A Study of Moral Development of Selected Employees in Certain Public Accounting Firms.

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Tull, Guy L., Jr.

A STUDY OF MORAL DEVELOPMENT OF SELECTED EMPLOYEES IN CERTAIN PUBLIC ACCOUNTING FIRMS

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ABSTRACT

Little empirical research exists in the area of measuring morality and moral development of business, business people, and business-related professions such as accounting and law. While these professions have Codes of Professional Conduct that state that members must be of high moral character, mechanisms for empirically measuring moral character have, until recently, been non-existent. Through the pioneering research by Lawrence Kohlberg, a moral development testing instrument is now available.

The purpose of this study was to measure the level of moral development of auditors in three national ("Big-Eight") accounting firms, utilizing Kohlberg's stage theory of moral development. Eighteen subjects were randomly selected from each of 3 "Big-Eight" firms for a total sample of 54 subjects. Of these 54 subjects, 18 were partners of their respective firms and the remaining 36 were entry-level staff accountants. This research was conducted in both New York City and New Orleans, Louisiana; 27 subjects were interviewed in each city (9 partners and 18 staff accountants).

Parametric and non-parametric statistics were used to measure the median level of moral development of accountants and to test for differences in the level of moral development between

(1) partners and staff accountants
(2) accountants in each of the two cities, and
(3) differences among the three firms.
The median score of the accountants surveyed was measured as Kohlberg's conventional stage 4(3) and a moral maturity score (MMS) of 373. At the .05 level of significance, no difference in moral development was detected:

(1) between partners and staff accountants  
(2) between accountants in New York City and New Orleans, Louisiana, and  
(3) among the three accounting firms surveyed.
CHAPTER I

INTRODUCTION AND RATIONALE FOR THE STUDY

Introduction

The accounting profession, and auditors in particular, has been increasingly concerned with the question of ethical and moral integrity, both within the business firms they serve and within the profession itself.

At the national level, the accounting profession must operate under rules promulgated by the Securities and Exchange Commission (SEC) designed to protect the public from incompetence or lack of integrity among accountants. The American Institute of Certified Public Accountant's (AICPA) Code of Ethics articulates concepts of conduct to which each member is expected to adhere. This code is similar to the ethical codes of the medical and legal professions.

Emphasis on ethical and moral standards of public and private behavior was heightened in the 1970's and early 1980's. Public disillusionment with events such as Watergate, President Nixon's retirement, and the United States involvement in Vietnam contributed substantially to the emphasis on ethical and moral standards. Additionally, the Brilab investigations have uncovered organized crime links with national and local politicians; the Texas
Hunt brothers were accused of manipulating silver bullion prices in early 1980 when silver rose to over $50 an ounce, before falling back to $11 an ounce; certain political strategist s contend that Senator Ted Kennedy lost the 1980 Democratic nomination because of his perceived lack of credibility and morality in the minds of voters regarding the Chappaquidick affair.

These observations indicate that concerns with moral and ethical behavior and development in business and in the professions are attracting more attention at the global, societal, and individual levels. Moral development, as used herein, is defined as the growth, evolution, or advance from a lower to a higher stage of morality. Morality is the quality of conformity and rightness of actions and thoughts arising from a sense of duty and right conduct.

The concept of morality, moral values, and moral development is philosophically interconnected with ethics, ethical values, and ethical development in human society and its institutions, including education, as well as its intellectual disciplines including psychology, sociology, and anthropology. Randall and Buchler [1971, p. 257] compared ethics and moral values with the human sciences:

... Ethics, on the other hand, is concerned not with the description and explanation but with the evaluation of human conduct. In the former sciences, (psychology, sociology, and anthropology) the concepts of "rightness" and "wrongness," "goodness" and "badness" do not occur, except as part of the actual judgments men are found passing, and they are not concerned with the conditions under which these concepts are correctly applied to conduct. We must not suppose, however, that ethics has no connection with psychology, anthropology, and sociology. On the contrary, the judgments and distinctions of ethics can be made more accurate, precise, and sound the more they are based on the factual knowledge that may be furnished by these and other
An understanding of moral values relating to man must surely be increased if we know as much about man as we are able.

Since the time of Socrates, Plato, and Aristotle, concepts of morality and ethics have been a source of major philosophical debate. In Aristotle's book III of the *Nicomachean Ethics*, two requirements are stipulated for human conduct to be considered moral: (1) this conduct must be voluntary, and (2) human conduct must affect the basic direction of human life for the better. The directions would include man's intentions and actions toward other individuals, society's institutions (religion, education, government), or the formation of his own individual character. Aristotle also deals with the concept of human "happiness," but his is a substantially different concept than today's concept of happiness. Aristotle's "happiness" is a participation and a personal sharing of the intellectual wealth of the community--it can exist only in one's community, which denies happiness to the hermit. Aristotle's "happiness" is important because of his view that social institutions (including business) and human interaction with these institutions are necessary for rationality. Aristotle would deny the concept many business people today hold, that of a "self-made" person.

Plato, on the other hand, asked what the appropriate role of each class in a society in equilibrium would be as his "good republic." To Plato, each class was analogous to an element of human mental operation; rulers and top government administrators are
analogous to reason in the human soul, the army and its soldiers analogous to will, and the business and labor community analogous to human appetite. To Plato, the appropriate function of the business community is to provide for the material needs of the government's citizens in an efficient manner. Essentially, each class had its function and, ethically, should discharge this responsibility efficiently. Hence, even the Greek philosophers were divided on the ideal direction of moral and ethical developments, although both espoused a cognitive developmental approach to reasoning [Beauchamp, 1979].

This division leads to various ethical theories still debated today. These ethical theories may be divided into 4 major bodies of thought:

(1) **Deontology** - based on the ethical theory of duty
(2) **Teleology** - based on the ethical theory of utility
(3) **Axiology** - based on the ethical theory of values
(4) **Egoism** - based on the ethical theory of self-interest

**Deontology**

Deontology maintains that the concept of duty or obligation is independent of the concept of good. Essentially, a variety of relationships among people and between people and institutions have significance independent of the consequences of these relationships. For example, older customers of business enterprise may be favored over new or first-time customers in the purchase of scarce
goods, since the enterprise has an obligation or duty to sell to their existing customers first. Thus we have the concept of conscience, as articulated by Immanuel Kant, in his Foundations of the *Metaphysics of Morals* [Kant, 1973]. Kant's concept of conscience, obligation, and duty may be viewed as an extensive reworking of the fundamental moral rules such as the Golden Rule.

**Teleology**

Teleological theories maintain that the moral worth or value of actions and practices is determined solely by the consequences of these actions and practices. Often referred to as utilitarianism, an action or practice is right (compared to any alternative) if it leads to the greatest possible balance of good consequences. Concepts of duty and obligation (deontology) are subordinated to, or determined by, that which is good. David Hume and John Stuart Mill developed the first utilitarian philosophical writings in the 1700's and 1800's. Jeremy Bentham also influenced modern economics philosophically with his hedonic calculus that, to Bentham at least, quantified personal happiness. His utilitarian theory molded substantial economic theory--price and diminishing marginal utility are economic theories based on utilitarianism--and much business theory has been subsequently built on these theories.

Utilitarianism has been divided into hedonistic utilitarianism (any action is right if it maximizes pleasure) and pluralistic utilitarianism (other values, such as friendship, knowledge, and
courage, besides pleasure have intrinsic value). Another division is act versus rule utilitarianism. Act utilitarians argue that one should perform the act that provides the greatest good for the greatest number. Rule utilitarians argue that ethical actions and judgments should conform to publicly-advocated moral rules. Many philosophers believe that rule utilitarianism is more adequate as a moral theory than is act utilitarianism because rule utilitarianism is not subject to multiple courses of actions that can change frequently. The accounting profession's Code of Ethics is an example of rule utilitarianism.

Axiology

Axiological theories deal with the nature, types, and criteria of values and value judgments. A particular value or value judgment is often viewed in substantially different ways by different people. An individual's "point of view" and life experiences determine his value system, and these differing value systems of individuals create two philosophical difficulties. First, communication between individuals is restricted due to their differing "points of view;" secondly, value systems are culturally influenced and therefore very difficult to agree upon. Plato's Meno is an example of the philosophical difficulty Socrates and Meno had with the concept of virtue when different value systems existed between them. Even now, much as it was with Socrates and Meno, many modern communication difficulties exist due to differing "points of view."
Egoism

Egoism is divided into two categories—psychological egoism and ethical egoism. Psychological egoism is the motivational theory based on the concept that man is always motivated to act in his own perceived self-interest. Some people act in a manner that overlooks or denies their real self-interest, yet they perceive these acts as in their self-interest. An example would be observed in the behavior of a narcotic addict. Ethical egoism was proposed as the alternative to psychological egoism. Ethical egoism is the theory about what one ought to do. Ethical egoism contends that taking others' interests into account when it suits one's purpose promotes one's own self-interest, because others' well-being influences one's own well-being.

These concepts of egoism were considered by the economist Adam Smith who recognized that this self-interest, guided by the "invisible hand" of government, could enhance the economic stem. Smith's concept of "restrained self-interest" within the established rules of the competitive business "game" has been accepted by many in the business community, although Smith's faith in the ultimate convergence of community interest and self interest might be regarded as overly optimistic today. [Grassian, 1981, p. 52].

As this brief review of the four major ethical theories indicates, the concerns for ethical standards and ethical behavior have long existed. In recent years, concerns for ethical standards and ethical behavior have been the subject of extensive debate and reflection in the business community. Concern for morality and
ethics in business firms and in the behavior of their top operating officials has escalated with disclosures of illegal bribes paid abroad, leading to the Foreign Corrupt Practices Act of 1977. The Metcalf Committee report has heightened awareness of moral and ethical responsibilities in the accounting profession and, in part, led to expanded reporting by business firms and their auditors.

This study is concerned with ethics and morality in the accounting profession. More specifically, this study is concerned with the development of ethics and morality, the progression from lower to higher levels of morality, and the way in which this development may be measured in individual accountants. To date, there has been no known reported research of moral development of auditors employed in public practice. It is proposed that ethical and moral development of auditors be empirically measured, using the cognitive-developmental approach initially suggested by Socrates and, more recently, by Lawrence Kohlberg and others.

Nature of the Problem

In recent years the accounting profession, along with the business community in general, has been subject to serious criticism regarding moral standards and ethical behavior. Blumenthal [1976] stated:

As a result of Watergate and other recent incidents in our society, a certain number of our institutions have come under scrutiny, if not under attack, far more than ever before. And this kind of public concern has created a skeptical and sometimes hostile atmosphere in which the business community must do its work [p. 32].
Dunstan [1978, p. 75] observed: "'Ethics in business,' 'good business practice,' 'business responsibility' are the topics of today . . . men of business are concerned to be just, and to be seen as just." Dunstan calls for business and professional people to engage in moral reasoning to enhance leadership and serve the public interest. Dunstan states: "His task, in short, is to engage in moral reasoning" [p. 76] so that "... moral leadership will be by persuasion, in relation to the moral principles or axioms believed in, to the facts of the case and to the options actually available" [p. 78, emphasis added].

The accounting profession has a code of ethics that addresses the nature of auditor ethics and service in the public interest:

- To coordinate, on a voluntary basis, the plans, programs, and activities of the state societies and of the institute, with particular emphasis on the adoption of uniform codes of professional ethics and enforcement procedures.

- To cooperate fully with all organizations of accountants, both at home and abroad, to the end that the entire accounting function can make its maximum contribution to the public good.

- To encourage all CPA's to perform a wide range of services in the broad field of accounting consistent with their professional competence and their ethical responsibilities. [emphasis supplied, AICPA, 1978, Rules of Conduct and Bylaws, p. 19-20]

Since the accounting profession is dependent on public trust, any criticisms that this public trust is violated is of serious concern to the profession. Recent legal disclosures and court cases involving corporate malfeasance, irresponsibility, and
illegal actions gave impetus to criticisms of the auditor's role in corporate financial reporting.

Several court cases have resulted in criminal convictions of auditors. In the Continental Vending case (U.S. v. Simon, 1969), 13 CPAs were convicted of gross negligence. In the National Student Marketing Corporation case (U.S. v. Natelli, 1975), another CPA was convicted of filing false and misleading information under the 1934 Securities Act. In the Equity Funding case, which was a large-scale, computer-assisted management fraud, three CPAs were convicted along with others. In the Equity Funding case the court found that if management fraud is so material as to make the financial statements misleading, then the auditors must assume responsibility.

The financial problems of companies (such as Lockheed and Penn Central) that ultimately led to either bankruptcy or reorganization prompted a Congressional investigation of the accounting profession. This investigative report, The Accounting Establishment, was chaired by Senator Metcalf (hereafter referred to as the Metcalf Committee Report-MCR) and was published in 1977.

The MCR was predominately an investigation of the practices of the largest accounting firms in the United States. The "Big-Eight" firms were criticized by the MCR:

Doubts as to the accuracy and reliability of information reported by corporations have resulted from continual revelation of corporate misconduct which was not found or not reported by independent auditors .... Public confidence in the independent auditors, which is essential to the success of the Federal securities laws, has been seriously eroded [MCR, p. 7].
In addition to the MCR, the **Foreign Corrupt Practices Act** was passed in 1977 (hereafter referred to as FCPA). The FCPA was passed due to widespread bribery and other illegal acts committed by corporations. Auditors were criticized for failure to discover many of these illegal acts; the FCPA charged both management and auditors with the joint responsibility for detecting any such illegal acts.

The preceding examples suggest that the accounting profession is being scrutinized by the courts, the Congress, and by the public. This scrutiny, and the criticisms it engenders, relates to the moral and ethical development and behavior of accountants. The accountants Code of Ethics offers guidance as to the moral and ethical standards he or she should aspire to, but even with this Code of Ethics, there is no assurance that it is followed. These criticisms of the profession's ethics should encourage the profession to measure the moral development of its practitioners, which is the purpose of this study.

**Purpose of this Study**

The public accounting profession has been, and will continue to be, concerned with the public trust. Since the public trust is to be protected by the implied level of moral development of its practitioners, moral and ethical development has a significant influence on the development of GAAP in response to the several needs of readers and users of financial information, to wit:

1. Fairness, objectivity, and measurability of financial information

2. Disclosures related to "societal" and "environmental" needs of users
3. Development of more efficient and effective communication vehicles in response to changing "societal" and "environmental" mores.

The need for ethical and moral standards in the public accounting profession is implicit; the concept of ethical and moral standards are explicitly stated in the Code of Ethics. Yet, in the area of behavioral research in business and accounting, no research has been directed to the measurement of moral development of individuals of a profession.

The purpose, then, of this study is to measure moral development of individuals in the accounting profession. The study of an individual's moral judgment will provide a numerical measure (index score) of moral development, which can then be used to determine a need for additional moral education in modern accounting education curricula and/or continuing education at the accounting firm level, or the need for more effective policing of the Code of Ethics by the AICPA.

Statement of the Study and Definition of Terminology

This study is designed to investigate the four following questions:

1. What level (stage) of moral development have the public accountants in this study attained (or operate at)?

2. Does a difference in moral development exist between top management (partners) of accounting firms and their staff employees ("juniors")?

3. Does a difference in moral development exist between different accounting firms?
4. Does a difference in moral development exist between different cities (specifically, New York, New York versus New Orleans, Louisiana)?

These four research questions will be presented as formal research hypotheses in Chapter 3. A brief description of the definitions employed in this study is presented below; detailed definitions will be found in Chapter 3. The methodology employed in this study is presented in the following section.

For purposes of this study, "accountants" refers to individuals classified as either partners (equity owners) or staff accountants ("juniors") of a given firm. Staff accountants ("juniors") are also defined as having no more than two years of experience in the profession at the time of selection for this study.

The accounting firms that participated in this study are national ("Big Eight") firms. Their common characteristics include: a national, and international, scope of operations, they are very large in size, with hundreds of partners and thousands of professional staff; each firm provides auditing, tax, and management advisory services; finally, client companies include substantially all major corporations in the U.S.

**Methodology**

The methodology of this study is based on independent samples randomly selected from three "Big-Eight" accounting firms. Both partners and "juniors" will be selected from each firm. Since each firm has offices in New York City and New Orleans, partners and juniors will be selected in each city.
As explained in detail in Chapter 3, individual interviews of subjects in this study were quite expensive. Each firm donated the interview time of their partners and juniors (along with the inevitable clerical support required); the opportunity cost of this research to each firm was considerable. It was initially decided that approximately 40 interviews would allow the use of the more powerful non-parametric and parametric statistics.

Four "Big-Eight" firms were initially contacted; one firm declined to participate in this study, and three agreed to participate. In consultation with the three firms that agreed to participate, it was determined that each firm would be agreeable to the expansion of this study to include sampling more "juniors." The rationale for this expansion was the significantly lower opportunity cost to each firm of sampling "juniors."

Consequently, a sample size of 54 respondents was employed. The 54 respondents consisted of 36 juniors (12 per firm, 6 from each city) and 18 partners (6 per firm, 3 from each city).

More than 54 respondents were randomly generated to provide for a "ready reserve" (approximately 30 to 50%) so this research could continue without interruptions due to any specific interviewee's sickness, travel, or other incapacity. Therefore, approximately 20 juniors from each firm (10 per city) and 8 partners (4 per city) were randomly selected. The first 12 juniors per firm (6 per city) and the first 6 partners per firm (3 per city) were interviewed subject to any substitutions necessary. A complete analysis of this methodology is presented in Chapter 3.
CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Concern for the moral values of professional and business people has increased in recent years. In the accounting profession, this concern has been expressed by the profession itself, primarily by the American Institute of Certified Public Accountants (AICPA). Concerns regarding the "rightness," or morality, of business firms' actions and dealings with customers, government, and employees have been expressed, particularly by the Securities and Exchange Commission (SEC).

In light of this concern with moral values and moral development, this review of related literature will consist of two major sections. The first section will review the related accounting and business literature, with particular emphasis on criticisms leveled at business firms and the accounting profession by the SEC and should serve to enhance an understanding of the issues involved in business and professional moral development.

The second section of this chapter focuses on a review of the related literature in the area of moral development. The cognitive-developmental theories of moral development articulated by Lawrence Kohlberg will be emphasized. Since Kohlberg's theory has
been empirically tested by many researchers, his moral development instrument will be employed in this study to measure the level of moral development of accountants in selected "Big-Eight" firms.

**Review of Related Accounting Literature**

There appears to be an emerging concern for an "ethical position" and a "higher morality" among business and professional leaders in today's society. As Dunstan [1978, p. 75] points out:

"Ethics in business," "good business practice," "business responsibilities," are the topics of today. Moral philosophers and theologians find themselves invited to seminars, consultations, symposia—with business men, managers, directors, marketing men, teachers in business schools. Codes of practice are evolved, circulated, revised. Business is business still. But men of business are concerned to be just, and to be seen as just.

Dunstan calls for managers and business men to engage in moral reasoning to enhance corporate leadership. For the business man, "His task, in short, is to engage in moral reasoning" [p. 76] such that "Moral leadership will be by persuasion in relation to the moral principles or axioms believed in, to the facts of the case and to the options actually available" [p. 78].

W. M. Blumenthal [1976], President and Chief Executive Officer of the Bendix Corporation, illustrates the grave questions being raised currently regarding the moral standards and ethical behavior in the business world.

As a result of Watergate and other recent incidents in our society, a certain number of our institutions have come under scrutiny, if not under attack, far more than ever before. And this kind of public concern has created a skeptical and sometimes hostile atmosphere in which the business community must do its work [p. 32].
Blumenthal concludes:

But one thing is certain: There is a moral tone in much of the criticisms which has been leveled against business in the past few years. The central issue is integrity—and much depends, in the coming years, on the forthrightness and courage with which we face up to that issue [p. 34].

Adair [1974], among others, argues that managers may seek profits and growth of their constituent firms as long as the individual manager has an obligatory personal moral philosophy to observe the dignity of his fellow man. Janzen and Boersma [1976] in their study also stress an individual's moral philosophy. They argue that what society needs is not more alert, skillful, achievement-oriented people, but rather more people who are capable of higher moral judgment.

Moral criticism has also risen in the accounting profession. Senator Lee Metcalf, in the 95th Congressional Senate report entitled The Accounting Establishment [1977] (hereafter referred to as the Metcalf Committee Report-MCR), sought to "inform Congress and the public regarding the participants involved in development and applying accounting practices which significantly affect government policy, the economy and society in general" [p. 1]. The MCR is generally critical of the accounting profession, particularly in respect to the apparent dominance of the "Big Eight" and other large accounting firms who, according to the MCR, "... have prospered from this Federal requirement [to audit and certify the financial statements of "publicly-owned corporations"] because they are retained as the auditors for the Nation's major corporations. Such auditors are responsible for providing independent certification
that corporate financial statements present fairly and accurately the results of business activities" [p. 1.].

Additionally, the MCR is also critical of seeming improprieties, bias, and mistakes made by many of these "Big Eight" firms. The following three paragraphs illustrate the MCR position regarding the role of auditors in administering the various Federal securities acts:

Independent auditors must have the complete confidence of the public for whose benefits the Federal securities laws were enacted. That confidence can only be maintained by strict adherence to standards of conduct which assure the public that auditors are truly independent and competent to perform their responsibilities. Even the appearance of bias or conflict of interest by an independent auditor can erode the public confidence necessary to make the disclosure policy embodied in the Federal securities laws successful.

The primary purpose of the Federal securities laws is to instill public confidence in the reliability and accuracy of information reported by publicly-owned corporations. Doubts as to the reliability and accuracy of such information impair its usefulness to the public for making efficient economic and social decisions, and defeat the purpose of the securities laws. Independent auditors perform a key function in achieving the goal of the Federal securities laws because they provide the means for independently checking and confirming the information reported by corporations.

Historically, Congress and the public have regarded accounting as an arcane subject better left to accountants themselves. Continual revelations of wrongdoing by publicly-owned corporations have caused a new awareness of the importance of accounting practices in permitting such abuses to occur. Unexpected failures of major corporations have led to requests for substantial assistance to such companies from taxpayers. Accounting practices ultimately involve social issues that affect the Nation's economic welfare [pp. 1-2].

The final paragraph of the MCR summary reaches a foreboding, and chilling, conclusion for the accounting profession:
Because of their broad social and economic significance, accounting issues must be addressed by Congress and the public in a manner which ensures that the public interest is protected. If past abuses are to be prevented in the future, it is important that the accounting establishment, which has permitted many abuses to occur, be understood. Accounting issues are too important to be left to accountants alone. 

A number of so-called "improprieties" and "judgmental errors" were reported in the MCR, of which several comments were directed precisely at the moral and ethical codes of participants and accountants. In the Report of the Trustee of Equity Funding Corporation of America (EFCA) October 31, 1974 [reprinted in the MCR, pp. 704-725], Equity Funding's auditors came under very heavy criticism for not detecting the fraud perpetrated over many years. Rhetorically asking, "How did the fraud last so long?" the trustee asserted:

If the EFCA fraud was truly as haphazard and disconnected as it has been portrayed in this report, then it is legitimate to ask how it persisted for a decade without detection. Obviously a number of factors contributed to the longevity of the conspiracy. Foremost, of course, were the lies, audacity and luck of the ringleaders. Of almost equal importance was the surprising ability of the originators of the fraud to recruit new participants over the years. Closely related was the moral blindness of those participants, including several who helped execute the scheme and then left the Company, but remained silent. It is noteworthy that in the end, the fraud was undone by the spite of a former conspirator who had been terminated, not by anyone's conscience pangs. 

The trustees went further: "Responsibility for failing to detect the fraud rests primarily with the accounting firms retained to certify the financial condition of EFCA and its subsidiaries. . . . Aside from the perpetrators themselves, only the auditors, as part of their annual examinations, had regular opportunities to
review these books and records" [MCR, p. 719]. The trustee con­cludes: "In the Trustee's judgment, had the auditors properly discharged their obligations, the fraud would have been caught years ago" [MCR, p. 719].

The Equity Funding Corporation of America was not the only case examined by the MCR; other "Big Eight" accounting firms had similar cases reviewed, such as Whittaker Corporation [Accounting Series Release (ASR) No. 157, July, 1974] and National Student Marketing Corporation, Talley Industries, Inc., Penn Central Company, and Sterling Homex Corporation [ASR No. 173, July, 1975]. Both generally accepted accounting principles (GAAP) and generally accepted auditing standards (GAAS) were criticized by the Securities and Exchange Commission (SEC) in these ASRs, particularly the standards of field work, client representations, and client manage­ment integrity. The accounting concept of "present fairly" lead to many of these cases.

Professor A. J. Briloff has widely criticized the accounting profession's concepts of "present fairly" and GAAP [Briloff, 1976a]. Repeating two political scientists, Briloff quotes them as follows:

Skilled obfuscation is now an essential accounting tool . . . Accountants are described as "hired miracle workers," rewarded by a market for "financial alchemy," obsessed more with paper representations than with real things [p. 2].

He continues: "The condemnation, in words or pictures, puts in question the viability of the accounting profession and the validity of its very special body of knowledge, namely, generally accepted accounting principles" [p. 2]. Critical of the Financial
Accounting Standard Board (FASB) for its reliance of voluntary cooperation to establish accounting standards, Briloff charges:

I have observed the ways in which it (FASB) has avoided the critical issues, vacillated on other controversial matters, and handed out special dispensations in order to obtain a consensus for a particular standard. I expected much, much more from a select body endowed with presumptive independence and supposedly possessed of intellectual might, integrity and intrepidity. In short, we have had a surfeit of compromise, of the vulgar pragmatism, of pussy-footing and inching along, if we are to overcome the prevailing crisis in confidence in corporate accountability [p. 9].

Briloff concludes that not only have failures in GAAP been chronicled, but failures exist also in GAAS, causing, in his view, a proliferation of legal suits:

If auditors had, in fact, recognized the significance of the term standards in the phrase auditing standards there would never have been the proliferation of litigation against the leaders of our profession for their dismal performance of the attest function.

Specifically, I maintain that the accounting profession itself is confused as to what it is saying, and the responsibility it is assuming, when the accountants certify that the statements are supposed to be fair in accordance with GAAP. I am now zeroing in on the accountant's assertion of "fairness" [p. 28].

Briloff reviews the historical Seidman Committee report in 1965 that focused on fairness in financial statement presentation, and he stated:

For a decade the accounting profession treated the Select Committee's urgent plea with benign neglect. In the meantime accountants were shaken by guilty verdicts against them in the Continental Vending and National Student Marketing fiascos; they were the subject of obloquy in the Penn Central and other civil actions—all revolving about the question as to whether it is sufficient for statements to be merely GAAP-fair or whether they must, in fact, be inherently fair as the independent auditor sees the fair [MCR, pp. 1638-1639].
A definitive codification of the "present fairly" doctrine was not promulgated until 1975, when the AICPA issued Statement on Auditing Standards (SAS), No. 5 [AICPA, 1975]. In paragraph 4 (p. 2), the fifth point (e) reads: "the financial statements reflect the underlying events and transactions in a manner that presents the financial position, results of operations, and changes in financial position stated within a range of acceptable limits, that is, limits that are reasonable and practicable to attain in financial statements." Critics charge that the "range on acceptable limits" may well be too large; the MCR and Briloff imply that substantial ethical and moral judgment will be required to discharge the accountant's professional obligations codified by SAS No. 5. Not only does the MCR call for substantial changes, but Briloff also has called the major changes, such as a "Corporate Accountability Corporation" [p. 5], and a restructuring of the current AICPA disciplinary apparatus so that "... the oligopolistic stranglehold by the Big Eight firms over the American Institute of CPAs must be broken in the profession's disciplinary and self-regulatory proceedings" [p. 45]. Also on p. 34, Briloff states some independent board should be formed to advance the accountant's personal principles:

I maintain that all of the arguments advanced by the Wheat Committee report leading to the establishment of an independent, broadly constituted board for the advancement of principles of accounting are appropriate with even greater import for the advancement of the principles of the accountant [p. 45].
Briloff had five recommendations in his statement to the House subcommittee [pp. 46-50]:

(1) That the "... SEC use its disciplinary procedures more aggressively, more even-handedly, and more openly."

(2) That the "... SEC use its legislated authority to establish and implement standards of accounting and for accountants."

(3) That the "... SEC mandate that the independent auditor's certificate be interpreted to mean that the auditor, on the basis of his professional responsibility and capability, asserts that the statements are as fair as he sees the fair and that in his view the alternatives selected from the spectrum of GAAP are those which (again, in his judgment) are most conducive to the fair."

(4) Because the Supreme Court's Hochfelder decision (decided March 30, 1976, wherein a defendant, under Rule 10(b)-5 of the Securities Act of 1934, must be guilty of "intentional misconduct" to be held liable for damages to third parties) narrowly and restrictively interprets Rule 10(b), according to Briloff; he believes it "... essential for the Congress to act promptly to make clear..." that both the Securities Acts of 1933 and 1934 entail a high degree of responsibility by all professions that bear on the issuance or trading of securities.

(5) Lastly, he proposes "... the establishment by Congress of a Corporate Accountability Commission." This overarching body (subsuming the SEC, Internal Revenue Service, Federal Trade Commission, General Accounting Office and others) is seen by
him to be a response to the limitations inherent in any one agency such as the SEC. He states: "Even the seemingly ubiquitous SEC finds itself stymied when it is confronted with an inherently moral and behavioral question regarding corporate slush funds. . ." [p. 50].

These comments and conclusions by Briloff appear to substantially influence the MCR. In addition to incorporating extensive excerpts from his books More Debits than Credits [Briloff, 1976b] and Unaccountable Accounting [Briloff, 1972], the MCR also included several articles about, and interviews with, Briloff (see Barron's, April 12, 19, and 26, 1976). Also included is a letter from Briloff to Representative Charles A. Vanik, Chairman of Committee on Oversight of the Committee on Ways and Means [Briloff, 1976c] wherein he states: "No, U.S. Steel, et.al., are not doing anything illegal--it's just immoral" [emphasis added; p. 3].

Most importantly, however, is the incorporation of four of Briloff's five recommendations (in his 1976 Statement to the House of Representatives, reviewed earlier) in the recommendations reached by the MCR. Although the MCR presented sixteen recommendations, several MCR recommendations can be subsumed under one of Briloff's recommendations. The following exhibit illustrates these similarities:
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<th>Recommendation</th>
<th>Briloff (1976)</th>
<th>MCR (1977)</th>
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<tr>
<td>A. SEC disciplinary proceedings</td>
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<td>14</td>
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<td>B. SEC to establish and implement standards of accounting and for accountants</td>
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<td>C. SEC to interpret &quot;fairness&quot; standards</td>
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<td>10</td>
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<td>D. Amend securities laws in wake of Supreme Court decision in Hochfelder</td>
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<td>E. Establish a &quot;Corporate Accountability Commission&quot;</td>
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Sources: Briloff [1976a, pp. 46-50]  
MCR [1977, p. 20-24]
The impact of the MCR on the accounting profession has been considerable and has caused the accounting profession's leadership to evaluate both accounting principles and auditing standards in light of potential direct governmental control. During the Metcalf Committee hearings in April, May, and June, 1977, Senator Metcalf publicly stated he and his staff "... have not proposed additional legislation to achieve accounting reform ... I sincerely hope that we can achieve our objectives without new legislation" [Metcalf, 1977, p. 7]. During these hearings, the then current President of the AICPA, M. N. Chetkovich, noted recent action by the profession to mitigate certain MCR criticisms, including the increasing existence of company audit committees, mandatory continuing professional education in many states, and public disclosure of any auditor/management dispute on accounting matters that leads to a change in auditors.

The statements of Chetkovich and other leaders and scholars in the accounting profession during these hearings led to the final report of the Metcalf Committee on November 4, 1977. This Senate report, entitled "Improving the Accountability of Publicly-Owned Corporations and Their Auditors" [Report of the Subcommittee on Reports, Accounting and Management of the Committee on Governmental Affairs, U.S. Senate, 1977], stated in the Introduction, "Public confidence in the integrity and efficiency of the business community must be restored because such confidence is the key element in making the Nation's economic system function effectively [p. 1]. This report modified the MCR recommendations as presented in March;
the purpose of the subcommittee's investigation was "... to improve the accountability of publicly owned corporations by improving the performance and stature of accounting firms which provide services to such corporations" [p. 2]. The subcommittee acknowledged "... that this subcommittee's inquiry was useful as a catalyst to help achieve necessary reforms" [p. 3].

The subcommittee recognized that critics of direct governmental standard setting "... endorsed efforts being made within the private sector to improve the performance of independent auditors" [p. 3]. Consequently, the subcommittee stated: "Self-initiated action by the private sector in cooperation with the SEC is the method of reform preferred by subcommittee members" [p. 4] since "... the subcommittee's staff study, several witnesses, and the SEC itself clearly demonstrated that ample authority already exists within the present framework to meet the goals which are contained in this report" [p. 4]. That standard setting was to remain in the private sector is a major modification of the MCR, as well as no call for immediate Congressional action. However, the subcommittee made it quite clear that new legislation may be required if the profession moves too slowly: "... the amount of time for achieving reforms is not unlimited. Therefore, the subcommittee expects the accounting profession and the SEC to act in a timely manner to implement the policy goals in this report" [p. 22].

A number of these subcommittee goals have been reached; the AICPAs Division of Firms was presented to the membership on August 8, 1977 [The CPA Letter, Special Supplement, August, 1977]. The
AICPA Council approved the division of firms into the "SEC Practice Section" and the "Private Companies Practice Section" on September 17, 1977 [The CPA Letter, September 26, 1977, p. 2], along with a Public Oversight Board to monitor the SEC Practice Section and mandatory peer reviews for SEC Practice Section (SECPS) firms. Further, the SECPS rules provide for mandatory rotation of audit engagement partners and public reporting of certain firm information. The Private Companies Practice Section (PCPS) affords smaller firms the opportunity for increased input into the AICPA as well as enhancing the status, and thereby enhancing the employability, of smaller firms. This PCPS should ultimately increase competition for audit engagements.

The AICPA Council also approved during the September meeting the following elements designed to counter criticisms of the SEC and MCR, and to attain several of the "policy goals" of the Senate's Subcommittee Report "Improving the Accountability of Publicly Owned Corporations and Their Auditors."

1. Opening to the public the AICPA Council meetings and portions of the meeting of senior technical committees.

2. Addition of public representatives on the AICPA Board of Directors.

3. Public disclosure of disciplinary proceedings and names of members found guilty.

4. Modification of rules regarding advertising and repeal of the existing rules forbidding the contact of other accountants' staff with employment offers. [The CPA Letter, September 26, p. 2].
Since the MCR's examination of the accounting profession, significant developments within the structure of the AICPA and increased SEC intervention in accounting principles and auditing standards are beginning to surface. Apparently, Congress and the SEC will continue with a "hands-off" policy as long as the profession counters public criticism vigorously by responsible actions and standards setting.

The Moss Committee, chaired by Representative John E. Moss, introduced in June, 1978, comprehensive legislation regulating the accounting profession via a "National Organization of SEC Accountancy (NOSECA)," similar to Briloff's "Corporate Accountability Commission (CAC)." Requiring mandatory registration by firms with one or more SEC clients and a 5-man Board (3 public members and 2 CPAs), the bill failed, in part due to the lack of support by the SEC. The questions and proposals raised by Briloff and Moss have been raised by others: Burton [1978], a former SEC Commissioner, has argued for a self-regulatory body (similar to the National Association of Securities Dealers) he would call the "National Association of Registered Accounting Firms (NARAF)" [pp. 67-68]. His premise for NARAF is based on his belief "... because it offers a promise of institutional stability that does not exist in the institutions currently in place" [p. 69]. He concludes:

If the approach is to be successful, the organization that would be established to perform the self-regulatory functions is of paramount importance. It must be highly professional, offer a rewarding and remunerative career path for staff and draw extensively on the participation of members. The member role must be real and effective. If such an organization can be established, the partnership
provided by a formal self-regulatory mechanism is one that would offer substantial benefits. It is an institutional structure that should be seriously considered for the profession in the decade ahead. [p. 69].

Opposed to Burton's arguments is A. A. Sommer, Jr. [Sommer, 1978], another former SEC Commissioner. Observing that Burton's proposal calling for establishing the NARAF is markedly similar to Representative Moss' NOSECA (and to Briloff's CAC), Sommer concludes that the AICPAs division of firms accomplishes the same objectives as do the Moss and Burton proposals, with a possible exception that Burton might argue for overruling the Hochfelder v. Ernst and Ernst decision. Arguing against the increased governmental regulation implicit in the Moss and Burton proposals, Sommer concludes:

Perhaps the ultimate fault of Dr. Burton's proposals is that it is obsolete in terms of the current morals and beliefs of Americans today. . . . the principal course of [the problem of over-regulation] was the impatience of Americans for instant solutions to only discerned problems. We had developed an excessive faith in the ability of law, and legislatures, and legislators, to guide us . . . Only lately . . . are we beginning to bridle this impatience. This is the consequence of our awakening to the realization that regulation is costly, often ineffective, often overkill, often stifling and often the enemy of imagination and resourcefulness [emphasis added; p. 75].

Carmichael [1979] also considers the regulatory mechanisms of the AICPAs division of firms and the FASB standard setting obligations preferable to increased governmental regulation. He contends that the expansion of the duties of the FASB to the broader concerns of financial reporting (beyond merely the accounting standards for financial statements) will provide benefits in the reduction of disclosure requirements (and hence expense) for smaller and closely-held companies and the ability to make financial reporting more
meaningful to investors by "experimenting" with "soft" information (for example, forecasting and inflation accounting).

In addition to the changes mandated by the MCR and SEC ASRs, the Foreign Corrupt Practices Act of 1977 (FCPA) [FCPA, 1977] requires certain accounting and internal control systems with which publicly-owned companies must comply as SEC registrants. The accounting standards set forth in the FCPA were taken directly from the AICPAs Statement on Auditing Standards (SAS) No. 1 (AICPA, 1973), section 320.28, and provides that:

"(A) make and keep books, records, and accounting, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the issuer; and

"(B) devise and maintain a system of internal accounting controls sufficient to provide reasonable assurances that--

"(i) transactions are executed in accordance with management's general or specific authorization;

"(ii) transactions are recorded as necessary (I) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and (II) to maintain accountability for assets;

"(iii) access to assets is permitted only in accordance with management's general or specific authorization; and

"(iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences [FCPA, p. 1494].

Cook and Kelly [1978] indicate the SEC will likely pursue a "flexible" working definition of "devising and implementing" the internal accounting controls required by the FCPA:

... the Report of the Senate Committee on Banking, Housing, and Urban Affairs [Senate Report No. 94-1031, 1976] has made it clear that cost/benefit considerations and professional audit judgment are essential to an evaluation of
internal accounting control. This would not seem to indicate a need for inflexible regulatory requirements [emphasis added; p. 63].

With fines of up to one million dollars for firms violating this law (and up to $10,000 and/or imprisonment up to five years for individual officers, directors, or stockholders who violate this law), the FCPA required company managements to share in the responsibility, along with the accounting firm, for adherence to GAAP (with respect to implementing a sound system of internal accounting control). It also forces these managements to assume responsibility for illegal acts committed by corporate officers and employees of both SEC and non-SEC reporting companies.

Subsequently, a number of United States corporations have voluntarily disclosed illegal or "questionable" practices. Sommer "1980] states:

As a consequence of the SEC investigations and the voluntary disclosure program, over five hundred U.S. corporations have disclosed practices that, in one degree or another, reflected illegal or "questionable" or "improper" conduct at home or abroad . . . [and] virtually every case of illegal or improper payments was accomplished by some falsification of, or improper entries on, the books of the corporation. In some cases, elaborate procedures were established to create "slush funds" offshore; in other cases, outright false entries disguised the uses to which funds were ultimately put [p. 55].

Sumutka's [Sumutka, 1980] study of disclosures of illegal or questionable payments of 117 corporations indicated a majority (93 of 117) of the questionable payments involved "grease" or "facilitating" payments. These payments were made to obtain: services the companies were entitled to, governmental approvals, permits, or clearances, and to collect accounts receivable or expedite product
registration [p. 51]. The recipients of these questionable or illegal payments were associated with governments (48%), non-governmental customer or employee (22%) and third-party intermediaries (30%; the ultimate recipient could not be discerned) [p. 52]. Sumutka also noted that four methods were used in these payments or practices:

1. Cash payments by fictitious or inflated invoices, payments of unwarranted commissions, employee reimbursements, cashiers check or bank transfer, or payment of travel and entertainment expenses of recipient

2. Transfers of merchandise

3. Granting of price reductions by excessive discounts

4. Use of questionable or illegal business methods [p. 54].

Sumutka also found that 50 of 117 companies had "off-book" cash accounts; the sources of this cash were scrap sales, cash sales, and vending machine receipts [p. 56]. Consequently, the concern of auditors with improper or illegal actions of clients, as well as concern for potential fraudulent acts, is increasing. This concern prompted the Peat, Marwich, Mitchell Foundation to fund a major multidisciplinary study of fraud and fraud detection [Romney, Albrecht, Cherrington, 1980]. Their fraud model deals with three major human variables: (1) situational pressures, (2) opportunities for the individual to commit fraud, and (3) personal characteristics [p. 64]. They point out:

A person with a high level of personal integrity and limited opportunity or pressure to commit fraud will most likely behave honestly. But fraud becomes increasingly likely as individuals with less personal integrity are placed in situations where there are increasing pressures
and greater opportunities to commit fraud. An interesting philosophical question is whether the composition of a person's personal characteristics which make up the trait of honesty can ever be so high that he is beyond the point of being overcome by overwhelming situational pressures and convenient opportunities and temptations to commit fraud [p. 64].

The conclusions of Romney, et al. are strikingly similar to the pioneering studies in honesty and moral behavior of Harshorne and May [1930] and Havinghurst and Taba [1949]. Romney, et al. do provide a "Fraud-Risk-Evaluation" questionnaire for use by auditors to investigate the personality and demographic characteristics of top management and key employees [p. 65-68]; this questionnaire could be of major assistance in fostering management's compliance with the FCPA.

Burton [1980] questions not only the controversy surrounding the appearance of auditor independence (and suggests that MAS provide substantial knowledge of a client's operation, required to effectively audit the client) but also the effect of audits on the detection of fraud. On page 52 he states:

The audit. In order to justify a criterion based on the views of an informed citizen, it is essential that more persons be educated to understand what an audit is. Many outside the profession, particularly attorneys who are often the most active critics of the current auditing system, misperceive it as an adversarial or prosecutorial investigation, based on a search for error. While audits can help prevent fraud or errors, this results more often from the auditor's presence rather than from specific discoveries. The audit process is designed to bring material fraud and error to light, but it is far from perfect. The auditor does not start with the assumption that management is covering up the facts. Professional skepticism does not imply a philosophy of distrust. When an auditor ceases to trust a client, it is fundamental that he should withdraw from an engagement.
Burton notes that the audit is a cooperative venture between management and the auditor for the benefit of the users of the resultant financial statements. Given Burton's position as a former SEC Commissioner, it is worthy of note that he has also considered the possibility of alternatives to the "cooperative audit." He suggests that it may be appropriate for the auditor to "... become an investigator [note the similarity to Romney, et.al.], starting with the assumption that his responsibility is to find errors rather than to participate in a cooperative process designed to report in the most meaningful fashion" [p. 53].

Another approach would be to give the auditor primary responsibility for financial statements. The independent accountant could have the responsibility of satisfying himself as to the adequacy of the client's information system and then report from the data produced in the fashion he found most appropriate to describe the company's economic activities. In other words, the auditor's role could become that of the professional reporter digging after the facts and presenting them in the fashion he thought best [p. 53-54].

Although Burton finds significant drawbacks to these alternatives (particularly regarding questions of who would pay auditors' fees, less work satisfaction for the auditor, and reduced auditor-management communication), his statements indicate an increasing need for audits that both fairly present the financial activity of the firm, as well as exhibit the potential to disclose fraud. Rappaport [1980] suggests a "strategic" audit to submit to the Board and its audit committee. Designed to assist the Board to discharge its fiduciary obligations to the company's stockholders, the strategic audit is defined "... as an overall evaluation of
factors that materially affect a company's economic welfare" [p. 73].

From the inception of the Metcalf investigations through the Foreign Corrupt Practices Act and the SEC's various ASRs, to current corporate disclosures of illegal and improper activities, the accounting profession finds itself under intense public scrutiny of its public role. Many critics of the profession may agree with the statement "the once feared watchdog (the SEC) is now management's poodle" [Sale, 1981, p. 83].

Summary of Related Accounting Research

Several criticisms emerge from this review of accounting literature; first, generally accepted accounting principles allow management significant flexibility in reporting operations and financial position that potentially may mislead readers of the financial statements. Secondly, generally accepted auditing standards and accounting principles are less than perfect for communicating financial information to users. Finally, moral and ethical values are not clearly and explicitly stated. As Barzun [1978] states:

A code [of professional ethics] only sets the limits beyond which behavior will be condemned, and the moral level is not high when all or most of those who live under it always act within a hairline of those limits. Codes, in fact, are for criminals and competitors, not for professions that want to be known as dedicated . . . [p. 68].

As a responsible, and responsive, profession; it is incumbent upon the accounting profession to determine its level of morality. If this determined level of morality is acceptable, then
the need for SEC "watchdog" activities is not necessary to serve the public interest. Conversely, if the determined level of morality is less than what is considered appropriate, the profession can take the action necessary to further develop morality. Since no known research has measured morality, or moral development, of accountants, this study should serve as an initial reference point for such research.

Review of Related Moral Development Literature

Lawrence Kohlberg of Harvard University has done significant research in the area of moral development and judgment in the last two decades. Yet, little research has emerged that directly measures the moral development of professionals and businessmen. The purpose of this study is to employ Kohlberg's methodology to specifically measure the moral development of auditors in the accounting profession.

The following review of related moral development literature will include a summary of Piaget's pioneering work in developing stage-structure concepts and Kohlberg's adaptation of Piaget's stage structure to measure moral development. Further, the research of Kohlberg and others will be reviewed. Finally, corollary research findings stemming from Kohlberg's findings will be presented.

Piaget's Cognitive Stage Structure

Kohlberg's theory of moral development is a cognitive-developmental model based on the developmental theories beginning
with Dewey and developed more recently by Jean Piaget. Piaget was a French biologist who turned to child psychology after observing that children who wrongly answered standardized I.Q. tests did so with surprising consistency. These "wrong" answers that were so similar among same-age-level children gave Piaget his first clue to the patterns of thought and reasoning children use. From this beginning, Piaget conceptualized the cognitive-development theory of children's reasoning processes and, as a biologist, he considered a human being to exhibit two biological "invariant functions" of organization and adaptation. The human mind also exhibits these two "invariant functions" through assimilation (dealing with environmental stimuli in terms of its current organization) and accommodation (a modification of its current organization in response to environmental stimuli). This "feedback loop," or systems approach to developmental learning, is the fundamental characteristic of Piaget's cognitive theory, which led to his "stages of development" [Hersh, et.al., 1979a, pp. 18-25].

Piaget's 4 stages of cognitive development were classified in an increasing order of complexity and intellectual integration; he classified these stages into their corresponding approximate age periods:

1. sensorimotor (birth to two years)
2. preoperational (two to seven years)
3. concrete operations (seven to eleven years)
4. formal operations (eleven years and older)
The "sensorimotor" stage is limited to sense (sight, hearing, taste) and motor or bodily movement in infants. As early as 18 to 20 months of age, an infant starts to "remember" and develop "associations" in a limited sense. This introduces stage two (the "preoperational" stage) thinking, characterized as the egocentrism of young children. This stage incorporates the use of language, but the child has not developed an awareness that other people have different perspectives, nor can the child readily separate fact from fantasy; fantasy or the "unreal" is real to a child in this stage. The child cannot think logically, since the child cannot "get out of himself" to verify his position. Consequently, Piaget also characterizes the "preoperational" stage as a "prelogical" stage.

The third stage ("concrete operations") represents the beginning of logical thinking by a child; the child starts to employ the intellectualization of "perspective," and overcomes fantasy with facts regarding what is real. Piaget uses the term "concrete operational" since this stage represents "operations" (e.g., addition and subtraction) that are reversible. A child knows that he may add two cookies to his plate by taking two from his younger brother's plate (or alternately, by taking one cookie from both his brother and his sister's plate); he "reverses" this action by subtracting two cookies from his plate and returning them to his brother (usually with some prodding from family members!). This stage also refers to "concrete" objects (how much does it cost, how tall is the ceiling) and is often seen as children's insistence on equality of size, rather than abstractions. The child's complaint "Mommy, Sue got a
bigger piece of cake (or more ice cream) than I did" has been heard often, and typifies this stage.

Piaget's fourth stage of "formal operations" marks the ability of a child to reason by way of formal abstractions, or "operations on operations." Since it is apparent that marked differences exist in the levels of abstractions reached by young teenagers, older teenagers, and adults, Colby and Kohlberg [1980] have suggested that "formal operations" be divided into two sub-stages they delineate as "beginning formal operations" and "basic formal operations." In both substages, formal operations is the ability to think abstractly and to classify objects, concepts, and ideals by logically formal criteria. Much of Piaget's work in researching the development of formal operations is based on mathematical and scientific thinking (Inhelder and Piaget, 1958) due to his belief that these two areas present abstract logical relationships in the most unambiguous form.

To explain the stage development of cognitive activity, Piaget uses the term decalage, which implies the "spreading" or extension of "concrete" and "formal operations" thinking in a few areas to many areas as a child grows. In the western cultures, the second substage of "basic (or consolidated) formal operations" begins developing in mid-to-late adolescence. However, not all adolescents or adults reach this stage; Kuhn's recent large-scale study of adolescents and adults in California indicated that approximately one-half the subjects had reached the second substage ("basic formal operations") of Piaget's stage four [Kuhn, 1977].
Piaget also researched moral judgments of children to determine how children develop respect for societal rules and authority [Piaget, 1965 and 1932]. He determined that the concept of "rules" (authority-induced) was first understood at approximately age six; the rules for a six-year old were fixed, inflexible, and immutable. In the child's cognition, the rules must be followed "or else!" At age eleven, a new understanding emerges, one that acknowledges rules emanate from agreements of individuals in society. This new understanding is typically understood by the eleven-year-old in a game (baseball, football, marbles) context (rather than the more sophisticated and cognitively-developed context of society). The child understands that the game rules can be changed to accommodate changing conditions if his peer group accepts and agrees to the new rules.

The move from the first to the second stage is not a purely cognitive process. Children do not simply think up a new definition of rules and respect. Rather, the cognitive redefinition (the new understanding or consciousness) emerges as children work out a new set of social relationships. As they become peers—one of several players on a team or members of a class—they slowly develop moral concepts to guide their behavior. In this process respect for rules becomes more adaptive. Children's behavior becomes more rationally guided by rules as they better understand the social contexts in which rules operate [emphasis added; Hersch, et.al., 1979b, p. 42].

While Piaget initiated research into children's moral judgment, he did not extend his studies to children past the age of twelve, nor did he detail the stages of moral judgment. This research into moral judgment stages was followed by Lawrence
Kohlberg, who developed a parallel stage structure of moral development.

**Kohlberg's Moral Development Stage Structure**

Kohlberg maintains that six levels or stages of moral development exist on a continuum from the lowest level (stage one) through the highest level (stage six). The six stages are defined as follows [Kohlberg, 1977a, p. 189-190]:

**KOHLBERG'S DEFINITION OF MORAL STAGES**

I. **PRECONVENTIONAL LEVEL**

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

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

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

II. **CONVENTIONAL LEVEL**

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

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

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

III. POSTCONVENTIONAL, AUTONOMOUS, OR PRINCIPLED LEVEL

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

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

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

In Kohlberg's paradigm, this stage structure is both universal and invariant, and that a later (i.e. higher) stage resolves moral questions more satisfactorily than does an earlier stage [Kohlberg, 1971b]. The interactional (as opposed to cultural learning or biological-maturational) assumptions of Piagetian structural stage theory include the following [Kohlberg, 1977b, pp. 188-189].

1. Stages are defined as differences in form or organization of response, not in the content or function of the response. Each ... stage involves a new set of interests and concerns and defines a new function, e.g. finding an identity. Each cognitive or moral stage serves the same function, logical inference or moral judgment, but serves it in a new way, form or pattern of functioning.

2. Differences in form are qualitative, not quantitative.

3. In a certain sense, then, stages are "cognitive," not in the sense of being free of emotions, but in the sense that a structure, or form of organization of personality is always a form of organizing thinking. Emotions develop as well as thoughts, but new emotions always have a base in thought and perception. In morality, one cannot develop from fear of punishment to guilt without developing the cognitive capacity to make moral self-judgments (as opposed to simply anticipating-punishing events).

4. Stages, as cognitive, are largely defined by competence, not by performance. A capacity for judging in terms or moral principles is not always translated into morally principled behavior. Morally principled behavior, however, presupposes the competence to make principled moral judgment.

Kohlberg's stage-structure theory is illustrated in Table 1; the content of each level and stage (both "what is right" and
"reason for doing right") as well as the social perspective of each stage is presented [Kohlberg, 1976].

The social perspective of stage structure development is summarized below "Hersh, et.al., 1979c):

Stage 1-Punishment and Obedience Orientation

The expressed wishes or orders of the authority figure become rules that a child understands he must follow to avoid punishment. Punishment is central to this stage conception; the child does not yet understand that punishment is only one possible response to his wrongdoing. Essentially, the child cannot disobey, since the following punishment will be too great to bear. A very primitive stage, this punishment/obedience orientation does not usually continue past preadolescence; stage two development usually starts at ages eight to nine.

Stage 2-Instrumental-Relativist Orientation

The child is able to take the role of one other person at a time and see the world from the other person's perspective (role-taking). The standard of fairness or equity emerges, wherein the actions of a person are judged based on "a good reason for doing ______", rather than the "arbitrary" will of an authority figure. This "fairness" means people of equal status or role should get equal shares (of ice cream, love, "staying-up-late" privileges, etc.). This sense of fairness means, in stage two, each individual can and should pursue his own best interests as long as it does not directly hurt anyone else. At this stage, hurt or harm is concrete reference; hurting oneself, such as cheating on an examination, does
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<tr>
<th>Level and Stage</th>
<th>Content of Stage</th>
<th>Social Perspective of Stage</th>
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<tbody>
<tr>
<td><strong>Level 1: Preconventional</strong>&lt;br&gt;Stage 1: Heteronomous morality</td>
<td>Sticking to rules backed by punishment; obedience for its own sake; avoiding physical damage to persons and property.</td>
<td>Egocentric point of view. Doesn't consider the interests of others or recognize that they differ from the actor's; doesn't relate two points of view. Actions considered physically rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own.</td>
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<td><strong>Stage 2: Individualism, Instrumental purpose and Exchange</strong></td>
<td>Following rules only when in one's immediate interest; acting to meet one's own interests and needs and letting others do the same. Right is also what is fair or what is an equal exchange, deal, agreement.</td>
<td>Concrete individualistic perspective. Aware that everybody has interests to pursue and that these can conflict; right is relative (in the concrete individualistic sense).</td>
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<tr>
<td>Level and Stage</td>
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<td>Level II: Conventional Stage 3: Mutual Interpersonal expectations, Relationships, and Interpersonal conformity</td>
<td>Living up to what is expected by people close to you or what people generally expect of a good son, brother, friend, etc. &quot;Being good&quot; is important and means having good motives, showing concern for others. It also means keeping mutual relationships such as trust, loyalty, respect, and gratitude.</td>
<td>Perspective of the individual in relationships with other individuals. Aware of shared feelings, agreements, and expectations which take priority over individual interests. Relates points of view through the concrete Golden Rule, putting oneself in the other guy's shoes. Does not yet consider generalized system perspective.</td>
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<td>The need to be a good person in your own eyes and those of others; caring for others; belief in the Golden Rule; desire to maintain rules and authority that support stereotypical good behavior.</td>
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<td>Stage 4: Social system and conscience</td>
<td>Fulfilling duties to which you have agreed; laws to be upheld except in extreme cases where they conflict with other fixed social duties. Right is also contributing to the society, group or institution.</td>
<td>Differentiates societal point of view from interpersonal agreement or motives. Takes the point of view of the system that defines roles and rules; considers individual relations in terms of place in the system...</td>
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<td>To keep the institution going as a whole and avoid a breakdown in the system &quot;if everyone did it&quot;; imperative of conscience to meet one's defined obligations. (Easily confused with stage 3 belief in rules and authority.)</td>
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<tr>
<td>Level and Stage</td>
<td>Content of Stage</td>
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<td><strong>Level III: Postconventional; or Principled</strong>&lt;br&gt;Stage 5: Social contract or utility and individual rights</td>
<td>Being aware that people hold a variety of values and opinions and that most of their values and rules are relative to their group. Relative rules usually upheld in the interest of impartiality and because they are the social contract. Some non-relative values and rights (e.g., life and liberty) must be upheld in any society and regardless of majority opinion.</td>
<td>A sense of obligation to law because of one's social contract to make and abide by laws for the welfare of all and for the protection of all people's rights. A feeling of contractual commitment, freely entered upon, to family, friendship, trust, and work obligations. Concern that laws and duties be based on rational calculation of overall utility, &quot;the greatest good for the greatest number.&quot;</td>
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Table 1 (Continued)

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<th>Content of Stage</th>
<th>Social Perspective of Stage</th>
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<tr>
<td><strong>Level and Stage</strong></td>
<td><strong>What Is Right</strong></td>
</tr>
<tr>
<td>Level III: Postconventional; or Principled (continued)</td>
<td>Following self-chosen ethical principles.</td>
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not "hurt" someone else, and helps the cheater. At this stage, children cannot be convinced that cheating is morally wrong.

**Stage 3- Interpersonal Concordance (Social Acceptability) Orientation**

Beginning at age 12 to 13, the child's interests shift from the concrete interests of each individual to the interests of one's group (or society). Essentially, this stage is one of stepping outside a two-person relationship and seeing it from a third (or outside) party viewpoint. How one *should* behave becomes important. At stage two, one looks out for one's self without harming another; at stage three, the relationship has expanded to a mutual trust or mutual commitment position. Breaking of that commitment with another is to a stage three person as acting unfairly is to a stage two person. This stage is the dominant stage for adolescents, and, along with stage four, is a major stage for most adults in Western society.

**Stage 4-Law-and-Order Orientation**

The shift in stage three to stage four is fundamentally one of scope. The stage three individual utilizes a third-person perspective based on significant others, while stage four individuals use a generalized or collective third-person perspective. The interests of the individual or group are weighed against the welfare and interests of the whole; these individuals appreciate that a society is bound together by certain social and moral conventions (usually codified into law) and that actions that break these conventions or agreements affect the degree of unity of that social
system. In stage four, the social system (or "society") preferred by an individual is a matter of content; a Communist and a Western capitalist may view the respective values of life and obedience to law quite differently; at stage four, the structured reasoning is the same for both (both Communist and capitalist view a social issue from the same fixed systems of laws and beliefs). This stage four reasoning starts developing in mid-to-late-adolescence; highly equilibrated, it is most often the highest level individuals in Western cultures attain. However, Kohlberg contends that stage four, even though highly equilibrated, is not adequate for resolving the conflicts between a system of laws and basic human rights. If the social system is unjust, people are forced to choose between adherence and dissent. Stage four reasoning does not provide persuasive criteria for when to choose dissent over adherence, or when faced with diversity outside the individual's own system, since a stage four person conceives of morality as a fixed system of laws and therefore cannot grant much, if any, validity to other views without threatening their own.

Stage 5-Social-Contract, Legalistic Orientation

Kohlberg's research indicates that later adolescents may adopt a "relativistic" perspective, where all values are equally arbitrary, and the best one can do is to do what one thinks is right, without hurting or harming others and allowing them to do as they see fit [Kohlberg, 1973a]. His findings indicated that this adolescent "relativism" is an inherently unstable position. Upon entering positions of social responsibility, they either "shelve"
relativism and utilize stage four reasoning, or seek a philosophically more sound rationale for moral decision-making. Stage five is a direct outgrowth of relativism by recognizing that values are relative to one's group, but it goes further to seek principles to accommodate the differences in values. Kohlberg uses the concept of "social contract" to provide this accommodation. Both legal and social contracts represent the willingness of both parties to compromise in a cooperative agreement mutually binding on each party. Kohlberg denies, as a valid or morally binding principle, any contract that abrogates basic human rights of life or liberty, such as selling a child into slavery. Kohlberg expressed dissatisfaction with stage five as the ultimate stage [Kohlberg, 1973b] even though few Americans ever stabilized at stage five (and none of more primitive cultures).

Stage 6-Universal-Ethical-Principle Orientation

Influenced by John Rawls' "original position" [Rawls, 1971], Kohlberg identified his stage six as incorporating the philosophical concepts of "reversibility" and "universalizability." These philosophical concepts have their origin, not in Plato or Aristotle, but the concept of "natural equality" of Man. Hobbes' "social contract" was based on the premise that men were "equal" in right due to roughly comparable strength and cunning; with a dismal view befitting the 17th century, Hobbes considered that men could agree ("contract" for) peace in lieu of war, since the individual reasons that the probability of gain (or domination) is less than the
probability of loss (death) [Erdynast, 1974, pp. 14-15.] This "social contract" was also a tenant of John Locke:

Man being . . . by nature all free, equal, and independent, one can be put out of this estate and subjected to the political power of another without his own consent, which is done by agreeing with other men, to join and unite into a community for their comfortable, safe, and peaceful living, one amongst another, in a secure enjoyment of their properties, and a greater security against any that are not of it [Locke, 1961, p. 504].

The concept of the universality of social contract came from Immanuel Kant. To Kant, the moral element of the social contract came, not from the other party to the contract, but rather as a commitment by the original person. Consequently, each person must legislate his own personal moral standards and, since moral principles should be followed by all men in moral situations, these principles should be "universal" or have applicability to all people. Kant codified his universality maxim by stating his "categorical imperative" as this: "I ought never to act except in such a way that I can also will that my maxim should become a universal law" [Kant, 1961a, p. 196].

Kant also stated his maxim another way: "Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end" [Kant, 1961b, p. 208].

Kant conceives of reversibility in much the same manner; from Kant to Rawls, the concepts of universality and reversibility have been the predicates of Kohlberg's stage six. Kohlberg states [Kohlberg, 1973b, pp. 641-645]:
Since Kant, formalists have argued that rational moral judgments must be reversible, consistent, and universalizable, and that this implies the prescriptivity of such judgments. We claim that only the substantive moral judgments made at stage 6 fully meet these conditions, and that each higher stage meets these conditions better than each lower stage. In fully meeting these conditions, stage 6 moral structures are ultimately equilibrated . . . . Universalizability and consistency are fully attained by the reversibility of prescriptions of actions. Reversibility of moral judgment is what is ultimately meant by the criterion of the fairness of a moral decision. Procedurally, fairness as impartiality means reversibility in the sense of a decision on which all interested parties could agree insofar as they can consider their own claims impartially, as the just decider would. If we have a reversible solution, we have one that could be reached as right starting from anyone's perspective in the situation, given each person's intent to put himself in the shoes of the other . . . .

At stage 6, reversibility is attained by a second-order conception of Golden Rule role-taking. In the Heinz dilemma, Heinz must imagine whether the druggist could put himself in the wife's position and still maintain his claim and whether the wife could put herself in the druggist's position and still maintain her claim. Intuitively we feel the wife could, the druggist could not. As a result, it is fair for the husband to act on the basis of the wife's claim. We call the process by which a reversible moral decision is reached, "ideal role-taking." Stage 6 moral judgment is based on role-taking the claim of each actor under the assumption that all other actors' claims are governed by the Golden Rule and accommodated accordingly. This is what is meant by calling stage 6 reversibility the second-order application of the Golden Rule. The steps for an actor involved in making such a decision based on ideal role-taking are:

1. To imagine oneself in each person's position in that situation (including the self) and to consider all the claims he could make (or which the self could make in his position).
2. Then to imagine that the individual does not know which person he is in the situation and to ask whether he would still uphold that claim.
3. Then to act in accordance with these reversible claims in the situation.

Kohlberg's original research in the 1950's dealt with a longitudinal study of American males. The stage of moral judgment
displayed by a subject was determined by the subject's response to various Universal Issues Kohlberg states are universal. These 12 Universal Issues are:

1. Law
2. Conscience
3. Personal Affectional Roles and Relations
4. Authority and Civic Order Rules
5. Civil Rights
6. Contract, Promise, Trust and Reciprocal Exchange
7. Punishment
8. Life
9. Property Rights and Rules
10. Truth
11. Sexual Roles
12. Value and Sexual Love

[Kohlberg, 1972b]

Using the Life issue (8 above), Kohlberg illustrates the movement to higher stages of reasoning exhibited by two boys of his longitudinal study as these boys matured [Kohlberg and Turiel, 1971a, pp. 434-436]. These two boys were presented the following dilemma:

A rare drug which was used in an attempt to save the wife of a man named Heinz didn't work, and there was no other treatment known to medicine which could save Heinz's wife, so the doctor knew that she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of painkiller like ether or morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough ether to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway. Should the doctor do what she asks and give her the drug that will make her die? Why?

When Tommy was age ten he was asked: "Is it better to save the life of one important person or a lot of unimportant people?"

He answered:

All the people that aren't important because one man has just one house, maybe a lot of furniture, but a whole bunch
of people have an awful lot of furniture and some of these poor people might have a lot of money and it doesn't look it.

Tommy measures the value of life in terms of the value of a quantity of furniture. His thinking is typical of what Kohlberg calls Stage 1, whereby an individual confuses the value of life with the value of material objects or power. At the age of thirteen Tommy said the following about mercy killing:

But the husband wouldn't want his wife to die, it's not like an animal. If a pet dies you can get along without it--it is 't something you really need. Well you can get a new wife, but it's not really the same.

At this time Tommy is able to distinguish between the value of human life and property. Life, at Stage 2, is valued in terms of the needs and wants of other individuals. The value of the woman's life is defined in terms of its instrumental value to her husband, who can't replace her as easily as he can a pet.

Tommy gave the following answer at age sixteen:

It might be best for her, but her husband--it's a human life--not like an animal; it just doesn't have the same relationship that a human being does to a family, you can become attached to a dog, but nothing like a human.

Tommy has moved to Stage 3 where life is valued in terms of human empathy and love for members of one's family. There is still an absence, at this stage, of any universal human value to the woman's life so that there would be a similar regard for it even if her husband didn't love her or if she had no husband.

Richard, another subject in Kohlberg's study displays thinking at higher stages. At age sixteen he said the following:
It's not a right or privilege of men to decide who shall live and who should die. God put life into everybody on earth and you're taking away something from that person that came directly from God. . . . it's almost destroying part of God when you kill a person.

Life, at Stage 4, is seen as sacred in terms of its place in a categorical moral or religious order. Life's value is not completely universal since it is dependent upon respect for God's authority. At this stage, moral value is defined by a conventional order that is maintained by fixed rules, law and authority.

Later at Stage 5 Richard gives the following response:

It's her own choice. I think there are certain rights and privileges that go along with being a human being. I am a human being and have certain desires for life and I think everybody else does too. You have a world of which you are the center, and everybody else does too and in that sense we're all equal.

At this stage, life is defined in terms of equal and universal human rights in a context of relativity and also in terms of concern for utility or welfare consequences. At age twenty-four, Richard's thinking was at Stage 6, when he said:

A human life takes precedence over any other moral or legal value, whoever it is. A human life has inherent value whether or not it is valued by a particular individual. The worth of the individual human being is central where the principles of justice and love are normative for all human relationships.

At Stage 6, life is conceptualized as absolute, representing universal and equal respect for the human being as an individual. Life is centrally valued for itself rather than derived from, or dependent upon, social or divine authority.
Research Employing Kohlberg's Stage Structure

Other researchers have investigated the two major tenents of Kohlberg's theory of moral reasoning: first, that stage sequencing is endogenous to his cognitive-developmental theory, and secondly, that his theory is universalizable across cultural boundaries. Investigators of age as a determinant of stage sequencing have employed both longitudinal (particularly Kohlberg and his associates) and cross-sectional data. Eisenberg-Berg [1976] investigated moral judgment of white middle-class seventh to twelfth grade students, and found that older students exhibited significantly higher moral reasoning as well as more liberal and humanistic attitudes. Saltzstein and Osgood [1975] also interviewed students in grades 1, 3, 5, and 8 and found the level of moral judgment positively correlated with age. They also noted that stage scores did not positively correlate with I.Q., lending support to the cognitive-development theory of Kohlberg.

Clinchy [1977] also noted the correlation between age and stage; females from traditional and progressive high schools were interviewed, and seniors' moral reasoning was significantly higher than sophomores. Further, the progressive high school students exhibited higher stage reasoning than did students from traditional high schools. Turiel [1976] investigated 3 high school types; progressive, traditional, and parochial. Again, moral judgment levels increased with increasing age; he also found that students from progressive schools exhibited a higher level of moral reasoning.
than did those students in traditional schools, who, in turn, had higher levels than those from parochial school.

Longitudinal studies have been conducted by Holstein, Rest, and Kohlberg and his associates. Holstein [1976] conducted a 3-year longitudinal study to examine empirically Kohlberg's invariant stage sequencing among 53 upper middle class Americans. This study supports Kohlberg's thesis for the first 2 of his 3 levels (i.e. stages 1 through 4); the third level (stages 5 and 6) were not attained by the subjects in Holstein's study.

Rest, Davidson, and Robbins [1979] examined several thousand high-school, college, and graduate school students, both cross-sectionally and longitudinally, using Rest's Defining Issues Test, adapted from Kohlberg's Moral Judgment questionnaires. Rest found significant differences in moral judgment when subjects were classified by age-educational level. Adults exhibit significantly stronger positive correlation between moral judgment and years of education than between moral judgment and chronological age. The 2 and 4-year longitudinal intervals indicate decreases in lower-stage, and increases in higher-stage, judgment. Rest suggests that a general developmental plateau occurs in each adulthood and after formal education is completed. Rest's study strongly supports Kohlberg's theory of moral development as a cognitive-developmental model, and suggests that advances in moral development can result from additional educational exposure.
Colby et al [1979a] also asserts that intellectual development precedes moral development, and that an individual's education will place a ceiling on the moral stage one can attain:

Since moral reasoning clearly is reasoning, advanced moral reasoning depends upon advanced logical reasoning. A person's logical stage has been found to put a ceiling on the moral stage she/he can attain .... Moral reasoning at stages 4 and 5 requires consolidated formal operations (considering all possibilities, isolating variables, etc.). Logical development, then, is necessary for moral development and sets limits to it, but it is not sufficient. Most individuals are higher in logical stage than they are in moral stage.

In short, logical or intellectual development precedes moral development. Moral development depends upon intellectual development, but intellectual development does not depend on moral development [Colby et al 1979a, p. 13].

Colby, Kohlberg, and Gibbs [1979b] publicly presented the most recent findings of Kohlberg's 20-year longitudinal study of 58 American males. Each subject was 10, 13, or 16 years old at time period one (1955), and was administered Kohlberg's interview at least twice; over 81% of them were interviewed 4 or more times during this 20-year period (see Table 2 for additional details). Kohlberg's 20-year data indicated 2 major findings; first, that the terminal ages of his subjects varied from 30 to 36 years old, well past the general completion age of formal education, and secondly, that all subjects exhibited higher stage reasoning at the conclusion of this study than exhibited initially in 1955. This progression to higher stage judgment exists even for the three subjects interviewed only 2 times [2 in time periods 1 (1955) and 2 (1959) and 1 in time periods 1 and 5 (1971)].
Table 2

ANALYSIS OF KOHLBERG’S LONGITUDINAL DATA
OF 58 AMERICAN MALES


<table>
<thead>
<tr>
<th>TIMES INTERVIEWED</th>
<th>NUMBER OF SUBJECTS</th>
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<tr>
<td>2</td>
<td>3</td>
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<tr>
<td>3</td>
<td>8</td>
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<tr>
<td>4</td>
<td>23</td>
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<td>5</td>
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<tr>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td><strong>N = 58</strong></td>
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</table>

B. COMPARISON OF INITIAL (1955) AND ENDING (1976) GLOBAL STAGE SCORES FOR KOHLBERG’S 58 SUBJECTS.

<table>
<thead>
<tr>
<th>INITIAL* STAGE SCORE</th>
<th>NUMBER OF SUBJECTS</th>
<th>ENDING* STAGE SCORE</th>
<th>NUMBER OF SUBJECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (1)</td>
<td>13</td>
<td>2 (3)</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>3 (2)</td>
<td>1</td>
</tr>
<tr>
<td>2 (3)</td>
<td>9</td>
<td>3</td>
<td>7</td>
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<tr>
<td>3 (2)</td>
<td>8</td>
<td>3 (4)</td>
<td>12</td>
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<td>3</td>
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<td>4 (3)</td>
<td>10</td>
</tr>
<tr>
<td>3 (4)</td>
<td>3</td>
<td>4</td>
<td>17</td>
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<tr>
<td></td>
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<td>4 (5)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 (4)</td>
<td>4</td>
</tr>
<tr>
<td><strong>N = 58</strong></td>
<td></td>
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</tbody>
</table>

Source: Colby, Kohlberg and Gibbs [1979c].

*See page 62 for an explanation of Kohlberg’s stage scores.
The global stage scores in Table 2 are ranked from the lowest stages (1 and 2, the preconventional level) to the highest stages (5 and 6, the postconventional or principled level) of moral judgment. Stage 3 is a pure stage 3 with less than 25% of a subject's reasoning at stages other than stage 3. If a subject exhibits mixed stage reasoning (more than 25% of his or her reasoning is at 2 or more adjacent stages), then the stage score is noted as 3 (4), which is predominately stage 3, but with 25% or more stage 4 reasoning exhibited, or 4 (3) which is predominately stage 4, but with 25% or more stage 3 reasoning exhibited (a more detailed examination of Kohlberg's scoring methodology will be presented in Chapter IV). The stage movement exhibited by Kohlberg's subjects ranged from 1 full stage or less (24 subjects or 41%); more than 1 full stage, but less than 2 stages (25 subjects or 43%); and those that moved more than 2 full stages (9 subjects or 16%).

The reader can see from Table 2 that few of Kohlberg's subjects exhibit principled reasoning (stage 5 and 6). Only 4 of 58 subjects were scored as predominately stage 5; however, these 7% are not pure stage 5 subjects, but rather exhibit significant (more than 25%) stage 4 (conventional) reasoning. Further, another 7% (4 of 58 subjects) were scored as stage 4 (5); at best, fewer than 14% of Kohlberg's subjects indicate any postconventional or principled thinking, and no evidence of stage 6 is found in Kohlberg's longitudinal study.

Consequently, while the cross-sectional studies (Eisenberg-Berg, Saltzstein and Osgood, Clinchy, and others cited earlier) and
the longitudinal studies (Holstein, Rest et al., and Kohlberg, cited above) empirically support Kohlberg's theory of stage-sequencing and development, little empirical evidence exists currently that clearly demonstrates Kohlberg's principled reasoning (stages 5 and 6).

Kohlberg's second major tenet is that his theory is universalizable across cultural boundaries:

The concept of stage implies an invariance of sequence in development, a regularity of stepwise progression regardless of cultural teaching or circumstance. Cultural teaching and experience can speed up or slow down development, but it cannot change its order or sequence [Kohlberg and Gilligan, 1971, p. 1058].

Kohlberg's cross-cultural studies began with United States, Taiwanese, and Mexican urban males [Kohlberg, 1969a]. Subjects in all 3 societies demonstrated increasing use of higher stage (stages 3 and 4) reasoning and decreasing uses of stages 1 and 2. The only significant difference between subjects were that United States subjects demonstrated more stage 4 reasoning than did the Taiwanese or Mexican subjects, leading to the conclusion that development in less-developed countries is slower than in the Western cultures. However, since stage 3 and 4 reasoning is exhibited in all 3 cultures, higher stage reasoning is not unique to a purely American context. Kohlberg and Turiel [1971b] also examined male subjects in isolated villages in Turkey and Yucatan. Again, these subjects demonstrated stage development; while the United Stated, Taiwanese, and Mexican subjects [Kohlberg, 1969b] indicated a clear preference for, and use of, stage 3 and 4 reasoning (over the preconventional stages 1 and 2), the Turkish and Yucatanian subjects were using
approximately half preconventional (stage 1 and 2) and half con-
ventional (stage 3 and 4) reasoning, with no stage 5 or 6 reasoning
exhibited. Kohlberg and Turiel concluded that, in less-developed
countries, moral stage development would be slower than in more-
developed countries; and secondly, that stage-development would
plateau sooner in these less-developed countries. Kohlberg
concludes:

. . . . While the stages of development and the order of
development are universal, the rate and endpoint of
development is not. The cross-cultural studies suggest that
the last two stages of moral thought [stages 5 and 6] do not
develop clearly in preliterate village or tribal com-
\[ Kohlberg, 1971a, p. 348].

Kohlberg and Bar-Yam [1971] also interviewed 45 Israeli boys
aged 15-16. Their stage development was similar to American boys in
Kohlberg's studies:

. . . . The middle-class city groups are essentially the
same, except that preconventional [Stage 2] thinking is
completely absent in the Israeli middle-class boys, and
there is a little less Stage 5 thinking. Compared to other
boys of this age, both Israeli and American boys are some-
what advanced. They are advanced not only as compared to
middle-class boys from "underdeveloped areas" like Turkey
and Yucatan, but also as compared to middle-class boys from
Great Britain [Hendry, 1971] and from Taiwan [Turiel,
Kohlberg and Edwards, 1971]. For reasons which I believe
are not too provincial or ethnocentric, I attribute this
advance to the greater sense of participation of adolescents
in a democratic national society in both the U.S. and
Israel. Both societies are high in "role-taking oppor-
tunities" which we propose as central to the stimulation of
moral development [Kohlberg, 1971b, pp. 349-350].

In a footnote to the above passage, Kohlberg points out
several American-Israeli differences:
There are, of course, important differences between the U.S. and Israel. The U.S. is a large society with a high awareness of value conflicts. Israel is a small consensus society, but one which is non-traditional and open. The greater consensus orientation of Israel as well as its sense of national threat and need for national unity is perhaps reflected in the very high concentration of middle-class judgment at Stage 4, Rules and Society Maintaining orientation. But both societies are high in adolescent sense of socio-moral or socio-political decision making and participation [Kohlberg, 1971b, p. 350].

Additional recent studies in other cultures support Kohlberg's cross-cultural universality. White [1975] interviewed both male and female Bahamian school children aged 7-14. White's age-stage development trends support Kohlberg's cross-culturality, as does Edwards' [1975] study of Kenyans. However, Edwards' study is more complex; in addition to interviewing 52 University of Nairobi students, Edwards also interviewed 61 adolescent and adult "community moral leaders." Edwards determined that moral stage of these Kenyan subjects was not related to sex or ethnic background, but was related to education and occupation lending support to Kohlberg's contention that "Cultural teaching and experience can speed up or slow down development . . ." [Kohlberg and Gilligan, 1971b, p. 1058]. Edwards found that stages 4 and above were found only in some university students and those few community leaders who either had attended secondary schools or universities, or who occupied white collar business or professional jobs in the modern sector of the Kenyan economy. Edwards concludes, much as Kohlberg does, that stages of moral judgment should be viewed as adaptive structures adapted by people to accomplish culturally important
social-cognitive tasks; consequently, moral development should, and would, be affected by cultural frames of references.

The preceding cross-sectional, longitudinal, and cross-cultural studies lend strong empirical support to Kohlberg's two major tenets; first, that there exists a stage-sequential, cognitive-developmental structure of moral development that is invariant (that is, one must pass through a preceding stage to attain the next higher stage). Secondly, Kohlberg argues, and research supports, that his cognitive-developmental model is universal to all people and cultures. While Kohlberg's theory has not been proven unequivocally (only time and substantial additional research can accomplish that), no major findings have refuted Kohlberg's two tenets. Further, other researchers have used Kohlberg's theory to examine corollary issues involving moral judgment. The two additional areas of research interest are: first, how religious beliefs affect moral judgment, and secondly, how moral judgment affects moral action.

Corollary Research

Kohlberg and Turiel [1971c], while recognizing that cultural "frames of reference" will affect the speed and endpoint of moral development, do not believe that religious beliefs influence moral judgment, but rather than moral judgment develops independently of religious belief:

We also have found that the sequence [of stages] is not dependent upon holding the beliefs of a particular religion, or upon holding any religious beliefs at all. No significant differences appear in the development of moral
thinking among Catholics, Protestants, Jews, Buddhists, Moslems, and atheists . . . . [p. 438].

Annis' [1976] study of 71 subjects on the Allport-Vernon-Lindzey Study of Values questionnaire, a scriptural literalism scale, and a "lady in distress" dilemma indicated no significant correlation between helping behavior and the Study of Values questionnaire and literal scriptural belief, church attendance, or frequency of prayer. Annis concludes that moral behavior develops independently of religious belief systems, supporting Kohlberg's contention.

Finally, several recent studies were undertaken to compare moral judgment and development with "moral action" actually taken by various subjects. Among these studies are several that deal directly with what Brown and Herrnstein call "the paradox of behavior" by examining juvenile delinquents' moral judgment versus their behavior. Brown and Herrnstein [1975, p. 289] state this paradox as follows:

There is a chapter about a paradox. Students of the development of moral reasoning in children and young people have found that a great majority attains a conventional "law and order" morality, which involves obeying the laws and trying to treat people decently. In the same research period, students of social psychology have outdone one another in discovering that in certain circumstances respectable young people are capable of deceitful conformity, vandalism, and indifference to life-and-death problems of strangers who ask for help, are capable even of endangering the lives of others. For the most part, the subjects in the developmental studies and in the social psychological studies were drawn from the same population--American young people, especially college students. Therein lies the paradox.

The two kinds of psychologists--developmental and social--seldom read each other's work, and since their
studies are described in different courses, the paradox has largely gone unnoticed. But if a young person believes in being lawful and decent, how can he sometimes lie, destroy property, ignore a threatened stranger, and be willing to endanger another's life?

Actually, there is no paradox unless you make a certain assumption. You must assume that the way people think about moral issues determines the way they act. You must believe there is neither paradox nor even surprise in someone talking on the high road and acting on the low road [Brown and Herrnstein, 1975, p. 289.]

The study of moral action or behavior began with the classical work of Hartshorne and May [1928]. They hypothesized that:

1. Adolescents could be bimodally divided into honest and dishonest groups.

2. Those adolescents who cheated in some situations were likely to cheat in others, and those who were honest in some situations would likely be honest in other situations.

3. Moral behavior could be predicted from the adolescent's verbal statement of valuing a high standard of honesty.

After numerous experiments, Hartshorne and May rejected their hypotheses. They discovered:

1. Cheating behavior was distributed in a normal bell curve around a mean of moderate cheating.

2. Cheating in one situation did not correlate well to cheating in another situation—their major finding was that cheating behavior varied directly with the risk of detection (as perceived by the subjects), the less was the likelihood of cheating behavior being exhibited.

3. Finally, there was very low correlation between expressed high standards of honesty and actual behavior in the experimental situations.
Erdynast [1974, p. 4] stated: "These research findings on situation variation suggest that moral conduct is in large part the result of an individual decision in a specific moral conflict situation. This research contradicts the view of moral character as a consistent set of general 'good habits' or as a 'strong conscience'." Havighurst and Taba [1949] hypothesized that "honest behavior" implied a strongly motivated personal internal structure that would prohibit stealing, lying, or cheating. If a person had such a personal belief system that lying and cheating were wrong, then that person should have particularly strong "guilt" feelings after committing such acts. Yet the correlation between such acts and subsequent "guilt" was low among their experimental subjects, as was the correlation between conformity to a moral rule and strength of stated belief, supporting much the same conclusions as did Hartshorne and May.

More recently, Fodor [1972] replicated certain of Hartshorne and May's experiments. Seventy-six 13 and 14-year old males participated in a "ray-gun" experiment; the experimental setting featured both high and low "risk of detection" phrases (as perceived by the subjects). Supporting previous research, the degree of cheating was significantly higher in the low "risk of detection" phase than in the high risk phase. These subjects were then administered Kohlberg's Moral Judgment Interview and the Cornell Parent Behavior Description. Fodor's research findings indicated that cheating behavior had no relation to either the subjects' level of moral judgment or the subjects' perceptions of parental behavior.
Essentially, Fodor concluded, as did both Hartshorne and May, that cheating behavior increases as the risk of detection decreases.

Hudgins and Prentice [1973] and Prentice and Jurkovic [1973] examined delinquent males and their mothers matched (age and I.Q.) with non-delinquent males and their mothers. Their findings indicate that the mothers, as a group, demonstrated higher moral judgment than their sons, and that non-delinquent sons exhibited a higher level of moral judgment than did the delinquent sons. Interestingly, the mothers of the non-delinquent sons also scored higher in moral judgment than did mothers of delinquent sons. These findings support Kohlberg’s thesis of invariant sequence and cultural effects. A major effect was the concept of "justice" and "equity" in the home environment as perceived by the sons. Similar to both the cross-sectional and longitudinal studies, this study supports the concept that moral judgment will be higher among children whose environment allows and encourages development.

Wright [1978] also found that moral reasoning scores differed significantly between delinquent and non-delinquent adolescents, even though Wright’s study dealt with sixth graders, rather than junior and senior high students.

Kohlberg and Turiel [1971d] address the differences between moral judgment and moral action. Regarding cheating, Krebs and Brown found that approximately 75% of post-conventional and conventional children (stage 4 or less) cheated, while only 20% of post-conventional children (stages 4/5 and higher) cheated in a particular experimental situation [p. 458]. According to Kohlberg
and Turiel, the later moral judgment of an adolescent who cheats cannot be predicted, but one can predict a high level of moral judgment for an adolescent who regularly does not cheat:

... It is only the highest, or postconventional range of development, that we can expect a relation between moral judgment and cheating behavior, since at this level the child can formulate a good reason for not cheating. To refrain from cheating when neither the authority nor the group care demands an element of principle. As conceptualized at the principled level, the critical issues of justics involved in cheating are: (1) the recognition of the element of contract and agreement implicit in the situation, (2) the recognition that while it does not seem so bad if one person cheats, what holds for all must hold for one, and (3) the recognition that in cheating, one is taking advantage (inequity) over those who do not cheat [Kohlberg and Turiel, 1971e, p. 458].

Kohlberg and Turiel note that the reverse seems to hold true regarding delinquency:

... Delinquency is a sign of low or preconventional moral judgment, but nondelinquency is not a sign of having reached the conventional level. (Many preconventional adolescents avoid delinquency out of fear, expediency, lack of opportunity, and similar reasons.) In addition to being preconventional in moral level, the repetitive adolescent delinquent is not only likely to come from a delinquency-prone neighborhood but is likely to come from a family with severe problems (Kohlberg, LaCrosse, & Ricks). In other words, delinquency requires sociological and psychological factors beyond immature moral judgment for its understanding, although it does indicate immature moral development [Kohlberg and Turiel, 1971f, p. 460].

The relationships between moral judgment and moral action have been examined by Kohlberg and Candee [1979]. Kohlberg and Candee contend that "From our viewpoint one's stage of moral reasoning is a filter through which these situational forces are perceived, interpreted, and acted upon" [p. 25]. They comment on the impact of "ego controls" on moral behavior [p. 26] and note that
the existence of contractual relationship seem to elicit a higher percentage of "morally just" actions. They postulate three types of forces influencing moral action in general (and cheating in particular):

**Type 1 - External Social Situational Forces**
Included are social punishment and reward, group pressures and expectations, influence of models, as these influence behavior through direct variation in the situation.

**Type 2 - Internal Moral Judgment Forces**
The primary variable here is moral stage. Such structures organize and interpret one's perception of the moral world.

**Type 3 - Internal Dispositions of Ego Strength or Ego Control**
The dispositions are not specifically moral; they also influence task performance and decisions in "non-moral" or "non-social" tasks, e.g., cognitive and achievement performances. Included are: I.Q., attention, delay of gratification, time, perspective, achievement motivation, etc.

The latter two types of forces are both cognitive and developmental. Both increase monotonically with chronological age and with cognitive maturity throughout childhood and adolescence. These factors may be loosely conceived as adaptive abilities which are general across situations [Kohlberg and Candee, 1979, p. 31].

Kohlberg and Candee conclude that, for lower stage individuals, differences between moral judgment and moral action tend to result from environmental and peer-group pressures (i.e., "what most people do," "what most people expect," or "everyone does it"). These peer-group pressures can produce quite different moral actions than the knowledge of an individual's moral judgment would suggest. Further, Kohlberg and Candee observe that, in day-to-day life, the consequences of ignoring real (versus imaginary) rules and
obligations can be painful to the individual who does not observe or follow "society's rules."

Kohlberg and Candee also conclude that higher stage (in moral judgment) individuals are less prone to cheating, and tend to exhibit actions that are more congruent with their moral beliefs, than are lower stage individuals. Also, because of internal (ego-control) and external (peer-group pressures) differences, some individuals may not be able to carry out (the action element) a certain moral judgment (the position or "belief" element).

**Summary of Related Moral Development and Accounting Literature**

It appears that two major criticisms emerge from this recent literature: first, that auditing standards and accounting principles are less than perfect for communicating financial information to users resulting in public clamor for regulations to provide legally for "full and fair disclosure." Second, the decline (or lack) of ethical and moral principles of the profession and its members, or, as Sale asserts, the lack of an "overriding philosophy:"

There seems little doubt that society is expecting more of the auditor than he has given in the past . . . . I realize that if students of today continue to be trained as I was, they will never be able to venture into deep water. Present educational requirements with the emphasis on practical experience will never take them out of the shallows. The accent is presently on mechanics, not concepts; on rules, not philosophy; on accounting records, not people, on how, rather than why . . . [the accountant's] slow development as a profession stems partly from the lack of an overriding philosophy, partly because little attempt is made to develop and enforce generally accepted auditing
standards and partly because little thought is given to exploring and redefining his reporting function in tune with changing needs and expectations [p. 83].

Nor is the accounting profession alone in facing public scrutiny; the legal, medical, and teaching professions have also been subjected to this public scrutiny. According to Gest [1981], the most recent 12 month period for which facts were available indicate almost 32,000 complaints were filed against attorneys with lawyer-discipline agencies and that Chief Justice Warren Burger stated in 1977 that up to half of U.S. trial attorneys are "unfit to appear in court" [p. 38]. The three charges against attorneys, according to Gest, are dishonesty, incompetence, and financial greed.

A growing number of lawyers are accused of defrauding clients, representing conflicting interests, breaking securities laws or other misdeeds that show either ignorance of ethics or contempt for them [emphasis added; p. 38].

Barzun [1978] has commented on private practice versus public need of the professions. Chronicling the public attacks on doctors, attorneys, teachers, and scientists, he observes:

Latest on the carpet, the austere, unfathomable accountant is being shown up as a master of misrepresentation, a cordon bleu at cooking the books. With this fall, the idea of "the professional man" is near to being swallowed up in contempt [p. 61].

Charging that "... the professions exhibit their fatal tendency toward routine. Routine relieves the mind of the effort of thought, and it is protected by the secret and the monopoly of the act" [p. 65], Barzun also contends that much public confusion and dissatisfaction comes at a time when society
. . . wants a huge supply of first-class services evenly distributed . . . . there is little chance that the requisite number of able and devoted professionals can be found. Here again we must stop and think what a profession as institution is for. It is to turn people who are not born teachers, born builders, born advocates, or born healers into a good imitation of the real thing.

. . . As a whole, every profession is always horribly average, mediocre. By definition it cannot be anything else. But the public expectation aims much higher than mediocrity, so that in a time of reckoning, when the laity is hot about its rights, general dismay and recrimination are inevitable [double emphasis added; p. 65].

Barzun also charges that governmental regulations results because ". . . a democratic nation, bent on equality in all things, is sure to judge a profession by its worst exemplars" [p. 67] and suggests that governmental intervention is the result of the professions not regulating themselves. Observing that: "Through their own routines, regulatory agencies lag behind the facts. They also protect featherbedding, prevent innovation, and give inspectors a power that may invite and spread corruption" [p. 67], Barzun suggests that the only hope for the professions is a moral force or moral code.

The message for the professions today is that their hope of survival with anything like their present freedoms is the recovery of mental and moral force . . . Moral here does not mean merely honest; it refers to the nature of any encounter between two human beings . . . as soon as a person serves another, ethical issues spring to life and get settled well or badly . . .

A code [of professional ethics] only sets the limits beyond which behavior will be condemned, and the moral level is not high when all or most of those who live under it always act within a hairline of those limits. Codes, in fact, are for criminals and competitors, not for professions that want to be known as dedicated . . .
Policing [i.e., governmental regulation], being negative, is not enough. It will not effect moral regeneration, which can come about only when the members of a group feel once more confident that ethical behavior is desirable, widely practiced, approved, and admired. After a marked decline, it can only be a slow growth and only one force can start it on its way, the force of moral and intellectual leadership . . . [p. 68].

Returning again to Dunstan's [1978] call for the business and the professional man to "... engage in moral reasoning" [p. 76], his contention that "Moral leadership will be by persuasion in relation to the moral principles or axioms believed in . . ." [p. 78], suggests that a measurement of moral development of professionals and businessmen would be the first research thrust for developing a viable moral standard to be employed by the professions and by business. The profession's knowledge of the measure of moral development of professionals and businessmen could also result in knowledge of how to increase or enhance personal moral judgments that necessarily form the internal structure of any moral or ethical code of conduct.

Kohlberg and Candee have contended that the higher the moral judgment of an individual, the greater is the likelihood of higher level moral action. By extension, it would appear that if the accounting profession could demonstrate a high level of moral development (e.g., stage 5 or higher, which are the post-conventional levels), societal needs and expectations of accountants would be satisfied. This is the "moral regeneration" that Barzun [1978] refers to; this higher moral development is necessary for
professions that wish to present themselves as dedicated and in the public service.

This chapter has presented a review of the accounting literature that addresses the broad spectrum of morality and ethics in the modern-day accounting profession. Additionally, this chapter has reviewed Kohlberg's cognitive-developmental theory of moral judgment, along with results from many researchers that support Kohlberg's basic contentions of "invariant stage sequencing" and "cross-cultural universality." Finally, a review of recent literature involving corollary works was presented.

The significance of this literature review for the accounting profession lies in the public sector's faith and confidence in the auditor. Kohlberg and Candee have stated that the higher the level of moral judgment possessed by an individual, the greater is the likelihood of congruent moral action. At this time, it appears that the public sector and regulatory agencies are concerned that the accounting profession exhibit moral actions relative to many of the moral and ethical problems the profession faces.

Consequently, chapters 3 and 4 will present the findings of this study to determine the level of moral judgment evidenced by auditors employed by three of the "Big-Eight" accounting firms in the United States. From these findings, certain tentative conclusions relative to the level of moral development of auditors examined in this study will be presented in chapter 5, as well as implications of this study for the accounting profession.
CHAPTER III

DESCRIPTION OF RESEARCH DESIGN AND PROCEDURE

Research in the area of cognitive and moral development indicates that the higher the level of moral judgment possessed by an individual, the greater is the likelihood of congruent moral action. Since the public accounting profession enjoys a high level of public trust, this study was undertaken to measure the moral development of accountants in the public accounting profession. As the level of moral development increases, the more likely is higher level moral action. If accountants exhibit high levels of moral development, then two implications exist: first, the public interest will be served; second, there would be little or no necessity for governmental intervention and regulation of the accounting profession. These implications will be discussed at length in Chapter 5.

Because of the number of member accountants in the public accounting profession and the criticisms of the "accounting establishment" by various governmental agencies and critics, the scope of this study has been limited to accountants employed in the audit function of the "Big-Eight" accounting firms. To quantify the level of moral judgment displayed by these auditors, Kohlberg's Moral Judgment Interview (KMJI) was employed in this study as the test instrument.
This study was designed to investigate four research areas. These four areas are:

1. Whether auditors have developed to Stage 5 in moral judgment as measured by the KMJI.
2. Whether a difference in moral judgment exists between partners and entry-level auditors.
3. Whether a difference in moral judgment exists between different accounting firms.
4. Whether a difference in moral judgment exists between the two different cities, New York, New York, and New Orleans, Louisiana.

**Hypothesis 1**

Kohlberg's level 5 (the post-conventional level) was used for stating the following research hypotheses since level 5 is the stated or implicit morality of the United States Constitution. He states:

Stage 5: The social-contract, legalistic orientation, generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights and standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal "values" and "opinions." The result is an emphasis upon the "legal point of view," but with an emphasis upon the possibility of changing law in terms of rational considerations of social utility (rather than freezing it in terms of Stage 4 "law and order"). Outside the legal realm, free agreement and contract is the binding element of obligation. This is
Kohlberg's postconventional levels (levels 5 and 6) indicate a clear effort to define moral values and principles that are universal to all people and in all circumstances. Thus, societal needs are best served with postconventional development. Consequently, a profession exhibiting a high level of moral development would indicate a high level of responsibility for, and responsiveness to, societal needs and concerns. If the accounting profession operates at level 5, the strong implication exists that governmental regulation would not increase, but rather decrease, the societal good.

If a profession has not developed to level 5, it would operate at Kohlberg's conventional level (levels 3 and 4). Reasoning at the conventional level is characterized as maintaining the status quo. There is not only a conformity to the social order, but also a loyalty to it and an active role in maintaining, supporting, and justifying this social order. Hence, such a profession may be resistant to change; this resistance to change may also lead to governmental intervention and regulation.

The first hypothesis is stated for measuring accountants' moral development relative to Kohlberg's level 5. This hypothesis is stated as:

\[ H_0 : \text{The level of moral development of accountants} \geq \text{Kohlberg's level 5.} \]

\[ H_A : \text{The level of moral development of accountants} < \text{Kohlberg's level 5.} \]
Hypotheses 2, 3, and 4:

These three research areas involve comparisons between partners and juniors, between firms, and between geographical location. The comparison between partners and juniors (hypothesis 2, below) is important since, intuitively, partners should exhibit a higher level of moral development than juniors, due in part to age, and in part to a greater exposure to "life crises," such as parenthood, death of family members and friends, and employment pressures. If partners do not exhibit a higher level of moral development than juniors, the implication then exists that the moral development of accountants sampled tends to plateau in early adulthood. Kohlberg's research [Kohlberg, 1977b] tends to support this early adulthood plateau.

The last two hypotheses were postulated to gain information regarding firm and city comparisons heretofore unknown. No a priori or intuitive assumptions were made regarding whether such differences would, or would not, exist. However, the absence of any differences between firms and between cities would lend strength to the argument that cultural or working environments would have little, if any, influence on the attained level of moral development of accountants. This argument of cross-cultural universality is a major postulate of Kohlberg's theory. These last three hypotheses are stated formally as:

\[ H_2 \quad H_0: \text{The level of moral development of partners} = \text{the level of moral development of juniors}. \]
Hₐ: The level of moral development of partners ≠ the level of moral development of juniors.

H₃ H₀: The level of moral development of \( AF_1 = AF_2 = AF_3 \)

Hₐ: The level of moral development of \( AF_i ≠ AF_j \), for some \( i, j = 1, 2, 3 \), \( i ≠ j \), and where \( AF \) denotes a selected accounting firm.

H₄ H₀: The level of moral development of \( A_{NY} = A_{NO} \)

Hₐ: The level of moral development of \( A_{NY} ≠ A_{NO} \) where \( A_{NY} \) denotes public accountants interviewed in New York and \( A_{NO} \) accountants interviewed in New Orleans.

This chapter will describe the research areas and hypotheses, the characteristics of accountants in the firm surveyed, how the respondents were selected for interviews, and the demographic characteristics of these respondents. Additionally, a description of Kohlberg's Moral Judgment Interview is furnished (the complete Moral Judgment Interview is presented in Appendix A) along with examples of replies obtained from respondents.

**Sample Selection**

The auditors selected for this study came from three "Big-Eight" accounting firms in the United States. The three selected firms that agreed to participate in this study will be designated as 1, 2, and 3.

For purposes of this study, individuals were selected on the basis of employment as either entry-level auditors (juniors) or
audit partners of their firm. Juniors and partners were randomly selected from each firm in each city to comprise this study's sample. The following definitions and terms will be used for purposes of this research study.

1. **Accountants**—Individuals currently employed in public accounting (in the audit function) as either an audit partner of a firm (see further definitions) or as a junior staff auditor (juniors) of a firm. This definition is inclusive only in the above framework (subject to following definitions) and specifically excludes:
   a. accountants in public practice not employed by a defined firm
   b. accountants employed by industry and government
   c. accounting academicians

2. **Audit partners**—Individuals holding an equity interest in their respective firms and considered to be general partners in the legal sense. Since the AICPA provides for professional corporations, the above definition includes stockholders of such corporations as general partners and each general partner shall be a Certified Public Accountant. This definition specifically excludes principals of subject firms who do not possess the designation of Certified Public Accountant.

3. **Juniors**—(Entry-level accountants) Individuals employed by a subject firm in the audit function, with these particular characteristics:
a. less than three years work experience with a public accounting firm at the time of random selection as a respondent in this study, and

b. initial date of employment with a public accounting firm within two years of college graduation.

The above characteristics (a and b) are stipulated so the sample respondents will conform to the concept of an "entry-level" or "beginning staff" accountant as these terms are commonly used in the profession. Other than the definitions and terms above, no other stipulations or characteristics such as race, religion, sex, age, etc. are made or contemplated.

Each firm furnished a list of audit juniors and audit partners as of July 1, 1980. Six juniors and three partners were randomly selected from each firm in each city for a total of 54 respondents. This sample was arrayed as illustrated in Table 3.

### TABLE 3

COMPOSITION OF SAMPLE

<table>
<thead>
<tr>
<th></th>
<th>New York</th>
<th></th>
<th>New Orleans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partners</td>
<td>Junior</td>
<td>Partners</td>
</tr>
<tr>
<td>Firm 1</td>
<td>18</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Firm 2</td>
<td>18</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Firm 3</td>
<td>18</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Totals</td>
<td>54</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>
Sample Characteristics

The sample of 54 respondents yielded the following demographic characteristics of sex, age, education, years of experience, and other characteristics of interest.

A. Sex of Respondents

Of 54 respondents, 10 were female and 44 were male. All 10 females were juniors at the time of this study and were almost equally divided among firms and cities.

According to the various firms' personnel partners, this sample of females to total juniors (10 of 36, or 28.8%) corresponds closely with the percentage of female juniors hired by "Big-Eight" firms during the 1979 and 1980 recruiting years. The three participant firms indicated that 32-36% of newly-hired juniors were female.

B. Accounting Experience of Respondents

All juniors surveyed in this study had less than three years of experience in public accounting. Partners ranged from 12 to 36 years of experience at the time of this study. This distribution of partners experience appears in Table 5.

C. Marital Status of Respondents

Of the 36 juniors sampled, 20 were single, 14 were married, and 2 were divorced. Of the 18 partners, 17 were married and 1 divorced.
TABLE 4

NUMBER OF FEMALES IN SAMPLE
(By Firm and Location)

<table>
<thead>
<tr>
<th>Number of Females by Firm</th>
<th>New York</th>
<th>New Orleans</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm 1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Firm 2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Firm 3</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

TABLE 5

PARTNERS' YEARS OF EXPERIENCE IN ACCOUNTING

<table>
<thead>
<tr>
<th>Partners' Years of Experience</th>
<th>New York</th>
<th>New Orleans</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 15 years</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>15-25 years</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
</tbody>
</table>
Partners were parents of 1 to 5 children; the mean number of children per partner was 2.7. Among the juniors sampled, only two men were fathers (1 child each).

D. Age of Respondents

Ages of the respondents range from 21 to 60 at the time of this study. Juniors range from 21 to 32; the youngest partner interviewed was 35 and the oldest was 60. Age groupings, by junior and partner, follows in Table 6.

E. Education of Respondents

While each respondent had a B.S. or the equivalent, 14 had an M.S. or M.B.A. degree as their highest degree. Of the 14 possessing advanced degrees, 9 were juniors (25%) and 5 were partners (28%). Ten of 14 advanced degree holders were in the New York firms; more New York partners (4) had advanced degrees than did New Orleans partners (1). All 5 partners with advanced degrees were comparatively young; none were over 45 years old.

Significantly more New York respondents graduated from private colleges or universities than did New Orleans respondents. Of the 27 New York respondents, 22 (81.5%) graduated from a private institution; in New Orleans, only 4 of 27 (14.8%) graduated from private institutions.

Administration of Kohlberg's Moral Judgment Interview

Kohlberg's Moral Judgment Interview was administered to 54 respondents, equally divided between New York City and New Orleans,
### TABLE 6

**COMPOSITION OF SAMPLE - BY AGE**

<table>
<thead>
<tr>
<th></th>
<th>Juniors</th>
<th>New York</th>
<th>New Orleans</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25 years</td>
<td>9</td>
<td>11</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>25-30 years</td>
<td>9</td>
<td>6</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>More than 30 years</td>
<td>0</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>18</td>
<td>18</td>
<td></td>
<td>36</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>24.4 years</td>
<td>24.2 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Partners</th>
<th>New York</th>
<th>New Orleans</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 40 years</td>
<td>3</td>
<td>4</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>40-45 years</td>
<td>4</td>
<td>2</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>46-50 years</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>51-55 years</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>More than 55 years</td>
<td>1</td>
<td>2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>9</td>
<td>9</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>43.9 years</td>
<td>44.3 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Louisiana, during the Summer and Fall of 1980. Each respondent was personally interviewed by this researcher in a private office furnished by each firm. Each interview was tape recorded; during the Winter of 1980 and the Spring of 1981, these interviews were transcribed and scored using Kohlberg's Standard Form Scoring Manual - 1979 [Colby, et al, 1979], hereafter referred as as the S.M.

Scoring reliability in many Kohlbergian studies has been achieved by "blind" rescoring of the original interviews by other members of the research team. However, when there is only one researcher, this "blind" rescoring technique can introduce a "learning" bias, particularly when the sample is relatively small. After communication with researchers at Harvard University's Center for Moral Development an "independent" scoring procedure for rescoring approximately 25% of the original interviews was recommended. This independent "scoring" would avoid any researcher bias, as well as provide scoring verification by experienced Kohlbergian researchers.

Consequently, after all original interviews were scored, a random sample of 13 interviews (13 of 54 equals 24%) was forwarded to the Center for Moral Development for rescoring by Dr. Dan Candee. This rescoring indicated a high degree of scoring consistency between this researcher and Candee, as illustrated in Table 7 (the Moral Maturity Score-MMS-was used rather than stage scores to facilitate statistical operations).

The 1979 Scoring Manual indicates that agreement between scores is considered 100% if the MMS scores are within 1/6 of a stage score; on the MMS scale, this would be ± 17 points. On an
<table>
<thead>
<tr>
<th>Original MMS Score</th>
<th>Rescored MMS Score</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOF2 C7</td>
<td>337</td>
<td>350</td>
</tr>
<tr>
<td>NOF1 C7</td>
<td>435</td>
<td>427</td>
</tr>
<tr>
<td>NOF1 C4</td>
<td>383</td>
<td>388</td>
</tr>
<tr>
<td>NOF3 C3</td>
<td>392</td>
<td>372</td>
</tr>
<tr>
<td>NOF2 C2</td>
<td>377</td>
<td>358</td>
</tr>
<tr>
<td>NYF1 C2</td>
<td>368</td>
<td>352</td>
</tr>
<tr>
<td>NYF1 C7</td>
<td>377</td>
<td>367</td>
</tr>
<tr>
<td>NYF2 C4</td>
<td>380</td>
<td>367</td>
</tr>
<tr>
<td>NYF1 C1</td>
<td>354</td>
<td>334</td>
</tr>
<tr>
<td>NYF1 C4</td>
<td>410</td>
<td>367</td>
</tr>
<tr>
<td>NYF2 C7</td>
<td>427</td>
<td>416</td>
</tr>
<tr>
<td>NYF2 C9</td>
<td>343</td>
<td>338</td>
</tr>
<tr>
<td>NOF2 C4</td>
<td>368</td>
<td>381</td>
</tr>
</tbody>
</table>

Mean Score 381 371 -10
aggregate basis, the entire rescore sample was within this 1/6 of a stage score. On an individual basis, 9 of the 13 interviews were within ± 17 points. Of the remaining four interviews, three were within approximately 1/4 of a stage (i.e., ± 25 points). Only 1 interview of 13 deviated more than 1/4 of a stage score; this deviation was less than 1/2 of a stage (-43 MMS points). In summary, the scoring reliability of the sample rescored by Harvard University's Center for Moral Development exceeded 92% based on ± 1/4 of a stage score (12 of 13 were within ± 25 points).

**Description of Kohlberg's Moral Judgment Interview**

The moral judgment and reasoning used by each respondent was assessed by administration of Kohlberg's Moral Judgment Interview (see Appendix A). Each respondent was asked to analyze three moral dilemmas that were read to them individually and then determine what should be done. Each respondent was asked, through probing questions, the reasons for his answers to determine his level of moral judgment.

Each interview was scored by first identifying which of the six issues was of the prime importance in the response a respondent gave to either an initial or probing question. The six issues incorporated into Kohlberg's Moral Judgment Interview (MJI) are divided into three dilemmas or hypothetical moral problems. The three dilemmas that constitute the MJI are:
Dilemma I - In this first Heinz dilemma, the conflict is between saving a life and obeying the law.

Dilemma II - In the second Heinz dilemma, the conflict is between conscience and punishment.

Dilemma III - The third dilemma deals with the conflict between contractual agreement and authority.

[Kohlberg et al] defined for each hypothetical dilemma a central value conflict between two moral issues. The probe questions for the dilemma focus on the two conflicting issues, e.g., in Dilemma I (the first Heinz dilemma) the importance of saving a life conflicts with the importance of obeying the law. (Life and law are the two issues for Dilemma I.) Each . . . Standard Form Moral Judgment Interview focuses on the same issues and the interview receives a summary stage score for each of the six issues. The assignment of a stage score for each of six content areas represents an attempt to sample the subject's reasoning across a range of content and to standardize that sampling across subjects.

Operationally, the issue designation of a response is defined by the dilemma choice which it supports or the value which it upholds. For example, arguments in favor of Heinz stealing the drug in Dilemma I provide life issue material; arguments against stealing the drug provide law issue material. [1979 Scoring Manual, p. 2-3].

During the interview scoring process, each dilemma was studied to determine the respondent's issues of prime importance; secondly, stage scores were developed; finally, the stage scores were converted to the MMS (moral maturity scores). The MMS relates to the stage (or level) scores on the basis of 100 points per stage. For example, a stage (or level) 4 response would be represented by a MMS score of 400, and a transitional stage 4/5 would be represented by a MMS score of 450.
Often, mixed responses occur; these mixed responses are predominately at one stage, but indicate some adjacent stage reasoning. For example, a predominately stage 4 response (the major stage) with a 25% stage 5 response (the minor stage) would have a stage score of 4(5) and a MMS score of 425.

An example of the conversion process follows to illustrate the conversion of stage scores to the MMS:

| Dilemma I | Stage 3 | MMS = 300 |
| Dilemma II | Stage 3/4 | MMS = 350 |
| Dilemma III | Stage 4 | MMS = 400 |

\[ 1050 \]

Consequently, the interview MMS score would be 350 \((1050 \div 3)\).

An example of an interview consisting of mixed stages may appear as:

| Dilemma I | Stage 4(3) | MMS = 375 |
| Dilemma II | Stage 4(5) | MMS = 425 |
| Dilemma III | Stage 3(4) | MMS = 325 |

\[ 1125 \]

In the second example, the interview MMS would be 375 \((1125 \div 3)\).

**Response Examples**

The first dilemma in the MJII involves the conflict between the value of life (the life issue) and the importance of obeying the
law (the law issue). This dilemma is stated as follows (see Appendix A for Dilemmas II and III):

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

The first question asked of each respondent was: "Should Heinz steal the drug?" Because of the nature of the dilemma, each respondent chooses either the life issue or the law issue as the more important issue to him (or her). The stage or level of moral judgment is determined by scoring the reasoning level of each respondent, not the respondent's selection of the life issue or the law issue. Essentially, each issue (life or law) may be scored at one of Kohlberg's six moral stages. His definition of moral stages follows [Kohlberg, 1977a, p. 189-190]:

KOHLBERG'S DEFINITION OF MORAL STAGES

I. PRECONVENTIONAL LEVEL

At this level, the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels either in terms of the physical or the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. The level is divided into the following two stages:
Stage 1: The punishment-and obedience orientation. The physical consequences of action determine its goodness or badness, regardless of the human meaning or value of these consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being Stage 4).

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

II. CONVENTIONAL LEVEL

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

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

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

III. POSTCONVENTIONAL, AUTONOMOUS, OR PRINCIPLED LEVEL

At this level, there is a clear effort to define moral values and principles that have validity and application apart from the authority of the groups or persons holding these principles and apart from the individual's own identification with these groups. This level also has two stages:
Stage 5: The social-contract, legalistic orientation, generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights and standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal "values" and "opinion." The result is an emphasis upon the "legal point of view," but with an emphasis upon the possibility of changing law in terms of rational considerations of social utility (rather than freezing it in terms of Stage 4 "law and order"). Outside the legal realm, free agreement and contract is the binding element of obligation. This is the "official" morality of the American government and constitution.

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

STAGE 1 RESPONSES

Kohlberg's first stage, the Punishment and Obedience Orientation, is characterized by the avoidance of punishment. Right and wrong derive not merely from the consequences of actions but rather from rules, which are assumed to be arbitrary and fixed. Consequently, stage one individuals often state that it is wrong to break the rules (or the laws against stealing).

The S.M. gives the following stage-one examples to the question should Heinz steal the drug:

1. "No, it's not right. It's a crime to steal." [S.M., p. 90]
2. "No, he shouldn't steal the drug because it's wrong." [S.M., p. 90]

3. "No, he shouldn't steal because he'll get caught and he would be called a crook." [S.M., p. 91]

Stage one individuals can also exhibit a deference to power, bigness, and importance of stronger people. There would be no idea of the moral value of life outside its physical existence, and powerful positions are not seen as an attainment of more responsibility but rather rising above responsibility. At stage one, a confusion exists between the intrinsic value of a person's life and his or her external status characteristics. A typical stage-one response to the same question (should Heinz steal the drug) would be:

"Yes, I think he would in a case like that because his wife might be an important person." [S.M., p. 8]

When asked if the punishment for stealing should be more if the lady was an important person, a stage-one reply was:

"If someone important is in a plane and is allergic to heights and the stewardess won't give him medicine because she's only got enough for one and she's got a sick one, a friend, in back, they'd probably put the stewardess in a lady's jail because she didn't help the important one." [S.M., p. 8-9]

STAGE 2 RESPONSES

As a person matures in his reasoning and cognitive abilities, his orientation develops into the Instrument-Relativist Orientation. This is the stage 2 concern of hedonistic satisfaction. Rather than evaluate rules and laws as absolutes to be obeyed to avoid punishment or gain material rewards, the stage 2 individual
evaluates the rules and laws in light of the consequences to him. At stage 2, rules are flexible, and perhaps reversible in terms of the consequences of obeying (or disobeying) them. Fairness and reciprocity are interpreted in a pragmatic way; "You scratch my back and I'll scratch yours." Retribution is seen at stage 2 as a quid pro quid exchange between two individuals.

Examples of stage 2 reasoning include:

"Yes. He should steal the drug because the druggist was ripping him off. So why shouldn't he rip the druggist off, if he can save his wife." [S.M., p. 12]

"Yes, because his wife is dying. And if my wife was dying I'd steal the drug." [S.M., p. 14]

Stage 2 individuals can also display a concern for the concrete property rights of ownership using law as the prime issue. When asked if Heinz should steal the drug, a stage 2 individual replied:

"No, because if the druggist was going to sell it, it was up to him [the druggist], because he discovered it. He discovered it and it was up to him what he wanted to do with it." [S.M., p. 93]

Also evident at stage 2 is the concern with "bad" consequences of stealing, particularly "going to jail":

(Heinz should not steal the drug) "Because if he steals the drug, he might get caught and then he'd have to put it back, and he'd be in jail . . ." [S.M., p. 95]

STAGE 3 RESPONSES

The first of Kohlberg's "Conventional Levels," the stage 3 Interpersonal Concordance, or "Good Boy-Nice Girl" Orientation, is extremely concerned with social acceptability. Good behavior is
that which pleases or helps others and is approved by others. Conformity to peer group ideals and actions is critical; moral values and principles that are apart, or different, from the group values cannot be conceived of by stage 3 individuals.

Stage 3 responses often include a stereotyped image of what is "normal" or "natural" behavior. For example, a "loving" concern for a wife could be generalized to all human beings:

(Should Heinz steal the drug? Yes) "From the point of view of the law, it was wrong to steal the drug. Looking at it from the human viewpoint, however, the druggist was in the wrong. After all, we all are human beings and should be willing to help each other out in times of despair and distress." [S.M., p. 21]

Another example was:

"... All of human life is precious and must be saved some way. I'd take it (the drug) anyway." [S.M., p. 21]

Answering the question of should Heinz steal the drug for a stranger, one subject replied:

"It's not important whether the sick one is his wife or not, but that it's a person. He should do the same thing." [S.M., p. 21]

Another subject at stage 3 views the deviant act of stealing as excusable in this case as a form of retribution against the druggist's selfishness:

"Yes, I think that Heinz should steal the drug. If the druggist was so materialistic as to charge $2,000 for a small dose of the drug he deserves the robbery of his store. I do not think that I can pity the druggist if he was so inhuman as to refuse to let a man pay later for a drug which his dying wife needed." [S.M., p. 25]

Another example of this stage 3 reasoning was given by an accountant in this research sample:
"He would have to go and steal the drug. To protect his own family. Any family person would do anything he could to protect his family in any situation. This is a hurt that is being inflicted upon a loved one. If it was not cancer, if it was someone beating up his wife, he would stop him and maybe kill that person. That would also be an illegal act, but I think he is faced with a killer or the killer being cancer, no holds can be barred." \[NY, Firm 2, Respondent 9\]

Another accountant used stage 3 reasoning:

"I might be tempted to break in there myself, in that circumstance, just because I'm married and have a wife and if she was dying I think that that might be something that I would get desperate enough about to do that." \[NO, Firm 2, Respondent 7\]

STAGE 3/4 RESPONSES

As individuals mature in their moral and cognitive reasoning, a number will achieve Kohlberg's second conventional stage, the stage 4 Law and Order Orientation. However, many individuals will mature to a conventional reasoning that is higher than stage 3, but does not completely represent stage 4. Kohlberg refers to this level as the "mixed" conventional stage (stage 3/4). This stage 3/4 is not the only "mixed" stage Kohlberg identifies; a "mixed" stage exists between any two adjacent stages, such as 2/3 and 4/5. Characteristics of the 3/4 mixed stage can include:

1. The stage 3 concern of caring for life but not as fully developed as the stage 4 concept of the value of life being implicitly sacred to society. In many cases, this stage also includes the feeling of repugnance that the druggist will "sacrifice" life for money. For example,

"Because it is a matter of life and death; if it gets down to a matter of life and death, then you are balancing the financial greed of one person against a life. I could see
how a person could flounder with the dilemma, (but) even with a stranger one could say, my God, the life of even a stranger is much more important than this guy's greed." [S.M., p. 40]

Another example comes from a sample respondent:

(Yes, Heinz should steal the drug) "Because I think the druggist is being unreasonable. He is being inhuman in thinking solely of profit and not thinking about a human life which I don't think you can do . . . ." [NO, Firm 2, Respondent 6]

2. While the explicit reference to sacredness of life as a societal idea (stage 4) is missing, the statements that "only God has the right to end a life" is beyond the stage 3 idea of a religious rule. For example:

". . . in a sense this guy (druggist) is exercising a control over life and death which is a power that really should not be granted to human beings, particularly in the way he's exercising it." [S.M., p. 42]

Also:

"If he is just making $1500 profit, he isn't morally justified. Because that in effect sets a price on human life. It sets him up as sort of a demi-god." [S.M., p. 42]

3. The concept that the druggist is taking unfair advantage of society; this concept is beyond the narrower view of the selfishness of the druggist, and yet had not completely integrated the concept of the extended social good. When asked if the druggist should charge so much, one of Kohlberg's subjects answered:

"No, I don't think so. I just don't think that it's right. It's one of those 'get rich quick' attitudes, I guess . . . . it just seems like if he was a druggist to begin with, at one time he was for the betterment of people, you know, to save lives and stuff like that. He has to be close
to a doctor in his thinking, I would think. I think he is
taking advantage of his position." [S.M., p. 44]

An accountant felt that Heinz should steal the drug because:

"... when someone, especially a druggist who is not
supposed to be out there to make money, invents a drug that
could be very beneficial to save people, to help them over
whatever illness that they may have, especially if they are
terminally ill, then precludes someone who really needs it from
getting it by charging some exorbitant fee ... I don't
believe the drug itself is worth that much money ... This
man (Heinz) can't afford it but he should still be able to
have access to it." [NO, Firm 3, Respondent 7]

4. Another characteristic is the dilemma between one
set of societal expectations (saving his wife) versus another
set (obeying the law). The "mixed" 3/4 stage falls short of
stage 4 because of the "individual," rather than societal,
orientation to these societal expectations. For example:

"To (Heinz), it was probably right (to steal). He loved his
wife, he's do to any extreme ... Speaking in his behalf
I'd say it was right." [S.M., p. 50]

Also:

"Yes, I think that Heinz would be, quote 'wrong' because it
is against the law to steal. But I think that if he loves
his wife he can rationalize it." [S.M., p. 51]

As one accountant stated:

"Yes, because I think he has a deep love for his wife ... and I feel that he should do anything that doesn't really
physically harm another person and, under these circum-
stances, I think he would be justified morally in doing so." [NO, Firm 3, Respondent 8]

Another accountant stated:

"Yes, to save his wife would be acting out of some emotion.
He sees something that is very dear to him. He could very
easily steal the drug. The motivation for doing that is the
love of his wife." [NY, Firm 2, Respondent 3]
STAGE 4 RESPONSES

In stage 3, rules and laws are seen as stereotypes of socially desirable actions. However, at Kohlberg's stage 4 (the Law and Order Orientation), rules and laws are seen as essential to the maintenance of social order and necessary to prevent social collapse. In stage 4, the rules and laws are seen as binding for all humans. It was seen that at stage 3 antisocial behavior could be excused (by the individual actor) if it were performed to maintain positive social relationships; at stage 4, the basic concern is "what if everyone did it." Further, personal relations and obligations are viewed as duties and a necessary component of the social order. Typical stage 4 responses often indicate that human life rights transcend property rights or society's need for laws or that laws, made by man, may not always be equitable in given situations. For example:

"... most laws that are passed are very general and when applied to specific situations like this one, or even ones which can't be anticipated, arise and I think that's one of the reasons why, even though a law may seem fair when passed or moral when passed, in a particular situation which wasn't anticipated, then moral dilemmas arise." [S.M., p. 67]

As an accountant stated:

"Heinz has that dilemma of living in a society that frowns on stealing, but I would take it back to even a more basic, broader basis of Mankind and start setting values at that point and trying to live within the confines of the law of the society that you are in. When he is faced with the choice of saving a human life and breaking the laws of the society of which he is in, I would break the law to save the life." [NY, Firm 2, Respondent 7]
A stage 4 response can also refer to saving human life as the highest expression of law or that saving human life is derived from fundamental religious laws that societal laws can add to, but not supplant. For example:

"What he (Heinz) did was legally wrong, but as I see it, what he did overruled anything that might have been legally not proper, such as stealing the drug." [S.M., p. 69]

Also,

"Legally, it wasn't right, but morally it was. After all, saving a life is much more important than the action he took." [S.M., p. 69]

Another accountant stated:

"I'm justifying stealing it because of the thought of life being sacred. I'm not justifying the stealing as good. But I am saying, because you are saving a life. Life is more sacred than are property rights." [NY, Firm 1, Respondent 4]

Also:

"Because I think that life, someone living, is more important than even the law . . ." [NO, Firm 3, Respondent 3]

STAGE 5 RESPONSES

Kohlberg's highest level (his Postconventional or Principled Level) includes stages 5 and 6. Stage 5 is the Social-Contract, Legalistic Orientation and differs from the stage 4 law and order orientation by recognizing that rules and laws can be changed by rational consideration of social utility. Stage 5, consequently, does not exhibit the "rigidity" of the law and order orientation of stage 4; rather than "laws creating society" as in stage 4, the "society creates laws" in stage 5. Essentially, societal dissent
provides the avenue for changes in rules and laws. Important at stage 5 is the concept of "social contract" between individuals and society to promote order. However, it is also important to note that there will be some laws and arrangements to which reasonable individuals could not be expected to commit; rather, some basic human rights and minimum guarantees must exist in social contracts in order for the participants to consider the commitment worthwhile.

The following statements typify stage 5 reasoning:

"Heinz is working from a hierarchy of values, in which life (at least the life of his wife) is higher than honesty (although he tried that route too—a lower but real value— until it proved incapable of serving a higher imperative). From my point of view, as distinct from Heinz's, human life and its preservation—at least as presented here—must take precedence over other values, like Heinz's desire to be honest and law abiding, or the druggist's love of money and his rights. All values stem from the ultimate value of life." [S.M., p. 80]

Also:

"[The] law serves Mankind and helps keep order, but where does that law of society come from? It comes from the basic value of life . . . law is made to preserve life. Therefore, in this case, law is not preserving life but a lesser right, and should be broken." [S.M., p. 81]

Several respondents in this study offered stage 5 responses to this dilemma:

"Laws are made to help us, to make us civilized people and to get along with one another. That is the purpose of laws. [But] the law is not appropriate if it is taking the life away from another person . . . . That was not the intent when the people set the law . . . [Heinz should steal the drug] because he does not have the intent of stealing for his own gain. He is stealing to save a life, something which is very precious that can never be regained once it's lost." [NY, Firm 1, Respondent 4]

Another accountant responded:
"It came to the point of saying the law is wrong. The reality overcomes the law. Laws are made by men and can be mistaken in their application, and you have to judge for yourself 99% of the time. There are certain situations where you would break the law because it was morally wrong . . . You shouldn't be able to take the law into your own hands just because you don't agree. You break it because you think it is morally correct to break it." [NY, Firm 1, Respondent 8]

Also:

"To a certain extent laws can be arbitrary. Laws reflect a consensus of opinion of the mass or the group, but I would take it back to basic laws. It might be my philosophical upbringing from a Jesuit education, but when you set down the initial laws of Mankind, I can't see what law takes precedence over a human being's life." [NY, Firm 2, Respondent 7]

Also:

"I think in situations like this sometimes there is a higher law and I think that is what he is following. That is why I say it is illegal but not immoral. He is following a higher law of responsibility to help another human being to the best of his ability . . . The moral law in this case transcends the legal law." [NO, Firm 1, Respondent 6]

STAGE 6 RESPONSES

Kohlberg's final stage is the stage of Universal-Ethical-Principles. The principles of justice, equality of human rights, and respect for the dignity of human rights are paramount at stage 6. The principle of "treat everyone as an end, not as a means" is the guiding philosophical force; obligations are defined in terms of universal ethical principles of justice; these universal principles form the socio/legal system from which our law are derived. An example of stage 6 reasoning in response to whether Heinz should steal the drug:
"It is wrong legally but right morally. Systems of law are valid only insofar as they reflect the sort of moral law all rational humans can accept. The existence of an implicit social contract and the violation of the conditions of the contract is always something that must be considered. If one goes this far, one must consider the personal justice involved, which is the root of the social contract. The ground on which society should be created is individual justice, the right of every person to an equal consideration of his claims in every situation, not just those which can be codified in law. Personal justice means, 'treat each person as an end, not a means.'" [S.M., Part 1, p. 27]

No stage 6 responses were encountered during this research with accountants; only a small number of accountant responses were scored at the Postconventional or Principled Level, and those that were scored at the Principled Level were predominantly stage 4/5, with only one clear stage 5 score (on dilemma only) found. There was no respondent that clearly responded at stage 5 over all three dilemmas.

Summary

This chapter has described the research methodology utilized in this research study. Particular attention was given to various demographic characteristics of the sample, as well as the sample selection process itself.

Given the importance of Kohlberg's 1979 Scoring Manual to this research, numerous examples of responses typical of the various stage scores were presented from the 1979 Scoring Manual to illustrate the six stages of moral judgment. Additionally, a number of responses from this research sample provided further examples of stage scoring.
The following chapter (Analysis of the Data) will present results of the hypotheses testing using the data collected from 54 sample respondents. Since this study employed a "nested" design (that is, partner/junior differences are nested within each firm, and firm differences are nested within each city), both the parametric nested-design ANOVA and a non-parametric rank-transformed nested-design ANOVA will be employed for hypotheses testing at the .05 level of significance.

In addition to the use of the "nested" design ANOVA for hypotheses 2, 3, and 4, hypothesis one will be tested using the non-parametric sign test first suggested by Arbuthnott [Daniel, 1978, p. 27ff].
CHAPTER IV

ANALYSIS OF THE DATA

This chapter will present an analysis of the data collected from 54 randomly selected employees of three "Big-Eight" accounting firms. Table 8 presents the distribution of Moral Maturity Scores (MMS) as well as age, sex, and employment status of the sample respondents by firm and city.

The four hypotheses stated in Chapter 3 were tested at the .05 level of significance; each hypothesis and the related statistical tests are presented below.

Hypothesis 1

The first hypothesis was stated as:

\[ H_0: \text{The level of moral development of accountants} \geq \text{Kohlberg's level 5.} \]

\[ H_A: \text{The level of moral development of accountants} < \text{Kohlberg's level 5.} \]

This hypothesis was stated to determine whether auditors have developed to Kohlberg's level 5 as measured by the KMJI. Hypothesis 1 was tested by using Arbuthnott's one-sample sign test. The assumptions of Arbuthnott's sign test are:

A. The sample available for analysis is a random sample from a population with [an] unknown median M.
B. The variable of interest is measured on at least an ordinal scale.
TABLE 8
MORAL MATURITY SCORES (MMS) BY CITY, FIRM, AND RESPONDENT

<table>
<thead>
<tr>
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<th></th>
<th>New Orleans</th>
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<td>Age</td>
<td>Education&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>429*</td>
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<sup>1</sup>F denotes female; blank denotes male

<sup>2</sup>Highest attained degree; blank denotes Bachelor's degree

<sup>*</sup>denotes partner
C. The variable of interest is continuous. The \( n \) sample values are designated by \( X_1, X_2, \ldots, X_n \) [Daniel, 1978, p. 27].

The 54 responses obtained in this study represent a random sample of Big-Eight partners and juniors in New Orleans and New York City. The responses were measured on an ordinal scale and were continuous.

Arbuthnott's sign test converts the data being analyzed to a series of plus or minus signs. If the null hypothesis (the level of moral development of accountants \( \geq \) Kohlberg's level 5) is true, then approximately one-half or more of the observed MMS should be \( \geq 500 \). If a sufficiently large number of observed MMS are less than 500, the null hypothesis must be rejected.

An examination of Table 8 indicates that all 54 respondents display MMScores of less than 500 (Kohlberg's level 5). Hence, the number of negative signs equal 54, and positive signs equal zero. By using Arbuthnott's one-sample sign test, the number of positive signs (\( K \)) equal zero, and \( n=54 \), and solving for \( z \) at the .05 level of significance, hypothesis 1 is rejected (that is, the level of moral development of accountants in New Orleans and New York City is not equal to Kohlberg's level 5), since the probability of observing a value of \( z \) of -7.21 is less than 0.00003 at the .05 level of significance (Siegel, 1956, Table A, p. 247).

\[
\begin{align*}
z &= \frac{(K + .5) - .5n}{.5 \sqrt{n}} \\
&= \frac{(0 + .5) - .5(54)}{.5 \sqrt{54}} \\
&= -7.21
\end{align*}
\]

By extension, a sub-hypothesis that the level of moral development \( \geq \) Kohlberg's level 4 (MMScore of 400) was tested:
\[ K = \text{number of positive signs} = 7 \]
\[ n = \text{number of positive and negative signs} = 50 \]

\[ z = \frac{(K + .5) - .5n}{.5 \sqrt{n}} = \frac{(7 + .5) - .5(50)}{.5 \sqrt{50}} = -4.95 \]

This sub-hypothesis is also rejected; the probability of observing a value of \( z \) of -4.95 is less than 0.00003 at the .05 level of significance (Siegel, 1956, Table A, p. 247).

As illustrated in Table 9, the median MMS score of partners is between 373 and 375; for juniors, the median MMS score is between 368 and 370. The combined median for both partners and juniors is 373. Table 10 illustrates the firm, city, and overall MMS score means; the overall mean for the entire sample is 374.5. Both the median and mean measures strongly support the rejection of hypothesis 1.

**Implications of Hypothesis 1**

The rejection of hypothesis 1 implies that accountants in this study have not developed to Kohlberg's postconventional level (stages 5 and 6). As stated earlier in chapter 3, the postconventional level of moral development would indicate a clear effort to define moral values and principles that would be universal to all people in all circumstances. Accordingly, societal needs and the public interest are best served with postconventional development. A profession exhibiting a high level of moral development would indicate a high level of responsibility for, and responsiveness to,
TABLE 9
RANKING OF MMS SCORES BY
PARTNER AND JUNIOR

$n_1=18$  \hspace{1cm} $n_2=36$

<table>
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<tr>
<th>Partners</th>
<th>Juniors</th>
<th>Combined Ranking</th>
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<td>277</td>
<td>277 \hspace{1cm} P \hspace{1cm} 381</td>
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<tr>
<td>345</td>
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<td>373</td>
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<tr>
<td>373 \hspace{0.5cm} Median</td>
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<td>429</td>
<td>368 \hspace{0.5cm} Median</td>
<td>364 \hspace{1cm} 435</td>
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|              |       |       |
| 370          | 373 \hspace{0.5cm} Median | 365 \hspace{1cm} 373 |
| 373          | 367 \hspace{1cm} 373 |
| 377          | 368 \hspace{1cm} 373 |
| 377          | 368 \hspace{1cm} 373 |
| 377          | P \hspace{1cm} 370 |
| 380          | P \hspace{1cm} 370 |
| 386          | 370 \hspace{1cm} 373 |
| 390          | P \hspace{1cm} 373 \hspace{1cm} Median |
| 392          | P \hspace{1cm} 373 |
| 392          | 373 \hspace{1cm} 373 |
| 400          | 373 \hspace{1cm} 373 |
| 400          | 375 \hspace{1cm} 377 |
| 400          | P \hspace{1cm} 377 |
| 400          | 377 |
| 410          | 377 |
| 415          | 377 |
| 435          | 380 |

$N = 54$

P denotes Partner
<table>
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<tr>
<th></th>
<th>New York City</th>
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</tbody>
</table>
societal needs and the public interest. Additionally, if the accounting profession operated at stage 5, the strong implication would exist that government regulation would decrease, rather than increase, the societal good.

The results of this hypothesis indicate that sampled accountants have not developed to Kohlberg's stage 5, but rather exhibit stage 4, and lower, development. To the extent this sample is representative of the accounting profession, the conclusion of stage 4 and lower moral development (the conventional levels) is that the accounting profession should perhaps take appropriate action to assure higher level moral development as a condition to public practice. If no action is taken, then moral development in the accounting profession will likely plateau at stage 4. Since stage 4 is characterized as a conformity with, and loyalty to, the social order, as well as actively maintaining and justifying this social order, it is possible that the accounting profession might be resistant to change. More importantly, this resistance to change could possibly lead to more governmental intervention and regulation.

This concern with societal change responsiveness and governmental regulation of the accounting profession has not gone unnoticed by the AICPA leadership. In October, 1982, outgoing AICPA chairman George D. Anderson stated: "We, as a profession, must . . . be able to demonstrate [that] the services we perform are of a meaningful nature to our clients and are in the public interest" [The CPA Letter, October 25, 1982, p. 1, emphasis added]. If the
profession heeds Mr. Anderson's admonition, then increasing the
moral development of the accounting profession is a logical step in
the right direction.

Hypotheses 2, 3, and 4

The second, third, and fourth hypotheses were stated as:

\[ H_2: \ H_0: \text{The level of moral development of partners} = \]
the level of moral development of juniors.

\[ H_A: \text{The level of moral development of partners} \neq \]
the level of moral development of juniors.

\[ H_3: \ H_0: \text{The level of moral development of } AF_1 = AF_2 = AF_3 \]
\[ H_A: \text{The level of moral development of } AF_i \neq AF_j, \text{ for} \]
some \( i, j = 1, 2, 3, i \neq j \), and where \( AF \) denotes
a selected accounting firm.

\[ H_4: \ H_0: \text{The level of moral development of } A_{NY} = A_{NO} \]
\[ H_A: \text{The level of moral development of } A_{NY} \neq A_{NO} \]
where \( A_{NY} \) denotes accountants interviewed in New
York and \( A_{NO} \) accountants interviewed in New
Orleans.

The structure of this study suggests the use of a nested
design in which the factor status (partner or junior) is nested
within firm (1, 2, or 3), which is itself nested within city (New
York or New Orleans). The linear model for such a design is

\[ Y_{ijkl} = \mu + c_i + f_j(i) + s_{k(ij)} + e_{l(ijk)} \]

where

\( Y_{ijkl} \) denotes the MMS for individual \( l \) with status \( k \) in
firm \( j \) in city \( i \).
\( \mu \) denotes the average MMS for all individuals in the population.

\( c_i \) denotes the city effect, \( i = 1, 2 \)

\( f_j(i) \) denotes the firm effect, \( j = 1, 2, 3 \)

\( s_k(ij) \) denotes the status effect, \( k = 1, 2, \ldots \)

\( e_{l(ijk)} \) denotes the unexplained random variation, \( l = 1, 2, \ldots, n_{ijk} \)

It is assumed that the \( e \)'s are independent, identically distributed \( n(0, \sigma^2) \) random variables. Of course, this assumption implies that the \( Y \)'s themselves are independent, identically distributed normal random variables as well.

To determine whether or not the assumption of normality is valid for the data of this study, skewness \( (\alpha_3) \) and kurtosis (peakedness) \( (\alpha_4) \) were calculated. Skewness \( (\alpha_3) = -0.349618 \) (slight negative skewness) and kurtosis \( (\alpha_4) = 5.28091 \). Since kurtosis is 3 for the normal distribution, it appears that the parent distribution for these observations has heavier tails and hence differs significantly from the normal. Heavier tails indicate a greater probability of occurrence in the extreme tail ends of this distribution than would exist in the normal distribution.

This hypothesis of normality was further tested using a modification of the Kolmogorov goodness-of-fit test. The assumptions of the Kolmogorov goodness-of-fit test are that "The data consist of the independent observations \( X_1, X_2, \ldots, X_n \), constituting a random sample of size \( n \) from some unknown distribution function" [Daniel, 1978, p. 268]. Since use of the Kolmogorov test
is permissible only when both the mean and variance of the distribution function are known, the modification presented by Lilliefors was employed [Conover, 1980, p. 357ff]. Lilliefors's modification tests the hypothesis of normality without specifying the mean or variance of the normal distribution; the Kolmogorov goodness-of-fit test assumptions of independent observations and a random sample still exist. The obtained p-value of .092 indicates a possible trend away from normality.

As an exploratory device for examining the differences among the levels of the factors in this study, the overall means for each level of each factor were calculated. These are given in Table 11 below. No strongly significant differences are readily apparent among the Factor Means in Table 11.

| TABLE 11 |
| FACTOR MEANS FOR MMS DATA |

<table>
<thead>
<tr>
<th>Level</th>
<th>City</th>
<th>n</th>
<th>MMS</th>
<th>Firm</th>
<th>Level</th>
<th>MMS</th>
<th>Status</th>
<th>n</th>
<th>MMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.O.</td>
<td>27</td>
<td>373.9</td>
<td>1</td>
<td>18</td>
<td>377.4</td>
<td>Junior</td>
<td>36</td>
<td>372.1</td>
<td></td>
</tr>
<tr>
<td>N.Y.</td>
<td>27</td>
<td>375.1</td>
<td>2</td>
<td>18</td>
<td>375.2</td>
<td>Partner</td>
<td>18</td>
<td>379.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>18</td>
<td>370.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n=54

An examination of the data in Table 10 indicates that one of the individuals in the data set had a MMS score of 277. This value is 3.6 standard deviations from the overall mean of the scores.
and therefore deserves consideration as a possible outlier (defec-
tive datum). Therefore, the skewness and kurtosis were recalculated
after deleting this observation and quite different results were
obtained: \( \alpha_3 = 0.607675 \) (positive skewness) and \( \alpha_4 = 2.947674 \)
(almost the same as the normal distribution). The Lilliefors test
for normality yielded quite different results as well: with the
apparent outlier deleted, the calculated value of the test statistic
had an approximate p-value of 0.023, indicating a significant
departure from normality. The factor means were also strongly
affected, as indicated in Table 12 below.

<table>
<thead>
<tr>
<th>City Level</th>
<th>n</th>
<th>MMS</th>
<th>Firm Level</th>
<th>n</th>
<th>MMS</th>
<th>Status</th>
<th>n</th>
<th>MMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.O.</td>
<td>26</td>
<td>377.7</td>
<td>1</td>
<td>17</td>
<td>383.3</td>
<td>Junior</td>
<td>35</td>
<td>374.8</td>
</tr>
<tr>
<td>N.Y.</td>
<td>27</td>
<td>375.1</td>
<td>2</td>
<td>18</td>
<td>375.2</td>
<td>Partner</td>
<td>18</td>
<td>379.3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>18</td>
<td>3</td>
<td>18</td>
<td>370.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Due to the presence of an apparent outlying observation and
the rejection of the hypothesis of normality for the data once this
observation was removed, it was decided to consider a nonparametric
alternative to the usual analysis of variance (ANOVA) procedures for
a nested design. No nonparametric equivalent exists for analyzing a nested design; however, Conover suggests:

"The recommended procedure in experimental designs for which no nonparametric test exists is to use the usual analysis of variance on the data and then to use the same procedure on the rank transformed data. If the two procedures give nearly identical results the assumptions underlying the usual analysis of variance are likely to be reasonable and the regular parametric analysis valid. When the two procedures give substantially different results, the analysis on ranks is probably more accurate than the analysis on the data and should be preferred." [Conover, 1982, p. 337].

Therefore, it was decided to perform the usual ANOVA for nested designs on the original data and then apply it to the ranks of these observations, after they had been ordered from smallest to largest.

The ANOVA table for the analysis of the MMS scores is given in Table 13 below. Note that no significant differences among the levels of any of the factors were detected by this analysis.

As per Conover's suggestion, the rank transformed data were analyzed using the same procedures. The ANOVA table for this rank transformed analysis is given in Table 14 below. Based on this rank transformed analysis, there appears to be a marginally significant difference among the accounting firms (p~.052).

As can be seen from these analyses, different results were obtained when the rank transform was used. This could be due to any one of several factors, including (1) the slight negative skewness in the original data, (2) the apparent deviation from normality (p~.09) or (3) the presence of an apparent outlier. In an attempt to ascertain the effect of (3), both analyses were performed again, after deleting this outlier (the MMS of 277). The results for these
### TABLE 13
ANOVA FOR MMS VALUES

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>11</td>
<td>10770.0</td>
<td>979.09</td>
<td>1.45</td>
<td>.19</td>
</tr>
<tr>
<td>City</td>
<td>1</td>
<td>17.80</td>
<td>17.80</td>
<td>.03</td>
<td>.87</td>
</tr>
<tr>
<td>Firm (City)</td>
<td>4</td>
<td>4314.59</td>
<td>1078.65</td>
<td>1.60</td>
<td>.19</td>
</tr>
<tr>
<td>Status (City Firm)</td>
<td>6</td>
<td>6437.61</td>
<td>1072.94</td>
<td>1.59</td>
<td>.17</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>28269.5</td>
<td>673.08</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>39039.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 14
ANOVA FOR MMS RANKS

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>11</td>
<td>4341.04</td>
<td>394.64</td>
<td>1.89</td>
<td>.068</td>
</tr>
<tr>
<td>City</td>
<td>1</td>
<td>13.50</td>
<td>13.50</td>
<td>.06</td>
<td>.800</td>
</tr>
<tr>
<td>Firm (City)</td>
<td>4</td>
<td>2133.17</td>
<td>533.29</td>
<td>2.56</td>
<td>.052</td>
</tr>
<tr>
<td>Status (City Firm)</td>
<td>6</td>
<td>2194.38</td>
<td>365.73</td>
<td>1.76</td>
<td>.132</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>8751.46</td>
<td>208.37</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>13092.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
53 observations are given in Table 15 and the results for the 53 rank transformed observations are given in Table 16.

A comparison of Table 13 and 15 indicates that the deletion of the apparent outlier had a significant effect upon the results of the analysis of the original data. (Note that marginally significant differences among firms and between partners and juniors are now indicated.) However, as expected, a comparison of Tables 14 and 16 indicates that the conclusions drawn from the analysis of the ranks are the same whether the apparent outlier is included or deleted. These results reinforce Conover's opinion that the rank transform technique is more appropriate for these data and therefore should be used in this study.

An examination of Table 14 and 16 indicates a (marginally) significant difference among the firms. In order to detect which differences between pairs of firms caused this difference, the least significant difference technique [Kirk, 1982, p. 466] was applied to the three possible pairwise comparisons of average MMS rank for the firms. No significant differences were found, so it must be concluded that the significant F statistic indicates a significant contrast which is not a pairwise comparison [Kirk, 1982, p. 115].

The conclusion from the ANOVA for the rank transformed MMS data is that no significant differences exist among cities, firms, or juniors and partners. Even though the overall F statistic for firms was marginally significant (p<.052), no significant differences between pairs of firms could be found. Consequently, hypothesis 2, 3, and 4 cannot be rejected.
### TABLE 15
ANOVA FOR MMS VALUES WITH APPARENT OUTLIER DELETED

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>11</td>
<td>10167.19</td>
<td>924.29</td>
<td>1.98</td>
<td>.057</td>
</tr>
<tr>
<td>City</td>
<td>1</td>
<td>88.15</td>
<td>88.15</td>
<td>.19</td>
<td>.666</td>
</tr>
<tr>
<td>Firm (City)</td>
<td>4</td>
<td>4616.97</td>
<td>1154.24</td>
<td>2.47</td>
<td>.060</td>
</tr>
<tr>
<td>Status (City Fin)</td>
<td>6</td>
<td>5462.06</td>
<td>910.34</td>
<td>1.95</td>
<td>.096</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>19186.70</td>
<td>467.97</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>29353.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 16
ANOVA FOR MMS RANKS WITH APPARENT OUTLIER DELETED

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>11</td>
<td>4260.34</td>
<td>387.30</td>
<td>1.96</td>
<td>.060</td>
</tr>
<tr>
<td>City</td>
<td>1</td>
<td>55.04</td>
<td>55.04</td>
<td>.28</td>
<td>.601</td>
</tr>
<tr>
<td>Firm (City)</td>
<td>4</td>
<td>2216.63</td>
<td>554.16</td>
<td>2.80</td>
<td>.038</td>
</tr>
<tr>
<td>Status (City Firm)</td>
<td>6</td>
<td>1988.68</td>
<td>331.45</td>
<td>1.67</td>
<td>.152</td>
</tr>
<tr>
<td>Error</td>
<td>41</td>
<td>8116.66</td>
<td>197.97</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>12377.80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Implications of Hypothesis 2

The hypothesis of equality (between partners and juniors) could not be rejected using the rank transformed nested ANOVA as suggested by Conover. Further, the nonparametric Mann-Whitney U test also resulted in non-rejection of the null hypothesis of equality (calculated $T = -0.5809$; the two-tailed $z$ values are ±1.96).

Intuitively, partners were expected to demonstrate a higher level of moral development than juniors. Partners were significantly older (mean age of partners was approximately 44; for juniors, approximately 24.3), were more likely to be married and be parents, more likely to have had major life crises (death, accidents, etc.) and had more experience than did the juniors.

This equality of moral development reinforces Kohlberg's findings that moral development plateaus in the early 20s. Two possible explanations arise from the stage 3 and 4 (conventional level) plateau: first, the work and living environments of individuals after completion of their formal education may not offer the impetus for moral development. Kohlbergian theory indicates that individuals prefer moral reasoning one stage higher than that stage they occupy. However, if most, if not all, other individuals one comes into contact with also exhibit the same (or lower) stage development, then little or no opportunity exists to observe and internally assimilate higher stage reasoning, and consequently, development cannot occur. Kohlberg also implies that higher stage development is more likely to be observed in very highly educated persons. His few recorded post-conventionally developed (stage 5
and/or 6) were predominately either graduate students or PhDs in philosophy and the social sciences. These post-conventionally developed individuals are quite unlikely to be members of the same social groups or settings as accountants. Hence, the feedback necessary for cognitive and moral growth is unlikely to exist in the accountants social infrastructure.

Secondly, and somewhat analogous to the preceding explanation, is that stage 3 and 4 individuals actively promote and encourage the status quo. This "active promotion" of the status quo suggests a relative lack of change responsiveness (or a rather high resistance to change). If an individual is "locked-into" his or her belief system or position in society, it becomes increasingly difficult to focus on a universal morality for all individuals without the existence of some external stimulus. This explanation implies that some "change agent" is required to move from conventional to post-conventional moral development. If this "change agent" does not exist in the individual's environment, spontaneous growth is unlikely to occur.

If the accounting profession determines that post-conventionally developed individuals are desirable to serve the public interest, then the AICPA would be a logical choice as this "change agent." Moral development can be encouraged; moral development courses can be implemented in college accounting curricula, in professional schools of accounting, and in professional development programs (both "in-house" and AICPA/state sponsored programs). No doubt exists that implementing these moral development courses will
be expensive; neither should there be much doubt that many accountants will resist such activity as a transgression of their personal or moral rights. Yet the cost, to accountants, to their clients, and to society, of governmental regulation and intervention, can be staggering. As long as the accounting profession operates with a conventional morality, governmental regulation in some form appears inevitable. The profession must decide if the cost of implementing moral development opportunities is less in the long run than continuing governmental intervention or the erosion of public opinion.

**Implications of Hypotheses 3 and 4**

The hypotheses of equality between firms (H3) and between cities (H4) could not be rejected using the rank transformed nested ANOVA as suggested by Conover. Further, even though the overall F statistic (p~.052) was marginally significant for firms (H3), a subsequent "least significant difference" technique as suggested by Kirk failed to discover any significant differences among the three possible pairings of firms.

The hypotheses of equality of moral development between firms and cities were stated to gain information that heretofore was unknown. No intuitive or a priori assumptions were made regarding whether equality of moral development between firms and cities would, or would not, exist. However, the inability to reject the hypotheses of equality reinforces Kohlberg's postulate of cultural universality. The absence of significant differences in moral
development among firms or between cities argues that cultural or environmental factors have little, if any, influence on the attained level of moral development of accountants sampled in this study.

The Summary of Results of these four hypotheses tests are presented in the following section.

Summary of Results

Four hypotheses were analyzed in this chapter using non-parametric and parametric statistical techniques at the .05 level of significance. Table 17 summarizes the tests of hypotheses.

Chapter 5 will present summaries and conclusions of this study, as well as potential future research areas.

TABLE 17
HYPOTHESES TESTS SUMMARY

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>TEST</th>
<th>REJECT NULL HYPOTHESIS AT THE .05 LEVEL OF SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arbuthnott's one-sample sign test</td>
<td>YES</td>
</tr>
<tr>
<td>2</td>
<td>Rank Transformed Nested ANOVA &amp; Mann-Whitney U</td>
<td>NO</td>
</tr>
<tr>
<td>3</td>
<td>Rank Transformed Nested ANOVA</td>
<td>NO</td>
</tr>
<tr>
<td>4</td>
<td>Rank Transformed Nested ANOVA</td>
<td>NO</td>
</tr>
</tbody>
</table>
CHAPTER V

SUMMARY, LIMITATIONS OF THIS STUDY, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

Criticism of the moral behavior and conduct of business and professional groups has been increasing in recent years. The accounting profession has for decades been concerned with the public trust granted to it as auditors of American business. Since the public trust is encouraged by the technical competence and moral development of its practitioners, this study was concerned with measuring the level of moral development in the accounting profession.

Lawrence Kohlberg developed his Moral Judgment Interview to measure the attained level of moral development in individuals. Extensively researched by numerous scholars, Kohlberg's theory has been empirically tested, using his Moral Judgment Interview as the measurement instrument, both longitudinally and cross-sectionally, and is the only known instrument for measuring moral development of individuals. The use of Kohlberg's instrument to examine the moral development exhibited by auditors in public accounting appears to be the first time that moral development of accounting practitioners has been specifically measured.
Kohlberg's instrument was individually administered to 54 randomly selected audit partners and staff auditors (juniors) from three "Big-Eight" accounting firms located in New York City and New Orleans. Non-parametric and parametric statistics were employed to test the four hypotheses of this study. These hypotheses are described below:

**Hypothesis 1:** The level of moral development of auditors was Kohlberg's level 5 or greater.

According to Kohlberg [1977a], the postconventional levels (5 and 6) indicate a clear effort to define moral values and principals universal to all people. Society is best served with postconventional moral development, according to Kohlberg. If the accounting profession has not attained level 5, then it operates at the conventional levels (3 and 4). Since the conventional level moral development is characterized as actively maintaining the status quo and an allegiance to it, a profession exhibiting conventional development would generally be resistant to change for the societal good. This "resistance to change" often leads to governmental intervention and regulation.

**Hypothesis 2:** The level of moral development of partners equaled the level of moral development of juniors.

Intuitively, one would suspect that partners, by virtue of age, experience, and maturity, would exhibit greater moral development than juniors. If, in fact, there exists no difference in moral development between the sampled partners and juniors, the implication then exists that moral development plateaus in an individual's
early 20s. Kohlberg's research [1977b] tends to support this "early 20s" plateau.

**Hypothesis 3:** The level of moral development of auditors in each firm was statistically equal.

**Hypothesis 4:** The level of moral development of auditors in each city was statistically equal.

The last two hypotheses were postulated to obtain information regarding firm and city comparisons heretofore unknown. One of Kohlberg's two major tenets is that of cross-cultural universality. Rejection of either (or both) hypothesis 3 and 4 would cast doubts on this tenet of Kohlberg's theory of moral development. However, the absence of any differences between firms and cities would lend strength to the argument that cultural or working environments would have little, if any, influence on the attained level of moral development of auditors.

In this study, the first hypothesis was rejected and the second, third, and fourth hypotheses could not be rejected at the .05 level of significance. The findings of this study indicate:

1. The level of moral development exhibited by accountants was less than Kohlberg's stage 5; the results indicate that sampled accountants attained a mixed stage 4(3), which is a preponderance of stage 4 and approximately 25% stage 3 reasoning.

2. There was no statistical difference in moral development between juniors and partners, between firms, or between cities.

These results also support other studies that indicate that moral development plateaus at stage 4 for the majority of Americans
(Holstein [1976]; Rest, Davidson, and Robbins [1979]; Colby, Kohlberg, and Gibbs [1979b], among others). Colby asserts:

Since moral reasoning clearly is reasoning, advanced moral reasoning depends upon advanced logical reasoning. A person's logical age has been found to put a ceiling on the moral stage she/he can attain . . . . Logical development, then, is necessary for moral development and sets limits to it, but it is not sufficient. Most individuals are higher in logical stage than they are in moral stage [Colby, et al., 1979a, p. 13].

Since moral development lags behind intellectual development, the path toward moral development lies in additional education. If the American society feels a higher level of moral development is necessary for its auditors, then the mission of American colleges and schools of accounting and/or business should incorporate moral education in the 80's curricula.

The following sections of this chapter discuss limitations of this study and recommendations for further research in this area.

**Limitations of This Study**

A major limitation of this study was that no employees between the junior staff level and partners were sampled. The two employee levels omitted are generally referred to as seniors and managers. The rationale for this decision to omit seniors and managers was based on Kohlberg's developmental stage theory. In Kohlberg's paradigm, stage structure is universal and sequential [Kohlberg, 1971b] and is non-regressive. Kohlberg states:

Stages are defined as differences in form or organization of responses, not in the content or function of the response. Each . . . (higher) stage involves a new set of interests and concerns and defines a new function, e.g., finding an identity. Each cognitive or moral stage serves the same function, logical inference or moral judgment, but serves it
in a new way, form or pattern of functioning [Kohlberg, 1977b, p. 188].

For purposes of this study, employees with the greatest difference in age and experience would be the two groups most likely to demonstrate differences in moral development, if any such difference exists at all. Since the partner-junior classification of employees exhibited the greatest differences in age and experience, they served as the sample population for this study.

A second limitation of this study was the number of employees interviewed and number of accounting firms represented. Since each in-depth personal interview was expected to take (and actually did take) 1 1/2 to 2 hours per interview, the amount of time donated by these accounting firms was very substantial. Further, since the billing rates of partners were four to five those of juniors, the opportunity cost to the firms was significantly greater for the partners' time. Also, the possibility of future longitudinal studies suggested that increasing the number of juniors interviewed (from 18 to 36) should be attempted. Each firm agreed to this request. Financial limitations precluded participation of more than three firms in this study; if this research encompassed the remaining five "Big-Eight" firms, these findings may have differed.

The conclusions reached in this study were based on "Big-Eight" auditors from three firms interviewed in two cities. Since financial limitations precluded interviewing in other major metropolitan areas, the same limitations mentioned above also apply;
consequently, location bias may exist. Since no local and/or regional accounting firms were interviewed, the findings of this study may not be applicable to non-"Big-Eight" auditors.

A further limitation exists by the use of auditors as the research group. Employees and partners in the tax and management service areas of the accounting profession were specifically excluded from this study. Consequently, the results of this study may not be applicable to tax and management service personnel.

Two final limitations exist regarding the Kohlbergian methodology employed in this study. First, some subjects interviewed may have had prior exposure to Kohlberg's interview and/or may be familiar with stage responses. While this prior exposure to Kohlbergian theory is much more likely in subjects with training or education in psychology or education, the possibility of prior exposure of auditors interviewed in this study cannot be ignored.

Secondly, errors in scoring the auditors' interviews could exist. Substantial time and money was spent for initial scoring of these interviews. Further, Harvard University's Center for Moral Development was employed to rescore approximately 25% of the original interviews to assure scoring reliability. Nonetheless, scoring errors could still exist, thereby adversely affecting the results of this research.

Recommendations for Further Research

The preceding section indicates several limitations of this study that further research should address. It would appear
beneficial if subsequent research was directed to all professional staff (juniors, seniors, managers, and partners) to ascertain if the level of moral development is similar among these employees. It also appears to be beneficial to expand the number of firms sampled to include all accounting firms (local and regional, as well as national). It is apparent that a significant expansion of this research to include all professional employees and all accounting firms would require a very significant effort; it may be appropriate for the AICPA or the American Accounting Association (AAA) to allocate financial resources for supervision of further research in this area. Additionally, a longitudinal study of auditors interviewed in this study could be conducted to determine if changes in their moral development occur over time.

Significant additional work is required to determine the actual level of moral development required for CPAs to meet society's expectations and/or needs. The AICPA's Code of Ethics does not state a "level of moral development" that CPAs should possess in order to practice public accounting. Research should be directed toward determining if such a "level of moral development" should be attained by an individual entering the profession; further, what level of development (e.g., conventional-stage 4; postconventional-stage 5; or some other stage) that is desirable, and attainable, should be examined.

Further, if the AICPA were to state that a certain level of moral development of CPAs is desirable, the implications for regulatory agencies (such as the SEC and IRA) must be investigated.
The implications of such a position with regard to the business users of CPA services must also be researched. Finally, substantial additional research would be required to determine the most cost-effective method for raising the accountants' level of moral development.

In addition to expanding this original research, additional research along the lines of this study examining other professionals (e.g. attorneys, physicians, engineers) and public servants (elected officials, Senators, Representatives, ranking federal, state, and local employees, among others) should prove interesting. This research could also be extended by measuring if differences in moral development exist between accounting firms that have recently experienced significant lawsuits (or criminal actions) brought against them and those firms without such recent experience.

Another fruitful area for research would lie in the development of business and/or accounting related dilemmas for use in measuring moral development in a "real-world" environment. While Erdynast [1974] has done some preliminary work in this area, significant additional work still remains.

Finally, the area of "values" education in the typical business/accounting curricula of universities has been largely unexplored, and should warrant additional research. It appears that "values" and "moral development" can be taught; Reimer [1981] states that both moral judgment and moral action increased in a high school after introduction of moral discussion programs. Candee [1980] prepared an "in-house" program for medical pediatric residents that
was successful in increasing moral analytical reasoning ability (the ability to identify moral categories, to construct philosophical arguments, and to identify the steps in the moral reasoning process). Candee's program took place during morning rounds and required less than forty hours of case presentation (and no outside time on the part of the residents). With Candee's pioneering research applied to a work environment, the tools for extension of "values" education to "in-house" programs and seminars have been developed. With additional research and modification, these tools can be applied at the university level as well as "in-house" programs.
REFERENCES


______. Rules of Conduct and Bylaws (as amended March 31, 1978).

______. The CPA Letter, Special Supplement (August 1977).


Meyer, John; Bernham, Brian; and Cholvat, John, eds. Values Education: Theory/Practice/Problems/Prospects. Waterloo, Ontario, Canada: Wilfred Laurier University Press, 1975.


Peters, Richard S. "A Reply to Kohlberg 'Why Doesn't Lawrence Kohlberg do his Homework?'" Phi Delta Kappan LVI (June 1975): 678.


Public Oversight Board Report. "Scope of Services by CPA Firms," published for the Public Oversight Board of the SEC Practice Section of the Division for CPA Firms of the American Institute of Certified Public Accountants, March 9, 1979.


APPENDIX A

KOHLBERG'S MORAL JUDGMENT INTERVIEW (FORM A)
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VITA

Guy L. Tull, Jr. was born September 8, 1944, in Vicksburg, Mississippi, the son of Guy L. Tull and Ina Martak Tull. After graduation from Baton Rouge High School in Baton Rouge, Louisiana, he attended Louisiana State University, receiving the Bachelor of Science degree in 1966, and the Master of Science in 1973.

He received his Certified Public Accountant designation in 1967, and subsequently practiced as a sole practitioner and as a local firm partner in Baton Rouge. He has experience in the securities industry, as a small business owner and investor, and as comptroller for a meat-packing firm. During his Ph.D. studies in Accounting, he was an Assistant Professor of Accounting at California State University-Fullerton, and a graduate assistant and Instructor at Louisiana State University. In August of 1982, he accepted an Assistant Professorship of Accounting at the University of New Orleans.
EXAMINATION AND THESIS REPORT

Candidate: Guy L. Tull, Jr.

Major Field: Accounting

Title of Thesis: A Study of Moral Development of Selected Employees in Certain Public Accounting Firms

Approved:

[Signatures: Major Professor and Chairman, Dean of the Graduate School]

EXAMINING COMMITTEE:

[Signatures: Bart P. Hartman, Kenneth Y. Orbanel, Kenneth Oehler, Edmund R. Strong]

Date of Examination:

November 29, 1982