0337 (240) P = .302	-.0024 (240) P = .485	-.0045 (240) P = .473	-.1539 (243) P = .008**	.0023 (241) P = .486	.1295 (239) P = .023*	.0859 (239) P = .093	-.0396 (242) P = .270	-.0309 (240) P = .317
TEL1	-.1158 (243) P = .036*	1.0000 (243) P = .	-.0439 (240) P = .249	-.0948 (240) P = .072	-.1995 (240) P = .001**	.5902 (243) P = .000**	.0591 (241) P = .180	-.0225 (239) P = .365	.0730 (239) P = .130	.6437 (242) P = .000**	-.0057 (240) P = .465
TEL2	-.0337 (240) P = .302	-.0439 (240) P = .249	1.0000 (240) P = .	-.1837 (240) P = .002**	.2020 (240) P = .001**	.0475 (240) P = .232	.7028 (240) P = .000**	.0088 (238) P = .446	.1187 (238) P = .34*	-.1541 (239) P = .009**	.6658 (239) P = .000**
TEL3	-.0024 (240) P = .485	-.0948 (240) P = .072	-.1837 (240) P = .002	1.0000 (240) P = .	-.0333 (240) P = .304	-.2237 (240) P = .000**	-.1926 (240) P = .001**	.5149 (238) P = .000**	-.1349 (238) P = .019*	-.1447 (239) P = .013*	-.1479 (239) P = .011*
TELA	-.0045 (240) P = .473	-.1995 (240) P = .001**	.2020 (240) P = .001**	-.0333 (240) P = .304	1.0000 (240) P = .	-.1623 (240) P = .006**	.1064 (240) P = .050*	.0120 (238) P = .427	.4635 (239) P = .000**	-.2365 (239) P = .000**	.1247 (240) P = .027*
EJ1	-.1539 (243) P = .009**	.5902 (243) P = .000**	.0475 (240) P = .232	-.2237 (240) P = .000**	1.0000 (243) P = .	1.0000 (243) P = .	.1325 (241) P = .020*	-.0143 (239) P = .413	.0058 (239) P = .195	.5825 (242) P = .000**	.0428 (240) P = .255
EJ2	.0023 (241) P = .486	-.0439 (240) P = .249	-.1837 (240) P = .002	-.2237 (240) P = .000**	-.1623 (240) P = .006**	1.0000 (241) P = .020*	1.0000 (241) P = .	.0843 (239) P = .097	.2630 (239) P = .000**	-.0225 (240) P = .364	.7538 (240) P = .000**
EJ3	.1295 (239) P = .023*	-.0948 (240) P = .365	-.0088 (238) P = .446	.5149 (238) P = .000**	.0120 (238) P = .427	1.0000 (239) P = .	.0843 (239) P = .097	1.0000 (239) P = .	.1127 (239) P = .041*	-.0030 (238) P = .481	.0015 (238) P = .491
EJ4	.0859 (239) P = .093	.0730 (239) P = .130	.1187 (238) P = .34*	-.1349 (238) P = .019*	.4635 (239) P = .000**	-.0143 (239) P = .413	.2630 (239) P = .000**	.1127 (239) P = .041*	1.0000 (239) P = .	.0050 (238) P = .469	.1398 (238) P = .016*
DOC1	-.0396 (242) P = .270	.6437 (242) P = .000**	-.1541 (239) P = .009**	-.1447 (239) P = .013*	-.1479 (239) P = .011*	-.0309 (240) P = .317	-.0225 (240) P = .364	-.0030 (238) P = .481	1.0000 (238) P = .	1.0000 (242) P = .	-.0945 (240) P = .072
DOC2	-.0309 (240) P = .317	-.0057 (240) P = .465	.6658 (239) P = .000**	-.1479 (239) P = .011*	.1247 (240) P = .027	-.0428 (240) P = .255	.7538 (240) P = .000**	.0015 (238) P = .491	.1398 (238) P = .016*	-.0945 (240) P = .072	1.0000 (240) P = .

PEARSON CORRELATION COEFFICIENTS

	CMD	TEL1	TEL2	TEL3	TELA	EI1	EI2	EI3	EI4	DOC1	DOC2
DOC3	.0998 (241) P = .061	-.0553 (241) P = .197	-.1752 (240) P = .003**	.6291 (240) P = .000**	-.0355 (240) P = .292	-.1305 (241) P = .021	-.1736 (241) P = .003**	.5567 (239) P = .000**	-.0570 (239) P = .190	-.0068 (240) P = .458	-.1920 (240) P = .001**
DOC4	.0582 (241) P = .184	-.0043 (241) P = .474	.1229 (240) P = .029	-.1294 (240) P = .023*	.6762 (240) P = .000**	.0007 (241) P = .496	.1258 (241) P = .026*	.0440 (239) P = .249	.5716 (239) P = .000**	-.0629 (240) P = .166	.1918 (240) P = .001**
V15	-.0318 (239) P = .312	.6711 (239) P = .000**	-.0871 (236) P = .091*	-.0800 (236) P = .110	-.1238 (236) P = .029*	.6288 (239) P = .000**	.0160 (237) P = .403	.0443 (235) P = .250	.0213 (235) P = .373	.8047 (239) P = .000**	-.0255 (237) P = .348
V16	-.0328 (237) P = .308	-.0372 (237) P = .284	.6844 (236) P = .000**	-.1258 (236) P = .027*	.0965 (236) P = .070	.0729 (237) P = .363	.7443 (237) P = .000**	.0256 (235) P = .348	.0814 (235) P = .107	-.1140 (237) P = .040*	.9252 (237) P = .000**
V17	.0834 (237) P = .100	-.0534 (237) P = .207	-.0984 (236) P = .066	.6293 (236) P = .000**	-.0064 (236) P = .461	-.1006 (237) P = .061	-.1061 (237) P = .052	.5818 (235) P = .000**	-.0832 (235) P = .102	-.0782 (236) P = .116	-.1176 (236) P = .036*
V18	.0669 (237) P = .152	-.0479 (237) P = .231	.1576 (236) P = .008**	-.0905 (236) P = .083	.5733 (236) P = .000**	-.0635 (237) P = .165	.1808 (237) P = .003**	.0326 (235) P = .309	.5064 (235) P = .000**	-.0596 (236) P = .181	.2096 (236) P = .001**
B11	-.0930 (241) P = .075	.5262 (241) P = .000**	-.0750 (238) P = .125	-.2005 (238) P = .001**	-.0836 (238) P = .099	.5305 (241) P = .000**	.0218 (239) P = .368	-.1358 (237) P = .018*	.0164 (237) P = .401	.5870 (240) P = .000**	-.0689 (238) P = .145
B12	-.211 (238) P = .373	-.0682 (238) P = .147	.6605 (236) P = .000**	-.1266 (236) P = .026*	.0508 (236) P = .219	.0215 (238) P = .371	.7074 (237) P = .000**	-.0010 (235) P = .494	.0848 (235) P = .098	-.1491 (237) P = .011*	.7628 (236) P = .000**
B13	.0179 (236) P = .392	-.0419 (236) P = .261	-.1168 (234) P = .017*	.6469 (236) P = .000**	-.0209 (234) P = .375	-.1972 (236) P = .001**	-.1884 (235) P = .002**	.4284 (233) P = .000**	.0964 (233) P = .071	-.1111 (235) P = .045*	-.1772 (234) P = .001**
B14	.1073 (236) P = .050	-.0341 (236) P = .301	.0589 (235) P = .184	-.0928 (235) P = .078	.5579 (235) P = .000**	-.0947 (236) P = .073	.0673 (236) P = .152	-.0792 (234) P = .114	.4788 (234) P = .000**	-.1199 (235) P = .033*	.1278 (235) P = .025*
СЛИКЪ	-.0209 (239) P = .374	-.0280 (239) P = .333	-.1081 (236) P = .049	-.0307 (236) P = .319	-.0086 (236) P = .448	-.0667 (239) P = .152	-.1494 (237) P = .011*	.0460 (235) P = .241	-.0145 (235) P = .412	.0608 (238) P = .175	-.1107 (236) P = .045*

PEARSON CORRELATION COEFFICIENTS

	CMD	TEL1	TEL2	TEL3	TEI4	EJ1	EJ2	EJ3	EJ4	DOC1	DOC2
V27	-.0213 (243) P = .371	.1433 (243) P = .013*	-.0548 (240) P = .199	.1157 (240) P = .037*	-.1210 (240) P = .031*	.0699 (243) P = .139	.0743 (241) P = .125	.1091 (239) P = .046*	.0282 (239) P = .332	.0883 (242) P = .085	.0067 (240) P = .459
AGE	-.0384 (238) P = .278	.0624 (238) P = .169	-.0642 (235) P = .163	.0782 (235) P = .116	-.1047 (235) P = .055	.0539 (238) P = .204	.0091 (236) P = .445	.0861 (234) P = .095	-.0676 (234) P = .152	-.0169 (237) P = .398	-.0634 (235) P = .166
SEX	.0399 (243) P = .268	.0115 (243) P = .429	-.1251 (240) P = .026*	-.0127 (240) P = .422	-.0535 (240) P = .204	-.0514 (243) P = .212	-.1555 (241) P = .008**	-.0308 (239) P = .318	-.1063 (239) P = .051	-.0270 (242) P = .338	-.1373 (240) P = .017*
V30	-.0056 (243) P = .465	-.2150 (243) P = .000**	.0140 (240) P = .414	.0580 (240) P = .185	.0776 (240) P = .115	-.0477 (243) P = .230	-.0298 (241) P = .323	-.0660 (239) P = .155	-.0925 (239) P = .077	-.0966 (242) P = .067	.0031 (240) P = .481
V31	-.0049 (242) P = .470	.0135 (242) P = .417	.0035 (239) P = .479	.0429 (239) P = .255	-.0722 (239) P = .133	-.0045 (242) P = .472	.0524 (240) P = .209	.0123 (238) P = .425	.0154 (238) P = .406	.0361 (241) P = .289	.0329 (239) P = .306
V32	.0298 (243) P = .322	.0664 (243) P = .151	.1034 (240) P = .055	-.0445 (240) P = .246	.0922 (240) P = .077	.0988 (243) P = .062	.0960 (241) P = .069	-.0719 (239) P = .134	.0496 (239) P = .223	.0310 (242) P = .316	.0604 (240) P = .176
V33	-.1389 (239) P = .016*	.1250 (239) P = .027*	.1327 (236) P = .021*	.0485 (236) P = .229	-.0756 (236) P = .124	.1161 (239) P = .037*	.1489 (237) P = .011*	.0877 (235) P = .090	-.0261 (235) P = .346	.0579 (238) P = .187	.0628 (236) P = .168
V34	.1268 (242) P = .024*	-.0496 (242) P = .441	-.0737 (239) P = .128	-.0038 (239) P = .477	-.0205 (239) P = .376	.0155 (242) P = .405	-.0327 (240) P = .307	-.0853 (238) P = .095	.0494 (238) P = .224	.0846 (241) P = .095	.0030 (239) P = .482
V35	-.0357 (240) P = .291	-.0382 (240) P = .278	-.0296 (237) P = .325	-.0271 (237) P = .339	.1892 (237) P = .002**	-.0523 (240) P = .210	-.0923 (238) P = .078	-.0677 (236) P = .150	.0676 (236) P = .150	-.1573 (239) P = .007**	-.0278 (237) P = .335

PEARSON CORRELATION COEFFICIENTS

	DOC3	DOCA	V15	V16	V17	V18	B11	B12	B13	B14	CHECK
CMD	.0998 (241) P = .061	.0582 (241) P = .184	-.0318 (239) P = .312	-.0328 (237) P = .308	.0834 (237) P = .100	.0669 (237) P = .152	-.0930 (241) P = .075	-.0211 (238) P = .373	.0179 (236) P = .392	.1073 (236) P = .050*	-.0209 (239) P = .374
TBL1	-.0553 (241) P = .197	-.0443 (241) P = .474	.6711 (239) P = .000**	-.0172 (237) P = .284	-.0514 (237) P = .207	-.0479 (237) P = .231	.5262 (241) P = .000**	-.0682 (238) P = .147	-.0419 (236) P = .261	-.0341 (236) P = .301	-.0280 (239) P = .333
TBL2	-.1752 (240) P = .003**	.1229 (240) P = .029*	-.0871 (236) P = .091	.6844 (236) P = .000**	-.0984 (236) P = .066	.1576 (236) P = .008**	-.0750 (238) P = .125	.6605 (236) P = .000**	-.1168 (234) P = .037*	.0589 (235) P = .184	-.1081 (236) P = .049*
TBL3	.6291 (240) P = .000**	-.1294 (240) P = .023*	-.0800 (236) P = .110	-.1258 (236) P = .027*	.6293 (236) P = .000**	-.0905 (236) P = .083	-.2005 (238) P = .001**	-.1266 (236) P = .026*	.6469 (234) P = .000**	-.0928 (235) P = .078	-.0307 (236) P = .319
TBL4	-.0355 (240) P = .292	.6762 (240) P = .000**	-.1238 (236) P = .029*	.0965 (236) P = .070	-.0064 (236) P = .461	.5733 (236) P = .000**	-.0836 (238) P = .099	.0508 (236) P = .219	-.0209 (234) P = .375	.5579 (235) P = .000**	-.0086 (236) P = .448
BJ1	-.1305 (241) P = .021	.0007 (241) P = .496	.6288 (239) P = .000**	.0229 (237) P = .363	-.1006 (237) P = .061	-.0635 (237) P = .165	.5305 (241) P = .000**	.0215 (238) P = .371	-.1972 (236) P = .001**	-.0947 (236) P = .073	-.0667 (239) P = .152
BJ2	-.1736 (241) P = .003**	.1258 (241) P = .026*	.0160 (237) P = .403	.7443 (237) P = .000**	-.1061 (237) P = .052	.1808 (237) P = .003**	.0218 (239) P = .368	.7074 (237) P = .000**	-.1884 (235) P = .002**	.0673 (236) P = .152	-.1494 (237) P = .011*
BJ3	.5567 (239) P = .000**	.0440 (239) P = .249	.0443 (235) P = .250	.0256 (235) P = .348	.5818 (235) P = .000**	.0326 (235) P = .309	-.1358 (237) P = .018	-.0010 (235) P = .494	.4284 (233) P = .000**	-.0792 (234) P = .114	.0460 (235) P = .241
BJ4	-.0570 (239) P = .190	.5716 (239) P = .000**	.0213 (235) P = .373	.0814 (235) P = .107	-.0832 (235) P = .102	.5064 (235) P = .102	.0164 (237) P = .401	.0848 (235) P = .098	-.0964 (233) P = .071	.4788 (234) P = .000**	-.0145 (235) P = .412
DOC1	-.0068 (240) P = .458	-.0629 (240) P = .166	.0847 (239) P = .000**	-.1140 (237) P = .040*	-.0782 (236) P = .116	-.0596 (236) P = .116	.5870 (240) P = .000**	-.1491 (237) P = .011*	-.1111 (235) P = .045	-.1199 (235) P = .033	.0608 (238) P = .175
DOC2	-.1920 (240) P = .001**	.1918 (240) P = .001**	-.0255 (237) P = .348	.9252 (237) P = .000**	-.1176 (236) P = .036*	.2096 (236) P = .001**	-.0689 (238) P = .145	.7628 (236) P = .000**	-.1772 (234) P = .003**	.1278 (235) P = .025*	-.1107 (236) P = .045*

PEARSON CORRELATION COEFFICIENTS

	DOC3	DOC4	V15	V16	V17	V18	BI1	BI2	BI3	BI4	CHECK
DOC3	1.0000 (241) P = .	.0037 (241) P = .477	.0195 (237) P = .383	-.1899 (237) P = .002**	.8349 (237) P = .000**	.0122 (237) P = .259	-.2337 (239) P = .000**	-.1561 (237) P = .008**	.6799 (235) P = .000**	-.0661 (236) P = .156	.1261 (237) P = .076*
DOC4	.0037 (241) P = .	1.0000 (241) P = .	-.0163 (237) P = .401	.1146 (237) P = .039*	.0197 (237) P = .381	.7715 (237) P = .000**	-.0375 (239) P = .282	.0711 (237) P = .138	-.0659 (235) P = .157	.6919 (236) P = .000**	.0281 (237) P = .334
V15	.0195 (237) P = .383	-.0163 (237) P = .401	1.0000 (239) P = .	-.0888 (237) P = .086	.0124 (236) P = .425	-.0896 (236) P = .085	.5210 (237) P = .000**	-.0821 (234) P = .105	-.0186 (232) P = .389	-.0883 (232) P = .090	.0295 (235) P = .326
V16	-.1899 (237) P = .002**	.1146 (237) P = .039*	-.0888 (237) P = .086	1.0000 (237) P = .	-.1379 (236) P = .017*	.2321 (236) P = .000**	-.0990 (235) P = .065	.7455 (233) P = .000**	-.1646 (231) P = .006**	.0887 (232) P = .089	-.1303 (233) P = .023*
V17	.8349 (237) P = .000**	.0197 (237) P = .381	.0124 (236) P = .425	-.1379 (236) P = .017*	1.0000 (237) P = .	.0097 (237) P = .441	-.1793 (235) P = .003**	-.0757 (233) P = .125	.6784 (231) P = .000**	-.0058 (232) P = .465	.0806 (233) P = .110
V18	.0422 (237) P = .259	.7715 (237) P = .000**	-.0896 (236) P = .085	.2321 (236) P = .000**	.0097 (237) P = .441	1.0000 (237) P = .	-.1018 (237) P = .060	.0948 (233) P = .074	-.0050 (231) P = .470	.6121 (232) P = .000**	.0552 (233) P = .201
BI1	-.2337 (239) P = .000**	-.0375 (239) P = .282	.5210 (237) P = .000**	-.0990 (235) P = .065	-.1793 (235) P = .003**	-.1018 (237) P = .060	1.0000 (241) P = .	.0271 (237) P = .339	-.0232 (235) P = .362	-.0106 (235) P = .436	-.0529 (237) P = .209
BI2	-.1561 (237) P = .008**	.0711 (237) P = .138	-.0375 (239) P = .282	-.0821 (234) P = .105	-.0186 (232) P = .389	-.0896 (236) P = .085	.0271 (237) P = .339	1.0000 (238) P = .	-.0325 (236) P = .310	.1976 (236) P = .001**	-.2119 (234) P = .001**
BI3	.6799 (235) P = .000**	-.0659 (235) P = .157	1.0000 (239) P = .	-.0888 (237) P = .086	.0124 (236) P = .425	-.0896 (236) P = .085	-.0232 (235) P = .362	-.0325 (236) P = .310	1.0000 (236) P = .	.0082 (235) P = .450	.0862 (232) P = .095
BI4	-.0661 (236) P = .156	.6919 (236) P = .000**	-.0163 (237) P = .401	.1146 (237) P = .039*	.0197 (237) P = .381	.7715 (237) P = .000**	-.0106 (235) P = .436	.1976 (236) P = .001**	1.0000 (236) P = .	1.0000 (236) P = .	-.0161 (232) P = .404
CHECK	.1261 (237) P = .076*	.0281 (237) P = .334	.0295 (235) P = .326	-.1303 (233) P = .023*	.0806 (233) P = .110	.0552 (233) P = .201	-.0529 (237) P = .209	-.2119 (234) P = .001**	.0862 (232) P = .095	-.0161 (232) P = .404	1.0000 (239) P = .

PEARSON CORRELATION COEFFICIENTS

	DOC3	DOC4	V15	V16	V17	V18	III1	III2	III3	III4	CHICK
V27	.1009 (241) P = .059	-.0632 (241) P = .164	.1037 (239) P = .055	-.0118 (237) P = .428	.1069 (237) P = .050*	-.0722 (237) P = .134	.0649 (241) P = .158	.0277 (238) P = .336	.0661 (236) P = .156	-.0129 (236) P = .422	-.0065 (239) P = .460
A(13	.0466 (236) P = .238	-.0896 (236) P = .085	-.0192 (234) P = .385	-.0625 (232) P = .172	.0902 (232) P = .085	-.1562 (232) P = .009**	.1152 (236) P = .039*	.0083 (234) P = .450	.0247 (232) P = .354	-.0602 (232) P = .181	-.0763 (234) P = .123
SEX	-.0126 (241) P = .423	-.1225 (241) P = .029*	-.0879 (239) P = .088	-.0802 (237) P = .109	-.0597 (237) P = .180	-.0820 (237) P = .104	-.0837 (241) P = .098	-.1518 (238) P = .010*	.0286 (236) P = .331	-.1649 (236) P = .006**	-.0237 (239) P = .358
V30	.0751 (241) P = .123	-.0336 (241) P = .302	-.0915 (239) P = .079	.0132 (237) P = .420	.0348 (237) P = .297	-.0102 (237) P = .438	-.0006 (241) P = .496	.0258 (238) P = .346	.0406 (236) P = .268	-.0024 (236) P = .485	.0471 (239) P = .235
V31	.0629 (240) P = .166	-.0582 (240) P = .185	-.0199 (238) P = .380	.0246 (236) P = .354	.0169 (236) P = .398	-.0445 (236) P = .248	.0285 (240) P = .330	.1179 (237) P = .033*	.0651 (235) P = .160	-.0316 (235) P = .315	.0105 (238) P = .436
V32	.0954 (241) P = .070	.0757 (241) P = .121	.0168 (239) P = .398	.0407 (237) P = .266	-.0300 (237) P = .323	.0664 (237) P = .154	.0708 (241) P = .137	.0456 (238) P = .242	-.1349 (236) P = .019*	.0388 (236) P = .276	-.0985 (239) P = .064
V33	.0141 (237) P = .415	-.0536 (237) P = .206	.0423 (235) P = .260	.0351 (233) P = .297	.0265 (233) P = .344	-.0993 (233) P = .065	.0691 (237) P = .145	.1618 (235) P = .007**	-.0410 (233) P = .267	-.0296 (233) P = .327	-.1368 (235) P = .018*
V34	-.0395 (240) P = .271	-.0571 (240) P = .189	.0719 (238) P = .135	-.0038 (236) P = .477	-.0981 (236) P = .066	-.1235 (236) P = .029*	.0458 (240) P = .240	-.0674 (237) P = .151	-.0820 (235) P = .105	-.0278 (235) P = .336	.0253 (238) P = .349
V35	-.0958 (238) P = .070	.1082 (238) P = .048*	-.1304 (236) P = .023*	-.0335 (234) P = .305	-.0440 (234) P = .251	.0742 (234) P = .129	-.0028 (238) P = .483	-.0447 (235) P = .248	-.0306 (233) P = .321	.2045 (233) P = .001**	-.0555 (236) P = .198

PEARSON CORRELATION COEFFICIENTS

	V27	ADH	SIX	V30	V31	V32	V33	V34	V35
CMD	-.0213 (243) P = .371	-.0384 (238) P = .268	.0399 (243) P = .268	-.0056 (243) P = .465	-.0419 (242) P = .470	.0298 (243) P = .322	-.1389 (239) P = .016*	.1268 (242) P = .024*	-.0357 (240) P = .291
TEL1	.1433 (243) P = .013*	.0624 (238) P = .169	.0115 (243) P = .429	-.2150 (243) P = .000**	.0135 (242) P = .417	.0664 (243) P = .151	.1250 (239) P = .027*	-.0096 (242) P = .441	-.0382 (240) P = .278
TEL2	-.0548 (240) P = .199	-.0642 (235) P = .163	-.1251 (240) P = .026*	.0140 (240) P = .414	.0035 (239) P = .479	.1034 (240) P = .055	.1327 (236) P = .021	-.0737 (239) P = .128	-.0296 (237) P = .325
TEL3	.1157 (240) P = .037	.0782 (235) P = .116	-.0127 (240) P = .422	.0580 (240) P = .185	.0429 (239) P = .255	-.0445 (240) P = .246	.0485 (236) P = .229	-.0038 (239) P = .477	-.0271 (237) P = .339
TEL4	-.1210 (240) P = .031	-.1047 (235) P = .055	-.0535 (240) P = .204	.0776 (240) P = .115	-.0722 (239) P = .133	.0922 (240) P = .077	-.0756 (236) P = .124	-.0205 (239) P = .376	.1892 (237) P = .002**
EJ1	.0699 (243) P = .139	.0539 (238) P = .204	-.0514 (243) P = .212	-.0477 (243) P = .230	-.0045 (242) P = .472	.0988 (243) P = .062	.1161 (239) P = .037*	.0155 (242) P = .405	-.0523 (240) P = .210
EJ2	.0743 (241) P = .125	.0091 (236) P = .445	-.1555 (241) P = .008**	-.0298 (241) P = .323	.0524 (240) P = .209	.0960 (241) P = .069	.1489 (237) P = .011*	-.0327 (240) P = .307	-.0923 (238) P = .078
EJ3	.1091 (239) P = .046	.0861 (234) P = .095	-.0308 (239) P = .318	-.0660 (239) P = .155	.0123 (238) P = .425	-.0719 (239) P = .134	.0877 (235) P = .090	-.0853 (238) P = .095	-.0677 (236) P = .150
EJ4	.0282 (239) P = .332	-.0676 (234) P = .152	-.1063 (239) P = .051	-.0925 (239) P = .077	.0154 (238) P = .406	.0496 (239) P = .223	-.0261 (235) P = .346	.0494 (238) P = .224	.0676 (236) P = .150
DOC1	.0883 (242) P = .085	-.0169 (237) P = .398	-.0270 (242) P = .338	-.0966 (242) P = .067	.0161 (241) P = .289	.0310 (242) P = .316	.0579 (238) P = .187	.0846 (241) P = .095	-.1573 (239) P = .007**
DOC2	.0067 (240) P = .459	-.0634 (235) P = .166	-.1373 (240) P = .017*	.0031 (240) P = .481	.0329 (239) P = .306	.0604 (240) P = .176	.0628 (236) P = .168	.0030 (239) P = .482	-.0278 (237) P = .335

PEARSON CORRELATION COEFFICIENTS

	V27	AGE	SEX	V30	V31	V32	V33	V34	V35
DOC3	.1009 (241) P = .059	.0466 (236) P = .238	-.0126 (241) P = .423	.0751 (241) P = .123	.0629 (240) P = .166	-.0954 (241) P = .070	.0141 (237) P = .415	-.0395 (240) P = .271	-.0958 (238) P = .070
DOC4	-.0632 (241) P = .164	-.0896 (236) P = .085	-.1225 (241) P = .029*	-.0336 (241) P = .302	-.0582 (240) P = .185	.0757 (241) P = .121	-.0536 (237) P = .206	-.0571 (240) P = .189	.1082 (238) P = .048*
V15	.1037 (239) P = .055	-.0192 (234) P = .385	.0879 (239) P = .088	-.0915 (239) P = .079	-.0199 (238) P = .380	.0168 (239) P = .398	.0423 (235) P = .260	.0719 (238) P = .135	-.1304 (236) P = .023*
V16	-.0118 (237) P = .428	-.0625 (232) P = .172	-.0802 (237) P = .109	.0132 (237) P = .420	.0246 (236) P = .354	.0407 (237) P = .266	.0351 (233) P = .297	-.0038 (236) P = .477	-.0335 (234) P = .305
V17	.1069 (237) P = .050*	.0902 (232) P = .085	-.0597 (237) P = .180	.0348 (237) P = .297	.0169 (236) P = .398	-.0300 (237) P = .323	.0265 (233) P = .344	-.0981 (236) P = .066	-.0440 (234) P = .251
V18	-.0722 (237) P = .134	-.1562 (232) P = .009**	-.0820 (237) P = .104	-.0102 (237) P = .438	-.0445 (236) P = .248	.0664 (237) P = .154	-.0993 (233) P = .065	-.1235 (236) P = .029*	.0742 (234) P = .129
B11	.0649 (241) P = .158	.1152 (236) P = .039*	-.0837 (241) P = .098	-.0006 (241) P = .496	.0285 (240) P = .330	.0708 (241) P = .137	.0691 (237) P = .145	.0458 (240) P = .240	-.0028 (238) P = .483
B12	.0277 (238) P = .336	.0083 (234) P = .450	-.1518 (238) P = .010**	.0258 (238) P = .346	.1179 (237) P = .035*	.0456 (238) P = .242	.1618 (235) P = .007**	-.0674 (237) P = .151	-.0447 (235) P = .248
B13	.0661 (236) P = .156	.0247 (232) P = .354	.0286 (236) P = .331	.0406 (236) P = .268	.0651 (235) P = .160	-.1349 (236) P = .019*	-.0410 (233) P = .267	-.0820 (235) P = .105	-.0106 (233) P = .321
B14	-.0129 (236) P = .422	-.0602 (232) P = .181	-.1649 (236) P = .006**	-.0024 (236) P = .485	-.0316 (235) P = .315	.0388 (236) P = .276	-.0296 (233) P = .327	-.0278 (235) P = .336	.2045 (233) P = .001**
CHECK	-.0065 (239) P = .460	-.0763 (243) P = .123	-.0237 (239) P = .358	.0471 (239) P = .235	.0105 (238) P = .436	-.0985 (238) P = .064	-.1368 (235) P = .018*	.0253 (238) P = .349	-.0555 (236) P = .198

PEARSON CORRELATION COEFFICIENTS

	V27	AGE	SEX	V30	V31	V32	V33	V34	V35
V27	1.0000 (243) P = .	.6639 (238) P = .0000**	-.1767 (243) P = .003**	-.1497 (243) P = .010**	.0004 (242) P = .497	-.0794 (243) P = .109	.3329 (239) P = .000**	.0470 (242) P = .234	-.0347 (240) P = .296
AGE	.6639 (238) P = .0000**	1.0000 (238) P = .	-.1405 (238) P = .015*	-.1290 (238) P = .023*	-.0407 (238) P = .266	-.0533 (238) P = .206	.3940 (235) P = .000**	-.0157 (237) P = .405	.0140 (235) P = .415
SEX	-.1767 (243) P = .003**	-.1405 (238) P = .015*	1.0000 (243) P = .	.2426 (243) P = .0000**	.1233 (242) P = .028*	-.2636 (243) P = .0000**	-.3236 (239) P = .000**	-.0560 (242) P = .193	.0448 (240) P = .245
V30	-.1497 (243) P = .010**	-.1290 (238) P = .023*	.2426 (243) P = .0000**	1.0000 (243) P = .	.2424 (242) P = .0000**	-.0889 (243) P = .083	-.1667 (239) P = .005**	-.0131 (242) P = .420	.0889 (240) P = .085
V31	.0004 (242) P = .497	-.0407 (238) P = .266	.1233 (242) P = .028*	.2424 (242) P = .0000**	1.0000 (242) P = .	-.0328 (242) P = .306	-.0381 (238) P = .279	-.0908 (241) P = .080	-.1380 (239) P = .016**
V32	-.0794 (243) P = .109	-.0533 (238) P = .206	-.2636 (243) P = .0000**	-.0889 (243) P = .083	-.0328 (242) P = .306	1.0000 (243) P = .	.2689 (239) P = .000**	-.0824 (242) P = .101	-.0187 (240) P = .386
V33	.3329 (239) P = .000**	.3940 (235) P = .000**	-.0157 (237) P = .405	-.1290 (238) P = .023*	-.0407 (238) P = .266	.2689 (239) P = .000**	1.0000 (239) P = .	-.1576 (238) P = .007**	-.2192 (236) P = .000**
V34	.0470 (242) P = .234	-.0157 (237) P = .405	-.0560 (242) P = .193	-.1290 (238) P = .023*	-.0407 (238) P = .266	-.0824 (242) P = .101	-.1576 (238) P = .007**	1.0000 (242) P = .	.0103 (239) P = .437
V35	-.0347 (240) P = .296	.0140 (235) P = .415	.0448 (240) P = .085	-.1290 (238) P = .023*	-.0407 (238) P = .266	-.0187 (240) P = .386	-.2192 (236) P = .000**	.0103 (239) P = .437	1.0000 (240) P = .

Vita

Dennis Cole was born in Cleveland Ohio. He graduated from Liverpool University, England with a B.A. in Social Studies. He holds an MBA from Boston College and has worked for the Hartford Courant and the Massachusetts Eye and Ear Hospital. As well as teaching at Virginia Tech, he has taught marketing classes at Wake Forest University in North Carolina. Currently he is working to spread the word about PROUT (Progressive Utilization Theory), an economic theory first propounded by the Indian visionary P.R. Sarkar.

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