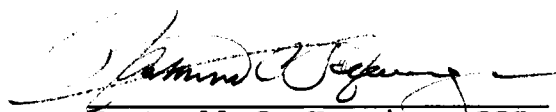
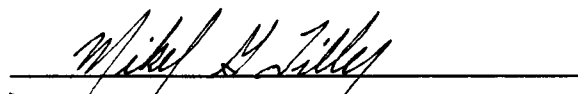


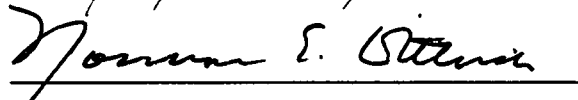
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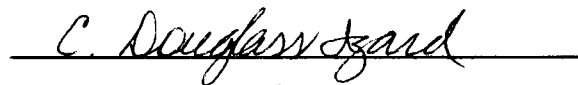
I am submitting herewith a dissertation written by John Milbourne Waters, II, entitled "An Empirical Assessment of Attitudes Toward Audit Opinions and Attitudes Toward Audit Reporting." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Business Administration.

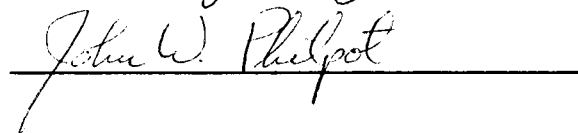

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We have read this dissertation
and recommend its acceptance:









Accepted for the Council:


Vice Provost
and Dean of The Graduate
School

AN EMPIRICAL ASSESSMENT OF ATTITUDES
TOWARD AUDIT OPINIONS AND ATTITUDES
TOWARD AUDIT REPORTING

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

John Milbourne Waters, II

March 1988

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This entire work is dedicated with love to my family, Kimberly, Andrew, and Bret. Without their patience and understanding I could not have spent the long hours away from them, nor would I have wanted to.

I would like to thank my dissertation committee, Hartwell C. Herring, III, Mikel G. Tiller, C. Douglass Izard, Norman E. Dittrich and John W. Philpot for their time, perseverance and encouragement. I would also like to thank the Department of Accounting and Business Law at the University of Tennessee for the financial support provided.

ABSTRACT

An expectation gap has been a continual problem for the accounting profession for over twenty-five years. This study indicates the continued existence of the expectation gap and provides evidence that a person's knowledge about the audit process is a factor in this gap.

Data was collected from members of three groups involved with the flow of financial information: Certified Public Accountants, Commercial Loan Officers, and Corporate Controllers. The data collection instrument was a mailed questionnaire. An overall response rate of 45.7 percent was achieved. The Total Design Method developed by Dillman in 1978 contributed to this response rate.

The Fishbein expectancy value model was used to measure attitudes toward audit opinions and attitudes toward audit reporting in general. Then differences in attitudes between the groups were assessed. The groups had significantly different attitudes toward the unqualified audit opinion and toward audit reporting in general.

Next, knowledge of the audit process was added to the analysis as a covariate. Knowledge is a significant covariate with respect to attitude toward the unqualified audit opinion and attitude toward audit reporting in general. With the covariate (knowledge) included in the model the significant differences between the groups' attitudes toward the unqualified audit opinion ceased to

exist. This finding coupled with the significance of the covariate indicates that knowledge of the audit process has an influence on an individual's attitude toward certain aspects of auditing.

The main conclusions include that the existence of the expectation gap will continue and that knowledge of the audit process does have an influence on attitudes.

The accounting profession has several options for addressing the problems created by the expectation gap. These include:

1. Better education regarding what the audit process is supposed to accomplish;
2. Better explanation in the audit opinion, especially in the unqualified audit opinion; and
3. A clear statement of the role and responsibilities of the auditor as determined through discussions with users of financial information.

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CHAPTER I

INTRODUCTION

Certified Public Accountants (CPAs) perform an integral function within our financial reporting framework and receive substantial fees for their services. However, people outside the accounting profession often do not have an understanding of the CPA's role. Carmichael (1979, p. 32) provides this description of the CPA's role:

The auditor is an intermediary between issuers of financial information and users. The social function of an audit is to scrutinize the account of their performance submitted by the management of an entity to those to whom they are accountable.

While this description provides a rationale for the auditing function, it does little to explain how or why an auditor performs his/her duties.

Statement on Auditing Standards Number One, (1972, p. 1) provides this description of the CPA's role:

The objective of the ordinary examination of financial statements by the independent auditor is the expression of an opinion on the fairness with which they present financial position, results of operations, and changes in financial position in conformity with generally accepted accounting principles.

Again, this definition provides little assistance to a person outside the accounting profession in understanding what an auditor's role is and how he/she performs that role.

A typical audit opinion contained in a corporate annual report is a two or three paragraph statement filled with technical jargon. These published opinions also do little to explain the auditor's role in the audit process to the statement users.

In the role of intermediary or attester the auditor is in the middle in the present scheme of financial reporting. Briefly, financial reporting encompasses three main stages. Stage one is the accumulation, aggregation, and dissemination of financial and non-financial information relating to a particular entity by management. Stage two is the review and attestation of the above financial information by the auditor. Stage three is the use, by many different types of users, of financial information provided by management and attested to by the auditor. Such users can include shareholders, debtholders, bankers, regulators, unions, employees, academics, and other interested third parties.

This study is an investigation regarding the understanding that persons from each of the above three stages have regarding the method of communication employed by the auditor. A survey instrument was used to determine the attitudes toward audit opinions by members of three

groups involved in the financial reporting process. The groups included were CPAs, Commercial Lending Officers (CLOs), and Corporate Controllers. Attitudes toward audit opinions in this study were used as the measure of understanding of the audit opinion by the group members. In some instances there is a difference in attitude toward audit opinions among the groups.

A. Nature of the Problem and Rationale for the Study

An agency perspective. Researchers who have described the nature of the principal-agent relationship provide an analytical foundation for the audit process. Information asymmetry between owners (principals) and managers (agents) may result in the need for an independent intermediary. In the existing model of the principal-agent relationship, CPAs serve as the independent intermediary.

In large publicly held corporations there is a separation of ownership and control of the entity. This separation can lead to two different sets of problems, one set is from the owners' perspective and the other is from management's perspective. These different sets of problems have been called goal incongruence and/or information asymmetry in the accounting literature. Owners incur monitoring costs to reduce the effects of information asymmetry, while management incurs bonding costs to reduce

the effects of information asymmetry. Owners have little direct knowledge of day to day operations and decisions of the companies in which they have an investment. Owners require financial information about companies in order to make informed investment decisions. Financial statements prepared by management are an important source of owners' financial information. Most management personnel do not own a material proportion of the outstanding stock of the companies which they manage. Therefore, managers, "do not bear a substantial share of the wealth effects of their decisions." (Fama and Jensen, 1983, p. 301.) Moreover, one goal of management is to meet an internal set of objectives including certain personal goals of a pecuniary nature. These objectives may or may not be congruent with the objectives of owners.

Separation of ownership and control offers the potential for conflicts of interest. A company's management has access to and controls all of the information regarding the company. Some information of interest to owners is available only from management. Therefore, the owners' information set may not be as complete as management's information set. Given the absence of complete congruence of management-owner goals, "there is good reason to believe that the agent will not always act in the best interests of the principal." (Jensen and Meckling, 1976, p. 308.)

Coupled with incongruence of goals, asymmetry of information between managers and owners enables managers to exercise wide latitude in handling the company's resources. Within the principal-agent framework the two sides need a method for mitigating information asymmetry. This need is especially important for owners since they are removed from the control function of the entity. The need for reducing information asymmetry from the managers point of view is not quite as obvious.

... in some situations it will pay the agent to expend resources (bonding costs) to guarantee that he will not take certain actions which would harm the principal or to ensure that the principal will be compensated if he does take such actions. (Jensen and Meckling, 1976, p. 308.)

One way of achieving this goal is to have the financial statements audited. Jensen and Meckling (1976) argue that since the manager already has access to all of the firm's financial information, then he/she should be able to provide such information at a lower cost than the owners. In this instance, "it would pay him to agree in advance to incur the cost of providing such reports and to have their accuracy testified to by an independent outside auditor." (Jensen and Meckling, 1976, pp. 338-39.)

The annual report provided to shareholders is one means of reducing information asymmetry. Financial statements may be the most important part of the annual report. They are management's representation of the complete information set of economic transactions and activities. Financial

statements only provide a summary of the company's operations for the accounting period. Therefore, the owners' information set is a subset of management's information set.

The auditor's function developed in response to the need of owners and management to reduce costs associated with information asymmetry (Jensen and Meckling, 1976.) Information asymmetry has direct costs to both the owners and managers of the firm. While these costs are difficult to measure, they can be explained from a theoretical perspective.

Jensen and Meckling (1976) provide a thorough discussion of the theory of the firm in a principal-agent framework. A firm has a potential market value equal to X if the principal and agent possess the same information, i.e. no information asymmetry. However, the existence of information asymmetry will prevent the market value of the firm from reaching X . One cost of information asymmetry is the undervaluing of the firm by the market. The market realizes there is a divergence in goals between owners and managers. A manager's goal is to attain the most wealth possible. Manager's wealth is a combination of pecuniary and non-pecuniary benefits. Pecuniary benefits consist of the manager's salary, bonus, and measurable fringe benefits. Non-pecuniary benefits may include, " . . . the physical appointments of the office, the attractiveness of the

secretarial staff, the level of employee discipline, the kind and amount of charitable contributions, personal relations . . . with employees, a larger than optimal computer to play with, purchase of production inputs from friends, etc." (Jensen and Meckling, 1976, p. 312.) Owners seek to maximize the value of their investments. Since the owners' information set is a subset of management's information set the possibility exists for management to hide excessive non-pecuniary benefits in the financial statements. Owners realize this potential exists, therefore the actual market value of the firm remains below X.

Owners realize that managers may attempt to increase their wealth through the appropriation of excessive nonpecuniary benefits. Owners then take action to limit the amount of managers' non-pecuniary benefits. Hiring an independent auditor is one action owners can take. The auditor assesses the fairness of management's report of the company's activities to the owners. The value of the firm hiring an auditor is assumed to be closer to X than if an auditor is not hired.

Two types of costs exist in the principal-agent framework which serve to mitigate reduction in firm value due to information asymmetry. Monitoring costs relate to actions initiated by principals to ensure that agents' actions are congruent with principals' goals. Bonding costs relate to actions initiated by agents which provide

principals with assurance that agents are keeping principals' goals in mind.

Auditors are usually monitors providing services for the owners' benefit. A premise of the audit function is to reduce costs associated with asymmetry of information between principals and agents. While an audit cannot be expected to eliminate information asymmetry, it may diminish its impact on a firm's value. The audit should reduce users' uncertainty about the fairness and completeness of the information disclosed by management.

The audit opinion is the most important element in auditor/principal communication and may be the only contact that some statement users have with the auditor. If the auditor's role is to reduce costs associated with information asymmetry, it follows that there should be some agreement among management, auditors, and users as to what the audit opinion means. If such agreement is not present then the audit opinion is not providing the necessary information in the proper manner.

An expectation gap perspective. The accounting profession has faced criticism regarding its performance on numerous occasions in the past two decades. A major reason for this criticism stems from the level of understanding or lack of understanding regarding what CPAs are supposed to do and how CPAs communicate their role. As early as 1974 the problem was described as:

. . . the "expectation gap," a factor of the levels of expected performance as envisioned by both the independent accountant and by the user of the financial statements. The difference between these levels of expected performance is the expectation gap. (Liggio, 1974, p. 27.)

Liggio further states:

The expectation gap stems from differing expectation levels as to both the quality and standard of the accounting profession's performance and what it is expected to accomplish. A prime example of this dichotomy is found in the belief of the consuming public, many regulators, courts and lawyers that the auditor is a guarantor or insurer of the company's financial solvency. This has been translated by some -- principally members of the Plaintiff's Bar -- into a guarantee of the quality of the investor's judgment. (Liggio, 1974, p. 28.)

In response to the rising tide of criticism from many sectors the accounting profession undertook a self-examination in the mid-1970's. The American Institute of Certified Public Accountants (AICPA) charged the Commission on Auditors' Responsibility¹ (Cohen Commission) with examining the role of auditors in society. The Cohen Commission's overall objective was to:

. . . develop conclusions and recommendations regarding the appropriate responsibilities of independent auditors. It should consider whether a gap may exist between

1. The Commission on Auditors' Responsibilities was formed in 1974 by the American Institute of Certified Public Accountants (AICPA). The Commission was chaired by the late Manuel F. Cohen and is commonly referred to as the Cohen Commission.

what the public expects or needs and what auditors can or should reasonably expect to accomplish. If such a gap does exist, it needs to be explored to determine how the disparity can be resolved. (Commission on Auditor's Responsibilities, 1978, p. xi.)

At the same time, the United States Senate and the United States House of Representatives were conducting investigations regarding the role of the accounting profession. The Congressional investigations and the Cohen Commission reached at least one similar conclusion, the expectation gap regarding the independent auditor's role and responsibilities existed.²

Evidence abounds that communication between the auditor and users of his work--especially through the auditor's standard report--is unsatisfactory. . . . Recent research suggests that many users misunderstand the auditor's role and responsibilities, and the present standard report only adds to the confusion. (Commission on Auditors' Responsibilities, 1978, p. 71.)

Currently, Representative John Dingall's (D-MI) Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce of the United States House of Representatives is scrutinizing the accounting profession. One of the profession's responses before the Subcommittee concerns the public's inability to distinguish between an audit failure and a business failure. This

2. The Senate Sub-committee was chaired by the late Senator Lee Metcalf of Montana. The House Sub-committee was chaired by former Representative John Moss of California.

inability is an outgrowth of the expectations gap identified in the early seventies.

In a recent article, Mednick asserts, "...the evidence continues to mount that the gap between auditors' stated objectives and users' perceptions is widening." (Mednick, 1986, p. 70.) Mednick further states:

One has to look only to the recent confusion surrounding the auditor's role--marked in recent litigation and congressional hearing testimony, by the apparent inability to distinguish between a business failure and an audit failure--to realize that something has to be done to resolve this problem soon. (Mednick, 1986, p. 71.)

The standard audit report currently in use has remained virtually unchanged since 1948. Since 1965 there have been four unsuccessful attempts to change the standard audit report. Presently, a project by the Auditing Standards Board is the fifth attempt by the profession to change the standard audit report in the last twenty-two years. (Landsittel, 1987, p. 80.) There have been repeated attempts to change the standard audit report, continual Congressional investigations, studies and articles dealing with the expectation gap. Presently, there is a general litigious atmosphere in the United States. The combination of all of these factors should be enough to prod the accounting profession into the realization that something has to be done to foster better communication between the auditor and the user of his/her work.

The accounting profession has time to make the necessary changes if appropriate action is taken soon. In 1986 Lou Harris and Associates, Inc., conducted an opinion poll for the AICPA. The major thrust of the poll shows that CPAs are held in high regard by all of the groups included in the survey. However, there are some areas that require the attention of the profession. One of those areas is the communication of or the understanding of the CPA's role:

. . . almost all of the general public, including those who know accountants and who own securities, simply do not understand the meaning of a clean opinion. The stakes in not preparing an accurate explanation of such a sign-off are high. If the misconception held by large numbers of people is not corrected, then CPA firms and the accounting profession will be highly vulnerable to be blamed for nearly anything that goes wrong with a company that receives a clean opinion. . . . Thus, it is not an overstatement when 8 in 10 among all of the groups say that "the accounting profession needs to be better understood." (Journal of Accountancy, December 1986, p. 34.)

The audit report should reduce the cost of information asymmetry between users and preparers of financial statements. If the audit report is to achieve this end then all involved with the audit report should agree on the assurance level the report provides. Evidence supporting different meanings ascribed to the audit report by users and auditors leads to a conclusion that such agreement on the level of assurance is not taking place. This non-agreement limits the reduction in the costs due to information

asymmetry versus the reduction achieved when there is agreement. Non-agreement also lessens the value of the audit report. If the highest potential value of the firm is to be attained, then the audit report must fulfill its objective in the most complete manner possible.

B. Research Objective

This study's research objective has two phases. The first phase is to demonstrate that differences in meanings ascribed to the audit opinion exist among auditors, preparers, and users. The second phase is to assess a possible cause of differences in ascribed meanings between groups. The posited cause of such differences is a link between subject knowledge of the audit process and subject attitudes toward the audit opinion. The measurement and calculation of knowledge and attitudes will be described in Chapter II and Chapter III, respectively.

There are four types of audit opinions:

1. Unqualified opinions;
2. Qualified opinions;
3. Disclaimer of opinions; and
4. Adverse opinions.

Of the four opinion types, auditors most commonly issue either an unqualified opinion or a qualified opinion. However, prior to issuance of the audit opinion, auditors

perform many hours of audit work. Audit work is performed in several stages including (but not limited to):

1. researching the client;
2. researching the client's industry;
3. performing preliminary reviews of the client's condition (both financial and otherwise);
4. planning the audit work; and
5. performing the audit procedures specified by the plan.

The result of the audit process is the expression of an opinion on the fairness of management's presentation of financial position and events for the period covered.

The summary of the audit process (the audit opinion) is usually the only interface between the auditor and the financial statement users. An integral part of this project is to determine how an individual's knowledge of the audit process affects his/her attitude toward different audit opinions.

C. Contributions

In recent years, the accounting profession increasingly contended with the expectation gap. An anticipated contribution of this study is to help us better understand this expectation gap. Assessment of differences in attitudes elicited by audit opinions and attitudes toward

audit reporting across the three groups included in the study will help determine how the accounting profession can begin to narrow the expectation gap. If attitudes elicited by (meaning of) the audit opinion differ across groups, then the argument regarding existence of the expectation gap is enhanced.

Ascertaining attitudes toward audit opinions will allow the profession to better identify what various groups expect from the audit process. If results show that groups have significantly different attitudes toward audit opinions and toward the audit process, then investigation of underlying reasons for such differences is necessary. Auditing is a service provided to the many different types of users mentioned earlier. Such users have diverse reasons for wanting audited financial statements, deriving from the need for information in making legal, regulatory, ethical, and valuation decisions. Given the diversity in both users and their needs, it becomes important for the accounting profession to perform and communicate the auditor's role in an understandable manner.

Several explanations may exist for differences in attitudes toward audit opinions among the groups. Knowledge about the audit process may be one such explanation. Other explanations may include educational background, work experience and/or a present employment situation. A common misconception regarding the audit process involves knowledge

about the amount of testing an auditor performs and the nature of such testing. Many individuals outside the accounting profession perceive the audit process as a complete review of all activities and transactions related to the entity undergoing an audit. Therefore, an individual's knowledge regarding the audit process and his/her corresponding attitudes toward audit opinions and audit reporting provide insight as to how members of various groups view the entire audit process.

A major concern of any profession, especially a service oriented profession, is to provide a service (in this case information) which is useful to those paying for the service. If the provider of a service and the receiver of a service do not agree on the nature of the service then inefficiencies and misunderstandings seem likely. Results of this study will provide insight into areas where the accounting profession can begin to narrow the expectation gap between preparers, auditors, and users of financial information in order to strengthen the accounting function.

Once attitudes and ascribed meanings of audit opinions and audit reporting for the three groups are identified, the accounting profession can assess ways to make these more similar. The accounting profession can assess the role auditors serve as perceived by both auditors and others. Through such an assessment the profession will be better able to define the role it should play in the overall

process of financial reporting. Three courses of action for the profession exist:

1. shift the profession's attitudes to meet users' expectations;
2. shift users' attitudes to match the profession's attitudes through user education; or
3. work with users and preparers to find a more common middle-ground which all groups better understand.

Any of these courses of action will result in better use of financial resources once all of the groups involved reach the same level of understanding regarding the audit report.

D. Organization of the Study

Chapter II includes a discussion of research related to the study from both accounting literature and psychological literature.

Chapter III is a discussion of research design and analyses, the mailed instrument, and the subjects.

Chapter IV presents and discusses results of the study. Calculated attitudes and knowledge scores are presented along with results of hypothesis tests.

Chapter V provides a summary of the empirical study and conclusions drawn therefrom.

CHAPTER II

RELATED RESEARCH

Accounting and psychology provide the background for this study. Accounting provides the framework within which the study of auditing is conducted, while the tools for measuring attitudes are from psychology. Both disciplines have studies and discourses pertinent to this particular project. This chapter includes a brief review of related writings from accounting and psychology. The heart of the study revolves around auditing. Therefore, related literature from the accounting field is presented in the first section of the chapter. Literature from the psychology field is presented in the second section of the chapter. The final section of the chapter is a brief summary.

A. Accounting Literature

Several areas of research within the accounting literature have either a direct or an indirect bearing on this study. One important phenomenon of this research is the continuing problem of defining the role of the accounting profession. This definition problem is evidenced by repeated discussions regarding an expectation gap between

users and auditors. However, in order for an expectation gap argument to have any merit the usefulness of auditor association with financial information should be demonstrated. Within this section the expectation gap literature is discussed followed by a discussion regarding the auditor association literature.

Expectation gap literature. Concerns regarding the meaning of audit opinions, especially to users, have arisen periodically in both the academic accounting literature and the popular financial press. Such concerns lead to much introspection and discussion within the accounting profession. Concurrent with above, public discussion about the audit opinion occurs, along with empirical investigations of the audit opinion's meaning. Four attempts at persuading the accounting profession to change the audit opinion have been unsuccessful since 1965. The last major attempt at changing the audit opinion arose from the work of the Cohen Commission which concluded its work and released its final report in 1978. However, even before the work of the Cohen Commission there were several calls for a better definition of the audit function and the meaning of the audit opinion.

Bevis (1962) makes a case for the attest function as part of the role of the CPA. He defines the attest function as, " . . . the expression of an opinion by an independent expert that a communication of economic data by one party to

another is fairly presented." (Bevis, 1962, p. 28.) CPAs have been performing this role in many areas of our society for years. A major premise of the attest function is communication. The message communicated needs to be understood in a similar manner by both the sender and the receiver. Since 1962 the auditor's role in the economy has expanded. Along with the expanded role of the CPA the attest function has expanded. Bevis (1962) had several suggestions for the profession to help strengthen such an expansion of the attest function. One suggestion was to: "educate issuers and users of economic data as to the attest-function's purpose, role, and value." (Bevis, 1962, p. 35.)

Roth (1968) made this observation regarding the move in the mid-1960's to change the standard auditor's report:

" . . . there is sufficient evidence to indicate that the present form of report . . . is understood differently by those who read it and by those who write it." (Roth, 1968, p. 63.) Again, the argument was made that the auditor's report was a communication tool and that both sides of the communication process need to have the same understanding of the meaning of the auditor's report. In 1968 the Committee on Auditing Procedure concluded the main objectives of a revision of the auditor's report should be:

1. To make the report more understandable to those who use it and, at the same time,
2. Have it acceptable both to clients and to those agencies which require it, but

3. Not to increase our legal responsibilities as a result of the revision. (Roth, 1968, p. 64.)

Education was also stressed at this juncture. All entities involved with the preparation and dissemination of financial information were encouraged to help educate the public regarding the meaning of the audit opinion. One solution was provided by then AICPA Administrative Vice President John L. Carey:

The simplest and most effective move to make with respect to this problem is to change the standard short form of the auditor's opinion so that it says just what it means, in terms that no intelligent person could plausibly claim he couldn't understand. (Roth, 1968, p. 64.)

The Summer 1974 issue of the Journal of Contemporary Business was devoted entirely to then current auditing topics. Liggio (1974) points out that the accounting profession had been under attack from many fronts; including the courts, the media, and the regulatory agencies since the 1960's regarding the quality of the profession's performance. (Liggio, 1974, p. 27.) This same argument can be used today as there have been repeated attacks on the accounting profession regarding the quality of the profession's performance throughout the 1970's and the 1980's. Liggio (1974) provides several reasons why the accounting profession may be on the receiving end of such attacks. One reason may be that many people regard accounting as merely a mathematical exercise. (Liggio,

1974, p. 29.) Another reason, the expectation gap problem, may have been created by the accounting profession in the mid-1930's. During that period the accounting profession had the auditor's opinion referred to as a certificate. "Auditors 'certified' the financial statements. The use of 'certificate' and 'certified' implied a degree of accuracy which is not inherent in financial statements." (Liggio, 1974, p. 29.)

Another front is from the courts in the form of decisions handed down related to auditor's responsibilities. "These expectation levels demonstrate that the lay public (or at least the lawyers who represent them) believe the auditor to be a guarantor of the accuracy down to the last 'mil' on the financial statements." (Liggio, 1974, p. 31.) Such a continual expansion of auditor's responsibilities leads to confusion regarding what the auditor's role really should be within our present financial reporting framework.

Carmichael (1974) described auditing in terms of an assurance function rather than as an attest function:

The attest function has been equated with the Good Housekeeping Seal of Approval. In reality, the function independent auditors can and should perform is probably more analogous to the informative Consumer Reports than to the Good Housekeeping Seal.
(Carmichael, 1974, p. 55.)

The expansion of the attest function by the independent auditor makes use of the term tenuous. An auditor lends credibility to an entity's financial statements. But,

he/she does not provide complete assurance regarding those financial statements. The assurance level provided by auditors is at the heart of the problem for the accounting profession. The question continually being discussed is, what should the assurance level be? The answer to this question is important in and of itself. But, equally important is the agreement among all parties involved in the financial reporting process as to what level of assurance is necessary. This agreed upon assurance level should be clearly communicated to all parties involved with financial reporting.

In the late summer and fall of 1974 the Journal of Accountancy published three articles which espoused the same basic theme. Hicks (1974), Rosenfield and Lorensen (1974), and Carmichael (1974) all expressed concerns regarding the perceived meaning of the audit report and the perceived role of the independent auditor. The authors agreed there was a difference in the perceived meaning of the audit report among auditors and users of financial information. They also agreed that in order to help narrow the difference in the perceived meaning of the audit report several steps needed to be taken simultaneously. One step is a clear definition of the independent auditor's role within the financial reporting framework. A second step included the revamping of auditing standards to meet the evolving needs of the financial community. The third step espoused in all

three articles involved communication and education. The communication and education process should include both members of the accounting profession and users of financial information. The subject matter to be communicated should include:

1. definition of the independent auditor's role in the financial reporting process;
2. revamped auditing standards and their purpose; and
3. a thorough discussion of the meaning of the audit report.

Barnett (1976) surveyed investors from Texas in order to ascertain the level of understanding they had regarding the audit report. The respondents were classified as either professional investors or nonprofessional investors. Professional investors were persons with investments who as a part of their business invested or provided others investment advice. Nonprofessional investors were persons with investments who did not as a part of their business invest or provide others investment advice. The overall results of the study indicated that neither group has a very good understanding of the meaning of the audit opinion.

The survey instrument employed had two parts, a demographic section followed by a knowledge section. The knowledge section included a sample audit opinion and fifteen multiple choice questions about the audit opinion. Many of the questions from Barnett (1976) were modified and

used in the present experiment. (This is further explained in Appendix A: Development of the Instrument.) The average correct score for the professional investor was 7.7 out of 15 and the average correct score for the nonprofessional investor was 7.5 out of 15. (Barnett, 1976, p. 130.)

With an average score of fifty percent the author concluded that for this sample the standard audit report is unsuccessful in its goal of communicating the auditor's message. A message cannot be considered successful unless the receiver understands what the sender means by the message.

From a review of the literature Barnett (1976) concluded there were three major factors that contribute to the problems encountered by the auditor's opinion. These factors were:

1. Technical meanings have been assigned to words which convey different meanings in ordinary usage or in the parlance of other fields;
 2. Exactness has been sacrificed in the attempt to achieve brevity and conciseness; and,
 3. The auditor's role with respect to the financial statements being audited has not been clearly described.
- (Barnett, 1976, p. 8.)

Baron, Johnson, Searfoss, and Smith (1977) reported the results of a 1975 study aimed at examining the extent of the expectation gap problem. The survey questionnaire employed focused on two major issues:

(1) the auditor's responsibility for detecting corporate irregularities and illegal acts and (2) the auditor's responsibility for disclosing irregularities and illegal acts. (Baron, Johnson, Searfoss, and Smith, 1977, p. 57.)

The authors included randomly selected members from five groups in their sample. The groups were chosen to represent members of the financial community, "who were assumed to be well informed about and concerned with auditing standards." (Baron, Johnson, Searfoss, and Smith, 1977, p.57.) The groups included:

1. corporate financial managers, (preparers);
2. small-firm CPAs, (auditors);
3. large-firm audit partners, (auditors);
4. bank loan officers, (users); and
5. financial analysts, (users).

The groups selected represent the three stages in the flow of financial information, preparation, audit, and use.

The study's main findings indicated that the groups felt auditors have a degree of responsibility for detecting deliberate material falsifications. However, the group which assigned the lowest responsibility to this was the large-firm auditor group. The differences between the groups were found to be significant, with the nonauditor groups indicating the highest levels of auditor responsibility for detection of deliberate material falsifications.

Auditor responsibility for other material misstatements was another area where an expectation gap was suggested by the data. The financial analysts' perceptions of auditor responsibilities in this area were significantly different from the large-firm audit partners.

The expectation gap problem was again demonstrated by results from the question regarding auditor's disclosure responsibility. The authors found significant differences in the perceived disclosure responsibility levels, especially when they reduced the five groups down to two groups, ". . . the banker-financial analyst group holds the auditor to more extensive reporting responsibility than that felt to be the case by auditors and corporate financial managers." (Baron, Johnson, Searfoss, and Smith, 1977, p. 63.)

The authors point out that between the time of the study and its ultimate publication, the Auditing Standards Executive Committee issued two new standards:

1. Statement on Auditing Standard No. 16, The Independent Auditor's Responsibility for the Detection of Errors or Irregularities; and
2. Statement on Auditing Standards No. 17, Illegal Acts by Clients.

The authors felt these new standards would do much to help narrow the expectation gap. Both standards tend to increase the auditor's responsibility in their respective areas.

This increased responsibility is closer to the perceptions demonstrated by the bankers and financial analysts in the survey results.

In 1978 the Cohen Commission released the results of their four year study into the problems affecting the accounting profession. The problems studied and the recommendations to help alleviate such problems stem from the often repeated assertion that there is a gap between the expectations of financial statement users and the performance of auditors. The original charge of the commission was to investigate whether such an expectation gap existed. Briefly, the main findings of the Cohen Commission included:

1. There is a gap between performance of auditors and the expectations of users.
2. New standards need to be developed in order to implement the commission's recommendations.
3. The accounting profession should strive to educate the public about the clear distinction between accounting and auditing.
4. Auditing standards should be the same for all audits regardless of the nature of the entity being audited.

The body of the Cohen Commission's report is divided into eleven sections. Each section is devoted to an identified problem area and the discussion of the

Commission's proposed recommendations. Each section is described briefly, below.

Section one is a discussion of what the auditor's role in society should be. The users of financial information expect auditors to become involved in virtually every aspect of the company's existence. In this respect the auditor's role is to provide assurance that the company's financial statements are as fair and complete as necessary. In many cases users expect auditors to detect fraudulent and other illegal activities as a part of their normal audit procedures. This is one area where the commission found the expectation gap to exist.

Section two examines the auditor's opinion formulation process. The crux of the auditor's work is most often the issuance of an opinion on the fairness of financial statements and their conformity with Generally Accepted Accounting Principles (GAAP). The commission found that in many cases both management and auditors failed to exercise the necessary judgment in interpreting and/or applying GAAP.

Section three basically is a recommendation that auditors no longer make references to uncertainties in the audit report. The proper place for the disclosure of material uncertainties is in the notes to the financial statements.

Section four is a discussion of the auditor's role in the detection of fraud. The commission felt the auditor

should take a more active role in the detection of fraud as a part of normal audit procedures. Users presently believe and expect that the auditor has an active and necessary responsibility to detect fraud. The commission suggested that the auditor's responsibility for fraud detection be expanded. This expansion should then be clarified to the financial community as a whole.

Section five discusses how the auditor fits into the area of corporate accountability and the law. The commission suggested that the auditor follow the rules of materiality, the corporate charter and/or by-laws, and the law of the land. The auditor's responsibility is to review the information provided by management for completeness. The auditor should not be the final arbiter regarding the legality of management's actions.

The discussion in section six centers on the boundaries of the auditor's role and possible extensions of that role. The possible extensions of the auditor's role are virtually limitless given the dynamic and complex nature of our financial community. The main recommendation in section six implores the accounting profession to be flexible enough to change as necessary within a few guidelines. The basic restrictions would require that data to be audited be financial and/or economic, factual to the extent possible, recorded within an accounting system, and limited to specific periods of time. The major exception from the

above criteria is the auditor's responsibility to examine and report on the adequacy of the controls within the accounting record keeping system. This step was proposed as an immediate necessity for the proper evolution of the audit function.

Section seven discusses the auditor's communication with users (i.e., the auditor's report). The present form of the auditor's report was found to be inadequate in many respects. The main recommendation regarding the audit opinion was to expand the opinion in both breadth and depth. The commission recommends the audit report become much more explanatory. Each and every step of the audit process should be explained in the audit report. Better explanation will help users better understand what the auditor did during the audit and what the auditor's report means.

Section eight includes the commission's recommendations regarding the education and training of auditors.

Section nine provides suggestions for CPAs to maintain and/or enhance their independence. Independence in both fact and appearance has long been regarded as part of the accounting profession's foundation. The report stresses this fact and encourages the profession to do all it can to improve the public's perception of auditor independence.

Sections ten and eleven deal with establishing accounting standards and maintaining the quality of audit practices, respectively. Both of these subjects need to be

addressed in the public forum. These areas, especially establishing new auditing standards, provide a visible means for the accounting profession to narrow the expectation gap.

The main focus of the Cohen Commission centers on better communication by those involved with auditing from the top down. All aspects of auditing need to be better communicated to auditors, preparers and users of financial information. Perspectives from all parties involved with financial information should be ascertained and incorporated into services provided by auditors (i.e., the audit). A common middle ground between the current expectations of users and the current performance of auditors should be developed. The development process should take place in public with continual input from all involved parties. The final piece to such an approach is communication. Auditors should know the type and details of service to be provided during the audit. And the users should have a clear idea what to expect from auditors during the audit. All of these ideas are from the Cohen Commission's Report which was released in 1978. Unfortunately, most of the same problems cited by the Cohen report continue to afflict the auditing profession today.

Several post-Cohen Commission studies have investigated the meaning of audit opinions to members of different groups. Libby (1979) developed bankers' and auditors' models of perceptions of the audit opinion using

multidimensional scaling (MDS). Libby's analyses suggested that no major differences in the auditors' and bankers' perceptions of the audit opinion existed. However, the study's tasks included:

1. assessing the similarity of ten different audit opinions in all pairwise comparisons; and
2. rating each audit opinion on thirteen adjective phrases.

Each audit opinion was identified by a three-part label, indicating:

- 1) the opinion type, and if other than unqualified;
- 2) the general reason for departure; and
- 3) the specific reason for departure.

The use of labels may have contributed to the apparent agreement among subjects because the subjects may have focused on the labels rather than on the meaning of the various audit opinions. Additional limitations include:

1. the subject group's homogeneity; and
2. the absence of additional information (Libby 1979).

Karvel (1979) surveyed six groups to ascertain their understanding of the opinion paragraph of the auditor's report. The groups included:

1. Certified Public Accountants;
2. Attorneys;
3. Bankers;
4. Financial Analysts;

5. Financial Executives; and

6. Credit Managers.

The author used a two phase process for the study. The initial phase involved the mailing of a preliminary questionnaire. The purpose of the first phase was to refine the instrument in order to collect the proper type of data for the study. The second phase of the study addressed the main research objective.

The final questionnaire consisted of a demographic section and opinion paragraphs from each of the four types of audit opinions. A semantic differential technique was used to determine the subject's understanding of each opinion paragraph presented. Each opinion paragraph was followed by sixteen pairs of bipolar adjectives separated by a seven point scale. Factor analysis was used to develop the subject's measure of understanding of the opinion paragraphs' meanings.

Karvel's main findings indicated there are no differences in understanding among the groups regarding the meaning of the unqualified report opinion paragraph. In addition, all the groups were able to distinguish the unqualified opinion from the other opinion types. All user groups had difficulty in agreeing on the meaning of the qualified, adverse, and disclaimer opinions and in distinguishing these opinions from each other.

Bailey, Bylinski, and Shields (1983) used MDS to investigate the perceived message communicated by the audit opinion. Their study included twenty different audit opinions, ten were in accordance with Statement on Auditing Standards No. 1 (AICPA, 1972), and ten incorporated wording changes proposed by the Auditing Standards Board (ASB) in 1980 (AICPA, 1980). The study's main factors were:

1. the wording of the audit opinions; and
2. the knowledge of the subject's auditing knowledge level.

The authors performed tests which assessed both the relative wording effect and the absolute wording effect. The relative difference results indicated no wording effect in both the MDS analyses, while the knowledge main effect for MANOVA was significant. The absolute difference portion showed significant effects due to both the wording format and the subject's knowledge. These results were borne out by both the MDS analysis and the MANOVA.

The authors acknowledged the conflict of their results, but further stated:

More specifically, we found that our subjects rated the proposed reports as attributing more responsibility for the information in the financial statements to management, and less to the auditor. This was the major goal of the ASB's exposure draft. . . . However, the more detailed tests by ANOVA of the data from both experiments indicated that there was an audit report knowledge effect on perception, with the more knowledgeable subjects perceiving the

auditor as less responsible for the information in the financial statements. (Bailey, Bylinski, and Shields, 1983, p. 369).

Responsibility for financial information lies with company management. Present communication between the auditor and the user of financial information does not make this distinction clear. The ASB audit report wording changes are from the Cohen Commission's Report (AICPA, 1978). The Cohen Commission Report brought this issue directly into public view. The accounting profession has done little in educating the users about the audit function. Furthermore, the profession has not changed the wording of the audit opinion to provide users with a better understanding of the audit process.

Two studies (Arrington, Hillison, and Williams, 1983, and Arrington, Bailey, and Hopwood, 1985) relied on attribution theory to assess subjects perceptions of audit responsibilities. The subjects in both studies were CPAs and small business owners. One finding of the earlier study was:

CPA's given the same information as non-CPA's about an audit failure will attribute less responsibility for that failure to the auditor involved than will non-CPA's. (Arrington, Hillison, and Williams, 1983, p. 249.)

The latter study focuses on subjects models for processing information within attribution theory. The authors concluded that CPAs processed information

differently than non-CPAs. (Arrington, Bailey, and Hopwood, 1985, p. 16) Taken together, these studies provide evidence that users may assign more responsibility for financial information to the auditor than do CPAs.

Pillsbury (1985) provided additional evidence of differences in message perception between auditors and users. The study used MDS and developed both bankers' and auditors' perceptual models of the assurance level intended by reports issued for limited assurance engagements (LAEs). The results indicated: "...both auditors and bankers have very well-defined ideas about the assurance implied by the different reports." (Pillsbury, 1985, p. 70.) Analysis comparing the two groups' perceptual models revealed that there are significant differences between auditors' and bankers' perceptions of assurance levels intended by LAEs. (Pillsbury, 1985, p. 74.)

Anderson (1985) had the following observation:

A crisis of confidence and credibility is confronting the accounting profession. In today's volatile environment, perhaps no other single issue is of greater concern to, or as deeply felt by CPAs than this one. If it is not it should be. (Anderson, 1985, p. 91.)

This comment came almost a decade after the release of the Metcalf Committee report and seven years after the release of the Cohen Commission Report. The issues addressed in both of those studies from the 1970's are still confronting the accounting profession today.

Work (1985) detailed a list of judgments and settlements paid by the Big Eight accounting firms since 1980. Together the Big Eight paid close to \$180 million in lawsuits in the first half of the decade. In some instances the claims were legitimate, but in some instances the lawsuits resulted in a large part because of misunderstanding as to the nature of auditing and the role of the auditor. This is not a new problem for the accounting profession. As one can see from the literature review above, the accounting profession has been struggling for many years in an effort to define and then communicate the role and responsibilities of the auditor.

Two articles in the Journal of Accountancy in 1986 repeated the call for action on the part of the accounting profession. Mednick (1986) expressed concerns regarding a perception gap. In this case the perception gap is synonymous with the expectation gap. Reference to the work of the Cohen Commission pointed out that most of the problems addressed by the Commission have not been resolved by the accounting profession. The recommendations of the Cohen Commission have not been implemented either. Mednick offered several avenues for mitigating the expectation gap. Most of these are renewed calls for solutions recommended by the Cohen Commission. The ideas include:

1. Extend the auditor's role to other types of information, than the traditional financial and/or economic information.
2. Better educate the public regarding the nature and role of the auditor.
3. Be more responsive to the expectations of users, do not reject their ideas out of hand.
4. Modify the standard audit report in order to make it more explanatory.
5. Require supplemental reports by the auditors in the annual reports regarding other types of information.

All of these suggestions can be found in both the Cohen Commission Report (1978) and in Mednick (1986).

Connor (1986) argues that, "if the public's expectations are to be met, auditing standards must be revised." (Connor, 1986, p. 77.) Two areas are presented in which the expectations of users are not being met.

1. Expectations that the audit mission, no excuses accepted, is to prevent the publication of misleading financial statements . . .
 2. Expectations that the financial reporting system will warn the public of impending business failure . . .
- (Connor, 1986, p. 77.)

Connor suggests increased auditor responsibility in both areas. The auditor should be required "to review and evaluate the system of management controls . . . " (Connor, 1986, p. 78.) In addition, the auditor should "identify

potential symptoms existing within the entity's business environment that would indicate a higher risk of misstated financial statements . . . " (Connor, 1986, p. 78.)

Implementation of both recommendations along with their clear and concise communication to all involved would be a big step in narrowing the expectation gap facing the accounting profession.

The findings in the Cohen Commission Report (1978) and the more recent evidence support the assertion that a gap exists between auditors' and users' perceptions of the auditor's role. One problem appears to be the assignment of responsibility for the financial information presented. Users seem to be unable to distinguish which party bears the responsibility for a company's financial information, management or the auditor. The audit opinion, in its current format, does little in providing the message that management bears primary responsibility for the company's financial information presented in the financial statements.

Three assertions for the misunderstanding involving assignment of responsibility include:

1. Auditors and users have different models for processing information;
2. Knowledge of the audit process has a bearing on an individual's perception of responsibility; and

3. The audit opinion perpetuates the problem by making no clear assignment of responsibility to management.

This research will focus on the latter two assertions, an individual's knowledge of the audit process and the message emanating from the audit opinion. Individual attitude estimates provide a method for comparing how individuals and/or groups perceive an object. In this research the object of interest is the standard audit opinion.

Auditor association literature. An assumption underlying any study investigating the meaning of the audit opinion is that the audit opinion has some measure of utility to users. If the audit opinion is not useful then the meaning ascribed to it makes no difference. Recent studies by Pany and Smith (1982) and Johnson and Pany (1984) provide support for the premise that a company's association with an auditor has a positive effect on users' perceptions regarding information released by the firm. These studies provide evidence that financial information users do rely upon auditor involvement.

Since financial information users are relying upon the audit opinion, it is important that the accounting profession explore what the audit opinion means to auditors, preparers, and users. For a profession that deals with information dissemination, it is important that both the

sender and the receiver of a message regarding that information ascribe similar meaning to that message. The meaning ascribed to the audit opinion by the auditor should roughly correspond to the meaning ascribed to the audit opinion by preparers and users. If, for example, the independent auditor issues an unqualified opinion, users with access to the opinion should know what message the auditor meant to convey through the issuance of the unqualified opinion. Agreement about the meaning of the audit opinion should exist among auditors, preparers, and users.

Most public accounting firms issue audit opinions which follow the standard form set forth in professional standards. The accounting profession's critics assert that all audit opinions look alike and that this sameness reduces the opinion to a symbol without any real information value.

As noted earlier, several studies demonstrate auditor association enhances the credibility of a company's financial information, especially quarterly or interim statements and financial forecasts. However, these studies did not investigate the ascribed meaning of the audit opinion to auditors, preparers, and users. Given the significance of the audit function, one hopes there is some valuable information provided by the audit opinion. Research investigating the meaning of the audit opinion to

different groups and possible causes of differences in the meaning of the audit opinion to those groups is necessary.

B. Attitudes

The field of accounting provides the subject matter and the field of psychology provides the tools for this study. The concept of attitude has been around for over a century beginning with Herbert Spencer in 1862. From the early days of attitude study until the late 1960's social scientists, "assumed attitudes could be used to explain human action since they viewed attitudes as behavioral dispositions." (Ajzen and Fishbein, 1980, p. 13.)

Even though the study of attitudes has been going on for well over one hundred years in the fields of psychology and social psychology, researchers have been unable to reach a consensus definition of attitude. However, "there seems to be agreement among investigators that attitudes toward any object are determined by beliefs about that object." (Ajzen and Fishbein, 1980, p. 62.) For the most part the social psychologists have been extremely interested in using attitudes to predict behavior. Therefore, most studies develop or ascertain attitude measures and then try to predict behavior based upon the attitude measures obtained. A lack of consistency between the attitude measures obtained and the actual behavior observed has been a problem.

Theorists presume that while attitude measures toward objects and situations can be obtained or estimated, there is not a one to one relationship between attitudes and behavior. In most situations there are many intervening variables/factors which preclude a one to one relationship between attitudes and behaviors.

This study's interest lies in obtaining (estimating) subject attitude measures toward two audit opinions and audit reporting in general. This chapter includes a brief discussion of the attitude concept along with several definitions of attitude. This is followed by a discussion of the attitude definition used in this study and a discussion of the model used to measure (estimate) attitudes for the study.

Definitions of attitude. As previously stated, researchers have come up with many definitions of the attitude concept. Allport (1967) provides a relatively early view of the attitude concept. He traces the use of the term back to the works of Herbert Spencer. From the early 1860's until the mid 1930's many researchers had attempted to define the concept of attitudes. Allport (1967) examines and discusses many of these definitions. From all of the definitions included Allport concludes:

It is not difficult to trace a common thread running through these diverse definitions. In one way or another each regards the essential feature of attitude as a preparation or readiness for response. (Allport, 1967, p. 8.)

In addition, Allport (1967) points out that psychologists as of 1935 had not reached any degree of agreement regarding attitudes. In joining with the others, Allport provides his definition:

An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. (Allport, 1967, p. 8.)

The early attitude researchers considered the attitude concept to be unidimensional. Over time as the prediction of behavior failed, researchers began to recognize that the attitude concept was multidimensional. By the late 1960's to early 1970's attitude research was based on the premise of multidimensionality. Rokeach (1972) provided a more recent definition of the attitude concept:

An attitude is a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner. (Rokeach, 1972, p. 205.)

Fishbein and Ajzen (1972) reviewed over 750 articles concerning the attitude concept. "In the literature review we found almost 500 different operations designed to measure attitudes." (Fishbein and Ajzen, 1972, p. 492.) The theme of their article was guided by their conception of the relationship between beliefs, attitudes, intentions, and behaviors. The Fishbein and Ajzen (1972) conception of the relationship between beliefs and attitudes was:

A person learns or forms beliefs about an object. These beliefs influence his attitude toward the object. Consistent with Thurstone's position, attitude is viewed as a compound in which the elements are beliefs and the affective value of the compound (i.e. attitude) is some function of the affective value of the constituent beliefs. This attitude constitutes a predisposition to respond in a generally favorable or unfavorable manner with respect to, or in the presence of, the object. (Fishbein and Ajzen, 1972, p. 488.)

A trait common to almost all definitions of attitudes, whether unidimensional or multidimensional, is that it is a learned response or response set toward an object, person, or situation. Given all of the attitude definitions and attitude studies, the definition provided by Fishbein and Ajzen (1972, 1975, 1980) is the one adopted for this study. The following section briefly describes the Fishbein and Ajzen concept of attitudes.

Attitude concept for this study. Fishbein and Ajzen (1975) provide a brief description of the attitude concept as, ". . . a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object." (Fishbein and Ajzen, 1975, p. 6.) Figure 1 below shows the relationships between beliefs, attitudes, intentions, and behaviors in the Fishbein and Ajzen framework. For this study the interest begins and ends with the first loop of the figure, i.e. the calculation of attitude through the measurement of beliefs.

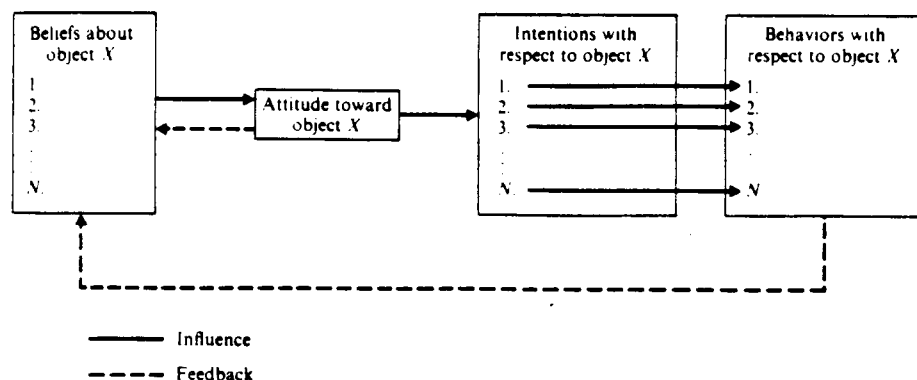


Figure 1. Schematic Presentation of Conceptual Framework Relating Beliefs, Attitudes, Intentions, and Behaviors With Respect to a Given Object. (From Fishbein, Martin and Icek Ajzen. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley Publishing Company, 1975. p. 15.)

The theory holds that there are many beliefs about an object which taken together produce the attitude toward that object. The method for measuring beliefs is to identify attributes which may be associated with the attitude object. Each attribute is then rated along two dimensions by the subject. The subject provides his/her assessment of the probability that each attribute is related to the attitude object. Then the subject evaluates each attribute in terms of its favorableness or unfavorableness. Through use of the model presented below both of the assessments of each

attribute are combined to form an estimate of the subject's attitude toward the attitude object.

Fishbein and Ajzen (1975) describe this part of the theory as follows:

1. An individual holds many beliefs about a given object, i.e., the object may be seen as related to various attributes, such as other objects, characteristics, goals, etc.
2. Associated with each of the attributes is an implicit evaluative response, i.e., an attitude.
3. Through conditioning, the evaluative responses are associated with the attitude object.
4. The conditional evaluative responses summate, and thus
5. on future occasions the attitude object will elicit this summated evaluative response, i.e., the overall attitude. (Fishbein and Ajzen, 1975, p. 29.)

The algebraic model for this part of the theory is:

$$A_o = \sum_{i=1}^n b_i e_i; \text{ where}$$

A_o = the attitude toward some object, O ;
 b_i = the belief i about O , i.e., the subjective probability that O is related to attribute i ;
 e_i = the evaluation of attribute i ; and
 n = the number of beliefs. (Fishbein and Ajzen, 1975, p. 29.)

There are three attitude objects of interest in this study. The attitude objects are:

1. an unqualified audit opinion;
2. a qualified audit opinion; and
3. audit reporting in general.

Attitude scores toward each of the attitude objects will be estimated using the Fishbein expectancy value model

presented above. The attributes included are items or ideas commonly associated with audit opinions and audit reporting. Each attribute presented will be measured along both dimensions as the model calls for. Five attributes are included in the attribute set associated with the two audit opinions. Seven attributes are included in the attribute set associated with audit reporting in general.

The entire concept of behavior as presented by Fishbein and Ajzen (1975 and 1980) is known as a theory of reasoned action. All beliefs are considered to be learned. The definition of an attitude as a learned predisposition to respond is also based on the premise of being learned. The notion of beliefs and ultimately attitudes being learned fits into the premise of this study. An objective of this study is to show a link between the knowledge the subject has about auditing and the understanding the subject has regarding audit opinions. The understanding the subject has regarding the meaning of audit opinions for this study is measured by the attitude estimated by the Fishbein expectancy value model. Therefore, if beliefs are learned there should be a link between the knowledge of auditing and the attitude toward the audit opinion and audit reporting in general for an individual.

Other studies using the Fishbein model. Even though the Fishbein expectancy value model does not measure attitudes directly it has been shown to predict attitudes

through the measurement of beliefs related to the attitude object and evaluations of those beliefs. Fishbein (1963) uses the model described above to assess subjects' attitudes toward Negroes. Fifty subjects completed a questionnaire in which they rated ten attributes associated with Negroes along both the probability and evaluative dimensions, necessary variables for the model. Approximately two weeks earlier these same subjects provided a direct measure of their attitudes toward Negroes. The author used Spearman rank order correlation to compare the attitude scores estimated from the model with the direct attitude scores. The Spearman rank order correlation was .801 ($p < .001$, $N=50$). When the author used just the bi to estimate attitudes the Spearman rank order correlation with the obtained attitude score was .653 ($p < .01$, $N=50$). (Fishbein, 1963, p. 237.) As this shows, the full model does a very good job in estimating an individual's attitudes when both the probability of relationship and the evaluative aspect of the attribute are included.

The individual holds many beliefs about an attitude object and all of these beliefs combine in some fashion to produce the individual's attitude toward that object. However, at any one time for an individual, "there are probably only six to eleven beliefs that actually appear in his hierarchy (i.e., that are above some response threshold) and function as determinants of attitude." (Fishbein, 1967,

p. 395.) Some researchers have argued that for the model to work best for individuals only the salient or important beliefs should be measured. Fishbein (1967) reports on the work of Rosenberg (1956 and 1960) and Kaplan (1966) in which they support the hypothesis of six to eleven salient beliefs. In addition, their work supports the idea that fairly accurate estimates of attitudes can be found without using salient beliefs (i.e., by using non-salient beliefs). (Fishbein, 1967, p. 396.)

Kaplan and Fishbein (1969) compared the estimates of attitudes from the expectancy value model based upon four different belief sets. The belief sets were as follows:

1. a standard set of six beliefs developed by the researchers;
2. all the beliefs elicited from the individual;
3. the first six beliefs elicited from the individual;
and
4. the first nine beliefs elicited from the individual.

From these belief sets the attitudes of sixty-seven undergraduate students were estimated using the Fishbein expectancy value model. The attitude object was Negroes. As in previous studies a direct measure of the subject's attitude toward Negroes was obtained. Correlations between the estimated attitude scores and the obtained attitude scores ranged from .37 ($p < .01$, $N=67$) for the attitude

estimated by the six standard beliefs to .21 ($p < .01$, $N = 67$) for the attitude scores estimated by the set of all beliefs elicited from the subject. "Although these correlations are not significantly different, they again clearly suggest the superiority of the estimates based on a standard set of beliefs." (Kaplan and Fishbein, 1969, p. 70.) Therefore, the use of the same belief set for all subjects puts them on equal ground as far as comparing attitudes is concerned. Each individual will have his/her own set of salient beliefs regarding the attitude object. Hopefully, a standard set of beliefs provided by the researcher will contain at least some of the salient beliefs held by each subject in the experiment.

Bowman and Fishbein (1978) applied the Fishbein expectancy value model in an effort to understand public reaction to energy proposals. "It was concluded that the Fishbein model should be extremely useful in understanding public reaction to future energy proposals." (Bowman and Fishbein, 1978, p. 319.) In the study eighty-nine subjects responded to a questionnaire ascertaining their intentions to vote or not to vote for public energy proposals on ballots in their states. Part of the questionnaire obtained a direct measure of the subject's attitude toward the act of voting, the attitude object in the study. In addition, the questionnaire gathered the data necessary to estimate the attitude toward voting using the Fishbein expectancy value

model. The correlation between the estimated attitude score and the obtained attitude score was .74 ($p < .01$, $df = 80$).

(Bowman and Fishbein, 1978, p. 331.) Again the model worked and was able to predict the attitude toward an object, in this case an act, from the probability of a relationship between an attribute and the object and an evaluation of that attribute.

From this brief review of the literature one can see that the Fishbein expectancy value model works in diverse situations for attitude prediction. In the present study the interest is in predicting the subject's attitude toward:

1. an unqualified audit opinion; and
2. a qualified audit opinion.

These attitude objects form the basis for the first part of study. A third attitude object is also presented in the study, audit reporting in general. This attitude object forms the basis for a latter part of the study.

Given the work on the salience of beliefs, and length considerations for the actual questionnaire, the belief set used to estimate the attitude score for the two audit opinions is five. The belief set used to estimate the attitude score for audit reporting in general is seven. The beliefs incorporated in the belief sets are attributes found in the accounting literature and the popular financial press. A more complete discussion of questionnaire development is in Chapter III and Appendix A.

C. Summary

The accounting literature provides the background for the problem examined in this study. The problem is presented in the repeated discussions about the lack of agreement between users of financial statements and auditors of those financial statements regarding the role the auditor does and/or should perform (i.e., the expectation gap). This study will focus on the expectation gap argument as it relates to understanding the audit opinion and understanding audit reporting in general.

Previous studies have shown:

1. Individuals, especially from the user group, do pay attention to the audit opinion; and
2. Individuals from different groups (i.e., auditors, preparers, and users) do have different perceptions of the meaning of the audit opinion.

Given that individuals actually use the audit opinion, it follows that the meaning of the audit opinion should be understood in the same manner by all who are involved with it in order for the audit opinion to be used properly.

The audit opinion and the objectives of audit reporting should be understood by all persons involved with financial information. The level of understanding or meaning ascribed to the audit opinion and to the objective of audit reporting

should be the same for members from all groups involved with financial reporting (i.e., auditors, preparers, and users).

One method of measuring the level of understanding or ascribed meaning is to ascertain the attitude an individual has toward a given audit opinion or toward audit reporting in general. In this study the Fishbein expectancy value model is used to estimate the individual's attitude toward:

1. an unqualified audit opinion;
2. a qualified audit opinion; and
3. audit reporting in general.

The results of the study are presented in Chapter IV.

Another key link in the study is the knowledge the subject has about the audit process. The underlying premise of an attitude is that it is a combination of beliefs that have been learned. Therefore, if the attitude is learned it should in some way be connected with the knowledge the subject has about auditing. The use of attributes from the accounting literature combined with the Fishbein model provide a basis to examine the above ideas empirically.

CHAPTER III

THE EXPERIMENT: DESIGN, HYPOTHESES, AND SURVEY ADMINISTRATION

The study's focal point is analysis of data collected with a questionnaire. The data was analyzed with both parametric and non-parametric tests. This chapter includes a discussion of research design, hypotheses and analyses performed, a discussion of the survey method employed, presentation of subject demographic data, and results of response bias tests.

A. Research Design

The study's basic research design is a three by two (3X2) Analysis of Covariance (ANCOVA) with a repeated measure. This section describes the factors, the covariate, and the dependent variable(s).

Factor one has three levels which correspond to subject group membership (i.e., auditor, preparer, or user). Subjects in each group were randomly selected (the selection process is described later). Factor two is the repeated measure and has two levels which correspond to the audit

opinions presented, i.e., an unqualified opinion and a qualified opinion.

The covariate of interest is subject knowledge regarding the audit process, which was determined by his/her score on section two of the survey instrument. The more knowledge a subject has regarding the audit process, the more likely his/her attitudes will match those reflected by the auditor group.

The dependent variables are the subject's attitudes toward the audit opinions presented and the subject's attitude toward audit reporting in general. Attitude scores for each subject were calculated with the Fishbein expectancy value model (Fishbein and Ajzen, 1975, p. 29). The data for the Fishbein model came from subject responses to the items in the first and third sections of the instrument.

B. Analyses and Hypotheses

Stage one of the analysis was a one-way Analysis of Variance (ANOVA) with subject knowledge of the audit process as the dependent variable (See Figure 2). Subject knowledge becomes the covariate for later analyses. Auditors should have the most knowledge about the audit process. Corporate controllers representing preparers should be the next most knowledgeable group. Users represented by commercial loan

Knowledge of the Audit Process	
Auditors i=1	K1
Users i=2	K2
Preparers i=3	K3

Where; K_i = Mean Knowledge score for Group i .

Figure 2. One-Way ANOVA with the Individual's Knowledge of the Audit Process as the Dependent Variable.

officers should have some knowledge of the audit process, but not as much as the other two groups. Therefore, the first hypothesis in both null and alternative form is:

H₀₁: There are no differences in knowledge regarding the audit process between auditors, preparers, and users.

H_{a1}: There are differences in knowledge regarding the audit process between auditors, preparers, and users. More specifically,

$K_1 > K_3 > K_2$; where:

K₁ = auditor's mean knowledge score,
K₂ = user's mean knowledge score, and
K₃ = preparer's mean knowledge score.

Stage two of the analysis was a three by two ANOVA with a repeated measure. The subject's attitude score (factor two) toward each audit opinion was the repeated measure and provided the dependent variable(s) (See Figure 3). The covariate, subject knowledge of the audit process, was not included in this stage of the analysis. This analysis was designed to ascertain whether:

1. within each group, each audit opinion elicits a different attitude; and
2. between the groups, the attitude toward an audit opinion is different.

Therefore, the hypotheses tested in their null and alternative forms are:

Audit Opinion Type; j = 1 or 2.		
	Unqualified j=1	Qualified j=2
Auditors i=1	A11	A12
Users i=2	A21	A22
Preparers i=3	A31	A32

Where; A_{ij} = Mean Attitude Score for Group i , on Audit Opinion j .

Figure 3. 3x2 ANOVA with the Individual's Attitude Score Toward an Audit Opinion as a Repeated Measure and as the Dependent Variables.

Ho2: There are no differences in subject's attitudes elicited by the different audit opinions within each group.

Ha2: There are differences in subject's attitudes elicited by the different audit opinions within each group. More specifically,

$A_{11} \neq A_{12}$,
 $A_{21} \neq A_{22}$, and
 $A_{31} \neq A_{32}$.

Ho3: There are no differences in attitudes elicited by an audit opinion between the groups.

Ha3: There are differences in attitudes elicited by an audit opinion between the groups. More specifically,

$A_{11} \neq A_{21} \neq A_{31}$, and
 $A_{12} \neq A_{22} \neq A_{32}$; where;

A_{ij} = the group's mean attitude score for each audit opinion presented.

The next step in the analysis is a one-way ANOVA with the subject's overall attitude toward audit reporting as the dependent variable. The assertion here is that the groups differ in their overall attitude toward audit reporting (See Figure 4). Therefore, the hypothesis tested in its null and alternative form is:

Ho4: There are no differences in overall attitudes toward audit reporting between the groups.

Ha4: There are differences in overall attitudes toward audit reporting between the groups. More specifically,

$OA_1 \neq OA_2 \neq OA_3$; where:

OA_i = the group's mean overall attitude score toward audit reporting.

Attitude Score Toward Audit Reporting in General	
Auditors i=1	OA1
Users i=2	OA2
Preparers i=3	OA3

Where; OA_i = Mean Attitude Score Toward Audit
Reporting in General for Group i .

Figure 4. One-Way ANOVA with the Individual's Attitude Score Toward Audit Reporting in General as the Dependent Variable.

The next analysis is a three by two ANCOVA with a repeated measure. The subject's attitude score (factor two) toward the audit opinion was the repeated measure and provided the dependent variable(s). The subject's knowledge of the audit process was the covariate (See Figure 5). The purpose here is to demonstrate a link between a subject's knowledge of the audit process (the covariate) and the subject's subsequent attitude score toward the two audit opinions (the dependent variable(s)). Earlier we were looking for differences in attitude scores toward the audit opinion between the groups. The expected finding from this phase of the analysis is that the covariate is significant and can explain a portion of the differences assessed through the three by two ANOVA employed earlier. The covariate should eliminate or account for much of the differences shown in the earlier ANOVA results. If it can be shown with the ANCOVA that the differences between groups become non-significant or that the covariate accounts for much of the variance (is significant) then the assertion of a link between knowledge of the audit process and the subsequent attitude score toward the audit opinion will be enhanced. Therefore, the hypothesis tested in its null and alternative form is:

Audit Opinion Type; $j = 1$ or 2 .		
	Unqualified $j=1$	Qualified $j=2$
Auditors $i=1$	AA11	AA12
Users $i=2$	AA21	AA22
Preparers $i=3$	AA31	AA32

Where; AA_{ij} = Mean Adjusted Attitude Score for Group i , on Audit Opinion j .

Figure 5. 3x2 ANCOVA with the Individual's Attitude Score Toward an Audit Opinion as a Repeated Measure and as the Dependent Variables, and the Individual's Knowledge Score as the Covariate.

Ho5: Knowledge of the audit process is not associated with the attitudes toward the audit opinion.

Ha5: Knowledge of the audit process is associated with the attitude toward the audit opinion.

The final stage of the analysis is a one-way ANCOVA with the subject's overall attitude score toward audit reporting as the dependent variable, and the subject's knowledge of the audit process as the covariate (See Figure 6). The purpose in this stage of the analysis is to demonstrate a link between a subject's knowledge of the audit process (the covariate) and the subject's attitude score toward audit reporting in general (the dependent variable). The expected finding from this phase of the analysis is also that the covariate is significant and can explain a portion of the differences assessed earlier in the second one-way ANOVA. If the covariate is actually working as hypothesized it should help to eliminate or reduce the differences found earlier with the ANOVA. Therefore, the hypothesis tested in its null and alternative form is:

Ho6: There is no association between a subject's knowledge of the audit process and the subject's overall attitude toward audit reporting.

Ha6: There is an association between a subject's knowledge of the audit process and the subject's overall attitude toward audit reporting.

Further, the data analysis includes a test for equal slopes due to the covariate across opinions. This analysis is to ensure that the covariate has virtually the same

Attitude Score Toward
Audit Reporting in General

Auditors i=1	AOA1
Users i=2	AOA2
Preparers i=3	AOA3

Where; $AOAi$ = Mean Adjusted Attitude Score Toward
Audit Reporting in General for Group i .

Figure 6. One-Way ANCOVA with the Individual's Attitude Score Toward Audit Reporting in General as the Dependent Variable and the Individual's Knowledge Score as the Covariate.

effect within each of the groups across opinions. The common thread throughout all the analyses is to show that:

1. the two audit opinions elicit different attitude scores within each group;
2. each audit opinion elicits different attitude scores between the groups; and
3. the attitude score toward audit reporting in general is different between the groups.

The use of subject's knowledge of the audit process as a covariate is to provide evidence of a link between such knowledge and the resulting attitude score toward audit opinions. If knowledge of the audit process is significant, then this will provide the accounting profession with a place to start mitigating the differences in attitudes toward the audit opinion.

C. Survey Administration

A mailed instrument was used to collect data from subjects. (Appendix B: The Instrument, contains a complete copy of the instrument.) Subjects were randomly selected from three groups representing auditors, preparers, and users of financial information. This section includes a description of the instrument, a description of the subject groups and a discussion of survey administration.

The instrument. The instrument included four sections. Section one contained two audit opinions which were designed to elicit responses in order to calculate subject attitude scores toward each audit opinion using the Fishbein expectancy value model. Section two was a series of questions designed to assess subject knowledge of the audit process. Section three was designed to collect data necessary to calculate subject attitude scores toward audit reporting in general using the Fishbein expectancy value model. Section four collected subject demographic data.

The study has two objectives. One objective is to obtain evidence of a link between subject knowledge of the audit process and subject attitude score toward an audit opinion. Many factors influence an individual's attitude toward an object; one factor is the individual's knowledge about the object. The audit opinion is the attitude object in this study. Therefore, knowledge a subject has about the process which leads to the issuance of the audit opinion should influence his/her attitude toward the audit opinion. A part of this objective is to show that the three groups included have different attitudes toward the audit opinion when subject knowledge is not included as a covariate in the analysis (between subject differences). When subject knowledge is included as a covariate in the analysis differences between groups should become smaller if the covariate, subject knowledge, is actually a moderating

factor. A second objective is to show that subject attitude differs toward each audit opinion (between opinion differences).

Section one gathered data to calculate each subject's attitude score regarding the audit opinions. The expectancy value model introduced by Fishbein and Ajzen (1975) was employed to calculate the subject's attitude scores.

Fishbein and Ajzen (1975) states:

According to the theory a person's attitude toward any object is a function of his beliefs about the object and the implicit evaluative responses associated with those beliefs. (Fishbein and Ajzen, 1975, p. 29.)

Fishbein expresses the above relationship in the following model:

$$A_o = \sum_{i=1}^n b_i e_i, \text{ where}$$

A_o is the attitude toward some object, o ;
 b_i is the belief i about o , i.e. the subjective probability that o is related to attribute i ;
 e_i is the evaluation of attribute i ; and
 n is the number of beliefs. (Fishbein and Ajzen, 1975, p. 29.)

The audit opinions are the objects of interest (A_o) for this part of the study. The attributes included are drawn from academic and professional literature and are usually associated with audit opinions. Subjects assessed the relationship between each attribute and the audit opinions presented. This relationship was measured via the subject's

response on a seven-point scale³ to a statement about the attribute. Next, the subject's evaluation of each attribute was measured via the subject's response on a seven-point scale to a statement evaluating the attribute.

Two audit opinions were presented to each subject:

1. An Unqualified Opinion; and
2. A Qualified Opinion.

One-half of the questionnaires had the unqualified opinion first while one-half had the qualified opinion first. This was done in order to facilitate testing for possible ordering effects. The Disclaimer of Opinion and Adverse Opinion were not included in the analysis for several reasons. The main reason for not including the Disclaimer of Opinion and Adverse Opinion is the rarity of issuance of either type. In addition, there is no common circumstance when an auditor can issue any of the four types of opinions he chooses. Therefore, in order to avoid possible confounding variables the Disclaimer of Opinion and Adverse

3. Support for the use of a seven-point scale is provided in Nunnally, 1967, p. 521: "As the number of scale steps is increased from 2 up through 20, the increase in reliability is very rapid at first, it tends to level off at about 7, and after about 11 steps, there is little gain in reliability from increasing the number of steps."

Opinion were not included.⁴ On a more practical note the Disclaimer of Opinion and the Adverse Opinion were not included due to questionnaire length considerations. In order to achieve an acceptable response rate, the length of the questionnaire had to be kept manageable. The text of the audit opinion followed that promulgated by SAS No. 2 (AICPA, 1974). The qualified audit opinion's middle paragraph does not include references to footnotes, specific reasons, or exact dollar amounts as required by SAS No. 2 (AICPA, 1974).⁵ Following each audit opinion is a series of statements assessing the relationship of an attribute with the audit opinion. The last page of section one was a series of evaluative statements, one evaluative statement for each attribute included. Table 1 shows the attribute statements included and Table 2 shows the evaluative statements.

4. The inclusion of an Adverse Opinion would force the subjects to focus on the actual cause of the audit opinion issued, which in the case of an adverse opinion would be different from the cause of any of the other types of opinions being issued. Because this study focuses on the audit opinion itself, rather than the cause of the audit opinion type or any other judgmental type factors, the possibility of confounding experimental factors is reduced.

5. The rationale for the omission of dollar amounts and specific references to financial statement footnotes follows that in note 4 regarding the Adverse Opinion. The intent is for the subjects to focus on the audit opinions; not on variables or factors outside of the opinion. The inclusion of dollar amounts or specific references to financial statement footnotes may lead the subjects to focus on factors such as materiality, conservatism, etc. This would possibly confound the results.

Table 1. Belief Statements for the Audit Opinions.

Number	Statement as it appeared in the questionnaire.
1.	Based upon the above audit opinion, the completeness of disclosure of the financial information in the financial statements referred to is adequate.
2.	Based upon the above audit opinion, the financial information in the financial statements referred to is not biased (e.g., it does not overstate revenue or assets).
3.	Based upon the above audit opinion, there are no material misstatements in the financial information in the annual report.
4.	The above audit opinion indicates that company management has not committed fraud.
5.	The above audit opinion is useful in evaluating the investment quality of the firm.

Table 2. Evaluative Statements for the Audit Opinions.

Number	Statement as it appeared in the questionnaire.
1.	The completeness of the disclosure is an important consideration when using financial statements.
2.	Freedom from bias is an important quality for financial information.
3.	Material misstatements are detrimental to the quality of a firm's financial information.
4.	The existence of management fraud is detrimental to the quality of a firm's financial information.
5.	Audit opinions should be useful in evaluating the investment quality of the firm.

The instrument's second section assessed subject knowledge regarding the audit function through a series of eleven questions pertaining to different attributes of the audit process. The attributes included are from a review of the Statements on Auditing Standards (AICPA, 1985). The subjects were asked to respond to each question in a multiple choice fashion. Scores from this portion of the instrument served as the subject's knowledge score. The questions included in section two of the instrument can be found in Appendix B: The Instrument.

Section three contained a series of seven attribute statements designed to gather data to calculate subject attitude scores toward audit reporting in general. Again, subjects assessed the relationship of each attribute included with audit reporting. Table 3 shows the attribute statements and Table 4 shows the evaluative statements.

The fourth and final section of the instrument is comprised of a series of questions designed to gather demographic data from each subject. This data helped ascertain that a subject's group membership was correct for the analysis. The demographic section of the instrument can be found in Appendix B: The Instrument.

The Subjects. Subjects were randomly selected from several source lists. Contact with each subject was via the mailed instrument. The three groups in the study included:

Table 3. Belief Statements for Audit Reporting in General.

Number	Statement as it appeared in the questionnaire.
1.	From reading an audit report a user is generally able to make an informed judgment regarding the independence of the auditor.
2.	Current audit reporting practices make the responsibility for the financial statement preparation clear.
3.	Current audit reporting practices have an adequate discussion of the internal control of the firm being audited.
4.	From reading an audit opinion a user can place individual responsibility for the conduct of an audit with the partner in charge of the audit and not just the firm performing the audit.
5.	The auditor is responsible for reporting any illegal activities by the client to the appropriate authorities no matter what the financial magnitude of the activity.
6.	Regardless of the materiality the auditor should be able to detect all cases of fraud by the client company and any of the client company's employees through the use of generally accepted auditing standards.
7.	Overall, audit reporting provides users of financial statements with information that is useful in making investment decisions.

Table 4. Evaluative Statements for Audit Reporting in General.

Number	Statement as it appeared in the questionnaire.
1.	Independence in actuality, as well as in appearance is an important quality for an external auditor to possess.
2.	A statement of responsibility for the financial statements would be useful in the audit report.
3.	A thorough discussion of internal control would be useful in the audit report.
4.	The audit report should disclose the partner responsible for the audit.
5.	Auditors report all illegal acts by clients to the proper authorities.
6.	Auditors should attempt to detect all cases of management fraud by the client.
7.	A complete discussion of the audit process used by the independent auditor would be useful to investors.

1. Certified Public Accountants with large public accounting firms;
2. Commercial Loan Officers (CLOs); and
3. Corporate controllers.

CPAs included in the first group were randomly selected from the most recent AICPA membership list (AICPA, 1984). CPAs selected were partners in major public accounting firms.

Commercial Loan Officers comprise group two, the user group. CLOs were selected from among those currently working for the 500 largest banks in the United States. Users' attitudes regarding the meaning of the audit opinions are a critical issue for many reasons. One important reason is that users provide most of the resources available to publicly held corporations. Therefore, users' attitudes regarding the audit opinion may affect how users allocate their resources.

Corporate controllers, the third group, were randomly selected from the Business Week listing of the 1000 most valuable firms in America. Corporate controllers represent the preparer function. A controller should be the highest ranking management member with direct responsibility for the corporation's financial statement preparation. An entity's financial statements are representations of the entity's management. Therefore, it is important to include a management group in the study. Management's attitudes

regarding the meaning of the audit opinion may have implications associated with management's actions.

Implementation of the survey. Dillman (1978) promoted the Total Design Method (TDM) for conducting surveys via the mail. TDM begins with the design of the survey instrument and proceeds through to the end of the survey period. The following section describes the actual administration of the survey from the initial mailing through the end of the survey period. (The discussion of questionnaire construction is found in Appendix A: Questionnaire Development.) The steps followed are from Mail and Telephone Surveys: The Total Design Method (1978) by Don A. Dillman.

Each subject selected received the instrument via the mail. The packets included (in this order):

1. a cover letter;
2. the survey instrument; and
3. a business reply envelope.

Each questionnaire presented the sections in the same order as follows:

1. the audit opinions and attitude section;
2. the knowledge section;
3. the overall attitude toward audit reporting section; and
4. the demographic section.

However, in order to test for form effects one-half of the questionnaires presented the unqualified opinion first and one-half of the questionnaires presented the qualified opinion first.

The cover letter was designed to achieve five objectives:

1. Solicit a response as soon as possible;
2. Tell the subject why and how he/she was selected;
3. Provide assurance of confidentiality for those responding;
4. Briefly describe the study and its importance; and
5. Promise a reward to enhance the response rate (the reward was a copy of the results).

The entire cover letter can be seen in Appendix C: First Request Letters.

All packets were pre-numbered in order to identify those subjects responding and to reduce the number of second requests necessary. One week after the initial request was mailed a follow-up postcard was mailed to all subjects. The intent of the postcard was to thank all those subjects who responded promptly and to provide a gentle reminder to those subjects who had not yet responded. The postcards can be seen in Appendix D: Postcards.

Three weeks after the initial mailing, second requests were mailed to all subjects who had not yet responded. The second request packets were identical to the initial request

packets with the exception of the cover letter. The second request cover letter was slightly stronger in terms of requesting a response. The second request cover letter can be seen in Appendix E: Second Request Letters.

All responses were recorded as received in order to perform the tests for possible response bias. The survey period ended approximately eight weeks after the initial mailing.

In keeping with the TDM all cover letters were addressed and printed individually. In addition, all cover letters and postcards were hand signed with a blue ball point pen. Each step in the TDM is designed to increase the survey's response rate. Most surveys using TDM discussed by Dillman (1978) achieve a response rate of over fifty percent. The response rates and the results of tests for response bias are presented in the next section.

D. Descriptive Statistics from the Demographics and Results of Tests for Response Bias

The following section presents response rates, descriptive statistics compiled from the demographic data provided by the subjects, and results of tests for response bias.

Response rates. Table 5 presents the response rates for the study. The overall response rate for total

Table 5. Response Rates: Overall and by Group.

GROUP	Number	Percentage of total	Percentage of remaining*
<u>OVERALL:</u>			
Returned, usable	418	41.8%	45.7%
Returned, unusable	4	.4%	N/A
Not returned	492	49.1%	N/A
Deleted**	87	8.7%	N/A
Total Mailed	<u>1001</u>	<u>100.0%</u>	N/A
<u>CPAs:</u>			
Returned, usable	160	40.0%	45.9%
Returned, unusable	0	0%	N/A
Not returned	189	47.3%	N/A
Deleted**	51	12.7%	N/A
Total Mailed	<u>400</u>	<u>100.0%</u>	N/A
<u>LOAN OFFICERS:</u>			
Returned, usable	120	40.0%	42.3%
Returned, unusable	1	.3%	N/A
Not returned	163	54.3%	N/A
Deleted**	16	5.4%	N/A
Total Mailed	<u>300</u>	<u>100.0%</u>	N/A
<u>CONTROLLERS:</u>			
Returned, usable	138	45.8%	49.1%
Returned, unusable	3	1.0%	N/A
Not returned	140	46.5%	N/A
Deleted**	20	6.7%	N/A
Total Mailed	<u>301</u>	<u>100.0%</u>	N/A

*Percentage remaining = Total mailed - Deleted

Therefore, CPA % remaining = 349

Loan Officers % remaining = 284

Controllers % remaining = 281

Overall % remaining = 914.

**Reasons for deleting subjects include:

1. Returned for wrong address.
2. Returned, no longer employed there.
3. Returned, cannot participate due to firm policy.
4. Returned, deceased.

questionnaires mailed (1001) was 41.8 percent (418).

Dillman (1978, p. 50) suggests that a better measure of the response rate is:

$$\frac{\text{Number Returned}}{\text{Number in Sample} - (\text{Noneligible} + \text{Nonreachable})} \times 100.$$

For this study the overall response rate when calculated in this manner is 45.7 percent. The reasons for deleting subjects included:

1. Returned for wrong address;
2. Returned, no longer employed there;
3. Returned, cannot participate due to company policy; and
4. Returned, deceased.

The majority of CPAs deleted were no longer employed at the firm where they were contacted. The majority of the CLOs deleted were contacted at the wrong address. The majority of the Controllers deleted could not participate due to company policy.

All groups included in the study had response rates over 40 percent. The group response rates were 45.9 percent, 42.3 percent, and 49.1 percent for CPAs, CLOs, and Controllers, respectively. The number of usable responses for each group was 160 for CPAs, 120 for CLOs, and 138 for Controllers. The total number returned was 422 of which 418 were usable.

Given the length of the questionnaire, ten pages, and the amount of time necessary to complete the questionnaire, twenty minutes, a response rate of 45.7 percent is very good. Dillman (1978) points out that questionnaire length is a factor in the response rate for a mail survey. The questionnaire used in this study is on the edge as far as length is concerned based upon prior studies. Dillman (1978) concludes, "There is not much difference in the response rates for questionnaires of less than 12 pages . . . for either the general public or specialized populations." (Dillman, 1978, p. 55.) The response rate for this study is slightly lower than the average reported by Dillman (1978). One reason for this is a minor departure from the TDM, in this study a third request by certified mail was not sent due to the response rate achieved and due to cost considerations.

Demographic data. Table 6 presents the combined demographic data for all subjects responding. Tables 7, 8, and 9 present the demographic data for the CPAs responding, the CLOs responding, and the Controllers responding, respectively.

As can be seen from Table 6 the average respondent is 43 years old, has worked for 20 years, has been in his/her present position for 8 years, has at least an undergraduate degree with a major in business and presently works with audited financial statements. Over 95 percent (395) of

Table 6. Descriptive Statistics for Demographic Data for All Subjects.

Characteristic	Result	Percentage (If Applicable)
Average years at current or similar position.	8.05	1 to 48
Average total years work experience.	20.08	2 to 48
Number taken the CPA Exam.	281	67.2%
Number passed the CPA Exam.	279	66.7%
Number worked for a CPA firm.	273	65.3%
Average years worked for a CPA firm.	14.61	1 to 40
Number involved in auditing.	273	65.3%
Number taken the CMA Exam.	28	6.7%
Number passed the CMA Exam.	28	6.7%
Number presently working with audited financial statements.	395	94.5%
Level of Formal Education:		
High School	1	.2%
Some College	12	2.9%
B.S. or B.A.	196	46.9%
Some Graduate School	69	16.5%
Masters Degree	128	30.6%
Ph.D. or DBA	0	0%
Other	12	2.9%
Undergraduate Major:		
Accounting	259	62.0%
Finance	19	4.6%
Other Business	92	22.0%
Non-Business	42	10.0%
None	6	1.4%

Table 6. (continued)

Characteristic	Result	Percentage (If Applicable)
Graduate Major:		
Accounting	62	14.8%
Finance	46	11.0%
Other Business	54	12.9%
Non-Business	3	.8%
Law Degree	13	3.1%
None	240	57.4%
Range of years in which education was completed.	1946 to 1986	
Average age.	43.33	22 to 66
Number completing each form:		
Unqualified Opinion First.	218	52.2%
Qualified Opinion First.	200	47.8%
Number returning in each period:		
Early, before Nov. 24, 1986.	252	60.3%
Late, after Nov. 24, 1986.	166	39.7%
Number returned from:		
First Request.	289	69.1%
Second Request.	129	30.9%
Number requesting the results.	183	43.8%

Table 7. Descriptive Statistics for Demographic Data for Certified Public Accountants (CPAs).

Characteristic	Result	Percentage (If Applicable)
Number at each position:		
Audit Partner.	135	84.4%
Tax Partner.	11	6.9%
Audit Manager.	12	7.4%
Audit Supervisor.	2	1.3%
Average years at current or similar position.	9.70	1 to 33
Average total years work experience.	20.44	2 to 40
Number taken the CPA Exam.	160	100%
Number passed the CPA Exam.	160	100%
Number worked for a CPA firm.	160	100%
Average years worked for a CPA firm.	20.44	2 to 40
Number involved in auditing.	149	93.1%
Number taken the CMA Exam.	25	15.6%
Number passed the CMA Exam.	25	15.6%
Number presently working with audited financial statements.	145	90.6%
Level of Formal Education:		
High School	0	0%
Some College	1	.7%
B.S. or B.A.	96	60.0%
Some Graduate School	22	13.7%
Masters Degree	33	20.6%
Ph.D. or DBA	0	0%
Other	8	5.0%

Table 7. (continued)

Characteristic	Result	Percentage (If Applicable)
Undergraduate Major:		
Accounting	128	80.0%
Finance	0	0%
Other Business	19	11.9%
Non-Business	12	7.5%
None	1	.6%
Graduate Major:		
Accounting	25	15.6%
Finance	6	3.8%
Other Business	14	8.8%
Non-Business	2	1.3%
Law Degree	9	5.5%
None	104	65.0%
Range of years in which education was completed.	1950 to 1983	
Average age.	43.85	25 to 62
Number completing each form:		
Unqualified Opinion First.	89	55.6%
Qualified Opinion First.	71	44.4%
Number returning in each period:		
Early, before Nov. 24, 1986.	107	66.9%
Late, after Nov. 24, 1986.	53	33.1%
Number returned from:		
First Request.	119	74.4%
Second Request.	41	25.6%
Number requesting the results.	63	39.4%

Table 8. Descriptive Statistics for Demographic Data for Commercial Loan Officers (CLOs).

Characteristic	Result	Percentage (If Applicable)
Number at each position:		
Loan Officer.	27	22.5%
Vice President.	72	60.0%
Vice President and Loan Officer.	13	10.8%
Other.	8	6.7%
Average years at current or similar position.	7.52	1 to 48
Average total years work experience.	18.67	2 to 48
Number taken the CPA Exam.	9	7.5%
Number passed the CPA Exam.	9	7.5%
Number worked for a CPA firm.	9	7.5%
Average years worked for a CPA firm.	5.33	1 to 12
Number involved in auditing.	14	11.7%
Number taken the CMA Exam.	0	0%
Number passed the CMA Exam.	0	0%
Number presently working with audited financial statements.	116	96.7%
Level of Formal Education:		
High School	1	.8%
Some College	11	9.3%
B.S. or B.A.	40	33.3%
Some Graduate School	24	20.0%
Masters Degree	43	35.8%
Ph.D. or DBA	0	0%
Other	1	.8%

Table 8. (continued)

Characteristic	Result	Percentage (If Applicable)
Undergraduate Major:		
Accounting	18	15.0%
Finance	18	15.0%
Other Business	58	48.3%
Non-Business	21	17.5%
None	5	4.2%
Graduate Major:		
Accounting	9	7.5%
Finance	24	20.0%
Other Business	22	18.3%
Non-Business	0	0%
Law Degree	2	1.7%
None	63	52.5%
Range of years in which education was completed.	1946 to 1986	
Average age.	42.12	22 to 66
Number completing each form:		
Unqualified Opinion First.	57	47.5%
Qualified Opinion First.	63	52.5%
Number returning in each period:		
Early, before Nov. 24, 1986.	56	46.7%
Late, after Nov. 24, 1986.	64	53.3%
Number returned from:		
First Request.	74	61.7%
Second Request.	46	38.3%
Number requesting the results.	60	50.0%

Table 9. Descriptive Statistics for Demographic Data for Corporate Controllers.

Characteristic	Result	Percentage (If Applicable)
Number at each position:		
Controller.	50	36.2%
Vice President and Controller or Vice President of Accounting.	38	27.5%
Vice President Reporting.	22	16.0%
Director of Internal Audit.	5	3.6%
Vice President of Finance.	5	3.6%
Chief Financial Officer.	7	5.1%
Treasurer.	3	2.2%
Corporate Accounting or Director of Accounting.	8	5.8%
Average years at current or similar position.	6.59	1 to 39
Average total years work experience.	20.89	6 to 46
Number taken the CPA Exam.	112	81.2%
Number passed the CPA Exam.	110	79.7%
Number worked for a CPA firm.	104	75.4%
Average years worked for a CPA firm.	6.45	1 to 17
Number involved in auditing.	110	79.7%
Number taken the CMA Exam.	3	2.2%
Number passed the CMA Exam.	3	2.2%
Number presently working with audited financial statements.	134	97.1%

Table 9. (continued)

Characteristic	Result	Percentage (If Applicable)
Level of Formal Education:		
High School	0	0%
Some College	0	0%
B.S. or B.A.	60	43.5%
Some Graduate School	23	16.6%
Masters Degree	52	37.7%
Ph.D. or DBA	0	0%
Other	3	2.2%
Undergraduate Major:		
Accounting	112	81.2%
Finance	1	.7%
Other Business	15	10.9%
Non-Business	9	6.5%
None	1	.7%
Graduate Major:		
Accounting	28	20.3%
Finance	16	11.6%
Other Business	18	13.0%
Non-Business	1	.7%
Law Degree	2	1.5%
None	73	52.9%
Range of years in which education was completed.	1948 to 1986	
Average age.	43.77	27 to 63
Number completing each form:		
Unqualified Opinion First.	72	52.2%
Qualified Opinion First.	66	47.8%
Number returning in each period:		
Early, before Nov. 24, 1986.	89	64.5%
Late, after Nov. 24, 1986.	49	35.5%
Number returned from:		
First Request.	96	69.6%
Second Request.	42	30.4%
Number requesting the results.	60	43.5%

those responding presently work with audited financial statements in some capacity. This familiarity with audited financial statements should make the respondent group knowledgeable regarding what they perceive about the quality versus what they need/want pertaining to the quality of audited financial statements. Over 95 percent of those responding have college degrees with almost 90 percent of the degrees being in a business major. Accounting was the most common major, 62 percent (259) of the respondents reported it as their undergraduate major. Almost 40 percent of those responding had some type of graduate business training and/or degree with accounting again being the most common. The overall results tend to be skewed toward accounting by the profession of two of the groups, i.e., CPAs and Controllers. A closer look at each of the three groups is warranted, followed by an analysis of differences between the groups on several of the demographic variables using both Chi-Square tests and ANOVA.

All of the CPAs except one have an undergraduate degree of some type. Over 34 percent of the CPAs have attended graduate school. The average age is almost 44 years, with almost 20.5 years of work experience. Of the CPAs responding 146 were partners with their firms. The questionnaires were mailed exclusively to partners, but in some cases the questionnaire was passed down to

subordinates. The average number of years in the current position for the CPA group was almost ten years.

The average age for the CLO group is slightly younger than that of the other two groups at 42 years of age. The total number of years work experience is also slightly lower at not quite 19 years. The number of years at the current or similar position falls almost in the middle at 7.5 years. Almost 90 percent of the CLOs have at least a college degree with almost 80 percent being in a business major. However, only 15 percent of the undergraduate majors were in accounting. Over 45 percent of the CLO group have attended graduate school. Over 93 percent fell into the categories desired regarding the position currently held by those in the CLO group responding. From this group 116 or almost 97 percent reported currently working with audited financial statements.

The Controller group presented the most diverse group as far as current position is concerned; however, all of the respondents work within the financial reporting framework of their respective firms. Those in the Controller group are almost the same age on average as the CPAs, almost 44 years old and the number of years of experience is also about the same at not quite 21 years. Those in the Controller group were, however, newer to their current positions, holding them about 6.5 years. Again, the majority, 97 percent, work with audited financial statements. All of the Controllers

responding have at least an undergraduate degree with over 81 percent of those majoring in accounting. The total with business majors of some type is almost 93 percent. Over 54 percent of the Controllers responding have attended graduate school.

Table 10 presents the results of tests for differences between the groups on selected demographic variables using a two-way chi-square analysis. The groups were significantly different on all the demographic variables tested at the $p=.01$ level, except for whether or not they currently work with audited financial statements. There were no differences between groups on the form type returned, the request responded to, or whether or not they requested a copy of the results. However, there was a significant difference between the groups regarding the period in which the questionnaire was returned, the CLOs were slower at returning the questionnaire than the other two groups. The demographic variables tested using the chi-square included:

1. Taken the CPA Exam (yes or no);
2. Passed the CPA Exam (yes or no);
3. Worked for a CPA firm (yes or no);
4. Involved with auditing (yes or no);
5. Taken the CMA Exam (yes or no);
6. Passed the CMA Exam (yes or no); and
7. Currently work with audited financial statements (yes or no).

Table 10. Tests for Differences in Demographics Between the Groups.

Variable	(N=418)		
	Chi-Square	Degrees of Freedom	Probability
Taken CPA Exam.	284.44	2	.000
Passed CPA Exam.	279.94	2	.000
Worked for CPA firm.	268.16	2	.000
Involved with auditing.	219.69	2	.000
Taken CMA Exam.	33.54	2	.000
Passed CMA Exam.	33.54	2	.000
Currently work with audited financial statements.	7.50	2	.024
Form Type Returned.	1.81	2	.404
Period Responded.	13.22	2	.001
Request Responded To.	5.21	2	.074
Requested Results.	3.15	2	.207

As the tables show, the CPA group has a higher percentage answering in the affirmative for the first six items than the other two groups. The Controllers rank second on the six variables followed by the CLOs. These results are expected because a large number of individuals involved in corporate accounting got their start in public accounting. The final variable compared regarding currently working with audited financial statements shows that more of the Controllers and CLOs answered in the affirmative than did the CPAs. On the surface this appears surprising, however, the number of tax partners in the sample and the number of audit partners currently on assignment elsewhere, account for the difference.

Table 11 shows the results of tests for differences on the demographic variables using chi-square when the responses are analyzed by form type. It did not matter which form type was returned, i.e., the unqualified opinion presented first or the qualified opinion presented first, the groups differed on the same six demographic variables regarding professional certification and affiliation with a public accounting firm.

Table 12 demonstrates that the same differences exist between the groups on the demographic variables regardless of when they responded, i.e., early or late. Those classified as early responded prior to November 24, 1986 and those classified as late responded after that date.

Table 11. Tests for Differences in Demographics Between the Groups Within Form Type.

Variable	Chi-Square	Degrees of Freedom	Probability
UNQUALIFIED OPINION PRESENTED FIRST, N=218.			
Taken CPA Exam.	145.93	2	.000
Passed CPA Exam.	145.93	2	.000
Worked for CPA firm.	136.45	2	.000
Involved with auditing.	105.14	2	.000
Taken CMA Exam.	20.70	2	.000
Passed CMA Exam.	20.70	2	.000
Currently work with audited financial statements.	2.68	2	.262
Period Responded.	12.81	2	.002
Request Responded To.	11.46	2	.003
Requested Results.	5.14	2	.077
QUALIFIED OPINION PRESENTED FIRST, N=200.			
Taken CPA Exam.	140.29	2	.000
Passed CPA Exam.	134.96	2	.000
Worked for CPA firm.	132.15	2	.000
Involved with auditing.	113.21	2	.000
Taken CMA Exam.	11.90	2	.003
Passed CMA Exam.	11.90	2	.003
Currently work with audited financial statements.	5.60	2	.061
Period Responded.	2.28	2	.320
Request Responded To.	.16	2	.921
Requested Results.	.17	2	.920

Table 12. Tests for Differences in Demographics Between the Groups Within Response Periods.

Variable	Chi-Square	Degrees of Freedom	Probability
RESPONDED EARLY, i.e., PRIOR TO 11-24-86, N=252.			
Taken CPA Exam.	176.97	2	.000
Passed CPA Exam.	174.51	2	.000
Worked for CPA firm.	160.96	2	.000
Involved with auditing.	129.64	2	.000
Taken CMA Exam.	20.33	2	.000
Passed CMA Exam.	20.33	2	.000
Currently work with audited financial statements.	3.25	2	.197
Form Type Returned.	3.42	2	.181
Requested Results.	2.53	2	.282
RESPONDED LATE, i.e., AFTER 11-24-86, N=166.			
Taken CPA Exam.	107.04	2	.000
Passed CPA Exam.	104.95	2	.000
Worked for CPA firm.	107.04	2	.000
Involved with auditing.	86.39	2	.000
Taken CMA Exam.	12.20	2	.002
Passed CMA Exam.	12.20	2	.002
Currently work with audited financial statements.	5.70	2	.058
Form Type Returned.	.14	2	.934
Requested Results.	2.29	2	.318

Table 13 presents the chi-square statistics for tests for differences between the groups on the demographic variables when isolated by which request they responded to, i.e., first or second. Again, the same differences show up between the groups on the first six variables presented.

Table 14 shows the results of tests for differences between the groups on the demographic variables when the subjects are identified as those requesting the survey results and those not requesting the survey results. Again, the groups were different on the same six demographic variables regardless of whether they requested the results.

Table 15 presents ANOVA results for tests for differences between groups on the demographic variable, number of years at current or similar position. There were significant differences between the groups on this variable. When the entire respondent group was included in the analysis an $F=8.92$, $p<.000$ was obtained. Upon further testing it was found that CPAs had been in their current position significantly longer than either the CLOs or the Controllers. However, from the overall sample there does not appear to be a significant difference between CLOs and Controllers in the length of time in their current position. The rest of Table 15 presents the ANOVA results when the sample was divided by form type, period responded, request responded to, and whether the results were requested. For the most part the results are similar in all of the tests

Table 13. Tests for Differences in Demographics Between the Groups Within Mailing Requests.

Variable	Chi-Square	Degrees of Freedom	Probability
RESPONDED to the FIRST REQUEST, N=289.			
Taken CPA Exam.	199.77	2	.000
Passed CPA Exam.	197.34	2	.000
Worked for CPA firm.	188.06	2	.000
Involved with auditing.	144.83	2	.000
Taken CMA Exam.	22.18	2	.000
Passed CMA Exam.	22.18	2	.000
Currently work with audited financial statements.	7.23	2	.027
Form Type Returned.	6.26	2	.044
Requested Results.	2.17	2	.338
RESPONDED to the SECOND REQUEST, N=129.			
Taken CPA Exam.	84.14	2	.000
Passed CPA Exam.	82.16	2	.000
Worked for CPA firm.	80.43	2	.000
Involved with auditing.	73.18	2	.000
Taken CMA Exam.	11.16	2	.004
Passed CMA Exam.	11.16	2	.004
Currently work with audited financial statements.	1.75	2	.416
Form Type Returned.	1.64	2	.441
Requested Results.	4.23	2	.121

Table 14. Tests for Differences in Demographics Between the Groups Within Results Requests.

Variable	Chi-Square	Degrees of Freedom	Probability
RESULTS REQUESTED, N=183.			
Taken CPA Exam.	121.25	2	.000
Passed CPA Exam.	116.31	2	.000
Worked for CPA firm.	124.17	2	.000
Involved with auditing.	105.15	2	.000
Taken CMA Exam.	26.66	2	.000
Passed CMA Exam.	26.66	2	.000
Currently work with audited financial statements.	6.84	2	.030
Form Type Returned.	.09	2	.958
Period Responded.	6.14	2	.047
Request Responded To.	5.50	2	.064
RESULTS NOT REQUESTED, N=235.			
Taken CPA Exam.	164.92	2	.000
Passed CPA Exam.	164.92	2	.000
Worked for CPA firm.	145.60	2	.000
Involved with auditing.	117.71	2	.000
Taken CMA Exam.	10.75	2	.005
Passed CMA Exam.	10.75	2	.005
Currently work with audited financial statements.	2.73	2	.255
Form Type Returned.	3.88	2	.144
Period Responded.	8.71	2	.013
Request Responded To.	2.83	2	.243

Table 15. ANOVA Results from Comparison of Group Means
for the Variable: Number of Years at Current or
Similar Position.

Dependent Variable: Years at current or similar position.

Test: Overall, N=418.

<u>Group</u>	<u>n</u>	<u>Mean</u>	<u>Standard Deviation</u>
CPAs	160	9.70	5.99
Loan Officers	120	7.52	7.75
Controllers	138	6.59	5.97

ANOVA Results: N=418

<u>Independent Variable</u>	<u>F Value</u>	<u>Probability</u>
Group	8.92	.0002

Contrast:

CPA vs. Loan	7.65	.0059
CPA vs. Controller	16.73	.0001
Loan vs. Controller	1.28	.2588

Test: by Form, Unqualified Opinion First, N=218
Qualified Opinion First, N=200

<u>Group</u>	<u>Unqualified</u>		<u>Qualified</u>	
	<u>n</u>	<u>Mean</u>	<u>n</u>	<u>Mean</u>
CPAs	89	9.80	71	9.58
Loan Officers	57	7.33	63	7.68
Controllers	72	6.57	66	6.62

ANOVA Results:

<u>Independent Variable</u>	<u>Unqualified</u>		<u>Qualified</u>	
	<u>F</u>	<u>Prob</u>	<u>F</u>	<u>Prob</u>
Group	5.08	.0070	3.79	.0242

Contrast:

CPA vs. Loan	4.67	.0317	2.95	.0876
CPA vs. Controller	9.19	.0027	7.35	.0073
Loan vs. Controller	.41	.5221	.89	.3459

Table 15. (continued)

Test: by Period, Early, N=252
Late, N=166

Group	<u>n</u>	<u>Early</u> <u>Mean</u>	<u>n</u>	<u>Late</u> <u>Mean</u>
CPAs	107	9.96	53	9.17
Loan Officers	56	9.11	64	6.13
Controllers	89	6.48	49	6.80

ANOVA Results

Independent Variable	<u>F</u>	<u>Early</u> <u>Prob</u>	<u>F</u>	<u>Late</u> <u>Prob</u>
Group	7.60	.0006	3.14	.0460

Contrast:

CPA vs. Loan	.67	.4140	5.90	.0162
CPA vs. Controller	14.64	.0002	3.15	.0779
Loan vs. Controller	5.89	.0159	.27	.6013

Test: by Request, First, N=289
Second, N=129

Group	<u>n</u>	<u>First</u> <u>Mean</u>	<u>n</u>	<u>Second</u> <u>Mean</u>
CPAs	119	9.71	41	9.66
Loan Officers	74	9.03	46	5.09
Controllers	96	6.38	42	7.10

ANOVA Results

Independent Variable	<u>F</u>	<u>First</u> <u>Prob</u>	<u>F</u>	<u>Second</u> <u>Prob</u>
Group	7.07	.0010	6.27	.0025

Contrast:

CPA vs. Loan	.48	.4868	12.52	.0006
CPA vs. Controller	13.33	.0003	3.77	.0545
Loan vs. Controller	6.61	.0106	2.45	.1202

Table 15. (continued)

Test: by Answers, Answers Requested, N=183				
Answers Not Requested, N=235				
Group	<u>Answers</u>		<u>No Answers</u>	
	<u>n</u>	<u>Mean</u>	<u>n</u>	<u>Mean</u>
CPAs	63	9.71	97	9.69
Loan Officers	60	6.35	60	8.68
Controllers	60	7.23	78	6.10

ANOVA Results

Independent Variable	<u>Answers</u>		<u>No Answers</u>	
	<u>F</u>	<u>Prob</u>	<u>F</u>	<u>Prob</u>
Group	5.60	.0044	5.79	.0035

Contrast:

CPA vs. Loan	10.35	.0015	.76	.3840
CPA vs. Controller	5.63	.0187	11.26	.0009
Loan vs. Controller	.70	.4050	4.57	.0336

for differences among the groups. The CPAs have been in their positions the longest followed by the CLOs with the Controllers on average in their positions the least amount of time.

Table 16 presents ANOVA results for tests for differences between groups for the demographic variable, total years of work experience. For the overall test with all 418 respondents included, there were no significant differences between the groups in total number of years work experience. The Controller group had slightly more experience than the CPA group, followed by the CLO group. ANOVA results when the sample was isolated by form type returned, period returned, request returned, and whether results were requested follow in Table 16. The only significant difference between groups appears to be in those requesting results. CLOs requesting results had significantly less experience than either CPAs or Controllers.

Table 17 presents the ANOVA results for tests for differences between the groups on the demographic variable, age. No significant differences were found between groups in their ages.

Response bias tests. In any mail survey tests for response bias are necessary in order to ascertain whether there are any significant differences between those subjects who respond faster and those subjects who respond slower

Table 16. ANOVA Results from Comparison of Group Means for the Variable: Number of Total Years Work Experience.

Dependent Variable: Total years work experience.

Test: Overall, N=418.

<u>Group</u>	<u>n</u>	<u>Mean</u>	<u>Standard Deviation</u>
CPAs	160	20.44	6.95
Loan Officers	120	18.67	10.35
Controllers	138	20.89	8.58

ANOVA Results: N=418

<u>Independent Variable</u>	<u>F Value</u>	<u>Probability</u>
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Group	2.39	.0932
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Contrast:

CPA vs. Loan	2.92	.0880
CPA vs. Controller	.21	.6489
Loan vs. Controller	4.32	.0383

Test: by Form, Unqualified Opinion First, N=218
Qualified Opinion First, N=200

<u>Group</u>	<u>Unqualified</u>		<u>Qualified</u>	
	<u>n</u>	<u>Mean</u>	<u>n</u>	<u>Mean</u>
CPAs	89	20.28	71	20.63
Loan Officers	57	18.40	63	18.90
Controllers	72	20.85	66	20.94

ANOVA Results

<u>Independent Variable</u>	<u>Unqualified</u>		<u>Qualified</u>	
	<u>F</u>	<u>Prob</u>	<u>F</u>	<u>Prob</u>

Group	1.33	.2666	1.09	.3383
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Contrast:

CPA vs. Loan	1.60	.2076	1.40	.2378
CPA vs. Controller	.17	.6836	.04	.8324
Loan vs. Controller	2.48	.1168	1.87	.1725

Table 16. (continued)

Test: by Period, Early, N=252 Late, N=166					
Group	n	<u>Early</u> Mean		<u>Late</u> Mean	
CPAs	107	20.60		20.11	
Loan Officers	56	20.13		17.39	
Controllers	89	21.90		19.06	
ANOVA Results					
Independent Variable		<u>F</u>	<u>Early</u> Prob	<u>F</u>	<u>Late</u> Prob
Group		.94	.3931	1.44	.2404
Contrast:					
CPA vs. Loan		.12	.7323	2.79	.0968
CPA vs. Controller		1.17	.2801	.37	.5461
Loan vs. Controller		1.54	.2155	1.01	.3175
Test: by Request, First, N=289 Second, N=129					
Group	n	<u>First</u> Mean		<u>Second</u> Mean	
CPAs	119	20.43		20.46	
Loan Officers	74	19.96		16.59	
Controllers	96	21.82		18.76	
ANOVA Results					
Independent Variable		<u>F</u>	<u>First</u> Prob	<u>F</u>	<u>Second</u> Prob
Group		1.16	.3139	2.27	.1080
Contrast:					
CPA vs. Loan		.14	.7102	4.48	.0362
CPA vs. Controller		1.42	.2339	.83	.3649
Loan vs. Controller		2.00	.1585	1.43	.2341

Table 16. (continued)

Test: by Answers, Answers Requested, N=183				
Answers Not Requested, N=235				
Group	<u>Answers</u>		<u>No Answers</u>	
	<u>n</u>	<u>Mean</u>	<u>n</u>	<u>Mean</u>
CPAs	63	20.06	97	20.68
Loan Officers	60	16.12	60	21.22
Controllers	60	20.03	78	21.55

ANOVA Results

Independent Variable	<u>Answers</u>		<u>No Answers</u>	
	<u>F</u>	<u>Prob</u>	<u>F</u>	<u>Prob</u>
Group	4.74	.0098	.22	.8027

Contrast:

CPA vs. Loan	7.28	.0076	.14	.7097
CPA vs. Controller	.00	.9836	.43	.5140
Loan vs. Controller	7.00	.0089	.05	.8242

Table 17. ANOVA Results from Comparison of Group Means
for the Variable: Age.

Dependent Variable: Age.

Test: Overall, N=418.

Group	n	Mean	Standard Deviation
CPAs	160	43.85	7.46
Loan Officers	120	42.13	10.71
Controllers	138	43.77	8.81

ANOVA Results: N=418

Independent Variable	F Value	Probability
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Group	1.53	.2182
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Contrast:

CPA vs. Loan	2.56	.1107
CPA vs. Controller	.01	.9372
Loan vs. Controller	2.17	.1414

Test: by Form, Unqualified Opinion First, N=218
Qualified Opinion First, N=200

Group	Unqualified		Qualified	
	n	Mean	n	Mean
CPAs	89	43.48	71	44.31
Loan Officers	57	41.05	63	43.10
Controllers	72	43.88	66	43.65

ANOVA Results

Independent Variable	Unqualified		Qualified	
	F	Prob	F	Prob

Group	1.73	.1800	.33	.7196
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Contrast:

CPA vs. Loan	2.43	.1205	.65	.4194
CPA vs. Controller	.07	.7882	.20	.6576
Loan vs. Controller	3.00	.0847	.13	.7162

Table 17. (continued)

Test: by Period, Early, N=252 Late, N=166					
Group	n	<u>Early</u> Mean	n	<u>Late</u> Mean	
CPAs	107	43.79	53	43.96	
Loan Officers	56	43.77	64	40.69	
Controllers	89	45.06	49	41.43	

ANOVA Results

Independent Variable	F	<u>Early</u> Prob	F	<u>Late</u> Prob
Group	.60	.5472	2.03	.1352

Contrast:

CPA vs. Loan	.00	.9854	3.82	.0524
CPA vs. Controller	1.01	.3170	2.01	.1585
Loan vs. Controller	.74	.3900	.19	.6659

Test: by Request, First, N=289
Second, N=129

Group	n	<u>First</u> Mean	n	<u>Second</u> Mean	
CPAs	119	43.83	41	43.90	
Loan Officers	74	43.36	46	40.13	
Controllers	96	44.95	42	41.07	

ANOVA Results

Independent Variable	F	<u>First</u> Prob	F	<u>Second</u> Prob
Group	.73	.4811	2.18	.1174

Contrast:

CPA vs. Loan	.12	.7247	4.09	.0451
CPA vs. Controller	.83	.3641	2.21	.1399
Loan vs. Controller	1.31	.2538	.26	.6123

Table 17. (continued)

Test: by Answers, Answers Requested, N=183				
Answers Not Requested, N=235				
Group	<u>Answers</u>		<u>No Answers</u>	
	<u>n</u>	<u>Mean</u>	<u>n</u>	<u>Mean</u>
CPAs	63	43.49	97	44.08
Loan Officers	60	39.50	60	44.75
Controllers	60	42.90	78	44.44

ANOVA Results

Independent Variable	<u>Answers</u>		<u>No Answers</u>	
	<u>F</u>	<u>Prob</u>	<u>F</u>	<u>Prob</u>
Group	3.79	.0245	.10	.9004

Contrast:

CPA vs. Loan	6.58	.0111	.20	.6521
CPA vs. Controller	.14	.7041	.07	.7966
Loan vs. Controller	4.66	.0323	.04	.8392

which might influence the results of the analyses in the focal part of the study. In survey research it is not possible to obtain data from the entire potential sample group, therefore tests for response bias are necessary. Nonsignificant results from response bias tests indicate that we should have a representative sample for our study. Tests for response bias were performed in two ways on the data. In the first response bias analysis the subjects were divided into two categories:

1. Early responders, those responding prior to November 24, 1986, (252); and
2. Late responders, those responding after November 24, 1986, (166).

In the second response bias analysis the subjects responding were again divided into two categories:

1. First, those responding to the first request (289); and
2. Second, those responding to the second request (129).

The variables selected for analysis in both sets of response bias tests include:

1. Attitude score toward an Unqualified Opinion;
2. Attitude score toward a Qualified Opinion;
3. Knowledge score;
4. "Do Not Know" score;
5. Attitude score toward audit reporting in general;

6. Years in current or similar position;
7. Years of work experience; and
8. Age.

The first five variables included in the response bias tests are variables from the main sections of the questionnaire. The three different attitude scores included are the dependent variables analyzed in the main focus of the study. The knowledge score is the covariate in the main focus of the study. The "do not know" score is compiled by adding up the number of times the subject responded, "I do not know", as the answer to a knowledge question. The final three variables are from the demographic section of the questionnaire.

Each variable was analyzed for differences using a one way ANOVA. In the first response bias analysis each of the seven variables mentioned above was the dependent variable for the ANOVA with the independent variable being the period in which the response was returned.

Table 18 presents the means, standard deviations, and the F values from the one way ANOVAs for each of the seven variables. Each variable was analyzed using the overall sample, N=418, and by group for differences between early and late responders.

Several significant differences were found between responses from the two periods. On the knowledge score the CLOs responding in the late group demonstrated more

Table 18. Results from Response Bias Tests for Early Versus Late Responders.

VARIABLE#	Means		Standard Deviation		F Value
	Early	Late	Early	Late	
Attitude Score Toward Unqualified Opinion:					
Overall	13.88	14.03	12.94	12.67	.01
CPAs	15.77	16.51	13.63	10.53	.12
Loan Officers	12.16	12.94	13.99	14.06	.09
Controllers	12.70	12.78	11.13	12.73	.00
Attitude Score Toward Qualified Opinion:					
Overall	.20	1.97	15.25	16.24	1.28
CPAs	.88	2.04	16.12	19.00	.16
Loan Officers	-3.48	1.00	16.21	14.93	2.49
Controllers	1.71	3.16	13.20	14.83	.35
Knowledge Score:					
Overall	8.63	8.29	1.95	2.01	2.99
CPAs	9.61	9.55	1.12	1.00	.11
Loan Officers	6.09	6.86	1.89	2.03	4.58*
Controllers	9.06	8.80	1.29	1.65	1.05
"Do Not Know" Score:					
Overall	.33	.43	.76	.83	1.75
CPAs	.18	.19	.53	.44	.02
Loan Officers	.82	.78	1.19	1.09	.04
Controllers	.20	.24	.48	.56	.22
Attitude Score Toward Audit Reporting in General:					
Overall	13.54	10.30	13.84	14.50	5.27*
CPAs	19.24	18.34	12.75	11.33	.19
Loan Officers	4.52	2.56	10.94	14.10	.70
Controllers	12.36	11.71	13.54	13.01	.07

Table 18. (continued)

VARIABLE#	Means		Standard Deviation		F Value
	Early	Late	Early	Late	
Average Years in Current or Similar Position:					
Overall	8.54	7.30	6.50	6.84	3.54
CPAs	9.96	9.17	6.38	5.11	.62
Loan Officers	9.11	6.13	7.73	7.55	4.56*
Controllers	6.48	6.80	5.22	7.19	.09
Average Years Work Experience:					
Overall	20.95	18.75	8.37	8.80	6.63*
CPAs	20.60	20.11	6.77	7.35	.17
Loan Officers	20.13	17.39	10.56	10.08	2.10
Controllers	21.90	19.06	8.58	8.36	3.52
Average Age:					
Overall	44.23	41.95	8.76	9.08	6.60*
CPAs	43.79	43.96	7.27	7.89	.02
Loan Officers	43.77	40.69	11.06	10.27	2.50
Controllers	45.06	41.43	8.81	8.41	5.53*

* Significant at the $p=.05$ level.

For all variables shown the subject breakdown is as follows:

Group	Number Responding	Early	Late
CPAs	160	107	53
Loan Officers	120	56	64
Controllers	138	89	49
Overall	<u>418</u>	<u>252</u>	<u>166</u>

knowledge than CLOs responding early. There were no significant differences from the other ANOVAs regarding the knowledge variable.

Another significant difference between early and late responders was found on the variable, attitude score toward audit reporting in general. However, when the individual groups were tested using ANOVA on this variable no significant differences were found. The tendency on this variable was for late responders to have less positive attitude scores toward audit reporting in general than early responders.

The remaining significant differences found between early and late responders were on the demographic variables. The CLOs responding late had been in their current position significantly fewer years than those responding early. Although the differences were not significant the CLOs responding late were also younger and had less total work experience than those responding early. This may help explain why the CLOs responding late had higher knowledge scores than those responding early. They could be more recently graduated or could have recently participated in some training program.

Overall those responding late tended to have significantly less work experience than those responding early. The F values from the individual group ANOVAs were not significant on this variable, however, the late

responders for each group did appear to have less work experience than the early responders.

The final significant differences found between early and late responders from the ANOVA tests were on the age variable. For the total sample late responders were significantly younger than the early responders. This was also true for the Controller group. There were no significant age differences between early and late responders for the CPA and CLO groups.

The second response bias analysis again uses seven one way ANOVAs for the tests for differences on the variables. In this case each of the variables again becomes the dependent variable for the ANOVA with the independent variable being the request responded to, i.e., the first or second request.

Table 19 presents the means, standard deviations, and F values for each of the one way ANOVAs for the seven variables. Each variable was analyzed using the overall sample, N=418, and by group for differences between those responding to the first request versus those responding to the second request.

There were several significant differences found between those responding to the first request and those responding to the second request. The first of these was on the variable, attitude score toward a qualified opinion. In the ANOVA using the entire sample the attitude score is

Table 19. Results from Response Bias Tests for First Versus Second Requests.

VARIABLE#	Means		Standard Deviation		F Value
	First	Second	First	Second	
Attitude Score Toward Unqualified Opinion:					
Overall	13.71	14.46	12.86	12.75	.30
CPAs	15.77	16.71	13.39	10.37	.17
Loan Officers	12.16	13.24	13.78	14.41	.17
Controllers	12.34	13.60	11.13	12.95	.33
Attitude Score Toward Qualified Opinion:					
Overall	-.25	3.48	15.58	15.56	5.10*
CPAs	.29	4.07	16.79	17.80	1.50
Loan Officers	-3.20	2.30	16.19	14.22	3.60
Controllers	1.36	4.19	13.23	14.91	1.23
Knowledge Score:					
Overall	8.56	8.35	1.97	2.01	1.02
CPAs	9.63	9.46	1.10	1.00	.73
Loan Officers	6.27	6.87	1.90	2.11	2.59
Controllers	9.00	8.88	1.32	1.66	.20
"Do Not Know" Score:					
Overall	.34	.43	.77	.83	1.20
CPAs	.18	.20	.51	.46	.04
Loan Officers	.80	.80	1.16	1.11	.00
Controllers	.20	.26	.47	.59	.46
Attitude Score Toward Audit Reporting in General:					
Overall	13.22	10.09	13.76	14.90	4.37*
CPAs	19.33	17.83	12.40	11.95	.45
Loan Officers	4.42	1.96	10.94	15.14	1.07
Controllers	12.43	11.45	13.54	12.89	.16

Table 19. (continued)

VARIABLE#	Means		Standard Deviation		F Value
	First	Second	First	Second	
Average Years in Current or Similar Position:					
Overall	8.43	7.19	6.81	6.26	3.09
CPAs	9.71	9.66	6.19	5.42	.00
Loan Officers	9.03	5.09	8.85	4.66	7.76@
Controllers	6.38	7.10	5.10	7.66	.42
Average Years Work Experience:					
Overall	20.77	18.53	8.52	8.61	6.15*
CPAs	20.43	20.46	6.70	7.72	.00
Loan Officers	19.96	16.59	10.75	9.42	3.06
Controllers	21.82	18.76	8.60	8.23	3.79
Average Age:					
Overall	44.08	41.64	8.94	8.76	6.77@
CPAs	43.83	43.90	7.37	7.79	.00
Loan Officers	43.36	40.13	11.18	9.70	2.62
Controllers	44.95	41.07	8.81	8.31	5.86*

@ Significant at the $p=.01$ level.

* Significant at the $p=.05$ level.

For all variables shown the subject breakdown is as follows:

Group	Number Responding	First	Second
CPAs	160	119	41
Loan Officers	120	74	46
Controllers	138	96	42
Overall	<u>418</u>	<u>289</u>	<u>129</u>

significantly higher for those responding to the second request than for those responding to the first request. The same pattern holds true for each of the group analyses, however, none of the individual group ANOVAs show a significant difference between first and second request responders.

The next significant difference found was from the ANOVA on the variable, attitude score toward audit reporting in general. Again, the significant difference is found in the ANOVA using the entire sample. Those responding to the second request had a significantly lower attitude score than those responding to the first request. This trend was similar for all three group ANOVAs on the attitude score, but none of these differences were significant. This finding is similar to the results from the ANOVA where the period returned was the independent variable. This consistency indicates that those individuals less satisfied with audit reporting in general tended to respond at a slower pace. In addition, this may indicate that those individuals contacted who did not respond may be less satisfied with audit reporting than those who did respond. However, all the groups appear to be affected by this result in a similar manner, therefore it should have no adverse impact on the later analyses in the study.

The same significant differences found on the demographic variables when the period returned was the

independent variable were found when the request returned was the independent variable. This tends to reinforce the following observations:

1. CLOs responding later tend to be newer to their current positions;
2. All subjects responding later tend to have fewer years of work experience; and
3. All subjects and in particular Controllers responding later tend to be younger.

All of these differences are statistically significant, but their practical significance must be questioned. In all the cases the average length of time in the current position, the average total work experience, and the average age appear to be long enough for most experiences to have been similar.

None of the response bias tests appear to have an adverse effect upon the main analyses of the study. The only potential problem may come from the finding that later responders tend to be less positive in their attitude scores toward audit reporting in general. This may tend to skew the attitude scores toward audit reporting in general found in the study to the high side when compared to the population. However, this should not distort the findings because the analysis is concerned with isolating differences between groups and the groups all displayed the same tendency for late responders.

E. Summary

This chapter has presented and discussed the research design for the study. The analyses to be used were also discussed. Rationale for each of the main hypotheses were included in the chapter.

The next section of the chapter presented a discussion of the actual survey administration. This included a brief discussion of the instrument, the model used to calculate the attitude scores, and a discussion of the subject groups. In addition, the actual survey method, the TDM was discussed.

The final section of the chapter presented the response rates for the study, the descriptive statistics, and the results of the response bias tests. The subjects contacted and responding were generally from the groups anticipated. The groups demonstrated the desired differences on the demographic variables.

Tests for response bias revealed no real surprises, except that, subjects responding later tend to have less positive attitude scores toward audit reporting in general. As noted earlier, this may cause the overall attitude scores for audit reporting in general to be higher for the sample versus the general population.

The following chapter presents the results from the analyses of the focal part of the study and a discussion of those results.

CHAPTER IV

RESULTS AND DISCUSSION OF THE EXPERIMENT

A major focus of this study is the demonstration that differences in attitudes toward audit opinions and audit reporting exist among important user groups. If such differences are found, they may be partially explained with reference to each user group's relative knowledge about the audit process. Thus, the anticipated results are that between user group attitudes will differ, and that the difference is explicable in terms of underlying differences in the groups' auditing knowledge. This finding would provide support for the idea that knowledge of the audit process mediates an individual's attitude toward audit opinions and audit reporting in general.

This chapter presents the main findings from the empirical experiment described in Chapter III. The following sections present how the variables used in the analyses were measured and scored followed by the results of the hypothesis testing and a discussion of those results.

A. The Variables of Interest

The primary models used in this study were Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) models.

Table 20 shows the means and standard deviations of the dependent variables and the covariate used in the analyses. Table 21 shows the partial correlation matrices for the variables used in the analyses. Both Table 20 and Table 21 present the results for the overall sample and by group.

There were six hypotheses of interest in this study. In order to test these hypotheses several models were used, but the variables of interest remain the same throughout. The dependent variables of interest include:

1. attitude score toward an unqualified audit opinion;
2. attitude score toward a qualified audit opinion; —
- and
3. attitude score toward audit reporting in general.

The covariate used in the study is knowledge of the audit process.

Subject knowledge of the audit process as used in this study was ascertained from the subject's answers to the knowledge section of the questionnaire, Section 2. (This can be seen in Appendix B: The Instrument.) The knowledge test includes eleven multiple choice questions relating to the audit process. The questions were obtained from several sources including textbooks, articles, and the general auditing literature. Most of the questions were used in a study (Barnett, 1976) attempting to measure knowledge differences among professional and non-professional investors. (The Barnett study was discussed in Chapter II.)

Table 20. Descriptive Statistics for the Major Variables:
Overall and by Group.

Variable	Mean	Std. Dev.	Minimum	Maximum
Overall: N=418				
Unqualified	13.94	12.82	-30	45
Qualified	.90	15.65	-45	45
Audit Reporting	12.25	14.18	-38	48
Knowledge	8.50	1.98	2	11
CPAs: N=160				
Unqualified	16.01	12.66	-28	45
Qualified	1.26	17.08	-45	45
Audit Reporting	18.94	12.27	-18	45
Knowledge	9.59	1.08	7	11
CLOs: N=120				
Unqualified	12.57	13.97	-30	45
Qualified	-1.09	15.63	-45	33
Audit Reporting	3.48	12.71	-38	39
Knowledge	6.50	2.00	2	11
Controllers: N=138				
Unqualified	12.72	11.68	-29	45
Qualified	2.22	13.77	-39	45
Audit Reporting	12.13	13.31	-18	48
Knowledge	8.96	1.43	4	11

Unqualified=Attitude Score Toward an Unqualified Opinion.
 Qualified=Attitude Score Toward a Qualified Opinion.
 Audit Reporting=Attitude Score Toward Audit Reporting.
 Knowledge=Knowledge Score.

Table 21. Correlations Between the Major Variables:
Overall and by Group.

GROUP	Unqualified	Qualified	Audit Reporting	Knowledge
Overall: N=418				
Unqualified	1.000	.399*	.147*	.146*
Qualified		1.000	.111@	.078
Audit Reporting			1.000	.345*
Knowledge				1.000
CPAs: N=160				
Unqualified	1.000	.373*	-.170@	.086
Qualified		1.000	.009	.027
Audit Reporting			1.000	.193@
Knowledge				1.000
CLOs: N=120				
Unqualified	1.000	.391*	.253*	.107
Qualified		1.000	.091	.017
Audit Reporting			1.000	.006
Knowledge				1.000
Controllers: N=138				
Unqualified	1.000	.461*	.295*	.171@
Qualified		1.000	.214@	.147
Audit Reporting			1.000	.138
Knowledge				1.000

* Significant at the $p=.01$ level.

@ Significant at the $p=.05$ level.

Unqualified=Attitude Score Toward an Unqualified Opinion.

Qualified=Attitude Score Toward a Qualified Opinion.

Audit Reporting=Attitude Score Toward Audit Reporting.

Knowledge=Knowledge Score.

Table 32 on p. 185 in Appendix A: Development of the Instrument provides the correct answers for the knowledge questions and the source of the answers.

As Table 20 shows, the knowledge scores ranged from a low of 2 correct responses to a high of 11 correct responses, a perfect score. Each question had four possible selections, with only one being correct. Therefore, a subject earned one point for each correct response and no points for an incorrect response. There was no partial scoring for any of the questions.

The data used to calculate the attitude scores toward the two audit opinions came from the first section of the questionnaire. The Fishbein expectancy value model introduced in Chapter II was used to calculate the attitude score. The belief statements used in the model are shown in Table 1, p. 72, and the evaluative statements are shown in Table 2, p. 73. The respondent indicated his/her agreement or disagreement with each statement on a seven point scale. The responses were scored for analysis purposes from -3, for strong disagreement, to +3, for strong agreement. The Fishbein model then calls for the belief statement response to be multiplied by the evaluative statement response for each attribute included. This multiplication causes the scores for each of the five attributes to range from a possible low of -9 to a possible high of +9. A negative

score for an attribute can be interpreted as a response where one of two positions may be the case:

1. The subject believes the attribute is related to the attitude object, and evaluates the attribute in a negative manner; or
2. The subject believes the attribute is not related to the attitude object, and evaluates the attribute in a positive manner.

The next step in the Fishbein model is to add the above attribute scores together which produces the attitude score toward the attitude object. As can be seen in Table 20 the attitude scores toward the unqualified opinion range from a low of -30 to a high of +45 and the attitude scores toward the qualified opinion range from a low of -45 to a high of +45. The lowest possible attitude score toward an audit opinion given the model used is -45 and the highest possible score is +45.

The last dependent variable of interest is the attitude score toward audit reporting in general. For this attitude object seven attributes were measured as to their relationship to the attitude object and their evaluation by the respondent in the same manner as the above mentioned variables. These responses were used in the Fishbein model to calculate the attitude score toward audit reporting in general. The belief statements from section 3 of the questionnaire are shown in Table 3, p. 75, and the

evaluative statements for this section are shown in Table 4, p. 76. As one can see in Table 20 the attitude scores toward audit reporting in general ranged from a low of -38 to a high of +48. The attitude scores for this variable could have ranged from a low of -63 to a high of +63. For the attitude score toward audit reporting in general neither extreme was reached.

Table 21 provides partial correlation matrices for the variables of interest in the study. One set of correlations of particular interest are those between knowledge of the audit process (the covariate) and the other variables (the dependent variables). In order for a covariate to have an influence there should be some degree of correlation either positive or negative between the covariate and the dependent variables. As Table 21 shows knowledge is significantly correlated with the attitude score toward the unqualified audit opinion and the attitude score toward audit reporting in general for the overall sample. However, knowledge is not correlated with the attitude score toward a qualified audit opinion. These findings are borne out by analyses that follow. Table 21 also shows the partial correlation matrices among the variables for each group involved in the study.

B. Results of the Hypothesis Tests

When using an ANCOVA model the first analysis may be to treat the covariate as a dependent variable. The model used for this analysis is an ANOVA model which includes knowledge of the audit process (the covariate) as the dependent variable and group membership as the independent variable. This is a test of the first hypothesis:

Hol: There are no differences in knowledge regarding the audit process between auditors, preparers, and users.

Hal: There are differences in knowledge regarding the audit process between auditors, preparers, and users. More specifically,

$K1 > K3 > K2$; where:
K1 = auditors' mean knowledge score;
K2 = users' mean knowledge score; and
K3 = preparers' mean knowledge score.

Table 22 presents the ANOVA results from the above model. Knowledge of the audit process is significantly different between the groups at the $p=.01$ level. More specific testing using specific contrasts indicates that all of the groups are significantly different from each other at the $p=.01$ level regarding knowledge of the audit process. The means for knowledge level also support the relationship between the groups as hypothesized. CPAs have the highest level of knowledge (9.59), followed by Controllers (8.96), and then CLOs (6.50).

Table 22. ANOVA Results Where Knowledge is the Dependent Variable and Group Membership is the Independent Variable.#

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANOVA RESULTS:				
Source of Variation				
Between Groups	698.90	2	349.45	154.67*
Within Groups	937.59	415	2.26	
TOTAL	1,636.49	417		
CONTRASTS:				
CPAs vs CLOs	653.57	1	653.57	289.33*
CPAs vs Controllers	28.83	1	28.83	12.76*
Controllers vs CLOs	389.62	1	389.62	172.45*

* Significant at the $p=.01$ level.

Descriptive statistics for the dependent variable:

Group	N	Knowledge Score	
		Mean	Standard Deviation
CPAs	160	9.59	1.08
Loan Officers	120	6.50	1.99
Controllers	138	8.96	1.43
TOTAL	418		

The analysis for the second hypothesis does not require the use of the covariate. To analyze the second hypothesis a repeated measures ANOVA model was used. In this model the dependent variables are the attitude score toward the unqualified audit opinion and the attitude score toward the qualified audit opinion. The independent variables are the opinion type (the repeated measure) and group membership. There was only one covariate obtained for each subject and the effects of the covariate should be consistent within a subject, therefore, the covariate need not be included in this model. The second hypothesis suggests that there are differences between attitude scores toward different audit opinions within a group:

Ho2: There are no differences in subject's attitudes elicited by the different audit opinions within each group.

Ha2: There are differences in subject's attitudes elicited by the different audit opinions within each group.

Tables 23 and 24 show the results of the repeated measures ANOVA. The between subjects' analysis indicates no significant differences between the groups with the overall model. However, the within subjects' analysis indicates there are significant differences between the attitude score toward an unqualified opinion and the attitude score toward a qualified opinion at the $p=.01$ level. This finding suggests that individuals are able to distinguish between a qualified audit opinion and an unqualified audit opinion, at

Table 23. Repeated Measures ANOVA Where the Attitude Score Toward an Audit Opinion is the Repeated Measure and the Dependent Variable, and Group Membership is the Independent Variable.

ANOVA RESULTS:			
Source of Variation	DF	Mean Square	F Value
Between Subjects	417		
Groups (G)	2	575.60	2.03
Error (b)	415	283.22	
Within Subjects	418		
Opinions (O)	1	34,689.12	280.75*
G x O	2	351.32	2.84
Error (w)	415	123.56	
Total	835		

Partial Correlation Coefficients for the Repeated Measure where DF = 414:

	Unqualified	Qualified
Unqualified	1.000	.401*
Qualified	.401*	1.000

* Significant at the $p=.01$ level.

Table 24. F Values From Tests for Differences on the Repeated Measure for Each Group and the Correlation Coefficients Between the Repeated Measure for Each Group.

Group	N	Source	F Value
CPAs	160	Opinions	119.75*
		Partial Correlation Coefficients	DF = 158
		Unqualified	Qualified
Unqualified		1.000	.373*
Qualified		.373*	1.000
CLOs	120	Opinions	83.41*
		Partial Correlation Coefficients	DF = 118
		Unqualified	Qualified
Unqualified		1.000	.391*
Qualified		.391*	1.000
Controllers	138	Opinions	85.58*
		Partial Correlation Coefficients	DF = 136
		Unqualified	Qualified
Unqualified		1.000	.461*
Qualified		.461*	1.000

* Significant at the $p=.01$ level.

least as measured by their attitude scores toward them. Table 24 presents the within subjects' results by group. Subjects from each group demonstrated the ability to distinguish between a qualified audit opinion and an unqualified audit opinion. For each group the within subjects' analysis for differences on the repeated measure were significant at the $p=.01$ level.

In this study the subject's attitude score toward an audit opinion is being used as a substitute for his/her level of understanding of the audit opinion's meaning. Therefore, based upon the results from the above analysis, subjects can be said to ascribe different meanings to an unqualified audit opinion than they ascribe to a qualified audit opinion. Table 20, p. 125, shows the mean attitude scores toward each type of audit opinion used in the study both for the overall sample and by group. For the overall sample and for each group the attitude score toward the unqualified audit opinion is significantly higher than the attitude score toward the qualified audit opinion. If a positive attitude score is interpreted as a positive meaning for the message of the audit opinion then the results are in the direction they should be. An unqualified audit opinion should be and in this case is recognized to convey a more positive meaning/message than the qualified audit opinion. This finding is consistent across all the groups involved in the study.

The next set of analyses were univariate analyses looking for differences between the groups on their attitude scores toward the unqualified audit opinion and then on their attitude scores toward the qualified audit opinion.

The hypotheses being tested here are hypothesis three:

Ho3: There are no differences in attitudes elicited by an audit opinion between the groups.

Ha3: There are differences in attitudes elicited by an audit opinion between the groups.

and hypothesis five:

Ho5: Knowledge of the audit process is not associated with the attitude toward the audit opinion.

Ha5: Knowledge of the audit process is associated with the attitude toward the audit opinion.

The models used to test for differences between groups on the attitude score toward the unqualified audit opinion were:

1. ANOVA, where the dependent variable was the attitude score toward the unqualified audit opinion and the independent variable was group membership; and
2. ANCOVA, where the dependent and independent variables are the same as in the above model and knowledge of the audit process is included as the covariate.

The ANOVA model is used to test hypothesis three and looks for differences between the groups on the attitude

score toward the unqualified audit opinion. Table 25 presents the ANOVA results when attitude score toward an unqualified audit opinion is the dependent variable. The results from the overall model are significant at the $p=.05$ level. Further investigation through the use of specific contrasts indicates that a part of the differences hypothesized are marginally correct. Analyses based upon the unadjusted means for the attitude score toward the unqualified audit opinion by group indicates that CPA attitude scores are significantly different from both CLOs and Controllers at the $p=.05$ level. However, CLOs and Controllers show virtually the same attitude score toward the unqualified audit opinion. This finding indicates that CPAs have a slightly different understanding of the meaning of the unqualified audit opinion than do CLOs and Controllers.

Table 26 presents the results of the ANCOVA where the attitude score toward the unqualified audit opinion is the dependent variable and knowledge of the audit process is the covariate. This model tests hypothesis five. As hypothesized the differences between the groups' attitude scores toward the unqualified audit opinion are no longer significant when the mean attitude scores are adjusted by the inclusion of the covariate, knowledge of the audit process, in the model. The overall model shows there is significance somewhere. This significance is explained by

Table 25. ANOVA Results Where Attitude Score Toward an Unqualified Audit Opinion is the Dependent Variable and Group Membership is the Independent Variable.#

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANOVA RESULTS:				
Source of Variation				
Between Groups	1,114.67	2	557.33	3.43@
Within Groups	67,390.84	415	162.39	
TOTAL	68,505.50	417		
CONTRASTS:				
CPAs vs CLOs	810.27	1	810.27	4.99@
CPAs vs Controllers	800.96	1	800.96	4.93@
Controllers vs CLOs	1.44	1	1.44	.01

@ Significant at the $p=.05$ level.

Descriptive statistics for the dependent variable:

Group	N	Attitude Score	
		Mean	Standard Deviation
CPAs	160	16.01	12.66
Loan Officers	120	12.58	13.97
Controllers	138	12.72	11.68
TOTAL	418		

Table 26. ANCOVA Results Where Attitude Score Toward an Unqualified Audit Opinion is the Dependent Variable, Knowledge of the Audit Process is the Covariate, and Group Membership is the Independent Variable. #

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANCOVA RESULTS:				
Source of Variation				
Model	2,050.97	3	683.66	4.26*
Within Groups	66,454.53	414	160.52	
TOTAL	68,505.50	417		
ANCOVA RESULTS: (As Adjusted by the Covariate)				
Group	587.85	2	293.92	1.83
Knowledge	936.30	1	936.30	5.83@
CONTRASTS:				
CPAs vs CLOs	5.01	1	5.01	.03
CPAs vs Controllars	510.37	1	510.37	3.18
Controllars vs CLOs	242.47	1	242.47	1.51

* Significant at the $p=.01$ level.

@ Significant at the $p=.05$ level.

Descriptive statistics for the covariate and the dependent variable:

Group	N	Knowledge Score		Attitude Score		
		M	SD	M	SD	Adj. M
CPAs	160	9.59	1.08	16.01	12.66	14.92
Loan Officers	120	6.50	1.99	12.58	13.97	14.57
Controllars	138	8.96	1.43	12.72	11.68	12.26
TOTAL	418					

the fact that the covariate is significant in the model at the $p=.05$ level. The use of specific contrasts also reveals no significant differences between the groups on the adjusted means. These results are consistent with earlier findings of:

1. a significant correlation between the covariate, knowledge of the audit process, and the dependent variable, the attitude score toward the unqualified audit opinion, as shown in Table 21, p. 126; and
2. significant differences between groups on knowledge of the audit process as shown in Table 22, p. 131. -

An additional test for equal slopes or equal treatment across groups by the covariate was non-significant. This finding indicates that the inclusion of the covariate had approximately the same effect upon all the groups regarding their attitude scores toward the unqualified audit opinion.

The results of the ANOVA and ANCOVA models taken together support the fifth hypothesis for the unqualified audit opinion in that knowledge of the audit process is associated with the attitude toward an unqualified audit opinion. The above results indicate that the knowledge an individual has regarding the audit process influences his/her attitude score toward an unqualified audit opinion and therefore, his/her understanding of the unqualified audit opinion's meaning.

Tables 27 and 28 present the results of the ANOVA and ANCOVA models, respectively, when the attitude score toward the qualified audit opinion is the dependent variable. Therefore, the models used to test for differences between groups on the attitude score toward the qualified audit opinion were:

1. ANOVA, where the dependent variable was the attitude score toward the qualified audit opinion and the independent variable was group membership; and
2. ANCOVA, where the dependent and independent variables are the same as in the above model and knowledge of the audit process is included as the covariate.

The ANOVA model is used to test hypothesis three and looks for differences between the groups on the attitude score toward the qualified audit opinion. Table 27 presents the results from this ANOVA model. When the attitude score toward the qualified audit opinion is the dependent variable there are no significant differences among the groups.

The ANCOVA model with the attitude score toward the qualified audit opinion as the dependent variable yields approximately the same results as the ANOVA model with the attitude score toward the qualified audit opinion as the dependent variable. There were no significant differences between groups on the dependent variable attitude score

Table 27. ANOVA Results Where Attitude Score Toward a Qualified Audit Opinion is the Dependent Variable and Group Membership is the Independent Variable.#

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANOVA RESULTS:				
Source of Variation				
Between Groups	739.17	2	369.58	1.51
Within Groups	101,421.00	415	244.39	
TOTAL	102,160.17	417		
CONTRASTS:				
CPAs vs CLOs	380.03	1	380.03	1.56
CPAs vs Controllers	68.59	1	68.59	.28
Controllers vs CLOs	705.91	1	705.91	2.89
# Descriptive statistics for the dependent variable:				
Attitude Score				
<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>Standard Deviation</u>	
CPAs	160	1.26	17.08	
Loan Officers	120	-1.09	15.63	
Controllers	138	2.22	13.77	
TOTAL	418			

Table 28. ANCOVA Results Where Attitude Score Toward a Qualified Audit Opinion is the Dependent Variable, Knowledge of the Audit Process is the Covariate, and Group Membership is the Independent Variable.#

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANCOVA RESULTS:				
Source of Variation				
Model	893.14	3	297.71	1.22
Within Groups	101,267.03	414	244.61	
TOTAL	102,160.17	417		
ANCOVA RESULTS: (As Adjusted by the Covariate)				
Group	274.96	2	137.48	.56
Knowledge	153.97	1	153.97	.63
CONTRASTS:				
CPAs vs CLOs	49.15	1	49.15	.20
CPAs vs Controllers	106.10	1	106.10	.43
Controllers vs CLOs	243.61	1	243.61	1.00

Descriptive statistics for the covariate and the dependent variable:

Group	N	Knowledge Score		Attitude Score		
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>Adj. M</u>
CPAs	160	9.59	1.08	1.26	17.08	.82
Loan Officers	120	6.50	1.99	-1.09	15.63	-.28
Controllers	138	8.96	1.43	2.22	13.77	2.03
TOTAL	<u>418</u>					

toward the qualified audit opinion. In addition, the covariate, knowledge of the audit process is not significant in this model. As Table 28 shows the adjusted means for the attitude score toward the qualified audit opinion were not much different than the unadjusted means. Again, the test for equal slopes for the ANCOVA model proved to be nonsignificant. Therefore, equal treatment across the groups on the dependent variable by the inclusion of the covariate in the model can be assumed.

The results from the ANOVA and ANCOVA models with the attitude score toward the qualified audit opinion as the dependent variable do not support hypothesis three or hypothesis five. The results indicate that regardless of the level of knowledge of the audit process, an individual has a similar attitude toward the qualified audit opinion no matter which group he/she belongs to.

The last two hypotheses to be tested are hypothesis four and hypothesis six. These hypotheses are concerned with the attitude score toward audit reporting in general. As explained earlier the data for calculating this attitude score came from the third section of the questionnaire. The fourth hypothesis is tested with an ANOVA model where the dependent variable is the attitude score toward audit reporting in general and the independent variable is group membership:

Ho4: There are no differences in overall attitudes toward audit reporting between the groups.

Ha4: There are differences in overall attitudes toward audit reporting between the groups.

While the sixth hypothesis is tested with the ANCOVA model where the dependent variable and the independent variable are the same as in the ANOVA model above and knowledge of the audit process is included as the covariate:

Ho6: There is no association between a subject's knowledge of the audit process and the subject's overall attitude toward audit reporting.

Ha6: There is an association between a subject's knowledge of the audit process and the subject's overall attitude toward audit reporting.

Table 29 presents the ANOVA results for the model where attitude score toward audit reporting in general is the dependent variable. There are significant differences between the three groups on their attitude scores toward audit reporting in general at the $p=.01$ level. Both the overall model and the specific contrasts show that attitude scores toward audit reporting in general are significantly different between the groups at the $p=.01$ level.

Table 30 presents the ANCOVA results for the model where attitude score toward audit reporting in general is the dependent variable. The overall model shows there are significant differences at the $p=.01$ level. Further investigation through the use of specific contrasts reveals

Table 29. ANOVA Results Where Attitude Score Toward Audit Reporting in General is the Dependent Variable and Group Membership is the Independent Variable.#

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANOVA RESULTS:				
Source of Variation				
Between Groups	16,411.05	2	8,205.52	50.51*
Within Groups	67,414.07	415	162.44	
TOTAL	83,825.12	417		
CONTRASTS:				
CPAs vs CLOs	16,407.92	1	16,407.92	101.01*
CPAs vs Controllers	3,439.54	1	3,439.54	21.17*
Controllers vs CLOs	4,808.60	1	4,808.60	29.60*

* Significant at the $p=.01$ level.

Descriptive statistics for the dependent variable:

Group	N	Attitude Score	
		Mean	Standard Deviation
CPAs	160	18.94	12.27
Loan Officers	120	3.48	12.71
Controllers	138	12.13	13.31
TOTAL	418		

Table 30. ANCOVA Results Where Attitude Score Toward Audit Reporting in General is the Dependent Variable, Knowledge of the Audit Process is the Covariate, and Group Membership is the Independent Variable. #

DESCRIPTION	Sum of Squares	DF	Mean Square	F Value
ANCOVA RESULTS:				
Source of Variation				
Model	17,062.34	3	5,687.45	35.27*
Within Groups	66,762.78	414	161.26	
TOTAL	83,825.12	417		
ANCOVA RESULTS: (As Adjusted by the Covariate)				
Group	7,066.54	2	3,533.27	21.91*
Knowledge	651.29	1	651.29	4.04@
CONTRASTS:				
CPAs vs CLOs	6,718.78	1	6,718.78	41.66*
CPAs vs				
Controllers	2,847.16	1	2,847.16	17.66*
Controllers				
vs CLOs	1,976.36	1	1,976.36	12.26*

* Significant at the $p=.01$ level.

@ Significant at the $p=.05$ level.

Descriptive statistics for the covariate and the dependent variable:

Group	N	Knowledge Score		Attitude Score		
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>Adj. M</u>
CPAs	160	9.59	1.08	18.94	12.27	18.03
Loan Officers	120	6.50	1.99	3.48	12.71	5.14
Controllers	<u>138</u>	8.96	1.43	12.13	13.31	11.74
TOTAL	<u>418</u>					

significant differences between all the groups at the $p=.01$ level on their attitude scores toward audit reporting in general. In this model the covariate, knowledge of the audit process, was significant at the $p=.05$ level. The test for equal slopes was again non-significant, therefore, equal treatment across groups on the dependent variable by the covariate can be assumed.

The inclusion of the covariate in this instance did not account for the significant differences between the groups on their attitude scores toward audit reporting in general. However, the marginal significance of the covariate, coupled with the convergence of the means in the ANCOVA model versus the means in the ANOVA model, indicate that knowledge of the audit process does influence an individual's attitude score toward audit reporting in general.

The overall results are mixed, for some attitude scores the knowledge an individual has about the audit process has an influence for others it does not. The results will be reviewed in the concluding section of this chapter. The next section includes a brief summary of analyses to test for form type effects due to the use of two differently ordered questionnaires.

C. Tests for Form Effects

Two forms of the questionnaire were used in the study. One form presented the respondent the unqualified audit opinion first and the other form presented the respondent the qualified audit opinion first. Each form type comprised one-half of the total forms mailed. An individual received the same form type in both requests if a second request was required.

In order to test for form effects the independent variable, form type, was added to the models used in the previous analyses for all the dependent variables. The independent variable, form type, had minor effects on the previous analyses. This section briefly describes the analyses in which the independent variable form type is included.

The first dependent variable tested was knowledge of the audit process, the variable which becomes the covariate for later analyses. Three ANOVA models were used to test for form type effects and all of the models yielded non-significant results for the form type variable. All three of the ANOVA models had knowledge of the audit process as the dependent variable with the independent variables:

1. form type;
2. form type and group; and

3. form type, group, and interaction of form type and group.

There were no differences between form types on knowledge of the audit process.

The next analyses included the independent variable form type in the repeated measures ANOVA models. Again, for the repeated measures analyses there were three models used to check for form type effects. There were significant differences found in the interaction term form type by type of audit opinion (the repeated measure). This is explained by looking at the means for the attitude scores toward audit opinions by form type. When the unqualified audit opinion was presented first the mean attitude score toward the unqualified audit opinion was 13.51 and the mean attitude score toward the qualified audit opinion was 2.73. This is a difference of 10.78 scale points. When the qualified audit opinion was presented first the mean attitude score toward the unqualified audit opinion was 14.41 and the mean attitude score toward the qualified audit opinion was -1.08. Here the difference in scale points was 15.49. The greater spread when the qualified audit opinion was presented first and the fact that the unqualified audit opinion was evaluated more positively and the qualified audit opinion was evaluated less positively than when the unqualified audit opinion was presented first are the causes of the

significant interaction. This result should have no adverse effects on the main analyses.

When the attitude score toward the unqualified audit opinion was used as the dependent variable there were five models used to ascertain whether there were form type effects. These models included as the independent variables:

1. form type (ANOVA);
2. form type and group (ANOVA);
3. form type, group, and knowledge as the covariate (ANCOVA);
4. form type, group, and the interaction between form type and group (ANOVA); and
5. form type, group, interaction between form type and group, and knowledge as the covariate.

The variable form type was not significant in any of the above models when the dependent variable was attitude score toward the unqualified audit opinion. The inclusion of the variable form type did not alter any of the findings presented earlier in this chapter regarding the attitude score toward the unqualified audit opinion.

The same five ANOVA and ANCOVA models were used to ascertain whether there were form type effects when the dependent variable is attitude score toward the qualified audit opinion. When the first model is used, where the only independent variable is form type, there are significant

differences between form type on the attitude score toward the qualified audit opinion at the $p=.05$ level. The same is true for the other four models as well, the independent variable form type is significant at the $p=.05$ level in all the models tested. However, these findings do not alter the results presented earlier. In these analyses significant differences due to form type were found, but the inclusion of form type in the models did not alter the results presented earlier in this chapter regarding the attitude score toward the qualified audit opinion.

The significant form type effect on the attitude score toward the qualified audit opinion can be seen by viewing the means for this variable by form type. When the qualified audit opinion was presented first the mean attitude score toward the qualified audit opinion was -1.08 . When the unqualified audit opinion was presented first the mean attitude score toward the qualified audit opinion was 2.73 . This can be explained in part by a carryover effect. Those respondents receiving the version with the unqualified audit opinion presented first recognized that there are differences between the unqualified audit opinion and the qualified audit opinion. However, their less positive responses toward the qualified audit opinion appear to be tempered by the fact that the respondent saw the unqualified audit opinion first. Whereas, those subjects receiving the version with the qualified audit opinion presented first had

no comparative reference point and respond in an even less positive manner.

The final five ANOVA and ANCOVA models used to test for form type effects had as their dependent variable the attitude score toward audit reporting in general. When attitude score toward audit reporting in general is the dependent variable the independent variable form type is non-significant in all models tested. Therefore, the independent variable form type has no effect upon the attitude score toward audit reporting in general.

The conclusion drawn from the form type analysis is that the form type used by the respondent had little if any effect upon his/her responses used to calculate the dependent variables and the covariate. The only significant differences found due to the form type involved the dependent variable attitude score toward the qualified audit opinion. However, even these differences did not alter the results found when the form type variable was not included in the model.

D. Conclusions

The overall conclusions drawn from the results reported in this chapter include:

1. Support for the first hypothesis, there are differences between the groups on knowledge of the audit (in the order hypothesized);
2. Support for the second hypothesis, there are differences between attitude scores toward different audit opinions within groups (within subjects);
3. Partial support for the third and fifth hypotheses, there are differences between groups and knowledge of the audit process has an influence on the attitude score toward an unqualified audit opinion.. There are no differences between groups on their attitude scores toward the qualified audit opinion and knowledge of the audit process does not appear to have an influence in this case;
4. Support for the fourth hypothesis, there are differences between groups on the attitude score toward audit reporting in general; and
5. Limited support for the sixth hypothesis, the differences between groups on their attitude scores toward audit reporting in general were large. This made it difficult to discern whether knowledge of the audit process had any influence on those attitude scores. However, the covariate, knowledge, was significant in the ANCOVA model.

The final section presents the results from the form type analysis. The only dependent variable that was significantly affected by the form type was attitude score toward the qualified audit opinion. But, the significant differences due to form type did not change the results found when form type was not included in the analysis. The use of different form types produced no significant differences on any of the other dependent variables analyzed.

The results presented in this chapter are more fully discussed in the next chapter within the context of the overall study.

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

The main focus of this study was to identify differences in attitudes toward audit opinions and audit reporting in general between the three groups involved in the flow of financial information. In addition, knowledge of the audit process was investigated for its influence on these differences. The three groups included were Certified Public Accountants (CPAs), Commercial Loan Officers (CLOs), and Corporate Controllers. The two types of audit opinions used were the Unqualified Audit Opinion and the Qualified Audit Opinion.

This chapter includes a brief restatement of the study's motivation and a synopsis of the results. Next the implications from the study's results are discussed, followed by general recommendations. The study's limitations are then presented along with concluding remarks.

A. Motivation for the Study

Two distinct perspectives provided motivation for the study. First is the agency theory perspective in which the auditor is an intermediary between the management of a firm

and users of financial information. A primary purpose of the audit function within this framework is to reduce the costs of information asymmetry. In order to reduce these costs the auditor must communicate effectively with those using the financial information. The main form of communication between the auditor and user of financial information is the audit opinion. Therefore, it is important that all the groups involved have a similar understanding of the audit opinion's meaning. In this study the attitude score toward the audit opinion served as a surrogate for measuring an individual's understanding of the audit opinion's meaning.

Repeated concerns regarding an expectation gap both internal and external to the accounting profession provided the second perspective for the study's motivation. The nature and role of the auditor has continued to expand over the years. As this expansion occurs the accounting profession continues the struggle to explain the auditor's role.

The main areas of contention include:

1. The role and responsibility of the auditor, and
2. The message communicated by the auditor in the audit opinion.

Several sets of Congressional hearings have centered on the accounting profession and the above points were included in the discussion. The accounting profession has also

appointed several Commissions to investigate matters related to the above points. Reports of such groups continually assert the existence of a gap between the expectations of users and the performance of auditors. Another common assertion is the lack of understanding of the audit opinion's meaning.

B. Results

The first analysis performed indicated that the level of knowledge regarding the audit process is significantly different between groups included in the study. CPAs were the most knowledgeable and CLOs were least knowledgeable regarding the audit process.

Within each group the subjects were able to distinguish between the unqualified audit opinion and the qualified audit opinion. This finding indicates that different types of audit opinions convey different messages. In addition, the finding indicates that readers of audit opinions are able to discern the different messages.

Phase one of the study's primary objective involved ascertaining differences between the groups on their attitude scores toward the two audit opinions presented and toward audit reporting in general. Phase two of the primary objective involved demonstrating that knowledge of the audit process influences the attitude scores. ANOVA

models were used to accomplish phase one and ANCOVA models were used to accomplish phase two.

The means for the dependent variables (attitude scores) for each group used in the ANOVA tests and the adjusted means for the dependent variables for each group used in the ANCOVA tests are presented in Table 31. The ANOVA tests indicated there are significant differences between the groups when the dependent variable is:

1. attitude score toward the unqualified audit opinion; and
2. attitude score toward audit reporting in general. —

The ANCOVA tests indicated significant differences between groups only when the dependent variable was attitude score toward audit reporting in general. When the dependent variable was the attitude score toward the qualified audit opinion there were no significant differences between the groups with either the ANOVA or ANCOVA models.

The covariate, knowledge of the audit process, was significant in the ANCOVA model when the dependent variable was:

1. attitude score toward the unqualified audit opinion; and
2. attitude score toward audit reporting in general.

Also, with the ANCOVA model when the dependent variable was the attitude score toward the unqualified audit opinion there were no significant differences between the groups.

Table 31. Means Used for the ANOVA Tests and Adjusted Means Used for the ANCOVA Tests.

DESCRIPTION	CPAs	CLOs	Controllers
Means for ANOVA Tests:			
Attitude score toward			
Unqualified@	16.01	12.57	12.72
Qualified	1.26	-1.09	2.22
General*	18.94	3.48	12.13
Adjusted Means for ANCOVA Tests:			
Attitude score toward			
Unqualified	14.92	14.57	12.26
Qualified	.82	-.28	2.03
General*	18.03	5.14	11.74

* All three groups are significantly different from each other at the $p=.01$ level.

@ CPAs are significantly different from both CLOs and Controllers at the $p=.05$ level.

The results from the ANCOVA tests provide limited evidence that knowledge of the audit process does influence the attitude scores an individual has toward an unqualified audit opinion. When knowledge of the audit process is included in the model it not only is significant but, the differences between the groups on the dependent variable attitude score toward the unqualified audit opinion no longer exist.

When the dependent variable is the attitude score toward audit reporting in general and the ANCOVA model is used, the covariate, knowledge of the audit process is significant. However, in the ANCOVA model the group means as adjusted by the covariate appear to converge, but the differences between the groups remain significant.

When the attitude score toward the qualified audit opinion was the dependent variable the covariate, knowledge of the audit process, was not significant.

C. Implications

The findings indicate there are differences between the groups on their attitudes toward the unqualified audit opinion and in their attitudes toward audit reporting in general. In addition, a subject's knowledge of the audit process appears to have an influence on his/her attitudes toward these two attitude objects. Several conclusions can

be drawn from the above results and these are presented in the following paragraphs.

Significant differences between the groups on their attitude scores toward the unqualified audit opinion provide additional evidence for the argument that there is a problem related to the understanding of the unqualified audit opinion's meaning. An unqualified audit opinion is what all firms strive to attain through the audit process. In order for the unqualified audit opinion to reduce the costs of information asymmetry to the fullest extent possible then the message of the opinion needs to be understood in a similar manner by all parties involved. If the message is perceived differently by the different parties then the unqualified audit opinion is not reducing the costs of information asymmetry as much as it could. The influence of knowledge of the audit process indicates that those individuals with knowledge levels similar to CPAs' knowledge levels have a similar understanding of the unqualified audit opinion.

The differences between groups on the dependent variable attitude score toward audit reporting in general provides additional evidence that an expectation gap exists. All of the groups have positive attitude scores toward audit reporting in general, but in descending order with CPAs being the most positive and CLOs being the least positive.

This is the same order the groups ranked in their level of knowledge regarding the audit process.

Due to the results of this study there appear to be three areas where the accounting profession can begin to address the problems indicated. The first is in the education area. The accounting profession needs to do a better job of educating users of financial information regarding the nature and the fundamentals of the audit process. The more knowledgeable a subject is regarding the audit process the more likely he/she will have attitudes similar to those of CPAs.

The second area is the wording of the unqualified audit opinion. In order to make the message of the unqualified audit opinion much clearer to all persons involved with financial information, the unqualified audit opinion should be much more explanatory. This has been a suggestion of several authors recently, including the National Commission on Fraudulent Financial Reporting (1987) and the Commission on Auditor's Responsibilities (1978).

A third area for improvement involves the very nature of auditing. The accounting profession should as a part of any educational campaign address the issue of the role and responsibilities of the auditor directly. The role and responsibilities of the auditor should be clearly defined and communicated to the public in direct terms. However, the public should be involved in defining the role and

responsibilities of the auditor. Part of the expectation gap argument stems from the fact that users of financial information do not seem to have any input into how auditing standards are defined. Public accounting is a service oriented profession and the service provided should be the service expected by the consumer.

D. Limitations

As with any empirical study there are several limitations inherent in this study. The first one is the vehicle of the study, a mailed questionnaire. Although the response rate was good and response bias was not detected, those who chose not to respond are different from those who chose to respond by their very nature. This is a concern and limits the conclusions drawn to the portion of the sample responding. In any event the conclusions should not be generalized beyond the groups included in the study.

An additional restriction arises because of the nature of those selected. The participants are persons involved with the financial information and audit reports of larger firms. Therefore, the results cannot be generalized beyond audit reports and audit reporting for larger firms.

The use of a mailed questionnaire limits the number of items that may be included to gather information. In order to obtain a respectable response rate the length of the

questionnaire should not exceed eleven pages or 125 items. (Dillman, 1978, p. 55.) The questionnaire used for this study was designed to gather as much information as possible without jeopardizing the response rate. In doing this, there is a possibility that important information is not addressed in the questionnaire. This could be the case for either the attributes used to determine the attitude scores, or the questions used to measure knowledge of the audit process.

E. Apercu

The findings of this study indicate that the accounting profession should undertake efforts to narrow the expectation gap. There are differences between the groups on several of the variables included in the analysis.

General thrusts for the accounting profession to make the changes include:

1. Better education regarding what the audit process is supposed to accomplish;
2. Better explanation in the audit opinion, especially in the unqualified audit opinion; and
3. A clear statement of the role and responsibilities of the auditor determined through discussions with users of financial information.

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APPENDIXES

APPENDIX A:
DEVELOPMENT OF THE INSTRUMENT

APPENDIX A:

DEVELOPMENT OF THE INSTRUMENT

The data collection instrument used for this study was developed in several stages. The attributes included in the calculation of the attitude scores were drawn mainly from the accounting literature. The knowledge questions used to ascertain the subject's knowledge of the audit process are general information type questions and were used in a previous study, Barnett (1976). This appendix provides a brief synopsis of the questionnaire development process employed.

A. Attributes Related to the Audit Opinions

The questionnaire included five attributes which are related to the individual audit opinions. These attributes were:

1. Completeness of disclosure in the financial statements;
2. Unbiased information in the financial statements;
3. No material misstatements in the financial statements;
4. Fraud not detected in the financial statements; and
5. Audit report is an investment tool.

The entire questionnaire is presented in Appendix B: The Instrument. In reviewing the questionnaire one can see that there are two statements related to each attribute. The first statement presented is the belief statement. The belief statement is designed to measure the level at which the respondent believes the attribute is related to the attitude object. The second statement presented for each attribute is the evaluative statement. The evaluative statement is designed to assess the respondent's evaluation of the attribute itself.

Each of these attributes has been mentioned as being a necessary part of the audit function by many of the authors referred to throughout this study. The Commission on Auditors' Responsibilities: Report, Conclusions, and Recommendations (1978) discussed the need for each of these attributes. The same attributes were again discussed in the Report of the National Commission on Fraudulent Financial Reporting (1987). Given the importance of these attributes and their repeated mention in the accounting literature, it seemed important that they be included in a questionnaire assessing attitudes toward audit opinions.

B. Attributes Related to Audit Reporting in General

In order to calculate attitude scores toward audit reporting in general seven attributes related to audit

reporting were included in the questionnaire. These attributes included:

1. Independence of the auditor;
2. Responsibility for financial information;
3. Discussion of internal control;
4. Identification of the individual auditor;
5. Reporting illegal activities;
6. Fraud detection; and
7. Investment tool.

These seven attributes are mentioned throughout the accounting literature in many of the same articles that mention the attributes related to the audit opinions.

Again, The Commission on Auditors' Responsibilities: Report, Conclusion, and Recommendations (1978) addressed each of these attributes, except for attribute number four regarding identification of the individual auditor. A similar discussion is also found in the Report of the National Commission on Fraudulent Financial Reporting (1987). The item regarding the identification of the individual auditor was of interest to this author.

C. Questions used to Ascertain Knowledge of the Audit Process

The questionnaire contained eleven multiple choice questions designed to ascertain the respondent's knowledge

of the audit process. Each one of the questions came from a knowledge test used in a previous study, Barnett (1976), discussed earlier. Several of the questions were modified for this study based upon discussions with colleagues and the results of the pilot tests. In the Barnett (1976) study each of the questions had five possible responses. One of the responses was, "None of the above", and another response was, "I don't know", in the Barnett study. In the present study there were four possible responses to each question where one of the responses was, "I do not know". The response not included in this study was, "None of the above". Table 32 provides the correct response for each of the knowledge questions. The entire knowledge section is presented with the questionnaire in Appendix B: The Instrument.

D. Stages of Development

There were three distinct stages of development for the questionnaire. The first stage was a pre-test of the initial draft of the questionnaire. In the pre-test stage a draft of the questionnaire was circulated to several faculty members and graduate students at the University of Tennessee with a request for their comments and/or suggestions. Many of the comments and suggestions from this stage were incorporated into the questionnaire.

Table 32. Correct Responses to the Knowledge Items.

Question Number	Correct Response	Authoritative Source*
1	B	<u>The Auditor's Report</u> , p. 3
2	B	<u>The Auditor's Report</u> , p. 7
3	C	APB Statement No. 4, Chapter 2
4	A	SAS No. 1, par. 150.02
5	A	SAS No. 1, par. 110.02
6	C	<u>The Auditor's Report</u> , p. 4
7	C	SAS No. 1, pars. 560.10-.12
8	A	<u>The Auditor's Report</u> , p. 8
9	C	SAS No. 1, par. 320.01
10	B	SAS No. 1, par. 110.05
11	C	<u>The Auditor's Report</u> , p. 13

* These same references can be found in Barnett, 1976, p. 101.

The second stage of development was a pilot test using intermediate accounting students at the University of Tennessee. The questionnaire in this stage included six sets of attribute statements related to audit opinions, twelve knowledge questions, and seven sets of attribute statements related to audit reporting in general. In reviewing the results of the pilot test one set of attribute statements related to the audit opinions and one knowledge question were dropped from the questionnaire. The set of attribute statements dropped addressed the same attribute (investment tool) as another set of attribute statements. An attribute did not need to be included in the questionnaire more than once. The knowledge question was dropped for the same reason, it addressed essentially the same aspect as another knowledge question. Table 33 presents the means and standard deviations for the knowledge variable and the attitude scores from the University of Tennessee pilot test, as it was given to the students, both for the overall sample and by group. Table 34 presents the means and standard deviations for the knowledge variable and the attitude scores from the University of Tennessee pilot test as adjusted by the deletion of the set of attribute statements and the knowledge question both for the overall sample and by group. The group designation relates to whether the student has completed an auditing class. Those in group one have not completed an auditing course, while

Table 33. Means and Standard Deviations for the Dependent Variables from the University of Tennessee Pilot Test Data as It Was Given.

Variable	Mean	Std. Dev.	Minimum	Maximum
For the Overall Sample: N=41				
Unqualified	16.80	12.28	-4	48
Qualified	8.63	14.24	-26	48
Audit Reporting	7.27	9.47	-11	31
Knowledge	5.39	2.62	1	10
Group One: N=23				
Unqualified	18.00	13.11	-4	48
Qualified	11.13	13.97	-10	48
Audit Reporting	7.96	9.53	-7	31
Knowledge	3.91	1.93	1	10
Group Two: N=18				
Unqualified	15.28	11.31	-4	36
Qualified	5.44	14.32	-26	25
Audit Reporting	6.39	9.59	-11	24
Knowledge	7.28	2.14	1	10

Table 34. Means and Standard Deviations for the Dependent Variables from the University of Tennessee Pilot Test Data as Adjusted.

Variable	Mean	Std. Dev.	Minimum	Maximum
For the Overall Sample: N=41				
Unqualified	15.63	11.96	-6	42
Qualified	6.61	13.76	-23	39
Audit Reporting	7.27	9.47	-11	31
Knowledge	4.83	2.56	1	9
Group One: N=23				
Unqualified	15.87	12.79	-4	42
Qualified	8.52	13.19	-10	39
Audit Reporting	7.96	9.53	-7	31
Knowledge	3.35	1.90	1	9
Group Two: N=18				
Unqualified	15.33	11.15	-6	36
Qualified	4.17	14.46	-23	28
Audit Reporting	6.39	9.59	-11	24
Knowledge	6.72	1.99	1	9

those in group two have completed at least one auditing course.

The third stage of the questionnaire development was a pilot test involving intermediate accounting students at Indiana University. These students were given the questionnaire in its final form. Table 35 presents the means and standard deviations for the knowledge variable and the attitude scores for the overall sample and by group from the Indiana University pilot test.

Reliability tests were performed on the knowledge portion of the questionnaire for the data collected at both the University of Tennessee and Indiana University. The reliability measure chosen was coefficient alpha and the method used to calculate it was the Kuder-Richardson Formula 20 for coefficient alpha. This formula is:

$$r = (k/k-1)[1 - (\sum pq / \sigma^2)]$$

where:

r = the coefficient of reliability;
 k = the number of items on the existing test;
 σ^2 = variance of total scores on the test;
 p = proportion of responses to one item which are correct; and
 q = proportion of responses to that same item which are not correct. (Ebel, 1972, p. 414.)

The coefficient of reliability for the data from the University of Tennessee pilot test when all twelve items presented were included was, $r=.686$. When only the same eleven items that appear on the final questionnaire are included in the calculation, the coefficient of reliability

Table 35. Means and Standard Deviations for the Dependent Variables from the Indiana University Pilot Test Data.

Variable	Mean	Std. Dev.	Minimum	Maximum
For the Overall Sample: N=32				
Unqualified	15.75	11.91	-15	45
Qualified	11.59	10.77	-8	33
Audit Reporting	8.37	10.34	-14	30
Knowledge	5.66	2.87	0	10
Group One: N=19				
Unqualified	12.84	12.95	-15	45
Qualified	9.95	11.67	-8	33
Audit Reporting	9.16	10.97	-6	30
Knowledge	4.32	2.58	0	9
Group Two: N=13				
Unqualified	20.00	9.05	4	33
Qualified	14.00	9.20	-7	30
Audit Reporting	7.23	9.67	-14	20
Knowledge	7.62	2.06	2	10

for the University of Tennessee pilot test data was, $r=.714$. The coefficient of reliability for the Indiana University pilot test data was higher than either coefficient calculated for the University of Tennessee data. The coefficient of reliability for the Indiana University pilot test data was, $r=.767$.

Another analysis used to test the reliability of the knowledge section was to compute the point biserial correlation coefficient for each of the items included in the final questionnaire for both the University of Tennessee and Indiana University pilot test data. The formula used for the point biserial correlation coefficient was:

$$r = [(M_p - M_q) / \sigma] \sqrt{pq}$$

where:

- r = the point biserial correlation coefficient;
- M_p = Mean score on the knowledge test for all those answering the item correctly;
- M_q = Mean score on the knowledge test for all those answering the item incorrectly;
- p = proportion of subjects answering the item correctly;
- q = proportion of subjects answering the item incorrectly; and
- σ = standard deviation of the scores on the knowledge test. (Isaac and Michael, 1984, p. 173.)

Table 36 presents the point biserial correlation coefficients for each of the eleven questions included in the final questionnaire for both the University of Tennessee and Indiana University pilot test data. The point biserial

Table 36. Point Biserial Correlation Coefficients for Each Knowledge Item for Both the University of Tennessee and Indiana University Pilot Test Data.

Item Number	UT Data Coefficient	IU Data Coefficient
1	.594	.717
2	.598	.715
3	.303	.501
4	.464	.463
5	.175	.553
6	.481	.421
7	.434	.177
8	.344	.499
9	.809	.718
10	.672	.700
11	.382	.391

correlation coefficients are respectable for each of the questions for at least one of the sets of pilot test data.

The coefficients of reliability and the point biserial correlation coefficients indicated that the knowledge section of the questionnaire was reliable and had good internal consistency. Therefore, all eleven items were included in the final questionnaire.

The final set of analyses to ascertain test reliability was the calculation of an index of discrimination for each of the eleven items in the knowledge test. The calculation of a discrimination index for each item included the following steps:

1. Determine those subjects in the top 25% on the knowledge test;
2. Determine those subjects in the bottom 25% on the knowledge test;
3. Calculate the proportion of the correct responses on an item for those subjects from the top 25%;
4. Calculate the proportion of the correct responses on an item for those subjects from the bottom 25%; and
5. Subtract the proportion of correct responses for the bottom 25% from the proportion of correct responses for the top 25%. (Barnett, 1976, p. 93.)

Table 37 presents the index of discrimination for each item for both the University of Tennessee and Indiana University

Table 37. Index of Discrimination for Each Knowledge Item
for Both the University of Tennessee and Indiana
University Pilot Test Data.

Item	(A) % Correct of Top 25%	(B) % Correct of Bottom 25%	(A)-(B) Index of Discrimination
University of Tennessee Data:			
1	.90	.00	.90
2	.90	.091	.809
3	.40	.091	.309
4	.50	.00	.50
5	.40	.091	.309
6	.80	.273	.527
7	.50	.00	.50
8	1.00	.636	.364
9	1.00	.00	1.00
10	.90	.091	.809
11	.90	.455	.445
		Average	= .588
		Median	= .50
Indiana University Data:			
1	1.00	.20	.80
2	1.00	.20	.80
3	.818	.10	.718
4	.727	.20	.527
5	.818	.20	.618
6	.455	.10	.355
7	.364	.20	.164
8	.818	.20	.618
9	1.00	.20	.80
10	1.00	.30	.70
11	.636	.30	.336
		Average	= .585
		Median	= .618

pilot test data. The average of the discrimination indices was .588 and the median score was .50 for the University of Tennessee pilot test data. The Indiana University pilot test data yielded an average discrimination index of .585 and a median score of .618.

E. Conclusion

After the pre-test and two pilot tests the instrument was deemed ready for mailing. The final form contained:

1. Two audit opinions (unqualified and qualified);
2. Five sets of attribute statements related to each audit opinion;
3. Seven sets of attribute statements related to audit reporting in general;
4. Eleven knowledge questions related to the audit process; and
5. Sixteen demographic questions.

The entire questionnaire can be reviewed in Appendix B: The Instrument.

APPENDIX B:
THE INSTRUMENT

To the Stockholders
ABC Corporation

We have examined the balance sheets of ABC Corporation as of December 31, 1985 and 1984, and the related statements of income, retained earnings, and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Certain of the Company's assets are carried at cost, the recovery of which is subject to the successful completion of a project which cannot be forecast at this time.

In our opinion, subject to the effects, if any, on the financial statements of the ultimate resolution of the matter referred to in the preceding paragraph, the financial statements referred to above present fairly the financial position of ABC Corporation at December 31, 1985 and 1984, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

CPA Firm
March 2, 1986

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED.

- | | STRONGLY
AGREE | | | | | | | STRONGLY
DISAGREE |
|---|-------------------|---|---|---|---|---|---|----------------------|
| 1) Based upon the above audit opinion, the completeness of disclosure of the financial information in the financial statements referred to is adequate. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 2) Based upon the above audit opinion, the financial information in the financial statements referred to is not biased (e.g., it does not overstate revenue or assets). | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 3) Based upon the above audit opinion, there are no material misstatements in the financial information in the annual report. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 4) The above audit opinion indicates that company management has not committed fraud. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 5) The above audit opinion is useful in evaluating the investment quality of the firm. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

PLEASE TURN TO THE NEXT PAGE

To the Stockholders
ABC Corporation

We have examined the balance sheets of ABC Corporation as of December 31, 1985 and 1984, and the related statements of income, retained earnings, and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of ABC Corporation at December 31, 1985 and 1984, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

CPA Firm
March 2, 1986

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED.

- | | STRONGLY
AGREE | | | | | | | STRONGLY
DISAGREE |
|---|-------------------|---|---|---|---|---|---|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 1) Based upon the above audit opinion, the completeness of disclosure of the financial information in the financial statements referred to is adequate. | | | | | | | | |
| 2) Based upon the above audit opinion, the financial information in the financial statements referred to is not biased (e.g., it does not overstate revenue or assets). | | | | | | | | |
| 3) Based upon the above audit opinion, there are no material misstatements in the financial information in the annual report. | | | | | | | | |
| 4) The above audit opinion indicates that company management has not committed fraud. | | | | | | | | |
| 5) The above audit opinion is useful in evaluating the investment quality of the firm. | | | | | | | | |

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU
CONSIDER APPROPRIATE ON THE SCALE PROVIDED.

	STRONGLY AGREE						STRONGLY DISAGREE
1) The completeness of the disclosure is an important consideration when using financial statements.	1	2	3	4	5	6	7

2) Freedom from bias is an important quality for financial information.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

3) Material misstatements are detrimental to the quality of a firm's financial information.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

4) The existence of management fraud is detrimental to the quality of a firm's financial information.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

5) Audit opinions should be useful in evaluating the investment quality of the firm.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO EACH QUESTION BY CIRCLING THE BEST ANSWER. IF YOU DO NOT KNOW THE ANSWER TO A QUESTION PLEASE INDICATE THIS BY CIRCLING SELECTION D) FOR THAT PARTICULAR QUESTION.

1) Generally, the date of the auditor's report coincides with which of the following dates?

- A) The balance sheet date.
- B) The date of completion of all important audit procedures.
- C) The date of transmittal of the report to the client company.
- D) I do not know.

2) One of the generally accepted auditing standards requires the auditor to be independent. Which one of the following is true?

- A) The independence standard requires that the auditor be elected by the stockholders of a company, and not directly appointed by the management, to insure the auditor's independence from the company's management.
- B) The independence standard is not violated by the payment of the auditor's professional fee by the client because the auditor is engaged by the client as an independent contractor, not as an employee.
- C) The independence standard allows the auditor to undertake an audit engagement and express an opinion on the financial statements of a client although he is not independent, so long as he states in his report that he is not independent.
- D) I do not know.

3) Auditors use the expression "financial position" in the second paragraph of their standard report. Which one of the following financial statements represents a presentation of financial position?

- A) Income Statement.
- B) Statement of Changes in Financial Position.
- C) Balance Sheet.
- D) I do not know.

4) The phrase "generally accepted auditing standards" refers to standards that have come into existence in which of the following ways?

- A) By being adopted and accepted by the membership of the accounting profession.
- B) By being required by the Financial Accounting Standards Board.
- C) By their general usage over a long period of time rather than by formal adoption by the profession.
- D) I do not know.

PLEASE TURN TO THE NEXT PAGE

- 5) Who bears ultimate responsibility for the content of a company's audited financial statements?
- A) The management of the company.
 - B) The independent auditor.
 - C) The stockholders of the company.
 - D) I do not know.
- 6) The auditor's report usually covers which one of the following?
- A) All financial information in the company's annual report including the financial statements and related notes, management's summary of its operations, and the financial information appearing in the president's letter.
 - B) Only the financial statements, excluding the notes to the statements.
 - C) Only the financial statements specifically mentioned in the report, including the notes to the statements.
 - D) I do not know.
- 7) The auditor's examination of financial statements usually is not completed until some time after the balance sheet date. Which one of the following statements describes the auditor's responsibility with respect to events occurring between the balance sheet date and the end of his examination?
- A) He is responsible for such events and for applying generally accepted auditing standards through the end of his examination.
 - B) He has no responsibility because this period will be included in the audit of the following year.
 - C) He is responsible for such events and for performing a general review of such events.
 - D) I do not know.
- 8) Which one of the following describes the meaning of the term "tests" as used in the auditor's report?
- A) The term refers to the audit procedure of selecting for examination a sample of the records and other types of evidence, as opposed to examining all of the records and other evidence.
 - B) The term refers to the audit procedure used to verify the mathematical accuracy of the accounting records.
 - C) The term refers to the basic audit procedure of examining all of the accounts appearing in the financial statements being audited.
 - D) I do not know.

PLEASE TURN TO THE NEXT PAGE

9) Measures are typically adopted by a client company to safeguard its assets, check the accuracy of its accounting records, and encourage adherence to prescribed policies and procedures. Which one of the statements describes the effect of such measures on the auditor's work?

- A) The primary responsibility for the establishment of adequate measures for safeguarding assets, assuring accurate records, and encouraging adherence to policies is typically assumed by the auditor in an audit engagement.
- B) While it is customary for the auditor to notify the client of any inadequacies in such measures, the measures do not have any significant effect on the auditor's selection of audit procedures.
- C) Because the auditor's selection of audit procedures depends partly upon the adequacy of such measures, the auditor must perform an investigation and evaluation of these measures.
- D) I do not know.

10) Which of the following correctly describes the auditor's responsibility for the detection of fraud when he/she is engaged in an audit in accordance with generally accepted auditing standards?

- A) Since compliance with generally accepted auditing standards should result in the detection of any material fraud, the auditor is responsible for such detection.
- B) Since compliance with generally accepted auditing standards will not necessarily result in the detection of material fraud, the auditor is responsible for detection of material fraud only when such detection results from compliance with auditing standards.
- C) An audit in accordance with generally accepted auditing standards is designed specifically to detect any material fraud, thus the auditor is responsible for such detection.
- D) I do not know.

11) The phrase "generally accepted accounting principles" appears in the second paragraph of the auditor's report. Which one of the following statements about such principles is correct?

- A) All accounting principles which are "generally accepted" have been formally adopted by an authoritative body of the accounting profession.
- B) Generally accepted accounting principles assure comparability among financial statements of different companies by permitting the use of only one method of accounting for a particular transaction.
- C) Generally accepted accounting principles include a range of practices which allows the use of alternative methods of accounting for a particular transaction.
- D) I do not know.

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED. YOUR ANSWERS SHOULD BE BASED UPON YOUR KNOWLEDGE OF THE OVERALL AUDIT PROCESS.

1) From reading an audit report a user is generally able to make an informed judgment regarding the independence of the auditor.	STRONGLY AGREE						STRONGLY DISAGREE
		1	2	3	4	5	6 7

2) Current audit reporting practices make the responsibility for the financial statement preparation clear.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

3) Current audit reporting practices have an adequate discussion of the internal control of the firm being audited.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

4) From reading an audit opinion a user can place individual responsibility for the conduct of an audit with the partner in charge of the audit and not just the firm performing the audit.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

5) The auditor is responsible for reporting any illegal activities by the client to the appropriate authorities no matter what the financial magnitude of the activity.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

6) Regardless of the materiality, the auditor should be able to detect all cases of fraud by the client company and any of the client company's employees through the use of generally accepted auditing standards.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

7) Overall, audit reporting provides users of financial statements with information that is useful in making investment decisions.		1	2	3	4	5	6 7
--	--	---	---	---	---	---	-----

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED. YOUR ANSWERS SHOULD BE BASED UPON YOUR KNOWLEDGE OF THE OVERALL AUDIT PROCESS.

- | | STRONGLY
AGREE | | | | | | STRONGLY
DISAGREE |
|--|-------------------|---|---|---|---|---|----------------------|
| 1) Independence in actuality, as well as in appearance is an important quality for an external auditor to possess. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) A statement of responsibility for the financial statements would be useful in the audit report. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) A thorough discussion of internal control would be useful in the audit report. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) The audit report should disclose the partner responsible for the audit. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Auditors report all illegal acts by clients to the proper authorities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Auditors should attempt to detect all cases of management fraud by the client. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) A complete discussion of the audit process used by the independent auditor would be useful to investors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

PLEASE TURN TO THE NEXT PAGE

DEMOGRAPHIC SECTIONPLEASE PROVIDE ANSWERS TO ALL QUESTIONS IN THIS SECTION

- 1) Current position or title: _____
- 2) Years at current or similar position: _____
- 3) Total years of work experience: _____

IF YOU ARE A CPA AND CURRENTLY WORK FOR A CPA FIRM PLEASE SKIP TO QUESTION #8.

- 4) Have you taken the CPA exam?
____ YES
____ NO
- 5) Have you passed the CPA exam?
____ YES
____ NO
- 6) Have you ever worked for a CPA firm?
____ YES
____ NO
- 7) How long did you work for the CPA firm: _____
- 8) Were or are you involved in auditing?
____ YES
____ NO
- 9) Have you taken the CMA exam?
____ YES
____ NO
- 10) Have you passed the CMA exam?
____ YES
____ NO
- 11) In your current position do you work with audited financial statements?
____ YES
____ NO

PLEASE TURN TO THE NEXT PAGE

12) Your highest level of formal education:

- ☐ HIGH SCHOOL
- ☐ SOME COLLEGE
- ☐ B.S. or B.A.
- ☐ SOME GRADUATE SCHOOL
- ☐ MASTERS DEGREE
- ☐ PHD or DBA
- ☐ OTHER _____

13) What was your undergraduate major? _____
(If applicable)

14) What was your graduate major? _____
(If applicable)

15) In what year did you complete your highest level of formal education? _____

16) What is your age? _____

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN IT IN THE ENCLOSED SELF-ADDRESSED, POSTAGE-PAID ENVELOPE. YOUR HELP IS GREATLY APPRECIATED. IF YOU HAVE ANY QUESTIONS OR FURTHER COMMENTS REGARDING ANY OF THE ISSUES DISCUSSED IN THIS QUESTIONNAIRE PLEASE FEEL FREE TO WRITE THESE ON THE BACK.

REMEMBER, IF YOU WISH TO RECEIVE A SUMMARY OF THE RESULTS PLEASE WRITE YOUR NAME AND ADDRESS ON THE BACK OF THE RETURN ENVELOPE.

To the Stockholders
ABC Corporation

We have examined the balance sheets of ABC Corporation as of December 31, 1985 and 1984, and the related statements of income, retained earnings, and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of ABC Corporation at December 31, 1985 and 1984, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

CPA Firm
March 2, 1986

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED.

- | | STRONGLY
AGREE | | | | | | STRONGLY
DISAGREE |
|---|-------------------|---|---|---|---|---|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) Based upon the above audit opinion, the completeness of disclosure of the financial information in the financial statements referred to is adequate. | | | | | | | |
| 2) Based upon the above audit opinion, the financial information in the financial statements referred to is not biased (e.g., it does not overstate revenue or assets). | | | | | | | |
| 3) Based upon the above audit opinion, there are no material misstatements in the financial information in the annual report. | | | | | | | |
| 4) The above audit opinion indicates that company management has not committed fraud. | | | | | | | |
| 5) The above audit opinion is useful in evaluating the investment quality of the firm. | | | | | | | |

PLEASE TURN TO THE NEXT PAGE

To the Stockholders
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Certain of the Company's assets are carried at cost, the recovery of which is subject to the successful completion of a project which cannot be forecast at this time.

In our opinion, subject to the effects, if any, on the financial statements of the ultimate resolution of the matter referred to in the preceding paragraph, the financial statements referred to above present fairly the financial position of ABC Corporation at December 31, 1985 and 1984, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

CPA Firm
March 2, 1986

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED.

- | | STRONGLY
AGREE | | | | | | STRONGLY
DISAGREE |
|---|-------------------|---|---|---|---|---|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) Based upon the above audit opinion, the completeness of disclosure of the financial information in the financial statements referred to is adequate. | | | | | | | |
| 2) Based upon the above audit opinion, the financial information in the financial statements referred to is not biased (e.g., it does not overstate revenue or assets). | | | | | | | |
| 3) Based upon the above audit opinion, there are no material misstatements in the financial information in the annual report. | | | | | | | |
| 4) The above audit opinion indicates that company management has not committed fraud. | | | | | | | |
| 5) The above audit opinion is useful in evaluating the investment quality of the firm. | | | | | | | |

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU
CONSIDER APPROPRIATE ON THE SCALE PROVIDED.

	STRONGLY					STRONGLY
	AGREE					DISAGREE
1) The completeness of the disclosure is an important consideration when using financial statements.	1	2	3	4	5	6 7

2) Freedom from bias is an important quality for financial information.	1	2	3	4	5	6 7
--	---	---	---	---	---	-----

3) Material misstatements are detrimental to the quality of a firm's financial information.	1	2	3	4	5	6 7
---	---	---	---	---	---	-----

4) The existence of management fraud is detrimental to the quality of a firm's financial information.	1	2	3	4	5	6 7
---	---	---	---	---	---	-----

5) Audit opinions should be useful in evaluating the investment quality of the firm.	1	2	3	4	5	6 7
--	---	---	---	---	---	-----

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO EACH QUESTION BY CIRCLING THE BEST ANSWER. IF YOU DO NOT KNOW THE ANSWER TO A QUESTION PLEASE INDICATE THIS BY CIRCLING SELECTION D) FOR THAT PARTICULAR QUESTION.

1) Generally, the date of the auditor's report coincides with which of the following dates?

- A) The balance sheet date.
- B) The date of completion of all important audit procedures.
- C) The date of transmittal of the report to the client company.
- D) I do not know.

2) One of the generally accepted auditing standards requires the auditor to be independent. Which one of the following is true?

- A) The independence standard requires that the auditor be elected by the stockholders of a company, and not directly appointed by the management, to insure the auditor's independence from the company's management.
- B) The independence standard is not violated by the payment of the auditor's professional fee by the client because the auditor is engaged by the client as an independent contractor, not as an employee.
- C) The independence standard allows the auditor to undertake an audit engagement and express an opinion on the financial statements of a client although he is not independent, so long as he states in his report that he is not independent.
- D) I do not know.

3) Auditors use the expression "financial position" in the second paragraph of their standard report. Which one of the following financial statements represents a presentation of financial position?

- A) Income Statement.
- B) Statement of Changes in Financial Position.
- C) Balance Sheet.
- D) I do not know.

4) The phrase "generally accepted auditing standards" refers to standards that have come into existence in which of the following ways?

- A) By being adopted and accepted by the membership of the accounting profession.
- B) By being required by the Financial Accounting Standards Board.
- C) By their general usage over a long period of time rather than by formal adoption by the profession.
- D) I do not know.

PLEASE TURN TO THE NEXT PAGE

5) Who bears ultimate responsibility for the content of a company's audited financial statements?

- A) The management of the company.
- B) The independent auditor.
- C) The stockholders of the company.
- D) I do not know.

6) The auditor's report usually covers which one of the following?

- A) All financial information in the company's annual report including the financial statements and related notes, management's summary of its operations, and the financial information appearing in the president's letter.
- B) Only the financial statements, excluding the notes to the statements.
- C) Only the financial statements specifically mentioned in the report, including the notes to the statements.
- D) I do not know.

7) The auditor's examination of financial statements usually is not completed until some time after the balance sheet date. Which one of the following statements describes the auditor's responsibility with respect to events occurring between the balance sheet date and the end of his examination?

- A) He is responsible for such events and for applying generally accepted auditing standards through the end of his examination.
- B) He has no responsibility because this period will be included in the audit of the following year.
- C) He is responsible for such events and for performing a general review of such events.
- D) I do not know.

8) Which one of the following describes the meaning of the term "tests" as used in the auditor's report?

- A) The term refers to the audit procedure of selecting for examination a sample of the records and other types of evidence, as opposed to examining all of the records and other evidence.
- B) The term refers to the audit procedure used to verify the mathematical accuracy of the accounting records.
- C) The term refers to the basic audit procedure of examining all of the accounts appearing in the financial statements being audited.
- D) I do not know.

PLEASE TURN TO THE NEXT PAGE

9) Measures are typically adopted by a client company to safeguard its assets, check the accuracy of its accounting records, and encourage adherence to prescribed policies and procedures. Which one of the statements describes the effect of such measures on the auditor's work?

- A) The primary responsibility for the establishment of adequate measures for safeguarding assets, assuring accurate records, and encouraging adherence to policies is typically assumed by the auditor in an audit engagement.
- B) While it is customary for the auditor to notify the client of any inadequacies in such measures, the measures do not have any significant effect on the auditor's selection of audit procedures.
- C) Because the auditor's selection of audit procedures depends partly upon the adequacy of such measures, the auditor must perform an investigation and evaluation of these measures.
- D) I do not know.

10) Which of the following correctly describes the auditor's responsibility for the detection of fraud when he/she is engaged in an audit in accordance with generally accepted auditing standards?

- A) Since compliance with generally accepted auditing standards should result in the detection of any material fraud, the auditor is responsible for such detection.
- B) Since compliance with generally accepted auditing standards will not necessarily result in the detection of material fraud, the auditor is responsible for detection of material fraud only when such detection results from compliance with auditing standards.
- C) An audit in accordance with generally accepted auditing standards is designed specifically to detect any material fraud, thus the auditor is responsible for such detection.
- D) I do not know.

11) The phrase "generally accepted accounting principles" appears in the second paragraph of the auditor's report. Which one of the following statements about such principles is correct?

- A) All accounting principles which are "generally accepted" have been formally adopted by an authoritative body of the accounting profession.
- B) Generally accepted accounting principles assure comparability among financial statements of different companies by permitting the use of only one method of accounting for a particular transaction.
- C) Generally accepted accounting principles include a range of practices which allows the use of alternative methods of accounting for a particular transaction.
- D) I do not know.

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED. YOUR ANSWERS SHOULD BE BASED UPON YOUR KNOWLEDGE OF THE OVERALL AUDIT PROCESS.

1) From reading an audit report a user is generally able to make an informed judgment regarding the independence of the auditor.	STRONGLY AGREE						STRONGLY DISAGREE
		1	2	3	4	5	6 7

2) Current audit reporting practices make the responsibility for the financial statement preparation clear.		1	2	3	4	5	6 7
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3) Current audit reporting practices have an adequate discussion of the internal control of the firm being audited.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

4) From reading an audit opinion a user can place individual responsibility for the conduct of an audit with the partner in charge of the audit and not just the firm performing the audit.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

5) The auditor is responsible for reporting any illegal activities by the client to the appropriate authorities no matter what the financial magnitude of the activity.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

6) Regardless of the materiality, the auditor should be able to detect all cases of fraud by the client company and any of the client company's employees through the use of generally accepted auditing standards.		1	2	3	4	5	6 7
---	--	---	---	---	---	---	-----

7) Overall, audit reporting provides users of financial statements with information that is useful in making investment decisions.		1	2	3	4	5	6 7
--	--	---	---	---	---	---	-----

PLEASE TURN TO THE NEXT PAGE

PLEASE RESPOND TO THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER YOU CONSIDER APPROPRIATE ON THE SCALE PROVIDED. YOUR ANSWERS SHOULD BE BASED UPON YOUR KNOWLEDGE OF THE OVERALL AUDIT PROCESS.

- | | STRONGLY
AGREE | | | | | | STRONGLY
DISAGREE |
|--|-------------------|---|---|---|---|---|----------------------|
| 1) Independence in actuality, as well as in appearance is an important quality for an external auditor to possess. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2) A statement of responsibility for the financial statements would be useful in the audit report. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3) A thorough discussion of internal control would be useful in the audit report. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4) The audit report should disclose the partner responsible for the audit. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5) Auditors report all illegal acts by clients to the proper authorities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6) Auditors should attempt to detect all cases of management fraud by the client. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) A complete discussion of the audit process used by the independent auditor would be useful to investors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

PLEASE TURN TO THE NEXT PAGE

DEMOGRAPHIC SECTIONPLEASE PROVIDE ANSWERS TO ALL QUESTIONS IN THIS SECTION

- 1) Current position or title: _____
- 2) Years at current or similar position: _____
- 3) Total years of work experience: _____

IF YOU ARE A CPA AND CURRENTLY WORK FOR A CPA FIRM PLEASE SKIP TO QUESTION #8.

- 4) Have you taken the CPA exam?
____ YES
____ NO
- 5) Have you passed the CPA exam?
____ YES
____ NO
- 6) Have you ever worked for a CPA firm?
____ YES
____ NO
- 7) How long did you work for the CPA firm: _____
- 8) Were or are you involved in auditing?
____ YES
____ NO
- 9) Have you taken the CMA exam?
____ YES
____ NO
- 10) Have you passed the CMA exam?
____ YES
____ NO
- 11) In your current position do you work with audited financial statements?
____ YES
____ NO

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12) Your highest level of formal education:

- ☐ HIGH SCHOOL
- ☐ SOME COLLEGE
- ☐ B.S. or B.A.
- ☐ SOME GRADUATE SCHOOL
- ☐ MASTERS DEGREE
- ☐ PHD or DBA
- ☐ OTHER _____

13) What was your undergraduate major? _____
(If applicable)

14) What was your graduate major? _____
(If applicable)

15) In what year did you complete your highest level of formal education? _____

16) What is your age? _____

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN IT IN THE ENCLOSED SELF-ADDRESSED, POSTAGE-PAID ENVELOPE. YOUR HELP IS GREATLY APPRECIATED. IF YOU HAVE ANY QUESTIONS OR FURTHER COMMENTS REGARDING ANY OF THE ISSUES DISCUSSED IN THIS QUESTIONNAIRE PLEASE FEEL FREE TO WRITE THESE ON THE BACK.

REMEMBER, IF YOU WISH TO RECEIVE A SUMMARY OF THE RESULTS PLEASE WRITE YOUR NAME AND ADDRESS ON THE BACK OF THE RETURN ENVELOPE.

APPENDIX C:
FIRST REQUEST LETTERS

October 28, 1986

Name of the CPA
Name of the Firm
Address
City, State Zip

Dear CPA:

Public accounting is a dynamic profession with constantly expanding horizons. To study how well accounting and accountants accommodate their horizons, often the opinions of professionals like yourself comprise the most relevant information available.

You are one of a small number of Certified Public Accountants being asked to participate in this study. You were randomly selected from the AICPA membership listing. For the results to meaningfully reflect the thinking of Certified Public Accountants, it is important that each questionnaire be completed and returned. Your questionnaire should take approximately twenty minutes to complete.

Please be assured of complete confidentiality. The questionnaire has an identification number so that we may follow up with nonrespondents. Neither you nor your firm will be associated in any way with your responses.

You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (615) 694-5082.

Thank you for your assistance.

Sincerely,

John M. Waters, II
Project Director

October 28, 1986

Name of CLO, Title
Bank
Address
City, State Zip

Dear CLO:

Accounting is a dynamic profession with constantly expanding horizons. To study how well accounting and accountants accommodate their horizons, often the opinions of professionals like yourself comprise the most relevant information available.

You are one of a small number of commercial loan officers being asked to participate in this study. Your bank was randomly selected from a listing of the 500 largest banks in the United States. For the results to meaningfully reflect the thinking of commercial loan officers, it is important that each questionnaire be completed and returned. Your questionnaire should take approximately twenty minutes to complete.

Please be assured of complete confidentiality. The questionnaire has an identification number so that we may follow up with nonrespondents. Neither you nor your firm will be associated in any way with your responses.

You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (615) 694-5082.

Thank you for your assistance.

Sincerely,

John M. Waters, II
Project Director

October 28, 1986

Name, Title
Company
Address
City, State Zip

Dear Name:

Accounting is a dynamic profession with constantly expanding horizons. To study how well accounting and accountants accommodate their horizons, often the opinions of professionals like yourself comprise the most relevant information available.

You are one of a small number of corporate financial executives being asked to participate in this study. Your company was selected randomly from a listing of the 1,000 most valuable companies in America. For the results to meaningfully reflect the thinking of corporate financial executives, it is important that each questionnaire be completed and returned. Your questionnaire should take approximately twenty minutes to complete.

Please be assured of complete confidentiality. The questionnaire has an identification number so that we may follow up with nonrespondents. Neither you nor your firm will be associated in any way with your responses.

You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (615) 694-5082.

Thank you for your assistance.

Sincerely,

John M. Waters, II
Project Director

APPENDIX D:

POSTCARDS

date mailed

Last week a questionnaire seeking your opinions regarding certain aspects of the accounting profession was mailed to you.

If you have already completed and returned it to me please accept my sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative, sample of Certified Public Accountants it is extremely important that yours also be included in the study if the results are to accurately represent the opinions of Certified Public Accountants.

If by some chance you did not receive the questionnaire, or it got misplaced, please call me right now, collect (615-694-5082) and I will get another one in the mail to you today.

Sincerely,

John M. Waters, II
Project Director

date mailed

Last week a questionnaire seeking your opinions regarding certain aspects of the accounting profession was mailed to you.

If you have already completed and returned it to me please accept my sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative, sample of commercial loan officers it is extremely important that yours also be included in the study if the results are to accurately represent the opinions of commercial loan officers.

If by some chance you did not receive the questionnaire, or it got misplaced, please call me right now, collect (615-694-5082) and I will get another one in the mail to you today.

Sincerely,

John M. Waters, II
Project Director

date mailed

Last week a questionnaire seeking your opinions regarding certain aspects of the accounting profession was mailed to you.

If you have already completed and returned it to me please accept my sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative, sample of financial executives it is extremely important that yours also be included in the study if the results are to accurately represent the opinions of financial executives.

If by some chance you did not receive the questionnaire, or it got misplaced, please call me right now, collect (615-694-5082) and I will get another one in the mail to you today.

Sincerely,

John M. Waters, II
Project Director

APPENDIX E:
SECOND REQUEST LETTERS

November 18, 1986

Name of CPA
CPA Firm
Address
City, State Zip

Dear CPA:

Three weeks ago I wrote seeking your opinions about several aspects regarding the accounting profession. As of today we have not yet received your completed questionnaire.

I have undertaken this research study with the belief that there are many areas of continual change within the accounting profession. To better identify these areas and isolate the needs of the groups involved with the flow of information, the opinions of such groups should be taken into account.

I am writitng to you again because of the significance each questionnaire has to the usefulness of the study. Your name was randomly selected from the AICPA national membership listing. For the results of this study to meaningfully represent the opinions of certified public accountants it is essential that each accountant contacted complete and return the questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially,

John M. Waters, II
Project Director

November 18, 1986

Name of CLO, Title
Bank
Address
City, State Zip

Dear CLO:

Three weeks ago I wrote seeking your opinions regarding important changes occurring in the accounting profession. As of today our records indicate we have not yet received your completed questionnaire.

This research was undertaken with the belief that these important changes in the accounting profession should be meaningfully identified and evaluated. In many instances the most relevant data is only available through the opinions of involved practicing professionals such as yourself.

Because of the significance each completed questionnaire has to the usefulness of the study, your participation is again requested. Your bank was randomly selected from among the 500 largest banks in the United States as ranked by Rand McNally. For the results of this study to meaningfully represent the opinions of commercial loan officers, it is essential that each loan officer contacted complete and return the questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially,

John M. Waters, II
Project Director

enclosures

November 18, 1986

Name, Title
Company
Address
City, State Zip

Dear Name:

Three weeks ago I wrote seeking your opinions regarding important changes occurring in the accounting profession. As of today our records indicate we have not yet received your completed questionnaire.

This research was undertaken with the belief that these important changes in the accounting profession should be meaningfully identified and evaluated. In many instances the most relevant data is only available through the opinions of involved practicing professionals such as yourself.

Because of the significance each completed questionnaire has to the usefulness of the study, your participation is again requested. Your company was randomly selected from among the 1000 most valuable companies in America as ranked by Business Week. For the results of this study to meaningfully represent the opinions of corporate financial executives, it is essential that each financial executive contacted complete and return the questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially,

John M. Waters, II
Project Director

enclosures