Abstract

SHANK, MARK JOSEF. The impact of moral reasoning on the performance of salespeople. (Under the direction of James Burrow)

Cognitive Moral Development theory was first developed by Jean Piaget in order to explain the mental processes that occur when deriving meaning from experience. From this theory, Lawrence Kohlberg developed the hypothesis that the higher the moral reasoning, the higher the ethical decision. Previous studies suggest that the sales representative works in an environment that is prone to unethical behavior. Examples of this unethical behavior include lying to the customer, not keeping promises and selling ineffective solutions. Researchers suggest that this damaging behavior has been largely attributed to the relative isolation and high pressure that the sales representative experiences in the field. As a result, this behavior can lead to a large variety of consequences that can have a marked impact on a company’s performance and financial success. The consequences to the company and the sales representative include loss of customer trust, employee turnover, reduction in repeat business, and lawsuits.

To avoid these outcomes, sales managers have a fundamental need to identify mechanisms that increase ethical decision-making. A first step is to understand the relationship between sales performance and morality in the decision making process.

The objective of this study was to provide a first order assessment of the existence of a relationship between sales performance and moral reasoning. Specifically, the study assessed whether or not a sales representative’s performance, measured by the three-year average sales quota achieved, had a positive correlation with cognitive moral development. Demographic variables; income, education, years of sales experience and ethics training
were also analyzed to determine if there was any relationship with cognitive moral development.

The survey data was gathered from a sample of 63 sales representatives in an international pharmaceutical company. The sales representatives completed two questionnaires. The Defining Issues Test-2 was used to measure an individual’s cognitive moral development level and a self-reported demographic questionnaire was created to gather information around income, performance, education and ethics training.

Findings indicate that there is no correlation between a sales representative’s performance and cognitive moral development. While previous research has indicated that demographic variables such as income, highest educational degree earned and years of experience, have a positive relationship with cognitive moral development, this study was not consistent with these findings. The one variable, participation in formal ethics training, did show a significant relationship with cognitive moral development among sales representatives. This suggests that participation in ethics training increases the likelihood of a sales representative having a higher level of moral reasoning.
THE IMPACT OF MORAL REASONING ON THE PERFORMANCE OF SALESPEOPLE

By
MARK J. SHANK

A dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Education

ADULT AND COMMUNITY COLLEGE EDUCATION

Raleigh

2005

APPROVED BY:

Dr. James L. Burrow
Co-Chair of Advisory Committee

Dr. Brad Mehlenbacher
Co-Chair of Advisory Committee

Dr. Paula Berardinelli

Dr. Mitch Javidi

Dr. Tony O'Driscoll
Biography

Mark Josef Shank is an international speaker and trainer who designs and delivers high impact leadership keynotes and workshops. He specializes in the areas of communication, customer service, conflict resolution, team building, motivation and work-life skills. As the founder and CEO of Encore Communication, Inc., Mark is dedicated to helping professionals become pragmatic leaders in their respective organizations.

Mark earned a bachelor’s degree in business from East Carolina University and holds a master’s degree in Adult Education from North Carolina State University. Mark is the son of Barry and Theresa (Terry) Shank. He resides in Holly Springs, NC with his wife, Jill and children, Stephen, Lauren and Matthew.
Acknowledgements

Throughout the many years of contributing to the brick and mortar of the educational institution, I have been blessed to have had the support of many people in the pursuit and completion of the doctorate degree. First and foremost, I would like to thank the chair of my advisory committee, Dr. James Burrow, for providing guidance, support, and lots of red ink. His analytical ability and perfectionist nature enhanced the finished product. Also, Dr. Tony O’Driscoll and Dr. Paula Berardinelli for their humor and ability to see angles for research that only a pointed boot could hit.

Also, this study would not have been possible without Gene Bucci, Regional Account Manager, who used his influence and selling skills to secure a study population from which to draw a sample. His willingness to walk the plank where risk taking is concerned is certainly appreciated.

I would like to thank my family, who has stood by me continuously through the rough white water of doctoral writing. My mother, Terry Shank, has been a beacon of light and was always out in front leading the charge. My father, Barry Shank, through his simple humor and deep felt empathy, had a lasting effect. By brother Tim understood what it takes and gave me the strength and inspiration to see the fruits of my labor. My brother Michael provided the much needed spiritual support.

Finally, my three children, Stephen, Lauren and Matthew, who will one day understand the importance of higher education and will hopefully pursue it. And my beautiful bride and business partner of nine years, Jill Shank. She has been a steadfast source of motivation, critique, and intellectual inspiration.
# Table of Contents

List of Tables ................................................................. vii

List of Figures ................................................................. viii

Chapter I Background ......................................................... 1
  Dishonesty in Selling ......................................................... 2
  Moral Reasoning ............................................................. 4
  Purpose ........................................................................ 6
  Problem Statement ........................................................ 7
  Research Questions ........................................................ 7
  Importance of the Study .................................................. 8
  Limitations of the Study .................................................. 8
  Definition of Terms ......................................................... 9
  Research Design ........................................................... 10
    Instrument Selection .................................................... 10
    The DIT-2 Instrument .................................................. 11
    Demographic Questionnaire .......................................... 11
    Population and Sample Selection .................................... 12
    Data Collection .......................................................... 12
    Data Analysis ............................................................ 12
  Summary ....................................................................... 14

Chapter II Review of the Literature ....................................... 15
  Scope Of The Investigation ............................................... 15
  Organization Of The Literature Review ............................... 15
  Moral Philosophies ........................................................ 15
  Ethical Decision-Making Models ......................................... 18
    Ethical Decision Action Process (EDAP) ............................ 18
    General Theory of Marketing Ethics ................................. 20
    Cognitive Moral Development (CMD) ............................... 21
    Criticism of Kohlberg’s CMD ......................................... 26
  Measuring Cognitive Moral Development ............................. 30
    Moral Judgment Interview (MJI) ....................................... 30
    Adapted Moral Judgment Interview (AMJI) ......................... 32
    The Multidimensional Ethics Scale (MES) ......................... 33
    Defining Issues Test (DIT) .............................................. 35
  Cognitive Moral Development and Sales Performance ............... 42
    General Performance Studies ......................................... 42
    Sales Performance Studies ............................................. 44
    Studies Relating to Specific Demographic Variables ............. 45
  Conclusion .................................................................... 51

Chapter III Methodology ....................................................... 54
  Overview ................................................................... 54
  Research Questions and Null Hypothesis ................................. 54
# List of Tables

Table 2.1 Categories of Personal Moral Philosophies .......................................................... 18  
Table 2.2 CMD Levels and Stages ....................................................................................... 23  
Table 2.3 Characteristics of Instruments for Deriving Cognitive Moral Development ...... 37  
Table 2.4 Test-Retest Sample ............................................................................................. 38  
Table 2.5 Cronbach Alphas of P Score ................................................................................. 39  
Table 2.6 DIT Average P Scores for Various Demographic Groups .................................. 47  
Table 2.7 Average DIT P Score Grouped by Education and Gender ................................. 48  
Table 4.1 Number of Responses Received on Each Day of Reception Period................. 63  
Table 4.2 Leaf Plot Diagram Showing the Distribution of P Scores ................................. 65  
Table 4.3 Frequency Distribution of Percentage of Quota ................................................ 66  
Table 4.4 Frequency Distribution According to Income .................................................... 67  
Table 4.5 Leaf Plot Diagram Showing the Distribution of Years of Sales Experience ...... 67  
Table 4.6 Frequency Distribution According to Highest Degree Earned ......................... 68  
Table 4.7 Frequency Distribution According to Academic Major ................................... 69  
Table 4.8 Frequency Distribution According to Participation in Ethics Training ................ 69  
Table 4.9 Frequency Distribution According to Perceived Usefulness of Ethics Training .... 70  
Table 4.10 Means, Median and Standard Deviations of P Scores for Performance ............ 71  
Table 4.11 Mean and Standard Deviation of P Scores to Performance Awards .................. 73  
Table 4.12 Mean, Median and Standard Deviation of P score for Four Income Levels ...... 75  
Table 4.13 Mean, Median and Standard Deviation of P Score According to Highest Education Degree Earned .......................................................... 77  
Table 4.14 Mean P Score and Standard Deviation for Ethics Training ............................... 80  
Table 4.15 Mean and Median P Scores and Standard Deviation of Perceived Usefulness .. 82  
Table 4.16 Confidence Interval ......................................................................................... 83  
Table 4.17 T-Test for Variable: P Score ............................................................................. 84  
Table 5.1 Summary of Statistical Test Results ................................................................. 88
List of Figures

Figure 2.1  Representation of the Study Analysis.................................................................53
Figure 4.1 Distribution of P Scores.......................................................................................66
Figure 4.3 Distribution of Sales Experience for the Sample ................................................68
Figure 4.4 Box Plot of P Scores for Performance.................................................................72
Figure 4.5 Comparison of P Scores and Performance Awards.............................................73
Figure 4.6 Scatter Graph of Relationship Between CMD and Years of Sales Experience ..76
Figure 4.7 Comparison of Highest Degree Earned and the Average P Score .................78
Figure 4.8 Mean P Score and Ethics Education.................................................................81
Figure 4.9 Comparison of P Score with Training Usefulness ..........................................83
Chapter I Background

Selling products or services is the most important component of a business (Clark & Lattal, 1993). The responsibility of the sales department (sales) is to provide the revenue stream that supports all of the business’s activities. The competitive business market creates great pressure for sales success. This pressure engenders an environment that fosters temptation for unethical behavior (Bellizzi & Hasty, 2003; Weeks & Nantel, 1992). The use of quotas, short-term contingency bonuses, and commissions contributes to high stress in the sales environment. For some salespeople, these pressures for success are motivating factors. Others cite these pressures as reasons for unethical business practices (Clark & Lattal, 1993).

Research has shown that individuals who work in close proximity to others and who make decisions together tend to possess higher levels of moral reasoning (Nichols & Day, 1982). Salespeople, however, do not generally benefit from this process because they often work apart and experience little daily interaction with peers and managers. Because they conduct sales operations in isolation, salespeople are referred to as boundary-role performers (Ingram & Laforge, 1989). Salespeople generally do not participate in the social functions that provide feelings of group togetherness and an understanding of company norms (Dubinsky, Howell, Ingram & Bellenger, 1986). This isolation tends to lead to a lower moral standard that can instill negative impressions on business customers (Rosengren, 1998).
Dishonesty in Selling

A Sales and Marketing Management survey of 200 sales managers, who worked in businesses ranging in size from major corporations to privately held companies, discovered that salespeople will go to great extents to make a sale (see Marchetti, 1997). A summary of the survey shows that 49% of managers said their salespeople have lied on a sales call, 34% said they have witnessed salespeople make unrealistic promises on a sales call, and 22% said their salespeople have sold products their customers didn’t need (Marchetti, 1997). In addition, Dudley and Goodson (1997) analyzed the “exaggeration” behavior of 5,000 sales representatives in nine countries and discovered that American salespeople exaggerate more than 50% of the time.

Lousig-Nont (1998) asked sales managers at more than 1,200 businesses what characteristics salespeople needed in order to be successful. He found that, in addition to the understanding and implementation of basic selling skills, the managers consider courtesy, ethics, and enthusiasm as beneficial to one’s success. Successful salesmanship requires skill in obtaining referrals, generating repeat business, building a reputable company name, and conducting business activities in an ethical manner (Rosengren, 1998). Businesses cannot succeed long-term if their reputation is damaged by the impression that their financial success outweighs ethical behavior (Clark & Lattal, 1993). Ethical behavior exhibited by the salesperson builds trust, facilitates cooperation, and generates buyer commitment. It also aids in the development and maintenance of long-term relationships (Hawes, Mast & Swan, 1989). Morgan and Hunt (1994) found, that to earn the buyer’s respect, salespeople must exhibit honesty, fairness, and high integrity. Buyers who trust their sales representative will
purchase the salesperson’s products, benefiting both the salesperson and the organization (Bingham & Dion, 1991).

Salespeople who take an unprincipled approach to the profession by lying, selling unnecessary solutions, or breaking promises to customers can cause costly lawsuits, generate negative press, contribute to employee turnover, and weaken market position (Marchetti, 1997; Bellizzi & Hasty, 2003). For example, sales agents of the Prudential Insurance Company of America, in hopes of larger commissions, convinced customers to purchase new policies. The sales agents promised that the new policies would “virtually pay for themselves.” However, the customers were unaware that the sales agents used up the cash value of the older policies to pay for the new ones. The company agreed to pay $425 million to settle a resulting class-action suit (Marchetti, 1997).

The discovery of unethical behavior can lead to job loss. This can affect an organization’s revenue stream (Gable, Myron & Dangello, 1992) and turnover, a particular concern of organizations that employ salespeople (Fern, Avila & Grewal, 1989). Some organizations feel fortunate if they retain 50% of their new salespeople for two to three years (Fern et al., 1989). Hiring and training new salespeople is a time consuming and expensive proposition (Rosengren, 1998). In the pharmaceutical industry, it can cost as much as $150,000 to hire and train a salesperson (B.C. Young, personal communication, August 2, 2004).

In summary, unethical behavior can have a negative impact on both the sales representative and the company. The company’s value in the marketplace can be affected by poor public image and loss of revenue. The sales representative can experience the loss of customer loyalty, of business activity, and potentially of his or her job. Salespeople make
decisions each day involving ethical considerations that have the potential to affect their organization, their employment, and their performance. Unethical behavior damages customer relations and causes revenue losses (Chonko, Wotruba & Loe, 2002). Because salespeople play a critical role in the overall success of an organization (Ingram, 1990), it is of great interest to organizations to further their understanding of the factors affecting a salesperson’s performance (Schwepker & Ingram, 1996). Izzo and Langford (2003) state that “In today’s competitive and litigious business environment, it is incumbent upon sales managers to emphasize both performance goals and socialization tactics that will help regulate compliance and assure ethical behavior” (p. 191). Researchers (Izzo, 2000; Schwepker & Ingram, 1996; Izzo & Langford, 2003) believe that salespeople who possess a higher level of moral reasoning are more likely to be successful than those who have a lower level.

Moral Reasoning

*Moral intent,* also referred to as *moral reasoning* (Hunt & Vitell, 1986), is derived from an individual’s values. It most often comes from religious studies, individual thought, or observations. Research in moral reasoning is important because moral reasoning enables us to understand differences in modes of thinking and may explain moral action (Blasi, 1980).

Most leading models of ethical decision-making (Rest, 1986; Ferrell, Gresham & Fraedrich, 1989; Hunt & Vitell, 1986; Wotruba, 1990) believe that a moral intent is enacted prior to engaging in ethical behavior through one’s internal reasoning or thought process. Ethics, on the other hand, describes external behavior or moral action taken (Barry, 1986). Empirical evidence gathered by Dubinsky and Loken (1989) supports this distinction by
indicating that a salesperson’s moral reasoning affects his or her intentions to act ethically or unethically.

One of the more popular and valid means of better understanding and exploring moral reasoning is Kohlberg’s 1969 theory of cognitive moral development (CMD) (Rest, 1986; Loe & Weeks, 2000; Arnold & Lampe, 1999). Kohlberg (1969) proposed that advanced moral reasoning requires a highly developed capacity for advanced logical reasoning. He hypothesized that moral development should follow a cognitive developmental process. In a moral dilemma, an individual with poorly developed logical reasoning abilities would be unable to recognize and analyze the complex relationships among all the elements involved. As a result, this individual would not be able to recognize all the possible options and consequences that might result from a particular course of action. According to Goolsby and Hunt, (1992) moral reasoning provides the underlying cognitive structure in cognitive moral development. Without adequate moral reasoning, a person would not be able to gather the rightful needs of all those involved into a judgment satisfying a moral ideal. The cognitive moral development approach to moral reasoning builds upon the progressive way an individual acquires, over time, an accurate understanding of the nature of moral obligations in complex social systems (Rest 1979).

Kohlberg (1969, 1981) has theorized that an individual begins with a stage of cognitive moral development that is concerned only for himself or herself as an individual. The individual then progresses through stages to a broader concern for the betterment of society. His theory focuses on the manner in which individuals understand the relationship between their actions and the consequences of those actions on themselves, on others, and on society as a whole.
Kohlberg (1969, 1981) describes cognitive moral development as consisting of three levels of moral reasoning: preconventional, conventional, and postconventional (See Chapter 2 Table 2.2). Each level contains two stages of development for a total of 6 stages. The postconventional level is the extent to which an individual considers other’s rights and takes a position for the common good. Cognitive moral development requires an individual to move progressively through these stages of moral reasoning. People who reason at the highest level (postconventional level, Stages 5 and 6) are less apt to cheat and are more likely to help others in distress (Clouse, 1983). For this reason, improving the moral reasoning skills of an organization’s sales force could provide a means for sales organizations to improve ethical behavior (Loe & Weeks, 2000).

Purpose

Although there has been extensive research in the area of CMD, few studies have examined the relationship between CMD and the moral reasoning of salespeople (Izzo, 2000). The purpose of the study was to extend the understanding of a salesperson’s moral reasoning by examining the relationship between moral reasoning, in the form of cognitive moral development, and sales performance. The study focused on the mental processes that sales representatives use when faced with moral dilemmas. The research employed cognitive moral development theory as the conceptual framework for examining the moral reasoning of study participants. In particular, the study attempted to determine if there was a relationship between a salesperson’s postconventional level (the extent to which a person considers other’s rights and concern for the common good) and sales performance. Additionally, the research attempted to determine if selected demographic variables, including the participation in a formal ethics training class or seminar, were associated with CMD.
Problem Statement

The problem serving as the focus of this study is the identified unethical practices of some salespeople. The pressures of the sales environment coupled with the relative isolation of salespeople, make sales a fertile ground for self-serving decisions. These decisions can lead to negative consequences for salespeople, their organization, and the customers they serve. Through the use of CMD, the research goal is to provide insights to managers to help identify the mechanisms to avoid these negative consequences.

Research Questions

The following research questions define the study.

Research Question 1: Is there a concurrent relationship between the postconventional level of cognitive moral development as measured by the DIT-2 and a salesperson’s performance as measured by the three-year average sales quota achieved?

Research Question 2: Is the relationship between the postconventional level of cognitive moral development and a salesperson’s performance moderated by selected salesperson’s demographic variables; educational major, highest education degree earned, income, and sales experience?

Research Question 3: Is there a difference in the postconventional level of cognitive moral development and a salesperson’s performance based on participation in ethics training?
Importance of the Study

A more ethical business environment may possibly result from understanding the relationship between CMD and sales performance. With such an understanding, organizations could take steps toward reducing ethical conflict by promoting the ethical behavior of their salespeople (Goolsby & Hunt, 1992).

According to Schwepker, Jr. (1999), salespeople using higher levels of cognitive moral reasoning indicate that they are less likely to participate in unethical behavior. Dubinsky and Loken (1989) found that salespeople’s moral reasoning affects their intentions to behave ethically or unethically. Therefore, improving salespeople’s cognitive moral reasoning may increase ethical behavior in salespeople (Schwepker, 1999). With a decrease in unethical behavior there would be less customer dissatisfaction, increased customer loyalty, and enhanced business reputation (Bellizzi & Hasty, 2003). For example, in the financial services sector the need to be perceived as ethical is critical. While working with bank personnel, Sergio (2003) discovered that ethical behavior leads to higher customer satisfaction, trust, and loyalty.

The identification of a person’s postconventional level could aid in the selection and hiring process (Schwepker, 1999; Schwepker & Ingram, 1996). Thus, sales managers might want to ask their sales representatives to respond to ethical scenarios to assess their level of moral reasoning (Schwepker & Ingram, 1996).

Limitations of the Study

The limitations of this study are discussed in detail in Chapter V. Briefly, a limitation of this study is the restricted number of sales representatives sampled and the fact that they...
come from a specific region of the country. Another limitation is that the study sample are all from one company in one industry (pharmaceuticals). The selling process in this industry has its particular set of pressures on salespersons to perform. In other industries, such as the automobile industry, the pressures to perform might be more or less extreme or with more emphasis on short-term gain. Due to the variation of sales pressures and competitive environments, the selling process could differ significantly in other circumstances. In such environments, a sales representative’s moral reasoning could vary from those studied here.

**Definition of Terms**

**Cognitive Moral Development (CMD):** The underlying cognitive theory in regard to moral reasoning (Goolsby & Hunt, 1992), whereby one progresses through different stages of moral reasoning (Kohlberg, 1969, 1981, 1984).

**Defining Issues Test-2 (DIT-2):** An objective instrument used to measure cognitive moral development (Rest & Narvaez, 1998).

**Ethical dilemma:** An undesirable or unpleasant choice relating to a moral principle or practice (Rest & Narvaez, 1998).

**Ethics:** Study and philosophy of human conduct with an emphasis on the determination of right and wrong (Ferrell, Gresham, & Fraedrich, 1989).

**Moral judgment:** An individual’s decision as to whether something is considered ethical or unethical (Schwepker & Ingram, 1996).

**Moral reasoning:** The cognitive skills and concepts an individual utilizes in solving moral problems (Dukerich et al., 1990).

**Morals:** The act of being concerned with the judgment of goodness or badness of human action and character (Rest & Narvaez, 1994).
**P score**: The sum of scores from Stages 5 and 6 from the DIT-2 converted to a percentage. The P score can range from 0 to 95. It is interpreted as the extent to which a person prefers postconventional moral thinking (Rest & Narvaez, 1998).

**Research Design**

This research design consists of four areas: instrument selection, population and sample selection, data collection, and data analysis.

**Instrument Selection**

The study utilized two instruments. The first was an instrument to measure cognitive moral development. The second was an instrument to measure important demographic variables related to CMD and focused on formal ethics training (e.g., class or seminar). Several instruments have been used to measure cognitive moral development. These are the Multidimensional Ethics Scale (MES) (Reidenbach & Robin, 1990), Moral Judgment Instrument (MJI) (Kohlberg, 1969), the Adapted Moral Judgment Instrument (AMJI) (Weber & Wasielecki, 2001), and the Defining Issues Test (Rest, 1986). Chapter 2 describes these instruments in more detail. Of the instruments available, the Defining Issues Test-2 (DIT-2), similar to the DIT, was chosen because of its broad data base, high validity and reliability, and relative ease of implementation and scoring.
The DIT-2 Instrument

This study used Rest and Narvaez’s (1998) DIT-2. The DIT-2, based on Kohlberg’s six-stage theory of CMD, is an objective test that assesses how people use different considerations in making sense of a moral situation. The DIT-2 is an improved version of the older DIT, but has clearer instructions and is shorter (five versus six dilemmas).

The DIT has been used extensively to measure an individual’s stage of cognitive moral development (Rest, 1986). The DIT presents written moral dilemmas followed by a list of 12 statements that an individual might consider in solving the dilemma. These 12 statements were constructed and validated to represent considerations that would be salient at each of the six stages of moral development. The individual completing the instrument must decide each statement’s level of importance. The levels of importance range from great importance to no importance. The individual must also select and rank the four most important statements for each dilemma. This ranking assesses the relative importance the individual gives to higher moral thinking (postconventional level) and provides an overall index of cognitive moral development that is signified as a P score.

Demographic Questionnaire

The researcher designed a demographic questionnaire consisting of eight questions designed to collect information in the areas of income, education, sales experience, sales performance, and ethics training. These demographic characteristics were explored in previous research (Izzo, 2000; Schwepker & Ingram, 1996; Goosby & Hunt, 1992) as reviewed in Chapter 2. The demographic questionnaire was subjected to a content review process described in Chapter 3.
Population and Sample Selection

The researcher selected an international pharmaceutical company for the study because of the researcher’s understanding of the company’s sales structure and the positive interest shown by the company. The researcher was able to recruit a two-state region consisting of a population of 150 salespeople to receive the questionnaires. The researcher surveyed the entire population, generating a sample size of 63 sales representatives.

Data Collection

Data for the study was collected through the two questionnaires: the DIT-2 and the demographic questionnaire. Both questionnaires were mailed to the sales representative population. Two rounds of emails to increase the response rate followed up the mailing.

Data Analysis

Analysis addressed the following hypotheses.

HO1: There is no concurrent relationship between a salesperson’s three-year average sales quota achieved and the postconventional level of cognitive moral development as measured by the Defining Issues Test-2.

A non-parametric test, the Spearman Correlation, was performed.

HO2a: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by level of income.

A Kruskal Wallis test, the non-parametric equivalent to a one-way ANOVA was performed.

HO2b: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by years of sales experience.
A Pearson Correlation which looks for a relationship between 2 quantitative variables was performed.

HO2c: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by highest education degree earned.

A Kruskal Wallis test was performed.

HO2d: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by educational major.

A Kruskal Wallis test was performed. In addition, all the demographic variables were factored into a multiple regression analysis to determine which variables were significantly related to the postconventional level of cognitive moral development.

HO3a: There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by having participated in a formal ethics training class or seminar?

An ANOVA was performed.

HO3b: There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by perceived usefulness of ethics training.

The Kruskal Wallis test was performed.
Summary

Some (Clark & Lattal, 1993; Bellizzi & Hasty, 2003) have suggested that sales representatives are susceptible, due to their work environment and role responsibilities, to perform unethical practices. The undesirable consequences for the selling company can include negative press releases, loss of revenue, and high employee turnover (Rosengren, 1998; Marchetti, 1997). Consequences for the sales representative can include a flood of customer complaints, competitor retaliation, missed sales opportunities, and potential loss of a job (Bellizzi & Hasty, 2003).

By understanding moral reasoning and its relationship with sales performance, organizations and sales representatives can become more aware of the need to improve ethical decision making. Using measures of CMD to evaluate the moral reasoning abilities of salespeople may help them to reason effectively when ethical situations come up (Izzo, 2000) leading to positive sales numbers and an environment of healthy business practices (Schwepker, 1999).
Chapter II Review of the Literature

Scope of the Investigation

This study investigates the concurrent relationship between the cognitive moral development of salespeople and their sales performance. It also investigates the moderating effect of certain demographic variables on cognitive moral development.

Organization of the Literature Review

To demonstrate how this research is integrated within the body of knowledge and to clarify its contribution to that body of knowledge, a discussion of the relevant literature is presented. The sequence of the discussion is:

- A review of literature related to cognitive moral development (CMD).
- An overview of the various CMD instruments used to guide the analysis of moral decision-making.
- A justification of the instrument selected.
- A review of the various demographic and performance elements deemed relevant to the major variables CMD and sales performance of this study.

Moral Philosophies

Moral philosophy is important in an ethical dilemma because it is a determining factor in how a person evaluates the various alternatives for action. The values established for determining right and wrong are based upon the moral philosophy adopted by the individual. Each philosophy takes a different approach as to what is ethical or unethical and to what creates ethical standards (Schwepker & Ingram, 1996). When making decisions, individuals may use several different moral philosophies (Reidenbach et al., 1991). Moral
philosophies can be classified into two types: teleological (the consequences of the behaviors) and deontological (the inherent rightness or wrongness of the behaviors) (see table 2.1). Both types of moral philosophies influence an individual’s intention to act in a particular manner when confronted with an ethical dilemma or ethical situation (Deconinck & Lewis, 1997; Ferrell, Gresham & Fraedrich, 1985; Hunt & Vitell, 1986). Rest (1979) believed that the individual progresses from unquestioning obedience to reasoning based on abstract principles found in utilitarian and deontological philosophies.

A teleological philosophy deals with the moral worth of a behavior. This worth is determined by its consequences and involves several constructs (Deconinck & Lewis, 1997, p. 499):

- The effect of the individual’s behavior for various stakeholder groups (for example, customers and employers).
- Estimating the probability that the consequences will occur to the stakeholders.
- Evaluating the negatives and positives of each consequence.
- Analyzing the importance of the stakeholder groups.

*Utilitarianism* and *egoism* are examples of teleological philosophy. Utilitarianism states that individuals should act to produce the greatest possible good for all of society, rather than in the individual’s self-interest. Utilitarianism forces the decision maker to consider all of the outcomes of an action or inaction and to weigh one against another to determine which is best for society (Reidenback & Robin, 1990). The main difference between utilitarianism and egoism is on the subject of the decision (Hanson, 1992). While utilitarianism focuses on society’s long-term interests, egoism focuses on the individual’s long-term interest (Reidenback & Robin, 1990). Egoism involves the difference between the
benefit an individual receives from the act compared to the negative consequences to the individual of the act (Deconinck & Lewis, 1997).

Deontological philosophies are concerned with moral obligations that should be binding or necessary for proper conduct. They focus on universal statements of right and wrong (Hanson, 1992). Deontological moral philosophers believe that individuals have moral obligations such as; fidelity, gratitude, and self-improvement, that influence behavior (Hunt & Vitell, 1986). These obligations are based on the individual’s personal norms, such as lying, cheating, honesty, and justice.

Justice theory, a deontological philosophy, focuses on protecting the interest of all participants in a particular situation (Ferrell, Gresham, & Fraedrich, 1989). In justice theory, there are two components of justice: distributive and procedural. Distributive justice refers to the proper distribution of social benefits and burdens. Procedural justice deals with developing rules or procedures that result in fair or just outcomes (Hanson, 1992).

Relativism is another deontological philosophy. Relativism maintains that decisions concerning what is ethical are a function of cultures or individuals and therefore no universal rules exist that apply to everyone (Reidenbach & Robin, 1990).

Table 2.1, adapted from Ferrell and Fraedrich (1991, p. 42) and Hanson (1992, p. 531), provides a summary description of personal moral philosophies investigated in this study.
Table 2.1 Categories of Personal Moral Philosophies

<table>
<thead>
<tr>
<th>Type of moral philosophy</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teleology</strong></td>
<td>Stipulates that acts are morally right or acceptable if they produce some desired result, such as the realization of self-interest or utility. Teleological philosophies include:</td>
</tr>
<tr>
<td></td>
<td><strong>Egoism</strong>: Right or acceptable actions as those that maximize a particular person’s self-interest as defined by the individual.</td>
</tr>
<tr>
<td></td>
<td><strong>Utilitarianism</strong>: Right or acceptable actions as those that maximize total utility or the greatest good for the greatest number of people.</td>
</tr>
<tr>
<td><strong>Deontology</strong></td>
<td>Focuses on the preservation of individual rights and on the intentions associated with a particular behavior rather than on its consequences. Deontological philosophies include:</td>
</tr>
<tr>
<td></td>
<td><strong>Relativist</strong>: What is ethical is determined by culture or the individual. All moral norms are relative to particular cultures.</td>
</tr>
<tr>
<td></td>
<td><strong>Justice</strong>: Emphasis is on fairness. Equals ought to be treated equal and unequals to be treated unequally.</td>
</tr>
</tbody>
</table>

**Ethical Decision-Making Models**

Researchers have developed ethical decision-making models where moral judgment is a key component. Moral judgment is not simply logical reasoning applied to moral problems. Moral judgment involves role taking: understanding others’ points of view, assessing what is owed, and prioritizing the reward (Penn & Collier, 1985).

**Ethical Decision Action Process (EDAP)**

Wotrub’a’s (1990) ethical decision action process (EDAP) describes ethical decision making as a repetitive process where individual characteristics impact the cognitive moral decisions in given situations. The EDAP is based largely on Rest’s (1986) four-component model where an individual’s moral decision structure consists of recognizing an ethical
situation, making a moral judgment, establishing moral intent, and acting on that judgment. Wotruba’s four components are:

1. Recognize what actions are possible in a given situation, what the outcomes would be, and who would be affected by each alternative outcome.

2. Determine which alternative is morally right.

3. Know what is right and assign a priority to the moral values in relation to other values.

4. Take action on the intention either as an ethical decision or behavior (Wotruba, 1990, p. 31).

Wotruba’s is the only framework that focuses on sales organizations and that attempts to provide a comprehensive statement of the process of decision-making under ethical conditions (McClaren, 2000). Wotruba’s approach also provides the opportunity to discuss and reason through the moral aspects of spontaneous decisions (those that must be performed quickly) (Loe & Weeks, 2000). However, the limitation of Wotruba’s approach is the lack of sales research upon which to build his framework (McClaren, 2000). For example, a major limitation with the EDAP framework is the way it describes selling activities and sales practitioners. It fails to sufficiently identify the dimensions upon which selling activities can be classified. Selling activities could consist within several different classifications. This lack of specifically defined selling activities has led to an ambiguity of results (McClaren, 2000). In addition, the EDAP framework does not sufficiently address personality style (individual characteristics) and the responsibilities of the selling position.
General Theory of Marketing Ethics

Hunt and Vitell (1986) created the General Theory of Marketing Ethics to better understand the decision-making process for situations requiring an ethical judgment. The researchers theorize that when an individual perceives a situation with ethical content, that person will develop possible options to resolve the ethical problem. The process of considering the various options is dependent upon the chosen moral philosophy (DeConinck & Lewis, 1997). These philosophies involve a deontological and a teleological evaluation. In the deontological evaluation, the individual measures the inherent rightness or wrongness of the behaviors implied by each alternative, while in the teleological evaluation the individual measures the consequences of the various behaviors. These consequences are analyzed in several ways: (a) the perceived consequences of each alternative for those affected (customers, employees, etc.), (b) the likelihood that each consequence will occur to each person involved, and (c) the desirability or undesirability of each consequence, the importance of each consequence, and the importance of each stakeholder group (Ferral, Gresham & Fraedrich, 1989).

Hunt and Vitell (1986) also suggest that ethical judgments are affected by conflicting intentions. An individual might perceive one alternative as most ethical but another alternative might have consequences that are more desirable. If behavior and intentions are inconsistent, the individual may feel a sense of guilt (Ferrell, Gresham & Fraedrich, 1989).
Cognitive Moral Development (CMD)

Research on cognitive moral development is rooted in the work of Jean Piaget, the Swiss theorist, who studied the moral development of children. Recognizing that the world did not look the same to all people, Piaget (1965) was impressed with the complex mental exercises utilized in deriving meaning from experience. Piaget theorized that moral development occurs in distinct stages. He believed that cognitive development and moral development proceed together. Piaget discussed such moral development as part of the intellectual development of children. Through interviews with children, Piaget discovered that cognitive development occurs in a progression of stages he labeled nonmoral, heteronomous, and autonomous.

In the late 1960s, Lawrence Kohlberg (1969), building upon the work of Piaget, recognized that advanced moral reasoning requires advanced logical reasoning capacity. Kohlberg reasoned that moral development should follow the cognitive developmental process. That is, an individual functioning at the lower stages of cognitive thought would be unable to recognize and analyze the complex relationships that exist among all the factors involved in a decision with moral implications. Therefore, the individual would not recognize all of the options and consequences that might result from a particular course of action. As a result, the decision reached would not satisfy a moral ideal by meeting the needs of everyone involved (Kohlberg, 1984).

Kohlberg reasoned that while advanced logical development is necessary for advanced moral reasoning, it alone is not sufficient. Kohlberg recognized that to reach an advanced moral reasoning capability, individuals must develop a social interpretative perspective (or role-taking recognition capability) that allows them to interpret the thoughts,
feelings, and roles of other individuals potentially affected by a decision. Kohlberg also
explored the reasons for an individual’s moral perception and decision-making behavior.
Kohlberg (1984) translated these reasons into stages of moral maturity that became his
“stages of moral development.”

According to Kohlberg (1969), cognitive moral development describes the
development of moral reasoning in terms of three levels and six stages. Individuals may
traverse as many as six stages of moral development in a sequential progression. With each
consecutive stage, individuals acquire a broader and more accurate societal perspective; their
logical interpretative capabilities increase, and their moral judgments become less dependent
upon others’ definitions of the situation. Cognitive moral development is understood as the
step-by-step improvement defined by the reasons an individual uses to justify a moral choice
(Ferrell, et al., 1989). A person who understands Stage 6, principled reasoning, also
understands the lower Stages 1-5 (Kohlberg, 1969). Individuals are thought to advance
through these stages toward a better understanding of moral obligations (Rest, 1979).
Kohlberg believed continued exposure to diverse points of view to be necessary for one to
reach the higher stages of cognitive moral development (Fraedrich, Thorne, & Ferrell, 1994).

The difference between Piaget’s and Kohlberg’s works was that Piaget studied
children from 5 to 13 years of age to create overlapping phases, whereas Kohlberg’s stages
attempts to account for development in moral judgment up through professional moral
philosophers (Rest, 1979). Kohlberg also replaced the word “phase” used by Piaget with
“stages” and said that over the course of moral development the individual should go through
the six stages in consecutive order, without stage skipping or stage reversal (Colby et al.,
1983). Piaget (1965) had used an open-ended method for interviewing the children in his
study. Kohlberg, on the other hand, developed a highly refined interview procedure that has
been used in assessing moral cognitive development over several years (Kurtines & Gewirtz,
1995). Kohlberg used longitudinal data, repeating the test to the same groups every three
years to substantiate the claim that people do change in moral judgment and that they change
in the ways stated by the theory (Rest & Narvaez, 1994). Table 2.2 describes CMD Levels
and Stages (Kohlberg, 1984, p. 174-176).

Table 2.2 CMD Levels and Stages

<table>
<thead>
<tr>
<th>Levels</th>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Preconventional</td>
<td>Stage 1: Heteronymous morality</td>
</tr>
<tr>
<td></td>
<td>Stage 2: Instrumental purpose and exchange</td>
</tr>
<tr>
<td>2: Conventional</td>
<td>Stage 3: Mutual interpersonal expectations, relationships, and interpersonal conformity</td>
</tr>
<tr>
<td></td>
<td>Stage 4: Social accord and system maintenance</td>
</tr>
<tr>
<td>3: Postconventional</td>
<td>Stage 5: Social contract and individual rights</td>
</tr>
<tr>
<td></td>
<td>Stage 6: Universal ethical principles</td>
</tr>
</tbody>
</table>

CMD levels and stages (Kohlberg, 1984).

CMD level 1 preconventional. Preconventional reasoning is moral reasoning based
on a highly egocentric rationale: individuals are concerned with how they will benefit most.
In this phase, the individual chooses to either (a) avoid punishment (Stage 1) or (b) seek
pleasure from external sources (Stage 2).

Stage 1, Heteronomous Morality: Individuals at the first stage are characterized by
orientation toward obedience to authority and the avoidance of punishment. Doing what is
right is necessary to avoid punishment, and superiors have the right to enforce conformity
according to rules. These individuals focus upon themselves and do not recognize the interests of others or consider them in the decision-making process.

Stage 2, Instrumental Purpose and Exchange: Individuals in the second stage follow rules when it is in their self-interest, and allow others to do the same. Stage two individuals recognize that people have the right to pursue their own interests and should be allowed to do so. The dominant motive of this group is to serve one’s own interest.

CMD level 2 conventional. The conventional level incorporates Stages 3 and 4. Here individuals are focused on significant others and peer relations. This phase is based on the desire of the individual to receive approval from significant others (Stage 3) or from society in general (Stage 4).

Stage 3, Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity: The Stage 3 individual is more inclined to do what others (such as peers, coworkers, family, or friends) think is appropriate behavior. Individuals in Stage 3 demonstrate good behavior in accordance to what others view as right. They live up to a perceived expected behavior in the many roles they play and they show concern for others’ positions or feelings (i.e., the Golden Rule). Individuals at this stage value trust, loyalty, respect, and gratitude. Stage 3 individuals are aware of other’s feelings, agreements, and expectations, which are interpreted as more important than self.

Stage 4, Social System and Conscience: This stage is referred to as the law and order stage of reasoning. The difference between Stage 3 and Stage 4 individuals is that Stage 4 individuals have instilled a perspective of a social contract to abide by the laws for the good and protection of people’s rights. Their reason for doing right is to avoid conflict and to obey the stated agreements. Stage 4 individuals have internalized the rules and expectations of
others. They view the legal system as the highest moral authority. Stage 4 individuals operate according to organizational policy or societal laws.

CMD level 3 postconventional. Postconventional, the final and most advanced level, reflects a line of reasoning that has progressed beyond social influences and is internally driven. Moral judgment criteria moves beyond the authority of group norms as the individual develops an increasingly strong personal commitment to self-selected universal principles and becomes decreasingly egocentric.

Stage 5, Social Contract and Individual Rights: Individuals at Stage 5 base their reasoning on beliefs of community-based justice. The protection of people’s rights is the core consideration for Stage 5 individuals. Concern for laws and duties is based on the greatest good for the greatest number. These individuals recognize that laws and morality sometimes conflict and they have a difficult time resolving the disagreement. Resolution emphasizes agreements designed to promote the common good. These individuals have developed their own set of principles rather than reflecting the norms of the status quo.

Stage 6, Universal Ethical Principles: Individuals in the sixth and final stage follow self-chosen ethical principles, and respect laws and social contracts only to the extent that they are consistent with their principles. These individuals have strong personal commitment to their principles and, when laws violate these principles, these individuals follow the dictates of the principle. Stage 6 moves beyond the community to a universal perspective. Individuals in Stage 6 have developed a moral belief that extends beyond their own needs and beyond the expectations of the family or social norms.

Levine, Kohlberg, and Hewer (1985) make several important assumptions about Kohlberg’s Six Stage Model:
• The model is universal.

• CMD is based on rules and principles.

• Moral judgments have the central function of resolving interpersonal and social conflicts related to rights.

• Higher stages of moral development are psychologically more adequate than lower stages.

• Fundamental qualities of moral judgments can be defined or agreed upon regardless of agreement on a particular issue.

Kohlberg’s stages of cognitive moral development have been widely used and are considered important in understanding moral reasoning (Goolsby & Hunt, 1992; Fraedrich et al., 1994). Extensive longitudinal, cross-cultural, and cross-sectional research conducted over the past two decades supports the stage sequence, as hypothesized by Kohlberg (Goolsby & Hunt, 1992). A review of 54 cross-cultural studies using Kohlberg’s interview showed that Stages 1 to 4 are found in practically all cultures while only a trace of Stages 5 and 6 were found. The more educated urban areas of the Western World demonstrated more incidents of Stage 4 than the less educated, and non-Western areas (Snarey, 1985).

Criticism of Kohlberg’s CMD

There are several criticisms of Kohlberg’s cognitive moral development theory. Rest, Narvaez, Bebeau, and Thoma, (1999) outlined four psychological processes for directing and evaluating the study of moral thought and behavior. They claim that an individual who behaves morally must have performed at least these four psychological processes:
• Moral sensitivity: consideration of how each party would be affected by the course of action and how interested parties would regard such effects on their welfare.

• Moral judgment: a decision about which course of action was morally right, thus labeling that course of action as what a person morally ought to do in that situation.

• Moral motivation: prioritization of moral values above other personal values to make a decision about what is morally right. (Rest et al., 1999, p.101)

• Moral character: possession of perseverance, strength of ego, and organizational skills to follow through on his or her intention to behave morally even under the most difficult of situations.

The contribution of the “prioritization of moral values framework” (Rest et al., 1999, p. 101) lies in its ability to separate moral behavior into four conceptually distinct operations (psychological processes). The failure to behave morally can be examined by viewing it as the result of a deficiency in any of the four processes. This failure might be (Rest et al., 1999):

• Failure to recognize the ethical dimension of a situation (moral sensitivity).

• Using inadequate moral reasoning (moral judgment).

• Other values may override their intention to carry through with the ethical judgment (moral motivation).

• Failure to carry through with their intentions to behave morally (moral character).

The criticism is that Kohlberg’s cognitive moral development theory addresses only one (moral judgment) of four processes. Because Kohlberg’s theory fails to address all four psychological components of moral development, many researchers criticize it as being too cognitive. Some researchers feel that an emotional component has been absent. One of those researchers is Gilligan (1982), who feels that males typically have a justice orientation due to
their objectivity, involvement in an occupation, and their disposition toward impartial rules and principles. Females on the other hand have a caring response orientation based on their perception of self, sensitivity toward others, and the need to create harmony in relationships. This type of emotional involvement has not been taken into account in Kohlberg’s stages of moral development. Research on this issue has had mixed results. Gilligan and Attancucci (1988) found that women had a propensity to be more concerned with a caring orientation than one of justice (what is fair and logical). However, Derry (1989) found no conclusive differences between the moral reasoning preferences used by a group of female and male managers. Another area of concern is the stage concept that Kohlberg adapted from Piaget (1976). Piaget introduced the progression from the lower to the higher stages as fundamental to the need to acquire balance between the individual and his or her social environment. He compared an individual’s advanced thinking with less advanced thinking and discovered that the more advanced thinking the higher the cognitive thought.

Kohlberg advocated that individuals move to subsequent levels of morality, one step at a time without any slippage, until one’s ultimate moral thinking is reached (Rest et al., 1999). Kohlberg believed that moral development is sequential and culturally universal. He made the following points about stages within the sequence (Boyce & Jensen, 1978):

- They are different thought processes of adult moral beliefs and standards.
- They move in a sequence of development.
- They form an integrated whole.
- They are hierarchical integrations. Each stage serves as a prerequisite for the next stage.
Several scholars have questioned this staircase metaphor for development. Arnold and Lampe (1999) suggest that progression among the stages involves reasoning from all the different levels. For example, an individual is not totally engaged in Stage 3 and then suddenly enters Stage 4. Developmental sequence is not a matter of a person quickly changing from stage to stage, but rather of using a combination of the two stages (Rest et al., 1999).

Kohlberg has also been criticized for disregarding the context of moral judgments (Murphy & Gilligan, 1980). His measure of CMD does not take into account real-life moral dilemmas or special circumstances. However, according to Rest et al. (1999), Kohlberg claimed that he provided a procedure that would allow each participant to take the role of all others involved in the dilemma with all the contextual factors of the participants included. He also prescribed a procedure for constructing a moral point of view specific to each moral situation. Kohlberg successfully rebuts the charge of not taking context into account (Rest et al., 1999).

One of the more substantial criticisms of Kohlberg’s model of moral development concerns Stages 5 and 6. In his studies, Kohlberg found that not many people achieved these stages. In fact, there is little evidence for Stage 6 scoring from around the world (Snarey, 1985). The lack of empirical evidence for postconventional thinking (Stages 5 and 6) is a serious problem because Kohlberg formulated the steps from the perspective of the higher stages. Kohlberg later eliminated Stage 6 from his scoring system for lack of empirical cases of Stage 6 thinking (Rest et al., 1999). However, a study of the results of 45,856 Defining Issues Tests suggests that postconventional (Stages 5 and 6) thinking, contrary to Kohlberg’s research, is prevalent (Rest et al., 1999).
There have been numerous claims against Kohlberg and his theory of cognitive moral development. Even so, Kohlberg’s stages of cognitive moral development have been widely used and are considered to be important in understanding moral reasoning. (Goolsby & Hunt, 1992; Fraedrich et al., 1994). Kohlberg was a major contributor to the field of moral development. His research has identified characteristics of moral reasoning that change as individuals develop (Kurtines & Gewirtz, 1995). Almost all research based on CMD has used a form of Kohlberg’s dilemma scenarios to assess moral reasoning (Rest et al., 1999). The main goal of moral judgment is to provide conceptual guidance for decision-making in situations that present a moral dilemma. From that perspective, Kohlberg’s model is effective (Rest et al., 1999).

**Measuring Cognitive Moral Development**

There are several methods available for measuring CMD. They include the:

- Moral Judgment Interview (MJI) (Kohlberg, 1969)
- Adjusted Moral Judgment Interview (AMJI) (Weber & Wasielecki, 2001)
- Defining Issues Test (DIT) (Rest, 1979)
- Multidimensional Ethics Scale (MES) (Reidenbach & Robin, 1990)

**Moral Judgment Interview (MJI)**

The stages of CMD are captured in Kohlberg’s original method called the Moral Judgment Interview (MJI) (1969). Kohlberg’s cognitive moral development theory serves to achieve two objectives. The first objective is to require participants to focus on the extent to which a particular moral argument creates awareness of the importance of social influences that effectively protect and promote the dignity of the human person. The second objective is
to develop a respondent’s critical analysis of the type of decision-making used to deal with moral issues.

In the MJI, the individual reads three scenarios. Each scenario deals with a moral conflict that tests the respondent’s moral reasoning. After reading each scenario, a trained interviewer asks the respondent what the proper course of action should be for the central character in the story. The interviewer then probes the respondent with open-ended questions concerning why the main character made that particular decision. The respondent generates spontaneous answers to these questions. The conversation is recorded and transcribed, and the responses are classified into stage categories. Through a process of classifying the content of the responses, a trained scorer uses the Standard Issue Scoring Method to discern the respondent’s moral reasoning underlying the responses (Colby, Kohlberg, Gibbs, & Berkowitz, 1983). In summary, the MJI is designed to capture a respondent’s (a) own development of moral reasoning, (b) moral frame of reference about right and wrong, and (c) the way these beliefs are used to make moral decisions (Colby & Kohlberg, 1987).

The administration of the MJI has met with some problems. The coding of the subject’s responses into a particular stage (1-6) level has been difficult. A trained researcher must understand Kohlberg’s stage model and use a content analysis procedure to code responses into verifiable stages (Kohlberg, 1984). Colby and Kohlberg (1987) attempted to make the scoring simpler by developing a 17 step process for coding the answers that breaks down the interview material into three sections (a) interview judgments, (b) matching the new interview judgments with previous interview judgments found in the scoring manual, and (c) assigning stage scores. Even with these modifications, usability is still a serious challenge to the practicality of this instrument (Elm & Weber, 1994). The administration of
the MJI requires a scorer highly trained in the use of proper interview techniques. The MJI also requires a considerable amount of time and is difficult to manage with large numbers of people (Izzo, 2000). The open-ended questions can be difficult to answer and can require a large amount of the subject’s time (Elm & Weber, 1994).

Adapted Moral Judgment Interview (AMJI)

According to Weber and Wasieleck (2001) the Adapted Moral Judgment Interview (AMJI) is an effective way to measure ethical judgment. It is derived from Kohlberg’s MJI where open-ended questions are asked concerning three ethical dilemmas and responses given orally. The researchers, however, made a few adaptations to the MJI. One, the format of the interview was changed into a written exercise with open-ended questions. Two, instead of three hypothetical dilemmas, the AMJI has one hypothetical moral dilemma followed by two dilemmas set in a business environment context. Third, follow-up questions are asked, targeting specific organizational values as attributes of various stages of moral reasoning.

The scoring method used for the AMJI was the Abbreviated Scoring Guide (ASG), which is based on the Standard Issue Scoring (SIS) method that Kohlberg and his colleagues developed to classify respondents’ stages of moral reasoning (Colby et al., 1983). Weber (1991) measured the AMJI for reliability in two ways. One, it was tested for interrater reliability. Three people, known as raters and who had experience in coding, were chosen with a random sample of five interviews for testing. When compared with the principal rater, the interraters were consistent with Pearson correlations within the acceptable levels. Second, Weber compared the response scores from both the ASG and the SIS method and, based on a Pearson test, found correlations well within the acceptable limits. Weber
concluded that his results “strongly support each of the adaptation to Kohlberg’s MJI and SIS Method” (Weber, 1991, p. 308).

Weber and Wasielecki’s (2001) research using the AMJI found that the context of the dilemma influences the stage level of moral development. One study found significant differences in moral reasoning when comparing managers’ reasoning across the three moral dilemmas. It noted that the Heinz dilemma, taken from Kohlberg (1969), elicited higher moral reasoning from the managers than the two business dilemmas. According to Weber and Wasielecki (2001) this may be due to the higher risk to life in the Heinz dilemma or to the fact that business related dilemmas were perceived as common and therefore required a lower stage of moral reasoning to sufficiently resolve them.

*The Multidimensional Ethics Scale (MES)*

The Multidimensional Ethics Scale (MES) developed by Reidenbach and Robin (1990) is a questionnaire that is self-administered and uses at least one scenario action pair (S/A) of the researcher’s choosing. Each S/A pair consist of one hypothetical scenario and one possible action. There are total of eight semantic differential items, each of which uses a seven-point scale. The eight items fit into three basic constructs (Skipper & Hyman, 1993, p. 536):

- A moral-equity construct that includes justness, fairness, morality and acceptability to one’s family.
- A relativistic construct that includes cultural and traditional acceptability.
- A social-contract construct that includes unspoken promises and unwritten contracts.
Ethical judgment scores are calculated by summing responses to the eight items and dividing by eight. The scores can range from 1-7 with higher scores indicating greater moral acceptability.

However, the MES also has a few problems. Kohlberg theorized that people select certain norms, often for principled reasons, and apply these norms to what they believe to be the salient issues of a scenario (Skipper & Hyman, 1993). The MES does not draw from this thinking. There is no link of the MES results to any ethical theory (Hanson, 1992). The MES scales are drawn, not from empirical research, but from philosophical writings (Skipper & Hyman, 1993). The MES does not look for issues, norms, or principles, but asks instead for graded responses to eight pre-selected opinions. The drawback to this measurement strategy is that respondents may find the eight opinions to be irrelevant to their own ethical judgments (Hanson, 1992). When the MES asks a question about a questionable moral behavior, the respondent must answer: yes, no, or maybe. However, the MES never asks how important is this questionable action in this situation (Skipper & Hyman, 1993).

Another area of concern is that the scenarios have few details. If the respondents need a fact in order to reach a judgment on the S/A pair, they must invent that fact. Because of a lack of detail, the respondents are stereotyping and prejudging rather than judging (Skipper & Hyman, 1993).

Murphy and Lacziak (1981) suggest that almost all normative ethical theories in moral philosophy can be classified as ether deontological or teleological. The MES includes three constructs: moral equity, relativistic, and social contract. Hanson (1992) suggests that the MES should add two others: deontological judgment and teleological judgment.
Defining Issues Test (DIT)

In an effort to simplify Kohlberg’s methodology for measuring CMD, Rest (1979) developed a new instrument: the Defining Issues Test (DIT). The theoretical foundation that underlies Rest’s theory of moral judgment is the idea of social justice (Rest, 1979). Individuals are born into a society of people where they must find a balance between their interests and others interests within that society. The issue of justice then is balancing interests in social cooperation and achieving harmony through that balance. Thus, moral reasoning is grounded on the distribution of rights and responsibilities in a social system to provide collaboration and security (Elm & Weber, 1994).

The DIT is based on Kohlberg’s six stages and presents hypothetical ethical dilemmas that are similar to those developed by Kohlberg in his original MJI (1969). Rest analyzed Kohlberg’s interviewing notes and discovered that individuals who were in the same stage demonstrated similar responses to the dilemmas. He created 11 Likert-type behavioral statements representative of each stage and a rank ordering method to determine levels that correlate to Kohlberg’s stages. From that list of behavior statements, respondents selected which one they would choose for each dilemma. The respondents were then asked to prioritize each behavioral statement according to its importance. For each dilemma there is a list of considerations for determining what is right. Individuals rank the four most important considerations. From this ranking, a \( P \) score based on Kohlberg’s CMD theory is derived. \( P \) scores range from 0 to 95 and indicate the importance the individual gives to principled (Stage 5 and 6) moral reasoning. A higher number indicates higher moral development (Rest, 1986).
The major difference between the DIT and Kohlberg’s MJI is that the DIT is a **recognition** procedure, whereas Kohlberg’s methodology is a **production** procedure (Elm & Weber, 1994). The MJI is a production procedure because it utilized in-depth interviews and required expert judges that had to match the verbal statements given by the respondent to a scoring guide. This process was complicated and time consuming.

The DIT, in contrast, had respondents read various ethical dilemmas and recognize from a list of behavioral statements the desired action (Fraedrich et al., 1994). Because participants usually find multiple-choice selection, identifying the most important statement (DIT), easier than trying to come up with the answer themselves (Kohlberg methodology), the DIT credits participants with more advanced thinking than does the Kohlberg test (Rest, 1986). However, lacking the detailed description the MJI provided, the DIT sacrifices some of the richness of the constructs being analyzed, thus raising the issue of whether one measure yields more accurate data than the other (Fraedrich et al., 1994). Table 2.3 briefly describes the attributes of the instruments evaluated by the researcher for deriving cognitive moral development. The information was adapted by the researcher from various sources (Elm & Weber, 1994; Hansen, R., 1992; Reidenbach & Robin, 1990; Weber & Wasielewski, 2001).
Table 2.3 Characteristics of Instruments for Deriving Cognitive Moral Development

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>MJI</th>
<th>DIT</th>
<th>AMJI</th>
<th>MES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of assessment</strong></td>
<td>Production task</td>
<td>Recognition</td>
<td>Combination production/recognitation</td>
<td>Recognition</td>
</tr>
<tr>
<td><strong>Administrator</strong></td>
<td>Trained researcher</td>
<td>Layperson</td>
<td>Trained researcher</td>
<td>Layperson</td>
</tr>
<tr>
<td><strong>Time and effort required</strong></td>
<td>Significant effort and time</td>
<td>Minimal effort and time</td>
<td>Moderate effort and time</td>
<td>Minimal effort and time</td>
</tr>
<tr>
<td><strong>Method of data analysis</strong></td>
<td>17 Step procedure complex scoring</td>
<td>Machine scored; simple scanning</td>
<td>Abbreviated scoring guide from the MJI</td>
<td>Ethical judgment scores</td>
</tr>
<tr>
<td><strong>Outcome of analysis</strong></td>
<td>Assigned a particular stage: stage score (1-6)</td>
<td>P-score for postconventional reasoning (stage 5 - 6)</td>
<td>Assigned a particular stage; stage score (1-6)</td>
<td>Measures behavioral intent</td>
</tr>
<tr>
<td><strong>Philosophical basis</strong></td>
<td>Built from deontology &amp; utilitarian</td>
<td>Built upon deontology &amp; utilitarian</td>
<td>Built upon deontology &amp; utilitarian</td>
<td>Not created from a moral philosophy</td>
</tr>
<tr>
<td><strong>Appropriate use</strong></td>
<td>To derive the predominant CMO stage for an individual</td>
<td>Seek to determine % of CMD stages of 5 - 6</td>
<td>To derive the predominant CMD stage for an individual</td>
<td>To assess the various ethical theories on one's reasoning</td>
</tr>
</tbody>
</table>

**Reliability.** Reliability refers to the consistency of results based on measures or observations. That is, if an individual were to take the same test at different times, the scores on those two tests should be similar. Two indicators are generally used to assess the reliability of survey instruments: internal consistency and test-retest reliability (Fraenkel & Wallen, 1993).

The test-retest method involves giving the same test twice to the same group or sample after a certain amount of time has passed. A reliability coefficient is computed to determine the relationship between the two scores. The length of time between the two tests
will affect the reliability coefficient. The longer the time period the lower the reliability coefficient due to the changes in the individuals who are taking the test (Fraenkel & Wallen, 1993).

Several studies have used the test-retest procedure to establish reliability for the DIT. Davison & Robbins (1978) conducted a test-retest of four samples to determine the reliability of the DIT. Sample 1 consisted of 123 people who were from age 16 to 56. Each had taken the DIT twice over a one week to five-month period. Sample 2a consisted of 19 ninth graders who took the DIT who were retested after 14 days. Sample 2b is from a study by McGeorge (1975) and consisted of 33 Australian college students who took the DIT twice, 18 days apart. Sample 2 is composed of both 2a and 2b. The results are displayed in Table 2.4.

<table>
<thead>
<tr>
<th>Sample</th>
<th>1</th>
<th>2</th>
<th>2a</th>
<th>2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>P score</td>
<td>.82</td>
<td>.76</td>
<td>.81</td>
<td>.71</td>
</tr>
</tbody>
</table>

The reliability coefficients ranging from .71 to .82 demonstrate how accurate the DIT performed by having very little variation among the four samples. The lowest reliability coefficient of all the samples was .71 demonstrating that the lapse of time has minimal impact on the scores.

**Internal consistency.** An internal consistency assessment is generally used when one cannot assume that all items on an instrument are of equal difficulty. It is the average of the intercorrelations among the survey items (Fraenkel & Wallen, 1993).
Cronbach Alpha is a commonly used indicator of internal consistency and is used to describe the reliability of the DIT (Rest et al., 1999). Table 2.5 provides estimates on the Cronbach Alpha for the DIT over 20 years.

Table 2.5 Cronbach Alphas of P Score

<table>
<thead>
<tr>
<th>Sample</th>
<th>P score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979 composite sample, n=994</td>
<td>.76</td>
</tr>
<tr>
<td>1995 Composite sample, n=932</td>
<td>.78</td>
</tr>
</tbody>
</table>

An earlier study conducted by Davison & Robbins (1978) consisted of 160 people; 40 were in junior high, 40 senior high, 40 college undergraduates and 40 graduate students. The graduate students sample was composed of 25 male seminary students and 15 male doctoral students in moral philosophy. The internal consistency when using the P score was .77.

The instrument’s reliability, based on test-retest correlations conducted over a wide range of settings, is in the mid .70s to lower .80s. The internal consistency measure (Cronbach’s Alpha) also averages in the mid to upper .70s. The DIT (1979) has been used in over 500 studies and has reported high validity and reliability (Loe & Weeks, 2000).

Validity. Validity of an instrument consists of a process of gathering evidence to prove the conclusions made by a researcher in using such an instrument. There are two types of evidence that a researcher collects: content validity and criterion validity.

Validating content is a matter of determining if the content that the instrument contains is an adequate sample of the domain of content it is supposed to represent. Rest (1979), when designing the DIT, looked over the answers provided by respondents in
Kohlberg’s MJI process. He analyzed statements that fell in particular stage scores. He then developed a statement for the dilemma that would represent a particular stage.

Lawrence (1978) conducted a study to investigate how well the subjects understood the DIT statements and what they were thinking when they ranked and rated each of the statements. By conducting several interviews, the researcher found that subjects with high DIT scores do understand the Stage 2 and 3 statements as well as they did Stage 5 and 6 statements. However, subjects with low DIT scores do not understand the higher stages of 5 and 6. Lawrence also analyzed how sufficient each statement was in solving the moral dilemma. The subjects with low DIT scores viewed many low stage statements as more sufficient, whereas the subjects with higher DIT scores viewed many low stage statements as being inadequate for the moral dilemma. Lawrence’s work confirmed that the item selection on the DIT is mainly guided by two processes: the adeptness to comprehend a statement and the sense of how sufficient a statement is for making moral decisions.

**Criterion validity.** Criterion validity measures how strong the relationship is between scores obtained using two or more measures. The goal is to determine how the scores predict future performance in a specified area (Fraenkel & Wallen, 1993). Researchers Davison and Robbins (1978) performed studies analyzing the criterion validity of the DIT. In the first study, 213 subjects (74 ninth graders and 139 college students) were used to estimate the correlation between scores on Kohlberg’s MJI and the DIT. The P score was .68, demonstrating a significant (p<.05) correlation with the MJI.

A second test compared the DIT with the measures of Comprehension of Moral Issues. This is a method designed to test comprehension of social-moral concepts. Subjects are asked to select from four statements the one that best summarizes the main idea of the
paragraph provided. This test used the sample of 160 subjects from the previously discussed Davison & Robbins (1978) study. The DIT was significantly related to the test of moral comprehension scoring in the .60s (Davison & Robbins, 1978; Bebeau & Thoma, 2003).

Reliability checks. The M index is a reliability check used to detect non-thoughtful respondents. Several items are included in the DIT-2 that a thoughtful respondent would not choose as having been an important criterion in making a decision about an ethical situation. Individuals who endorse such meaningless items are considered to be non-thoughtful and are removed from all analyses. There were five subject-reliability checks: (a) rate and rank consistency, (b) meaningless items, (c) missing rates, (d) missing ranks, and (e) non-differentiation of rates or ranks. Typically, 10 percent of tested subjects fail one or another of the reliability checks. DIT research has found that purging the sample of the unreliable protocols improves the strength of trends (Rest et al., 1999). The total sample of sales representatives was composed of only the subjects who survived the reliability checks.

While most of the previous analysis was based on the original DIT, the conclusions also apply to the DIT-2. The correlation of DIT with the DIT-2 is .79 which is close to the test-retest of the DIT (Bebeau & Thoma, 2003).

The Defining Issues Test-2 (DIT-2) was chosen for this study due to its broad data base, high validity and reliability, and relative ease of implementation and scoring. It does not require an expert to administer nor does it require an inordinate amount of time. It is deeply rooted in moral philosophies and is considered the most prominent objective test of CMD (Gibbs & Widamen, 1982).
Cognitive Moral Development and Sales Performance

There has been limited research performed on the relationship of cognitive moral development and sales performance (Schwepker & Ingram, 1996; Izzo, 2000). However, some studies have been conducted evaluating specific demographic variables of interest in this research. Also, some studies exist that investigate the general relationship of moral development and performance.

General Performance Studies

Researchers have studied performance and its relationship with CMD in various professions. Some of these professions, such as nursing and surgeons, have demonstrated positive performance results. However, in the teaching profession the results have not been significant.

Sheehan & Husted (1980) uncovered the connection between moral reasoning and the clinical practices of pediatric student nurses. The relationship between their moral reasoning and clinical performance was examined. Clinical performance was identified as the medical faculty ratings of the clinical performance of student nurses with their DIT scores. It was found that the moral reasoning ability of 244 pediatric student nurses was a predicator of their clinical performance. The conclusion was that high moral reasoning almost excludes the possibility of poor clinical performance, and that the very highest level of clinical performance is rarely achieved by those at the lowest level of moral reasoning.

Staying within the medical community, researchers (Baldwin, Adamson, Self & Sheehan, 1994) looked at the relationship between moral reasoning and clinical performance in the manner of malpractice claims with orthopedic surgeons. DITs were obtained from 57
orthopedic surgeons. It was discovered that orthopedic surgeons with few or no claims (less than .09) per year had P scores (number of principled responses, Stages 5 & 6) of 44 while those orthopedic surgeons with multiple claims had P scores of 38. This approached statistical significance at p< .07. This finding was similar to Adamson, Baldwin, Sheehan, and Oppenberg (1997) who found that low claims orthopedists had larger P scores than did orthopedists with higher claim rates per year. Orthopedists with P scores above 40 were significantly more likely to be in the low claims group (P=.04).

Teachers, on the other hand, through a study by McNergney and Satterstrom, (1984) did not demonstrate a significant relationship with higher levels of moral reasoning and performance. Their study consisted of 56 elementary student teachers who took the DIT and assessed their performance using rating scales to assess quality of expression, teaching procedures, classroom atmosphere, control, organization and planning, resourcefulness, initiative and cooperation. The relationship between moral reasoning and performance was not significant.

A later study by Thoma and Rest (1987) produced a similar outcome. Using a sample of 30 student teachers from the University of Minnesota College of Education, the researchers found that moral reasoning as measured by the P score relates to performance; however, it was not significant. Performance was measured using Likert scales to observe the student teachers in three main areas: instructional competence; relationships with staff, students, and school personnel; and personal/professional attributes such as leadership ability.
Sales Performance Studies

Schwepker and Ingram (1996) found that moral reasoning has a positive relationship with certain areas of performance. A self-report measure developed by Behrman and Perreault (1982) was used to measure four dimensions of performance: (a) success in achieving quantity and quality sales objectives, (b) development and use of technical knowledge/sales presentations, (c) providing information, and (d) controlling unnecessary expenses. They found from a sample of industrial salespeople that there is a significant relationship between moral reasoning and performance for three of the four dimensions. The one area that was not related to moral judgment was the providing information dimension, which involved turning in accurate and timely reports.

However, Schwepker and Ingram (1996) realized that there was a large amount of variance in job performance that cannot all be explained through moral reasoning. The researchers believe it is difficult to isolate the multitude of factors proposed to affect performance. In addition, the researchers did not use the Defining Issues Test for measurement. Their measurement instrument was the Multidimensional Ethics Scale, which is popular but not without its problems. Those problems include: (a) the instrument is not connected to an ethical theory, (b) few details are included for each scenario, and (c) given responses are not framed to level of importance (Hansen, 1992).

A researcher who did use the DIT was Izzo (2000), who studied the effects of CMD and performance on residential real estate sales agents and brokers. Convenience samples were taken while the agents and brokers were in attendance at regularly scheduled meetings. Two measures of success were used: job status and level of income. Job status was based on respondents self-reported level of real estate licensure. Respondents selected from five
categories that best described their income from real estate sales. The results show that when job status and income are independent variables, both have a significant positive relationship with CMD. This demonstrates that real estate salespeople who scored high in cognitive moral development were more likely to be successful than those practitioners who scored low in CMD (Izzo, 2000).

In a more recent study, Izzo and Langford (2003) studied another measure of success. They found that real estate professionals who held professional designations such as the Graduate Realtor Institute (GRI) or Certified Residential Specialist (CRS) demonstrated higher levels of CMD than those that did not hold these designations.

Studies Relating to Specific Demographic Variables

This study looked at five variables that have some relevance through prior research to CMD. These are (a) previous sales experience, (b) highest degree earned, (c) educational major, (d) income, and (e) participation in a formal ethics class or seminar. Below is a brief overview of the research literature surrounding each of these variables using the Defining Issues Test.

Sales experience. Trevino (1986) suggests that work experience plays a significant part in continued adult moral development because it provides opportunities for role taking and the responsibility for resolving moral dilemmas in the workplace. This stance is similar to Kohlberg’s longitudinal research showing that most adults continue their cognitive moral development beyond their years in school (Colby, Kohlberg, Gibbs & Berkowitz, 1983). However, Izzo (2000) found in his research with real estate salespeople that prior experience does not necessarily have a positive relationship with CMD. Prior experience was found to be a key predictor of success when it is regressed with the variables income and job status.
When Kelley et al. (1990) were surveying marketing professionals, they found that those salespeople holding positions for 10 years or longer considered their behavior more ethical than those with lesser experience.

*Formal education.* Rest (1975) found that high school graduates who attended college demonstrated higher levels of CMD than those high school students who did not go to college. This was consistent with Coder’s (1975) findings that students who continue on in graduate school have much higher P scores than those who do not attend graduate school. Empirical research using the DIT has shown that an individual’s moral maturity level will increase as (a) one gets older, (b) is exposed to higher level of interaction with peers, and (c) engages in more sophisticated discussions. All of these conditions are a part of the environment in many institutions of higher learning (Blasi, 1980; Rest, 1979; Dukerich et al., 1990). Using the sample from Kohlberg’s (1969) longitudinal study, Rest, Turiel, and Kohlberg (1973) found correlations (ranging from .53 to .69) between adults’ moral maturity and levels of formal education. Kohlberg (1984) concludes that as an individual matures, so does his level of cognitive moral development, and that formal education is part of that maturity process.

Formal education seems to be strongly associated with the DIT P score. Junior high school subjects generally average in the 20’s, senior high school subjects generally average in the 30s, college students average in the 40s, graduate students average in the 50s, and those graduate students who specialize in moral thinking average in the 60s (Rest, 1986). Rest (1986) reports that principled reasoning, Stages 5 and 6, are generally represented by scores of 50 or more and that in the majority of studies few subjects will score above 50. Longitudinal studies have confirmed that DIT scores increase as individuals gain additional
formal education (Rest et al., 1978). In studying residential real estate professionals, Izzo (2000) found that the level of formal education was significantly related to CMD ($r = .11, p < .05$). Table 2.6 provides a comparison of average DIT P scores of various student groups and the general population (Rest, & Narvaez, 1994, p. 14).

Table 2.6 DIT Average P Scores for Various Demographic Groups

<table>
<thead>
<tr>
<th>P-Score</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>65.2</td>
<td>Moral philosophy and political science graduate students</td>
</tr>
<tr>
<td>59.8</td>
<td>Liberal protestant seminarians</td>
</tr>
<tr>
<td>52.2</td>
<td>Law students</td>
</tr>
<tr>
<td>50.2</td>
<td>Medical students</td>
</tr>
<tr>
<td>49.2</td>
<td>Practicing physicians</td>
</tr>
<tr>
<td>47.6</td>
<td>Dental students</td>
</tr>
<tr>
<td>46.3</td>
<td>Staff nurses</td>
</tr>
<tr>
<td>42.8</td>
<td>Graduate students in business</td>
</tr>
<tr>
<td>42.3</td>
<td>College students in general</td>
</tr>
<tr>
<td>41.6</td>
<td>Navy enlisted men</td>
</tr>
<tr>
<td>40.0</td>
<td>Adults in general</td>
</tr>
<tr>
<td>31.8</td>
<td>Senior high school students</td>
</tr>
<tr>
<td>23.5</td>
<td>Prison inmates</td>
</tr>
<tr>
<td>21.9</td>
<td>Junior high school students</td>
</tr>
<tr>
<td>18.9</td>
<td>Institutionalized delinquents</td>
</tr>
</tbody>
</table>

Hau and Lew (1989) determined that university students attached greater importance to higher levels of cognitive moral development than do the younger secondary school students. Hau and Lew (1989) also determined that university students achieved a higher level, Stages 5 and 6 (postconventional) reasoning than did the younger secondary school students.
students. This supports that cognitive moral development increases with educational level and is in agreement with Kohlberg’s stages of pre-conventional, conventional, and postconventional levels. Table 2.7 illustrates that DIT P scores increase with education and vary by gender (Rest & Narvaez, 1994, p.14).

Table 2.7 Average DIT P Score Grouped by Education and Gender

<table>
<thead>
<tr>
<th>Education level</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior High</td>
<td>19.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Senior High</td>
<td>28.7</td>
<td>30.4</td>
</tr>
<tr>
<td>College</td>
<td>44.1</td>
<td>45.9</td>
</tr>
<tr>
<td>College Graduates</td>
<td>61.0</td>
<td>63.0</td>
</tr>
</tbody>
</table>

*Educational major.* Research suggests that an individual’s major in school may impact that person’s level of moral reasoning. Ponemon and Glazer (1990) found that accounting students who were enrolled in a liberal arts curriculum at a liberal arts college had a higher level of CMD than students who were not enrolled in a liberal arts curriculum. However, Jeffery (1993) found that seniors majoring in liberal arts did not have higher levels of CMD than seniors in accounting or other business majors.

*Income.* Research on the effects of income on moral reasoning also has demonstrated mixed results (Izzo, 2000). According to Schwepker and Ingram (1996), there is a positive relationship between moral reasoning and those sales representatives who earn more than $40,000 dollars a year. This holds true for any combination of compensation, salary and commission. When studying residential real estate salespeople, Izzo (2000) found that CMD is positively related to income. From the research, those salespeople who are low in CMD do not appear to be more successful when measured in terms of income or job status. Fin, Chonko and Hunt (1988) found that high-income accountants perceived fewer ethical issues
than did their colleagues at lower levels of income. However, no theoretical rationale for this finding is known.

*Ethics training.* There are training interventions (Lopez & Lopez, 1998; Sims, 1991; Leclair & Ferrell, 2000) that seem to elevate an individual’s moral reasoning patterns to better integrate the interests of others in their decisions. Many of these training programs focus on moral judgment, the second component of the four psychological processes. Much of the research has been targeted at increasing moral judgment by the use of moral dilemmas. Baxter and Rarick (1987) suggest that training interventions can advance individuals’ moral reasoning patterns, allowing them to better integrate the interests of other stakeholders in their decisions. Studies have been conducted to determine if increases in CMD can be tied to training programs aimed at helping participants to think through morally controversial dilemmas. A number of these studies have shown positive results (Power et al., 1989; Rest 1986). Exposing students to Kohlberg’s stages of higher reasoning through Socratic questioning and discussion is expected to promote internal cognitive conflict, leading the students to question their own reasoning and to consider the next higher reasoning stage. This restructures cognitive patterns and facilitates upward movement in cognitive moral development (Rest, 1986). Research indicates that for any given time frame, from a semester to a full year, discussing at least one moral dilemma per week will result in upward changes of one-third to one-half of a cognitive moral stage among the participants (Leming, 1986). Twelve studies using adult students, reviewed by Rest and Thoma (1986), compared the effectiveness of the cognitive moral development approach with other approaches, such as personality development programs and more traditional didactic courses. A moral psychology teaching strategy that incorporated dilemma discussion was found to have the
most powerful impact on moral reasoning. The most effective educational programs were those that lasted between four and twelve weeks. No significant changes in moral reasoning were found with more traditional academic courses (Rest & Thoma, 1986).

Intervention studies consistently demonstrate that formal training in moral philosophy has a positive impact on level of CMD (Rest, 1986). It has been demonstrated that after attending a course in ethics, an individual’s stage of CMD had increased relative to the stage measured prior to the program (Boyd, 1981; Penn & Collier, 1985). This positive change was evident in a study (Loe & Weeks, 2000) of 113 junior and senior college students who were participating in a professional selling class. A pre-test/post test research design was used along with the DIT. Each student took the DIT twice; once at the beginning of the semester (before the training intervention) and once four months later at the end of the semester. The training intervention consisted of 37 ½ hours of content regarding professional selling, and five ethics training sessions over an eight-week period. The ethics component consisted of ethical considerations in regard to problems common to the sales process. Realistic ethical dilemmas were presented and students were taught Wotruba’s Ethical Decision Action Process (EDAP) and told to use it while working in groups. A control group went through the same course material in professional selling without the discussion on ethics. The mean scores from the DIT for the control group and the treatment group were tested. There was no statistical significance in the pretest between the two groups; however, the posttest revealed a significant difference (t=-2.07; p=.05; means=37.52 and 43.32, respectively.) The findings suggest that individual moral reasoning can be influenced through ethics training. The EDAP using CMD theory (role plays and ethical dilemmas) seems to provide a foundation for building an effective ethics training program (Loe & Weeks, 2000).
In regards to salespeople, Izzo (2000) studied the relationship between a government mandated ethics education and CMD by testing the efficacy of a compulsory ethics intervention. The compulsory ethics intervention consists of ethics training that real estate practitioners are required to take as part of their licensing qualifications. The ethics portion of the training consists of 18 hours of ethics related subjects. The study used two measures: the P score from the DIT along with an industry specific measure the Real Estate Survey (RES). The RES was created to score the same areas as the DIT and uses three real life scenarios of industry-specific ethical issues. The outcome from the study suggests that compulsory ethics education does not appear to significantly influence cognitive moral reasoning and has little effect on industry-specific moral reasoning of real estate salespeople. Only Penn and Collier (1985) tested and found positive results for CMD in a business context. Loe and Weeks (2000) could identify no studies in the sales arena that examine the influence of ethics training on CMD.

**Conclusion**

There are several approaches to describing, analyzing, and predicting the ethical decision-making process of individuals. Moral judgment is a main theme in most of these ethical decision-making processes. Moral reasoning, which determines moral judgment, is typically based upon moral philosophies that explain how individuals create ethical standards.

When making ethical decisions, individuals may operate under different moral philosophies such as: justice, relativism, deontological, teleological, or egoism (Reidenbach et al., 1991). While scholars and philosophers have developed theories about moral perspectives, Kohlberg (1969) actually grounded his cognitive moral development theory in
longitudinal data collected on the moral decision making of young males. From his research, Rest (1986) developed an instrument, the Defining Issues Test, to provide an administratively easier, respondent friendly and valid assessment in diagnosing Stages 5 and 6 principled moral reasoning.

Figure 2.1 represents the conceptual design of the study. Given a specific ethical dilemma, an individual recognizes an ethical issue. The individual utilizes an internal reasoning process identified as moral intent or moral reasoning. During the process of moral reasoning, the individual weighs the available options within either a deontological or teleological philosophic framework.

This study focused on whether a relationship existed between the postconventional level of cognitive moral development and an individual's sales performance. The study also examined the logical hypothesis that moral reasoning may additionally be affected by (a) educational major, (b) highest education degree earned, (c) years of sales experience, (d) income, and (e) participation in a formal ethics class or seminar.

The DIT-2 instrument “P” score was used to identify the individual's postconventional level (Stages 5 & 6). This study does not explore the specific ethical or unethical behavior chosen by the individual. This model does acknowledge that ethical or unethical behavior is a by-product of the moral judgments made and may have an affect on sales performance.
Individual Variables
- Education
- Income
- Years of Sales Experience
- Participation in an Ethics class

Figure 2.1 Representation of the Study Analysis
Chapter III Methodology

Overview

A review of the literature supports that moral reasoning is fundamental to ethical decision-making. Researchers have focused on cognitive moral development as a method to better understand the moral reasoning of a person who is faced with an ethical dilemma. Major emphasis in the research has focused on Lawrence Kohlberg’s six stage theory of cognitive moral development.

This study examines the factors that may contribute to ethical decision-making by salespersons. Specifically, the study explores the relationship between cognitive moral development and sales performance. It also investigates the effect of selected demographic variables and participation in ethics training on CMD and performance. The following research questions and null hypotheses guide this investigation and the development and selection of the methodology.

Research Questions and Null Hypothesis

Research Question 1

Research Question 1: Is there a concurrent relationship between the postconventional level of cognitive moral development as measured by the DIT-2 and a salesperson’s performance as measured by the three-year average sales quota achieved?

HO1: There is no concurrent relationship between a salesperson’s three-year average sales quota achieved and the postconventional level of cognitive moral development as measured by the Defining Issues Test-2.
Research Question 2

Research Question 2: Is the relationship between the postconventional level of cognitive moral development and a salesperson’s performance moderated by selected salesperson’s demographic variables; educational major, highest education degree earned, income, and sales experience?

HO2a: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by level of income.

HO2b: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by years of sales experience.

HO2c: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by highest education degree earned.

HO2d: There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by educational major.

Research Question 3

Research Question 3: Is there a difference in the postconventional level of cognitive moral development and a salesperson’s performance based on participation in ethics training?

HO3a: There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by having participated in a formal ethics training class or seminar?

HO3b: There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by perceived usefulness of ethics training.
Methods and Processes

The research methods and procedures include instrumentation, population and sample, data collection and analysis.

Instrumentation

Two instruments were required for this study: the Defining Issues Test-2 (DIT-2) and a researcher-developed demographic questionnaire. The DIT-2 was available from the Center for the Study of Ethical Development at the University of Minnesota. This department provides a supplemental guide, distributes the DIT-2, and scores the completed assessment (See Appendix A).

The original DIT was developed 25 years ago and contained six dilemmas employed to determine the level of cognitive moral development of individuals. The DIT-2 is a revised version, consisting of a shorter test of five dilemmas that takes approximately 35 to 45 minutes to complete. Results are derived from the rating and ranking that respondents give to the level of importance for each of the statements following the moral dilemma. DIT-2 can be administered either through the mail or in person. There is, at this time, no electronic version of the DIT or DIT-2.

Currently, the only group competent to score the answer sheets is the Center for the Study of Ethical Development at the University of Minnesota. There the answer sheets are scanned through an optical reader and a report is generated. The report provides a listing of the respondent’s ID number and corresponding P score. The P score measures the degree to which a person is thinking at the postconventional level (Stages 5 and 6) or to what extent the person considers others’ rights and follows universal truths (Izzo, 2000).
Demographic Questionnaire

The demographic questionnaire was created by the researcher to measure variables identified in the literature that may influence CMD and sales performance (See Appendix B). The questionnaire consists of eight questions that focus on income, education major, highest education degree earned, years of sales experience, and participation in a formal ethics class or seminar. The demographic ranges for selection were determined by analyzing past research studies (Schwepker & Ingram, 1996; Izzo, 2000). As a pretest for pragmatic validity, the researcher assembled a panel of sixteen District Sales Managers to review the questions that focused on background data and performance. No changes were necessary after the panel’s review. A Regional Account Manager for the company tested the scale, wording, and comprehension of the questions geared to performance. Performance was measured in two ways: the three year average sales quota achieved and having won a major performance award. Both measurements were specifically relevant to the organization. The Regional Account Manager approved the design of these questions with one exception; the scale for the three-year average quota achieved was reduced to encourage differentiation between categories. For example the quota range from 90% - 99% was reduced to 90% - 94% and 95%-99%.

Population and Sample

The salespeople for this study are employed by an international pharmaceutical company. These salespeople promote and sell their line of products by calling on physicians. Their product sales are usually built on long-term relationships developed by sharing research and healthcare information.
The entire population of 150 salespeople that cover North Carolina and South Carolina were identified to receive the questionnaires. Of the 150 sales representatives, 63 completed and sent back the questionnaires and constituted the sample.

*Data Collection Procedures*

A package consisting of the research materials was sent by regular mail to each of the 150 sample sales representatives in North Carolina and South Carolina. The research materials included (a) a cover letter, (b) the instructions and answer sheet for the DIT-2, (c) the DIT-2 instrument, (d) the demographic questionnaire, (e) a movie gift card, and (f) a stamped return envelope addressed to the researcher. The cover letter, signed by the researcher, outlined the procedure, importance, and confidentiality of the study.

The researcher submitted the research procedure and questionnaires to the Institutional Review Board (IRB) and received approval by email letter dated 2/24/2004 (referenced in Appendix C). The sales representative’s participation in the study, as outlined in the cover letter, consented to voluntary participation (See Appendix D).

A movie gift card ($3.99 value) was included to provide an incentive for the timely completion and return of the questionnaire. The sales representatives could keep the cards regardless of their participation in the research program.

To assure confidentiality, both the DIT-2 answer sheet and the demographic questionnaire sent to each individual sales representative were marked with the same five digit numerical code that was unique to that sales representative. The researcher prepared each package for mailing but did not apply the address labels. The company’s Regional Account Manager generated the list of salespeople and placed mailing labels on the
envelopes. The researcher never saw the recipients’ names or addresses. This approach ensured confidentiality of each respondent’s identity.

Each salesperson was asked to complete and return the materials within one week. To encourage a higher rate of return, a follow-up strategy was implemented. This strategy involved a series of two emails from the Regional Account Manager to the sales managers who in turn forwarded them to each sales representative. The first email was sent two days after the questionnaires had been mailed and the second was sent on the fifth day. Both follow-up emails encouraged the completion and return of the questionnaires to the researcher. (See Appendix E and F)

After receiving the returned answer sheets, the researcher checked to make sure each DIT-2 questionnaire and each demographic questionnaire from an individual sales representative had identical, unique five-digit ID numbers. The researcher checked the condition of the answer sheets to ascertain that the answer circles for the DIT-2 were dark and completely filled in by pencil, that any erasures were clean, and that there were no stray marks. After checking the answer sheets for condition, the researcher sent the answer sheets, along with a Job Submission Form, overnight to the Center for the Study of Ethical Development at the University of Minnesota.

The Center conducted statistical analysis on the DIT-2s and generated a report providing the P score, which measures principled reasoning or postconventional Stages 5 and 6, for each sales representatives ID number. The answer sheets and the report were then returned to the researcher for additional analysis.

The answers to the demographic questions did not require scanning. As each demographic questionnaire was received, the researcher entered the data into a spreadsheet
using the unique five digit ID number as the identifier. For additional accuracy, the data were checked separately by a statistician.

*Reliability and Validity*

Detailed information regarding the reliability and validity of the DIT is found in Chapter 2.

*Data Analysis*

Because the report generated by the Center was limited in answering the hypotheses for this study, additional analysis was conducted.

Research Question 1: Is there a concurrent relationship between the postconventional level of cognitive moral development and a salesperson’s performance as measured by the three-year average sales quota achieved?

The variable Quota measures a salesperson’s performance level. This variable was reported in a categorical format with possible responses ranging from over 105% to below 85%. The P score variable measured a person’s cognitive moral development Stage 5 and 6 (postconventional level). It is an interval variable ranging from 0-95. A non-parametric test, the Spearman Correlation, was performed to determine if the mean P score differed significantly among each of the quota/performance levels.

Research Question 2: Is the relationship between the postconventional level of cognitive moral development and a salesperson’s performance moderated by selected salesperson’s demographic variables; educational major, highest education degree earned, income and sales experience?
A Kruskal Wallis test was performed for the variables educational major, highest education degree earned and income. This test is the non-parametric equivalent to an ANOVA. For the variable sales experience a Pearson Correlation was used. In addition, a multiple least squares regression assessed how well the demographic variables were at explaining the dependent variable, CMD.

Research Question 3: Is there a difference in the postconventional level of cognitive moral development and a salesperson’s performance based on participation in ethics training?

Research Question 3 was analyzed in a similar fashion as research question two. No correlation existed between performance and CMD so an ANOVA was employed; however, the hypothesis 3b was measured using a sub-sample of the original sample. A Kruskal Wallis test was conducted with only those salespeople who answered in the affirmative that they had participated in a formal ethics class or seminar were included. The SAS version 8.1 was used to run statistical tests. Minitab student version 12 was used to run the nonparametric tests and generate the box plots.

Additional Analyses

Research Question 1 examined the relationship between sales performance and the postconventional level of CMD by using the three-year average sales quota achieved. An additional sales performance measure, those sales representatives that had won a performance award, was also analyzed. An ANOVA was used to analyze the results.
Chapter IV Findings

Purpose of the Study

The purpose of this study was to determine if a relationship exists between cognitive moral development and a salesperson’s performance. Specifically, the study examined the CMD postconventional level (Stages 5 & 6) of salespeople from a leading pharmaceutical company with relation to the three-year average sales quota they achieved. The researcher also analyzed the relationship between the postconventional level of cognitive moral development and the demographic variables of income, highest degree earned, educational major, years of sales experience, and participation in a formal ethics-training class or seminar.

Data Collection

The data were gathered from a sample of 63 out of 150 sales representatives of a large pharmaceutical manufacturer whose sales territory was North and South Carolina. Cognitive moral development was determined by having the participants complete the Defining Issues Test-2. The DIT-2 measures the relative importance the respondent gives to specific statements in regards to a moral dilemma. Analysis of the DIT-2 determined the participants’ P scores. The P score is the sum of scores from CMD Stages 5 and 6 and is represented with a numerical score 0-95. A demographic questionnaire completed by sales representatives reported their income, highest education degree earned, educational major, years of sales experience, and participation in a formal ethics training class or seminar.

The researcher provided a self-addressed return envelope and requested respondents to return the completed DIT-2 and the demographic questionnaire postmarked by March 29,
2004. After mailing the initial instruments to the sales representatives, the pharmaceutical company’s Regional Account Manager sent two follow-up emails (one March 25, one March 30) encouraging the sales representatives to complete the two instruments. To provide for any delays by the postal service and for any last minute procrastinators, the researcher allowed two additional days beyond the postmark date for receiving the questionnaires.

A total of 63 completed questionnaires were returned, giving a return rate of 42%. Five additional incomplete instruments were received were not included in the analysis. Table 4.1 summarizes the per day rate of return over the 9-day receipt period.

<table>
<thead>
<tr>
<th>Date received</th>
<th>Number received</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 25</td>
<td>15</td>
</tr>
<tr>
<td>March 26</td>
<td>7</td>
</tr>
<tr>
<td>March 27</td>
<td>6</td>
</tr>
<tr>
<td>March 29</td>
<td>5</td>
</tr>
<tr>
<td>March 30</td>
<td>5</td>
</tr>
<tr>
<td>March 31</td>
<td>10</td>
</tr>
<tr>
<td>April 1</td>
<td>5</td>
</tr>
<tr>
<td>April 2</td>
<td>8</td>
</tr>
<tr>
<td>April 3</td>
<td>2</td>
</tr>
</tbody>
</table>

The completed DIT-2 instruments were scored by the Center for the Study of Ethical Development at the University of Minnesota. To test the study hypotheses, the researcher analyzed those scores and the responses to the demographic questionnaire using both parametric and non-parametric statistical measures.
General Results

The data collected included the following variables: Cognitive moral development, the dependent variable, was measured by the P score. Performance was based on the sales representative’s three-year average sales quota achieved. Quota was measured categorically. The researcher provided percentage ranges and respondents chose the one that matched their sales performance.

The variable income was also measured using categorical ranges. The categories were $100,000 and over, $80,000 to 99,999, $60,000 to 79,000 and $40,000 to 59,000.

Education level was determined by respondents reporting their highest education degree earned. Categories included high school, 2-year degree, 4-year degree, and Masters Degree. The respondents provided their academic major as well.

Sales experience was determined by a specific number of years indicated by the respondent in response to the statement, “total years of full-time sales experience”.

Participation in a formal ethics training class or seminar was measured using a “yes” or “no” forced choice. Respondents reported perceived usefulness of the training by comparing it to other training experiences. Respondents chose one of five categories to indicate usefulness.
General results of the sales representative sample

*P Scores.* The stem and leaf plot Table 4.2 shows the actual data (P scores) for the sample. The first column in Table 4.2 represents the number of respondents. The second column represents the stem or tens place and the third column represents the ones place. For example, in the first column there was one respondent who had a 0 in the tens place and an 8 in the ones place for a P score of 8. In the first column, the second number is 5, which shows there were 5 respondents with a 1 in the tens place and a 0, 2, 2, 4, 4 in the ones place for P scores of 10, 12, 12, 14, and 14. The P scores ranged from 8 to 60.

Table 4.2 Leaf Plot Diagram Showing the Distribution of P Scores

<table>
<thead>
<tr>
<th>Frequency of Responses</th>
<th>Stems (10s place)</th>
<th>Leafs (ones place)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>02244</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>666688888</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>000002222244444444</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>6668</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>0222444</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>668</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>0002244</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>6668</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>022</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 4.1 is a histogram providing a visual picture showing the shape of distribution while the leaf plot diagram (Table 4.2) provides the actual data. Figure 4.1 shows that the distribution of P scores for the sample is skewed to the right with a mode P score in the 20s.
Performance quota. Participants chose from one of six possible categories for their quota percentage: 105% or more; 100-104%; 95-99%; 90-94%; 85-89%; below 85%. Table 4.3 illustrates that all participants fell into one of the top three categories, with 54% having achieved 105% or more, 33% having achieved 100-104%, and 13% having achieved 95-99% over the last three years.

Table 4.3 Frequency Distribution of Percentage of Quota

<table>
<thead>
<tr>
<th>Percentage of Quota</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 85%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>85-89%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>90-94%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>95-99%</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>100-104%</td>
<td>21</td>
<td>33%</td>
</tr>
<tr>
<td>105% and above</td>
<td>34</td>
<td>54%</td>
</tr>
</tbody>
</table>
Demographic Variables

Income. Table 4.4 illustrates the income levels of participants. A majority of incomes were in the ranges $60,000-$79,000 (46%) and $80,000-99,999 (33%). Smaller number of incomes were in the ranges of $40,000-$59,999 (13%) and over $100,000 (8%).

Table 4.4 Frequency Distribution According to Income

<table>
<thead>
<tr>
<th>Income Level</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40,000-$59,999</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>$60,000-79,000</td>
<td>28</td>
<td>46%</td>
</tr>
<tr>
<td>$80,000-99,000</td>
<td>20</td>
<td>33%</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>5</td>
<td>8%</td>
</tr>
</tbody>
</table>

Sales experience. Table 4.5 shows the distribution of years of experience. A plurality (48%) of sales representatives in the sample had less than 10 years experience. The most frequent response (9 times) was 5 years.

Table 4.5 Leaf Plot Diagram Showing the Distribution of Years of Sales Experience

<table>
<thead>
<tr>
<th>Frequency of Responses</th>
<th>Stems (10s place)</th>
<th>Leafs (ones place)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>0</td>
<td>112233333344455555555556889</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>000001112233</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>55557889</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>0000222446</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
Figure 4.2 shows the distribution of sales experience. Sales experience ranged from 1 to 33 years with a mean of 10.7 years and standard deviation of 7.5 years, resulting in a distribution also skewed to the right.

Figure 4.2 Distribution of Sales Experience for the Sample

*Highest degree earned.* Education degree was measured categorically and consisted of highest degree earned. Table 4.6 shows the frequency distribution according to degrees earned. The choices were high school, 2-year degree, 4-year degree, masters, and doctorate. The overwhelming majority of sales representatives, 72 percent, had a 4-year college degree while 28 percent had a master’s degree. No high school degree was reported and only one respondent that had a 2-year degree. The 2-year degree was removed from consideration because of a too small sample size.

Table 4.6 Frequency Distribution According to Highest Degree Earned

<table>
<thead>
<tr>
<th>Highest Degree Earned</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 year degree</td>
<td>44</td>
<td>72</td>
</tr>
<tr>
<td>Masters degree</td>
<td>17</td>
<td>28</td>
</tr>
</tbody>
</table>
Educational major was measured categorically. The data consisted of study interests such as marketing, science, business, etc. Table 4.7 shows the distribution of majors across the study participants. The largest segment was Business/Marketing majors, which included MBA and Organizational Management majors. Sciences included Biology and Chemistry. Communication and Languages included speech and Slavic languages. Math/Finance included Engineering and Computer Science. The “Other” category included Liberal Arts, Education, English, Fashion, Health, History, Counseling, Nursing, Nutrition, PE, Pharmacy, and Social Work. The Other category accounted for 31% of academic majors.

<table>
<thead>
<tr>
<th>Academic Major</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business/marketing</td>
<td>19</td>
<td>32%</td>
</tr>
<tr>
<td>Sciences</td>
<td>11</td>
<td>19%</td>
</tr>
<tr>
<td>Math/Finance</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Communication and language</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>Other majors</td>
<td>18</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Ethics training.** Table 4.8 shows that 43 percent of sales representatives had participated in an ethics training class. All of the respondents answered this question.

<table>
<thead>
<tr>
<th>Participated</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>36</td>
<td>57%</td>
</tr>
<tr>
<td>Yes</td>
<td>27</td>
<td>43%</td>
</tr>
</tbody>
</table>
Table 4.9 represents those sales representatives that had participated in a formal ethics training class or seminar (n=27) and how they perceived the training’s usefulness. Most found the ethics training to be very useful (56%) or somewhat useful (33%).

Table 4.9 Frequency Distribution According to Perceived Usefulness of Ethics Training

<table>
<thead>
<tr>
<th>Perceived Usefulness</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat Useful</td>
<td>9</td>
<td>33%</td>
</tr>
<tr>
<td>Very useful</td>
<td>15</td>
<td>56%</td>
</tr>
<tr>
<td>Not useful</td>
<td>3</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Detailed Research Questions and Null Hypotheses Tests**

The following sections present findings related to each research question and null hypothesis. The results consist of a summary of the relevant findings, tables depicting the statistical analysis, and a decision about each null hypothesis based on the statistical analysis.

**Research Question One**

Research Question One: Is there a concurrent relationship between the postconventional level of cognitive moral development as measured by the DIT-2 and a salesperson’s performance as measured by the three-year average sales quota achieved?

HO1 (Null Hypothesis): There is no concurrent relationship between a salesperson’s three-year average sales quota achieved and the postconventional level of cognitive moral development as measured by the Defining Issues Test-2.

To address the first null hypothesis the P score, a number ranging from 0 to 95, for each sales representative along with the respondent’s three-year average sales quota achieved
had to be determined. The P score for each sales representative, through statistical analysis of the DIT-2, was provided by the Center for the Study of Ethical Development. The three-year average sales quota achieved for each sales representative was gathered by self-reported measures using the demographic questionnaire.

The mean, median, and standard deviations of P scores for each category are summarized in table 4.10 and graphically displayed in the box plot in Figure 4.3.

Table 4.10 shows that the mean P scores range from between 27.71 and 29.82 among the three levels of performance. The variation increases slightly with higher levels of performance: at the 95% performance level, the standard deviation is at 11, at the 100% level, it increased to 12, and at the 105% level, the standard deviation increased to 13.

<table>
<thead>
<tr>
<th>Percentage of Quota</th>
<th>N</th>
<th>Mean</th>
<th>Median P-score</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>95-99%</td>
<td>8</td>
<td>28.56</td>
<td>24.24</td>
<td>11.17</td>
</tr>
<tr>
<td>100-104%</td>
<td>21</td>
<td>27.71</td>
<td>26.00</td>
<td>12.17</td>
</tr>
<tr>
<td>105% and above</td>
<td>34</td>
<td>29.82</td>
<td>25.00</td>
<td>13.51</td>
</tr>
</tbody>
</table>

In Figure 4.3, a fairly consistent median is represented in the three plots. However, the variation in P scores increases as the level of performance increases. The medians as indicated by the lines in the middle of the boxes are very close to each other. The variation increases since the width of the boxes increase in size and the overall length of the box plots increase in length as the performance level increases.
Figure 4.3 Box Plot of P Scores for Performance

Due to an insufficient number of responses to determine normalcy for each category, the researcher performed a non-parametric test. Because the researcher was looking for a relationship with ordinal (quota percentage) and interval (P score) variables, a Spearman Correlation was used. The Spearman test yielded an $r = .05$ and $p = .71$. A $P$ value less than .05 would be considered significant. The actual $P$ value was .71 indicating that the results were not significant. Thus, there is no relationship between the three-year average sales quota achieved and the P score.

In addition to the performance measure, the three-year average sales quota achieved, the researcher analyzed the performance measure of whether or not a sales representative had won a performance award over the past three years. The company studied identifies its high performers as those sales representatives who have won a performance award. This measure was analyzed to look for a relationship between performance and CMD. Table 4.11 and Figure 4.4 show the results of this analysis. The results showed that of those who had won the award, the mean P score was 28.1, $s = 12.9$ of those sales representatives who had not won the award, the mean P score was 29.1, $s = 12.5$. 

72
Table 4.11 Mean and Standard Deviation of P Scores to Performance Awards

<table>
<thead>
<tr>
<th>Award</th>
<th>N</th>
<th>Mean</th>
<th>STDEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Won</td>
<td>29</td>
<td>29.95</td>
<td>12.49</td>
</tr>
<tr>
<td>Won</td>
<td>34</td>
<td>28.12</td>
<td>12.91</td>
</tr>
</tbody>
</table>

The box plot (Figure 4.4) demonstrates a greater spread in P scores for those that had not won an award, and a median that is slightly higher for those who did win a performance award.

![Box plot of P scores for winners and non-winners](image)

Figure 4.4 Comparisons of P Scores and Performance Awards

With sample sizes sufficiently large to assume normality, a t-test could be performed. The t-test ($t = .57$ $p = .57$) was conducted comparing mean P scores from those who received a performance award those that did not. These results suggest there is no significant difference in P score between those who received a performance award and those who did not. This supports the earlier conclusion that performance and P score do not appear related.

In analyzing both the three-year average sales quota achieved and sales performance awards with CMD, the researcher cannot reject the null hypothesis. This suggests that within
the current study there is no relationship between cognitive moral development and sales performance.

Research Question Two

This section addresses the four hypotheses dealing with research question two. First, the means and standard deviation for the dependent variable CMD (measured with the P score) are reported for the appropriate categories of the demographic variables. Second, a two-way inferential analysis that examines the relationship between CMD and the demographic variables is discussed.

Initially, the researcher did not know if a relationship between cognitive moral development (P score) and sales performance (three-year average sales quota achieved) would exist. If a relationship existed, the approach would be to use an ANCOVA to examine differences between P scores (CMD) and demographic variables, while holding quota constant. Because there was not a relationship, a covariate was not needed. Hence a 2-way analysis was appropriate between the P score and the demographic variable. For example, a 2-way analysis between the level of income and its relationship to the P score, or postconventional level of CMD, was conducted. Additionally, the sample size was smaller than initially expected, causing empty cells and impacting the reliability of results. In addition to the 2-way analysis, a multiple least squares regression that looks for any relationship between CMD and all demographic variables together was performed.

Research Question 2: Is the relationship between the postconventional level of cognitive moral development and a salesperson’s performance moderated by selected salesperson’s demographic variables; educational major, highest education degree earned, income, and sales experience?
HO2a (Null Hypothesis): There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by level of income.

Table 4.12 reports the descriptive statistics for the four income levels. Those participants who made between $40,000 and $59,999 had the highest average P score while those that made over $100,000 had the lowest average P score.

Table 4.12 also shows that the mean P score for those with income over $100,000 was 24.8 with a small standard deviation of only 4.6. One needs to mention, however, that the sample size for this group was especially small with n = 5. For those with income from 60,000 – 99,000, the mean P score fell at about 28 points. For the group with lower incomes, $40,000 - $59,999, the P score appeared higher at 34, but again the sample size was small for this group with n = 8. The overall variation was reasonably consistent at about 12-14, except for the “over $100,000” group which had a standard deviation of only 4.6.

<table>
<thead>
<tr>
<th>Income Level</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40,000-$59,999</td>
<td>8</td>
<td>34.06</td>
<td>38.00</td>
<td>13.17</td>
</tr>
<tr>
<td>$60,000-79,000</td>
<td>28</td>
<td>28.00</td>
<td>24.00</td>
<td>14.05</td>
</tr>
<tr>
<td>$80,000-99,000</td>
<td>20</td>
<td>28.60</td>
<td>26.00</td>
<td>11.43</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>5</td>
<td>24.80</td>
<td>24.00</td>
<td>4.60</td>
</tr>
</tbody>
</table>

An inferential analysis examined differences between median P scores for each category. A Kruskal Wallis test was performed. This test is the non-parametric equivalent to an ANOVA but it does not require an assumption of normality and is more appropriate when sample sizes are small. The results show the test statistic for the Kruskal Wallis, H = 1.73 with a p-value = .631. With such a high P value, the results are insignificant, thus there is no significant difference between median P scores based on income level.
HO2b (Null Hypothesis): There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by years of sales experience.

While the other variables were categorical, sales experience was quantitative thus, a scatter graph is an appropriate graphical technique. To examine the relationship between these two variables a Pearson Correlation was performed. The variable, years of sales experience, were widely dispersed, in relation to the P score. The results were $r = -.13$, $p = .32$. The scatter graph in Figure 4.5 suggests that there is no relationship between cognitive moral development and years of sales experience.

![Figure 4.5 Scatter Graph of the Relationship Between CMD and Years of Sales Experience](image)

HO2c (Null Hypothesis): There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by highest education degree earned.

Table 4.13 shows that participants were primarily college graduates with a 4-year degree (70%). Approximately one-quarter of the respondents had Master’s degrees. The
average P scores with those sales representatives that had a 4-year degree were 29.37 and
those that had a master’s degree the mean P score of 28.94.

Table 4.13 Mean, Median and Standard Deviation of P Score According to Highest
Education Degree Earned

<table>
<thead>
<tr>
<th>Education Level</th>
<th>N</th>
<th>Mean P score</th>
<th>Median P score</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 year degree</td>
<td>44</td>
<td>29.37</td>
<td>25.24</td>
<td>12.80</td>
</tr>
<tr>
<td>Masters degree</td>
<td>17</td>
<td>28.94</td>
<td>26.00</td>
<td>13.00</td>
</tr>
</tbody>
</table>

Figure 4.6 illustrates little difference in the median P score based on highest
education degree earned although it does show a shift in variation. Those with a four year
degree have more variation in P scores overall, although those with masters degrees tend to
be relatively consistent with P scores in the upper and lower 25% of the data but more spread
out in the middle 50 percent. The Kruskal Wallis test showed that there is no relationship
(H=0.05, P=0.815) between highest education degree earned and the P score or
postconventional level of cognitive moral development.
HO2d (Null Hypothesis): There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by educational major.

The educational major for respondents who answered this question (89% responding) varied, and are summarized in Table 4.14. The most frequently reported major was business (32%). A total of 17 additional majors are included in the “Other” category including such majors as English, Social Work, History, and Speech/Language. The median P scores were the highest among the business majors while Marketing/Communication representing only 8 percent of the respondents had the second highest median P score 28. The lowest median P scores were in the Math/Finance major (P score 22).
Table 4.14 Participant’s Major and Median P Scores

<table>
<thead>
<tr>
<th>Academic Major</th>
<th>Percentage</th>
<th>N</th>
<th>Median P Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business/Marketing</td>
<td>32%</td>
<td>19</td>
<td>36</td>
</tr>
<tr>
<td>Sciences</td>
<td>19%</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>Marketing/Communication</td>
<td>8%</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>Math/Finance</td>
<td>10%</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Other Majors</td>
<td>31%</td>
<td>18</td>
<td>22</td>
</tr>
</tbody>
</table>

A Kruskal Wallis test was performed to determine a relationship between educational major and the P score or postconventional level of CMD. It was found that there is no relationship (H= 6.21 P=0.184) between educational major and the P score.

A multiple least squares regression was used to answer Research Question 2 as a whole. This method was chosen for two reasons: (1) the sample sizes for the variables highest degree earned, income, and years of sales experience were small and did not meet the assumptions for normality, and (2) the data collected was both interval (P score, years of sales experience) and ordinal (highest degree earned, income).

The regression tested the null hypothesis that none of the variables were useful in predicting CMD. The results yielded an overall F = 1.20 P = .32. The null hypothesis cannot be rejected, suggesting that none of these three variables are useful in predicting a person’s CMD (P score).

The combination of these results suggests that we cannot reject the null hypothesis. There is not sufficient evidence to conclude that a person’s highest degree earned, sales experience, or income impacts cognitive moral development (P score).
Research Question Three

Research Question 3: Is there a difference in the postconventional level of moral development and salesperson’s performance based on participation in ethics training?

HO3a (Null Hypothesis): There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by having participated in a formal ethics training class or seminar?

The sample sizes for analyzing this hypothesis were large enough to assume normality through the Central Limit Theorem. The data, whether or not the sales representative participated in a formal ethics training class or seminar, was measured by a yes/no response. The yes/no answers were nominal and the P score was interval, so an ANOVA was used to determine any significant difference.

Table 4.15 shows that those sales representatives who attended an ethics class had a higher average P score (33.35) than those that did not (25.67). The standard deviation was about the same.

Table 4.15 Mean P Score and Standard Deviation for Ethics Training

<table>
<thead>
<tr>
<th>Participated</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>36</td>
<td>25.67</td>
<td>12.25</td>
</tr>
<tr>
<td>Yes</td>
<td>27</td>
<td>33.35</td>
<td>12.02</td>
</tr>
</tbody>
</table>

The box plot, Figure 4.7, suggests that the P scores for those who participated in a formal ethics training class or seminar are shifted up, indicating higher P scores than those who did not take an ethics class. Also, the variation in P scores is slightly higher among those that took the ethics class than those that did not. Based on the results of the analysis
F = 6.17 and P = .02 the null hypothesis is rejected. There is a significant difference in P scores between those who had participated in a formal ethics training class or seminar.

Figure 4.7 Mean P Score and Ethics Education

HO3b (Null Hypothesis): There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by perceived usefulness of ethics training.

Perceived usefulness of ethics training was measured by the following categories: very useful, somewhat useful, not particularly useful, or not useful at all. Of those who said ethics training was very useful or somewhat useful, there is not much difference in resulting mean P scores, although there is slightly more variation in P scores for those that report somewhat useful. Comparison with the not useful group cannot be made because the sample size did not provide reliable results.

Table 4.16 shows that there was only a slight variation in the average P scores for the usefulness of ethics training as compared to other types of education and training experiences. The average P score was 34.44 for participants finding ethics training as somewhat useful while for those that found it very useful the average P score was 33.50.
Table 4.16 Mean and Median P Scores and Standard Deviation of Perceived Usefulness

<table>
<thead>
<tr>
<th>Perceived Effectiveness</th>
<th>N</th>
<th>Mean P Score</th>
<th>Median P Score</th>
<th>StDev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat Useful</td>
<td>9</td>
<td>34.44</td>
<td>34.00</td>
<td>10.90</td>
</tr>
<tr>
<td>Very useful</td>
<td>15</td>
<td>33.50</td>
<td>36.00</td>
<td>12.59</td>
</tr>
<tr>
<td>Not useful</td>
<td>3</td>
<td>29.33</td>
<td>22.00</td>
<td>16.29</td>
</tr>
</tbody>
</table>

The box plot, Figure 4.8, demonstrates that the usefulness of ethics training as compared to other education and training experiences is similar. The variation of P scores was greater with those sales representatives who did not find the training useful. The median P score was much lower for those who found it not useful. The response rate for this question (n=27) consisted only of those who had taken an ethics class. Since so few responses fell into these four categories, the researcher conducted a Kruskal Wallis Test. The results gave a test statistic \( H = .92 \) with \( p = .63 \) thus causing the researcher to fail to reject the null hypothesis. This suggests that there is no significant difference among median P scores based on how a participant perceived the usefulness of ethics training. In addition to the analysis in answering the research questions and null hypothesis, inferential statistics were performed to compare the sample group with those in the general population. The researcher wanted to explore this further because the dependent variable, CMD is of significant interest. The researcher noticed that the P score were much lower than other populations (Rest & Narvaez, 1994) leading to the question is there a difference in P score with sales representatives and the general population. First, a confidence interval was performed to estimate the average P score of the population. Second, a hypothesis test was performed to test the average P score of the population versus the P score that would be expected from a population with a college education.
Table 4.17 illustrates that the researcher is 95% confident that the average P score falls between 25.77 and 32.15. This means that the average P score of the population of salespeople is consistent with Jr. High School to Senior High School students, even though the majority of the sample had a four-year college degree (71%).

Table 4.17 Confidence Interval

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
<th>SE Mean</th>
<th>95.0% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63</td>
<td>28.96</td>
<td>12.65</td>
<td>1.59</td>
<td>25.77, 32.15</td>
</tr>
</tbody>
</table>

The average P score for the general population of people with a four year degree is 45.9 (Rest and Narvaez, 1994), a level that corresponds with a college education. The t-test shows a t value of -10.63 and a P< .0001. This demonstrates a significant difference between the general populations’ average P score of 45.9 and the sample population 28.9 (table 4.18). There was a significant difference between this sample of salespeople with college degrees and the general population as reported by Rest and Narvaez (1994) and Hau and Lew (1989).
Table 4.18 T-Test for Variable: P Score

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>N</th>
<th>Mean</th>
<th>StDev</th>
<th>SE Mean</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO $\mu = 45.90$</td>
<td>63</td>
<td>28.96</td>
<td>12.65</td>
<td>1.59</td>
<td>-10.63</td>
<td>0.0000</td>
</tr>
<tr>
<td>HA $\mu \neq 45.90$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary

This study shows that there is not a significant relationship between cognitive moral development and sales performance ($r = .05$, $P = .71$). The variables of income level, highest education degree earned, educational major, and years of sales experience did not demonstrate a significant relationship with CMD and performance as well. The variable that did show significant results was the participation in a formal ethics training class or seminar with CMD ($F = 6.17$, $P = .02$). Those sales representatives that had participated in a formal ethics training class or seminar had a higher P score than those sales representatives that had not attended formal ethics training.
Chapter V Summary, Findings, and Recommendations

Summary

Cognitive Moral Development theory was first developed by Piaget (1965) in order to explain the mental processes that occur when deriving meaning from experience. From this theory, Kohlberg (1981; 1984) developed the hypothesis that the higher the moral reasoning, the higher the ethical decision. Previous studies suggest that the sales representative works in an environment that is prone to unethical behavior (Bellizzi & Hasty, 2003; Weeks & Nantel, 1992; Clark & Lattal, 1993; Rosengren, 1998). This behavior has been largely attributed to the relative isolation that the sales representative experiences in the field. For this reason, the salesperson is often referred to as a boundary role performer (Ingram & Laforge, 1989). This unethical behavior can lead to a large variety of consequences that can have a marked impact on a company’s performance and financial success. These consequences to the company include loss of customer trust, increased employee turnover, reduction in repeat business, and lawsuits (Bellizzi & Hasty, 2003). To avoid these outcomes, sales managers have a fundamental need to identify mechanisms that increase ethical decision-making. A first step is to understand the relationship between sales performance and morality in the decision making process in the sales environment (Schwepker & Ingram, 1996).

The objective of this study was to provide a first order assessment of the existence of a relationship between sales performance and cognitive moral development. Specifically, the study assessed whether or not sales representatives in a pharmaceutical company, had a positive relationship with the postconventional level of CMD based on their three-year average sales quota achieved. Cognitive moral development was measured by a P score derived from the DIT-2 instrument. P scores range from 0 to 95 and indicate the importance
the individual gives to principled (Stage 5 and 6) moral reasoning. A higher score indicates higher moral development (Rest et al., 1995). According to Kolberg (1984), there are six stages of cognitive moral development moving from egocentric (Stage 1) to principle centered (Stage 6). Individuals may move through these six stages in a sequential progression. The postconventional level, consists of Stages 5 and 6, and reflects an extent of reasoning that has progressed beyond social influences and is based on moral values. As the individual progresses through the postconventional level, one develops self-selected universal principles.

Unlike previous studies (Schwepker & Ingram, 1996; Izzo & Langford, 2003) that examined performance linked to expense accounts, quality of sales objectives, job status, and professional designations, this study focused directly on a specific sales performance measure: the three-year average sales quota achieved. Demographic variables consisting of (1) educational major, (2) highest education degree earned, (3) income, and (4) sales experience were determined for each subject. A non-demographic variable, participation in a formal ethics training class or seminar, was also assessed via the demographic questionnaire to identify any relationship of formal ethics training and the postconventional level of cognitive moral development.

The Defining Issues Test, DIT-2 was used to measure the postconventional level (Stages 5 & 6) of cognitive moral development. The DIT-2 consists of 5 ethical dilemmas along with statements of proposed action which the respondent weighs according to the level of importance. The DIT-2 was chosen due to reliability, validity and the relative ease of use.
The analysis addressed research questions and null hypotheses posed to determine whether or not there was a relationship between sales performance and cognitive moral development.

**Research Questions and Hypotheses**

The following research questions and null hypotheses were assessed:

**Research Question One:** Is there a concurrent relationship between the postconventional level of cognitive moral development as measured by the DIT-2 and a salesperson’s performance as measured by the three-year average sales quota achieved?

*(Null Hypothesis):* There is no concurrent relationship between a salesperson’s three-year average sales quota achieved and the postconventional level of cognitive moral development as measured by the Defining Issues Test-2.

**Research Question Two:** Is the relationship between the postconventional level of cognitive moral development and a salesperson’s performance moderated by selected demographic variables; educational major, highest education degree earned, income and sales experience?

*HO2a (Null Hypothesis):* There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by level of income.

*HO2b (Null Hypothesis):* There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by years of sales experience.

*HO2c (Null Hypothesis):* There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by highest education degree earned.
**HO2d (Null Hypothesis):** There is no relationship between the postconventional level of cognitive moral development and a salesperson’s performance by educational major.

**Research Question Three:** Is there a difference in the postconventional level of moral development and salesperson’s performance based on participation in formal ethics training?

**HO3a (Null Hypothesis):** There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by having participated in a formal ethics training class or seminar?

**HO3b (Null Hypothesis):** There is no difference in the postconventional level of cognitive moral development and a salesperson’s performance by perceived usefulness of ethics training.

Table 5.1 provides a summary of the statistical test performed and the results.

**Table 5.1 Summary of Statistical Test Results**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Hypothesis tested</th>
<th>Name of test</th>
<th>Results of test</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ 1</td>
<td>Relationship between sales Quota &amp; P score</td>
<td>Spearman Correlation</td>
<td>No relationship found</td>
</tr>
<tr>
<td>RQ 1</td>
<td>Difference between mean P scores for those that won an award and those that did not</td>
<td>t-test</td>
<td>No significant difference</td>
</tr>
<tr>
<td>RQ 2</td>
<td>Difference in median P scores for highest Education degree categories</td>
<td>Kruskal Wallis</td>
<td>No significant difference</td>
</tr>
<tr>
<td>RQ 2</td>
<td>Relationship between years of sales experience &amp; P scores</td>
<td>Pearson Correlation</td>
<td>No relationship found</td>
</tr>
<tr>
<td>RQ 2</td>
<td>Difference in median P scores for different Income categories</td>
<td>Kruskal Wallis</td>
<td>No significant difference</td>
</tr>
</tbody>
</table>
Table 5.1 continued

| RQ 2 | Difference in median P scores for different Educational Major categories | Kruskal Wallis | No significant difference |
| RQ 2 | Do the demographic variables as a whole have a relationship with the dependent variable, P score | Multiple Least Squares Regression | No variables contributed to P score |
| RQ 3 | Difference in mean P scores based on if participant had ethics training or not | ANOVA | Significant difference detected; p = .02 |
| RQ 3 | Difference in median P scores for different Perceived Usefulness of Ethics class categories | Kruskal Wallis | No significant difference |
| Additional | Range of P scores for Population | Confidence Interval | Range 25.11-32.15 |
| Additional | Comparison of mean P score for population of sales people vs. general population | T-test (against known value) | Significant results; p < .0001 |

The outcome of the study identified one variable that had a positive relationship with cognitive moral development. Those sales representatives who had participated in a formal ethics training class or seminar had a significantly higher P score than those that had not experienced this training. No other variable, performance quota, educational major, highest education degree earned, income and sales experience had a positive relationship with the postconventional level of cognitive moral development.

Findings

The following results were derived from the analysis of research questions and null hypothesis testing.

Finding 1. There is no statistically significant relationship between a sales representative’s three-year average sales quota achieved and the postconventional level of cognitive moral development.
Finding 2. There is no statistically significant relationship between a sales representative’s level of income and the postconventional level of cognitive moral development.

Finding 3. There is no statistically significant relationship between a sales representative’s highest education degree earned and the postconventional level of cognitive moral development.

Finding 4. There is no statistically significant relationship between a sales representative’s educational major and the postconventional level of cognitive moral development.

Finding 5. There is no statistically significant relationship between a sales representative’s years of sales experience and the postconventional level of cognitive moral development.

Finding 6. There is a statistically significant relationship between those sales representatives that had participated in a formal ethics class or seminar and the postconventional level of cognitive moral development.

Finding 7. There is no statistically significant relationship between a sales representative’s perceived effectiveness of ethics training and the postconventional level of cognitive moral development.

Finding 8. There is a significant difference between the P scores of this sample of salespeople and the general population with college degrees based on previous research.
Discussion of Findings

The following discussion focuses on the areas that are found to be the most researched and debated surrounding cognitive moral development and were formed based on the findings of the study and on the analysis described in Chapter IV.

Performance

This study found no relationship between a sales representative’s three-year average sales quota and the postconventional level of cognitive moral development. This means that a high level of moral reasoning did not correlate with higher performance. This result is inconsistent with other studies that focused on performance of sales representatives. One explanation may be the manner in which “performance” is defined. Other studies defined performance in many different ways. For this study, performance was measured as the three-year average sales quota achieved. Izzo and Langford (2003) defined performance as those practitioners who hold a professional designation in the real estate profession. Of those that held a professional designation (e.g., Graduate Realtor Institute GRI) a higher P score was achieved (Izzo & Langford, 2003). Although the DIT-2 was not used, Schwepker and Ingram (1996) found that performance, when defined as achieving quantity and quality of sales objectives, use of technical knowledge in sales presentations, and controlling unnecessary expenses were all related to higher levels of moral reasoning.

These previous studies then would invoke the expectation that having a higher level of moral reasoning would lead to a higher percentage of quota or other sales performance. This would largely be due to building customer trust by not breaking promises and by demonstrating other ethical practices (Chonko, Wotruba and Loe, 2002). However, based on
the present study results, a sales representative need not have a higher level of moral reasoning (P score) in order to achieve a high performance level. The sample population had a low average P score (28.96) compared to the general population. This may demonstrate that many sales representatives who had a higher level of moral reasoning had selected out of the sales representative position altogether. The unethical environment that may be necessary to succeed in sales may not have been tolerable to these sales representatives.

The results of a Sales and Marketing Management survey of 200 managers found that almost half of the managers said their sales representatives have lied on a call (Marchetti, 1997). One third of the managers said their sales representatives have made unrealistic promises (Marchetti, 1997). This erosion of morality may be a direct result of the pressures to achieve quota in competitive selling environments (Marchetti, 1997). This was evident in the Sales and Marketing survey where over half of the managers said that the drive to meet sales goals does a disservice to customers.

Based on the results of this study, one could suggest that sales representatives with low moral reasoning can achieve high performance. However, low moral reasoning can lead to unethical behavior that can have negative consequences. Just how long a sales representative can sustain those consequences (e.g., revenue losses) is unknown (Chonko, Wotruba & Loe, 2002). The sales experience of the participants in this study ranged from 1 to 33 years. However, the study did not assess the number of sales positions previously held by sales representatives in this sample or the length of time they had been employed in their current sales role. Nor, does this study analyze the effects of “sales pressure” on moral reasoning. For this reason, pressure induced from quota achievement would be an interesting variable for future research. Also, the sampling method of collecting the data from ranges
(e.g., 100%-104%) instead of quantitative values (e.g., 102%), might have contributed to the non-significant findings. If more specific quantitative values were given by sales representatives, a relationship might be discovered.
Level of Education

This study shows no relationship between a sales representative’s highest education degree earned and the postconventional level of cognitive moral development. This is an unexpected finding due to the volume of previous evidence supporting the fact that P scores increase according to education achievement (Rest & Narvaez, 1994; Hau & Lew, 1989; Rest, 1986; Coder, 1975). As an individual moves through Jr. High to Graduate school, the P score goes upward from the 20’s to the 60’s (Rest, 1986).

Kohlberg (1984) believed that formal education was part of the maturity process, which involved increasing cognitive moral development. Formal education appears to be strongly associated with the P score. Izzo (2000) found that the level of formal education was significantly correlated with the P score.

There may be alternative explanations why education level did not show significance in this study. First, the sample was not large enough to generate significant findings. This study surveyed 44 people with a four-year degree and 11 people with a master’s degree. In Izzo and Langford’s (2003) study with real estate practitioners, the sample was 365; 34 high school, 168 some college, 119 college and 43 post graduate. The sample for this study consisted of sales representatives from the one company, whereas the real estate practitioners were from state and local chapters of the National Association of Realtors in California, Tennessee, and Florida (Izzo & Langford, 2003). Other studies also had larger sample sizes and used different statistical methods (Izzo, 2000; Schwepker, 1999; Hau & Lew, 1989). Another explanation of why highest education degree earned did not show a relationship could be that sales people in general have lower CMD (P scores) than the general population.
Hence the education level doesn’t have an impact on moral reasoning of people who are naturally inclined to be sales representatives.

*Ethics Training*

This study found that there is a positive relationship between participation in formal ethics training and a higher P score or postconventional level of cognitive moral development. This finding is consistent with past research. It has been demonstrated that, after participating in a course in ethics, an individual’s stage of cognitive moral development had increased relative to the stage measured prior to the class (Boyd, 1981; Penn & Collier, 1985). Also, it was found that over the course of a semester, those students who had taken a class in ethics education revealed a positive relationship between their score on a DIT taken at the beginning of the semester and the score on a second DIT taken at the conclusion of the semester. This suggested that individual moral reasoning could be influenced through ethics training (Loe & Weeks, 2000). Twelve studies with adult students, reviewed by Rest and Thoma, (1986) compared the effectiveness of the cognitive moral development approach with other approaches, such as personality development programs and more traditional didactic courses. A moral psychology teaching strategy that incorporated dilemma discussion was found to have the highest impact on P scores and that those educational programs that lasted from four to twelve weeks were the most effective. More traditional academic courses showed no significant changes in moral reasoning.

The results from this study reemphasize the importance of ethics training to increasing an individual’s moral reasoning. Although this study failed to demonstrate a relationship between sales performance and moral reasoning, increasing an individual’s
ethical decision-making would be an advantage for both the organization and individual. Having a choice, most organizations would elect to have an employee of higher moral reasoning so that when an ethical gray area arises, the individual’s actions would be well received. The employee, by demonstrating a higher level of moral reasoning, would more likely build customer loyalty, enhance job stability, and be more likely to develop long lasting relationships with their co-workers (Morgan & Hunt, 1994).

Additional Discussion

The population of sales people for this study demonstrated an average P score in the twenties. This is significantly lower than previous research that shows adults in general score around 40 (Rest, & Narvaez, 1994). In addition, professions such as physicians, staff nurses and enlisted men in the U.S. Navy score in the 40s and 50s as well as law and medical students (Rest & Navaez, 1994). The findings of this study suggest that sales representatives have a lower P score than those in other professions. The large discrepancy suggests that further study would be beneficial.

Limitations

The following are factors that contributed to limitations of the study.

1. The limitation was sample size. The sample in this study was limited to 63 respondents of 150 pharmaceutical sales representatives covering both North and South Carolina. As a result, the categories for certain variables in the study did not have a level of response that was adequate to include in analysis. In addition, comparisons could not be made across certain variables due to the low number of responses.
2. The limitation was quota percentage range. The demographic questionnaire asked participants to select a particular range of quota percentages, such as “90% to 94%”, instead of asking for their specific quota percentage. This caused a lack of quantitative data with regard to sales quotas. In addition, not all of the range choices were equally spaced. For example, the upper range was “105 or above” which, because it had not upper bound, was not the same width as the other categories.

3. The limitation was the paper and pencil form of the DIT-2. This might have had some impact on the number of responses received. Losses in the mail, being misplaced by sales representative, and being somewhat more labor intensive, might have contributed to fewer response being received. An electronic or computer version of the DIT-2 could simplify the process of taking, sending, and returning the DIT-2.

4. The limitation was little variation in sales performance. The sales representatives in the study sample were at or above 95% of quota. As a result, there was no opportunity to analyze the moral reasoning of sales representatives who had achieved a lower percentage of quota.

Recommendations for the Organization

A major goal of the study was to determine if there was a relationship between moral reasoning and sales performance. The study captured information that may prove helpful in understanding what factors impact moral reasoning. As a result, the following recommendations should be considered for the employee and the organization:

1. In order to create an environment for ethical decision making, the organization should take proactive steps to implement and support ethics training programs.
2. When recruiting prospective employees, a manager might want to consider asking specific questions that address the completion of an ethics class or seminar (perhaps include it on application forms) to increase the probability of hiring a person of high moral reasoning.

3. From a personal development perspective, sales representatives who want to increase their moral reasoning (i.e., to build customer trust and/or greater self-awareness) should be given the opportunity to participate in an ethics training class or seminar.

4. Even though moral reasoning did not correlate with high performance in this study, the sales manager should not dismiss the possible impact of moral reasoning on loss of revenue due to employee turnover, lying to customers or purposely selling ineffective solutions. Moral reasoning, measured by the P score, may have a positive correlation with these types of variables even though they were not measured here.

   This study is important because it suggests that ethics training could play a vital role in increasing moral development. If an individual could increase his or her moral reasoning skills by moving toward principled thinking, his or her ethical decision-making would be enhanced. This would possibly contribute to a reduction in workplace turnover, an increase in customer trust, forging long-term relationships, and generating additional sales revenue. Such enhancements would benefit both the sales representative and the organization (Hawes et al. 1989; Bingham & Dion, 1991).

   **Recommendations for Future Research**

   This study examined whether performance quota achievement, specific demographic variables, and ethics training had a relationship with the postconventional level of cognitive
moral development (Stages 5 & 6) as measured by a P score. The study’s findings and conclusions form the basis for additional research. Suggestions for future investigation are to:

1. Expand the study with a larger sample across various geographic locations within the same organization. A larger sample would generate more data for different categories such as income ranges (e.g., $60,000 – 79,999) or educational major (e.g., business, science, chemistry). This would permit additional statistical tests, such as an analysis of variance, to be used for comparison. By having a larger sample, all of the categories would potentially have larger numbers for analysis. For example, the “not at all useful” category for training usefulness was N=3 and could not be included in the analysis.

2. Conduct a similar study in organizations outside of the pharmaceutical industry and compare findings. Pressure on sales representatives to achieve a specific performance quota could differ appreciably in other industries and locations. The more intense the pressure, the more likely unethical practices will occur. It would be interesting to compare the effect of varied degrees of pressure to achieve sales quotas on the moral reasoning of sales representatives.

3. Develop and implement an ethics training program teaching CMD theory and conduct a pre/post assessment using the DIT-2. It was shown in this study that participation in a formal ethics training class does have a significant positive relationship with moral reasoning. However, it was not determined what type of training or instructional method impacted CMD. Administering the DIT-2 before and after the training is completed would allow the researcher to see if the training method impacted moral reasoning.
4. The performance measure, the three-year average sales quota achieved was chosen to demonstrate consistent performance over time. It is viewed by organizations as one of the more accurate ways to judge performance. However, there are other important sales measures that can be monitored that lead to successful performance. Future research could identify the selection of a different performance measure such as customer retention, revenue generated from a particular product, the number of sales calls made each week/month, or the increase in percentage of quota/sales over a specific period of time.

5. Select a sample of sales representatives in the same organization that comprise of a high performing sales group (e.g., Winner’s Circle, Presidents Club, Diamond Club) and a low performing sales group. This study had a sample of sales representatives that had minimal variation in their performance. All of them had achieved at or above 95 percent of quota. It would be interesting to see if sales representatives with lower quota percentages would have had similar results in regards to their P score or moral reasoning.

**Final Comments**

Results of this study demonstrate that there is a positive relationship between formal ethics training and the postconventional level of cognitive moral development. However, there is no relationship with specific sales performance (the three-year average sales quota achieved) or with the demographic variables of income, sales experience, educational major, highest education degree earned, and the perceived effectiveness of ethics training. Additional studies are needed to determine if other measures of performance have an impact
on cognitive moral development. This may involve larger and more diverse sample sizes, alternative collection methods, and multiple organizations.
Reference List


Appendices
Appendix A DIT-2

The DIT-2 can be purchased and scored through the Center for the study of Ethical Development, University of Minnesota; 206 A Burton Hall; 178 Pillsbury Drive SE; Minneapolis, MN 55455; (612) 624-0876.
Appendix B Demographic Questionnaire

Demographic Questionnaire

Please provide the following information about yourself. ID #__________

1. What is your annual total wage/salary for the past year?
   ___$40-59,999
   ___$60,000-79,999
   ___$80,000-99,999
   ___Over $100,000

2. Total years of full-time sales experience (all industries)
   ________years (round to whole year)

3. Highest formal education level completed:
   ___high school diploma
   ___2 year associates degree
   ___4 year college degree
   ___masters degree
   ___doctoral or other advanced graduate degree

4. List your major for the highest educational degree earned. (if more than one list all)
   __________________________________________________________

5. Have you completed one or more formal ethics classes or seminars?
   ______Yes      ______No

   If yes, which of the following is closest to the total time you have spent in formal ethics classes or seminars?

   ___one-half day or less   ___two days   ___four or more days
   ___one day                ___three days

   If yes, when compared to other education and training experiences in which you have participated, was the ethics training:

   ___very useful      ___somewhat useful
   ___not particularly useful   ___not useful at all

   If yes, when compared to other education and training experiences in which you have participated, was the ethics training:
___ a much better learning experience       ___ about the same as others
___ a much worse learning experience

6. What is your average % of quota over the last three years?
   (add your year end % of quota for the last three years and divide by three)

   105% or above ____   90% to 94% ____
   100% to 104% ____   85% to 89% ____
   95% to 99% ____     Below 85% ____

7. My highest annual percent of quota at this company has been _____ %
   My lowest annual percent of quota at this company has been _____ %

8. Have you won any major performance awards in any of the last three years?
   Yes____          No____
Appendix C IRB Consent

From: Debra A. Paxton, Regulatory Compliance Administrator
North Carolina State University
Institutional Review Board

Date: February 25, 2004

Project Title: The Impact of Moral Reasoning on the Performance of Salespeople

IRB#: 042-04-2

Dear Mr. Shank:

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101.b.2). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: FWA00003429; the IRB Number is: IRB00000330

2. Review de novo of this proposal is necessary if any significant alterations/additions are made.

Please provide your faculty sponsor with a copy of this letter. Thank you.

Sincerely,

Debra Paxton
NCSU IRB
Appendix D Study Cover Letter

Dear Study Participant,

You may recall your manager asking you to fill out a survey. As a thank-you for your participation, I have included a Blockbuster card for you to enjoy a movie of your choice. I am providing this incentive for three reasons: 1) as a former sales representative, I realize how important your time is; 2) you are assisting in a valuable research study to better understand the relationship between decision-making and performance in the pharmaceutical industry; and 3) the effort you are providing will assist in the completion of my doctorate degree in education.

Confidentiality

The information in this study will be kept strictly confidential. You will note that your name does not appear on any of the surveys or the return envelope. Instead, a five digit ID number has been assigned to the surveys in order to track results. I, the researcher, will only see the five digit ID number. There are no names provided or involved in this process. The group response is important, not yours specifically. No reference will be made in oral or written reports, which could link you or your company to the study.

Process

You will need approximately 15 minutes to complete the two surveys included in this packet. The first consists of 5 ethical dilemmas where you will be asked to choose the most important action from a list of possible actions. Then you will prioritize all of the given statements in order of their importance to you. The second survey pertains to demographic information such as years of sales experience, education and performance measures. Please use a #2 pencil. There is a prepaid return envelope for your convenience. Please have the surveys postmarked by March 29.

Contact

If you have questions at any time about the study or the procedures, you may contact me, Mark Shank

Participation

Your participation in this study is voluntary and will in no way affect your employment. Completing and returning the surveys will indicate your consent to participate.

I would certainly appreciate it if you would take the time to complete these surveys now. I want to thank you for your time and effort in contributing to this research endeavor. Hope you enjoy the Blockbuster card — and remember to have the surveys in the mail by March 29.

Sincerely,

Mark Shank
NCSU Graduate Student

PS. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).
To: NC and SC District Managers
Subject: Survey
Date: March 23, 2004
Managers,

Pass onto your team members the importance of filling out both questionnaires and the prompt return to the researcher Mark Shank by the date on the form, (postmarked by March 29). This will help with an educational endeavor and also help us gain a better understanding between decision-making and performance in the pharmaceutical industry.

Please take a few minutes to fill this out. The survey will be 100% confidential.

Thanks,

Regional Account Manager
To: NC and SC District Managers  
Subject: Survey - 2nd reminder  
Date: March 26, 2004

Managers,

Pass onto your team members.

This is a second reminder on the importance of filling out the pharmaceutical questionnaire and returning it to Mark Shank by the date on the form, (March 29). Please take the 15 minutes to fill out both surveys. It will be 100% confidential.

I appreciate your help on this.

Thanks,

Regional Account Manager