Verreault, Kathryn Mary

AUDIT PARTNERS' PERCEPTIONS OF THE VARIABLES ASSOCIATED WITH THE DECISION TO WITHDRAW FROM AUDIT ENGAGEMENTS

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AUDIT PARTNERS' PERCEPTIONS OF THE VARIABLES ASSOCIATED WITH THE DECISION TO WITHDRAW FROM AUDIT ENGAGEMENTS

A Dissertation

by

KATHRYN MARY VERREAULT

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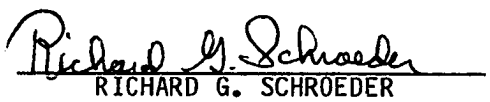
Approved as to style and content by:



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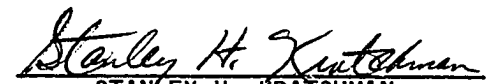

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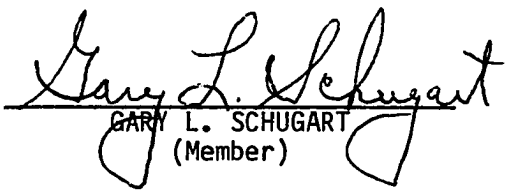

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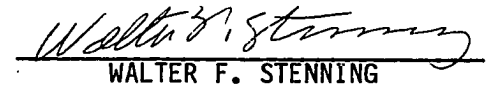

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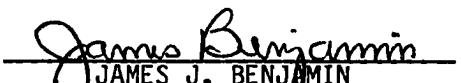

JAMES J. BENJAMIN
(Head of Department)

December 1982

ABSTRACT

Audit Partners' Perceptions of the Variables Associated with the Decision to Withdraw from Audit Engagements. (December 1982)

Kathryn Mary Verreault, B.A., University of Lowell;

M.B.A., Texas A&M University

Chairman of Advisory Committee: Dr. Richard G. Schroeder

In recent years auditors have increasingly found themselves the targets of lawsuits claiming legal liability for damages. A few years ago auditors were held liable only to those individuals directly involved with the financial statements. At that time few financial statement users questioned auditors' opinions. However, a court decision (Rusch Factors, Inc. v. Levin, 284 F. Supp. 85, 1968), has made auditors liable to all users of the financial statements. A potential investor, for instance, can file a suit against an auditor even though he may not have reviewed the financial statements prepared by the auditor. He or she need only claim to have been misled by the statements.

According to recent court decisions, the auditor can be held liable for either a tort (negligence, gross negligence, and fraud) or a crime in the performance of the attest function. Simple compliance to the profession's standards does not insure that an auditor is safeguarded against lawsuits. For example, in the "Continental Vending Case" (U.S. v. Simon, 425 F 2d 796, 1969) two partners and a manager of a large CPA firm were found guilty of fraud. The courts found that their compliance with professional standards was not

enough in this particular instance. Auditors today must look beyond the standards and maintain as their primary concern the "fair" presentation of the entity's financial position, which should not mislead an "average prudent investor."

In summary, no clear-cut standards currently exist that auditors may dutifully follow that will shield them from legal liability. Therefore, the auditor must accept some degree of risk when agreeing to accept any engagement. In evaluating current and potential audit engagements, the client's business must represent an expected net favorable change from present conditions, after consideration of these potential risks. After the engagement is accepted, the auditor will learn new information about the client. Possibly some information may make the auditor wish to disengage himself from the client. This study deals with the decision process utilized by management in contemplating whether or not to withdraw from engagements. Little research has been done to date in this area.

The research questions surrounding their decisions include the following: 1) investigation of the variables utilized, 2) their appropriate weights, and 3) whether or not these decisions are consistent and rational.

ACKNOWLEDGMENTS

I would like to thank my committee for their time, patience and encouragement.

DEDICATION

to my Mother and Father

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CHAPTER I

INTRODUCTION

Statement of the Problem

Our economic system and current business environment could not function adequately without independent public accountants. The function of accounting and of the audit is to assist our economic system. The usefulness of accounting and the subsequent audit arises in any society where one man is entrusted with the property of another. Our current economic system is comprised of many large corporations with external financing and separate owners and managers. Therefore, the usefulness of annual financial statements and reliance placed on auditors in today's society is readily apparent (Causey, 1979). The auditor conducts an examination of the data and supporting documents and attests to their "fair" presentation. However, with the increase in any service comes the increase of potential problems inherent in providing that service.

The growth of the business world dictated an increased need of the audit function. The evolution of incorporated entities introduced the problems inherent in the separation of ownership and management. Owners now needed an intermediary party to attest to the reports issued by management. External financing also became

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commonplace. These creditors needed an independent party to attest to management's financial statement to feel secure of the probability of their loan repayment. Still more users relied on the financial statements issued by management as the number of investors and creditors grew. The attest function by auditors became a common expectation in the financial statements for current or potential investees. The transactions also became more and more complex as the business environment evolved. Therefore, auditors increased their role in the business community and attempted to meet the challenge of the changing business environment. The increased responsibility of the auditor has brought new problems to the profession.

The auditing function is still in an evolutionary stage, even though it has changed substantially over the years. It began as a simple checking and verification procedure at the time accounting first became customary. However, it has expanded over time to include the attestation to management's financial statements, and the business community now has become accustomed to the auditor's current role in the preparation of published financial statements by corporations. That is, first, the preliminary financial statements are prepared by management. Second, the underlying financial data is examined, and the fairness of the financial statements is assessed by the auditor. Finally, the financial statements are published for use by various interested parties.

A major problem currently encountered by auditors is the possibility of lawsuits. This possibility results from their intermediary function of attesting to management's financial

statements. If these statements are subsequently proven other than "fair" the auditor is caught in a vulnerable position.

Therefore, auditors have increasingly found themselves the target of lawsuits claiming legal liability for damages. Perhaps one reason for such suits is that the auditor is the only solvent survivor in a failing business venture. When a company goes bankrupt, the auditor is a convenient person to blame. A slumping economy may also lead to an increase in auditor suits. For example, a relationship between the number of lawsuits brought against auditors in the past and the state of the economy can be readily observed. A similar relationship exists in other professional capacities such as medicine (Causey, 1979).

In the past auditors were only held liable for their opinions on the financial statements and were only liable to those individuals directly involved with the financial statements. At that time few financial statement users questioned auditors' opinions. However, a court decision (Rusch Factors, Inc. v. Levin, 284 F. Supp. 85, 1968) made auditors liable to all users of the financial statements. That is, a potential investor can file a suit against an auditor even though he may not have completely reviewed the financial statements prepared by the auditor. The investor need only claim to have been misled by the statements.

According to the findings of Rusch vs. Levin, the auditor must satisfactorily provide information to his client as well as any potential readers of the client's financial statements. This implies that the auditor may find herself preparing financial statements for

unknown readers with unknown questions. A decision must be made as to the exact information that should be disclosed and the extent to which it should be disclosed.

More recent court decisions have continued to expand the extent to which auditors can be held liable. Currently, the auditor can be held liable for either a tort (negligence, gross negligence, and fraud) or a crime in the performance of the attest function. Simple compliance to the profession's standards does not insure that an auditor is safeguarded against lawsuits.

For example, in the "Continental Vending Case" (U.S. v. Simon, 425 F. 2d 796, 1969) two partners and a manager of a large CPA firm were found guilty of fraud. The courts found that their compliance with professional standards was not enough in this particular instance. The auditors should have displayed additional care in this particular audit since there was already evidence of the existence of unusual events. Auditors today must look beyond the standards of the profession and concentrate on the "fair" presentation of the entity's financial position, which should not mislead an "average prudent investor."

The significance of the "Continental Vending" case is explained by Isbell (1970). He concluded that the case conveyed two practical lessons to auditors. The first lesson is that once an auditor is made aware of certain irregularities in the course of the engagement, he should consider each of his subsequent actions in dealing with that client in respect to how it may later appear in a court of law. Second, for self-protection, the auditor should be extremely

cautious. Every disclosure and nondisclosure now deserves special attention and any lack thereof could be construed as deliberately fraudulent.

The case of Ernst v. Hochfelder (44 LW 4451, 1976) also dealt with the fraud issue in relation to liability by the auditor in the presence of uncovered fraud. The auditors were tried for aiding and abetting management's fraud by failing to conduct a thorough audit of the First Securities Company. First Securities was a brokerage firm and its president had diverted funds for his own use. He then committed suicide after leaving a note explaining his actions and disclosing that the First Securities Company was bankrupt. The president had persuaded investors to invest in nonexistent high return escrow accounts. The checks were mailed directly to him, and his "mail rule" policy allowed only the president to open mail addressed to him. Any mail received in his absence was to be accumulated and left unopened until his return. This is a departure from traditional business mail proceedings and a violation of good internal control procedures. The auditors should have reacted to this unusual policy and attempted to determine what the president did not want revealed.

The Hochfelder case directly addressed the distinction between intentional fraud and inexcusable negligence. In other words, was there "intent" on the part of the auditor to defraud? The judge in this case concluded that an error in judgment was not comparable to negligence. Although the auditor may be negligent in a judgment decision, he should not be held liable for hidden management fraud.

Management has the ability to withhold information from the auditor whenever desired. It would be inequitable to hold auditors responsible for such management fraud. Second, due to collusion, management fraud is frequently difficult for the auditor to detect. In summary, the court held that the auditor's function is not to seek out fraud since an audit with this objective would be impossible to conduct due to time and cost constraints.

The evolution of the audit function has resulted in not only increased problems of the audit, such as fraud detection, but the extent to which the auditor may be held responsible for his audit opinion. Auditors' liability has expanded to include third parties. These parties include creditors, investors, or potential investors who may rely on the work of the auditor. They are unidentified users of the financial statements as opposed to the primary beneficiaries of an audit, identified by name to the auditor prior to the audit.

The "Ultrameres" (Ultrameres v. Touche & Co., 255 N.Y., 1970, 1931) case addressed the possibility of auditors' liability to third parties. The auditors in this case did not verify fictitious balances in various ledger accounts. Later, the client was found to be near bankruptcy. Thirty-two copies of the financial statements were prepared for the client, implying his intent to seek credit. The plaintiff creditor made loans to the client; the client soon went bankrupt and the creditor charged the CPAs with negligent misrepresentations and fraudulent misrepresentations. The auditors were found guilty of gross negligence in the performance of the audit. The court held that the auditors, aware of the requested

number of copies of their report, should have taken time and attempted to verify the fictitious balances.

In summary, members of the auditing profession are currently functioning without the guidance of a complete set of standards which they may dutifully follow that will shield them from legal liability. Instead they are functioning on a case by case basis. Each engagement requires separate judgments in order to determine the extent of work necessary by the auditor to be satisifed that a "fair" set of financial statements have been prepared by management. Any engagement accepted represents an element of risk to the auditor. Consequently, when the auditor evaluates current and potential audit engagements, he must be satisfied with the relationship. The engagement must represent an expected net favorable change from present conditions, after consideration of these potential risks. The decision may be purely financial with the auditor weighing the expected fees with the risks involved. Alternatively, the auditor may wish to expand his business in general or gain expertise in one area. In such cases the incentive is not only monetary.

If the auditor does not perceive a net favorable change as a result of accepting an engagement he should not accept it. The actual thought process auditors utilize in deciding to withdraw from an engagement or to retain the engagement is not known at this time. Probably, a combination of factors influence an auditor's decision to accept or reject a new engagement. A few studies have attempted to compile the relevant factors as a narrative survey of why auditors accept new engagements. None have adequately quantified them.

Therefore, auditors have no formal mechanism to aid in the decision to accept or reject a client, they must simply depend on their own judgement. Similarly, after a period of time they may decide that some engagements previously accepted were mistakes and contemplate terminating these relationships.

In the event the auditor initially accepts a client, he may later find he does not wish to continue the relationship. The auditor must then determine whether to disengage himself from the client or to retain the client. Studies in the area of withdrawal are few in number. They also tend to emphasize the legalities of withdrawal over the relevant factors involved in the decision itself. The results of research in this area would be useful not only in studying the withdrawal problem but also in working backwards toward the original decision of accepting clients. This information could also be useful to auditors for future decisions.

The identification of the variables considered in the auditor's withdrawal decision was chosen as a subject for this research. The topic is thought to be a timely one as is evident by the increased number of lawsuits filed against auditors. New information on this subject should be of use to the members of the profession in learning about their decision process and perhaps improving on it.

Justification for the Study

There are four main reasons why the decision to withdraw from audit engagements or retain them is an appropriate topic for research. The reasons are as follows:

1. Each engagement an auditor accepts represents a possible withdrawal decision.
2. The impact of this decision may result in legal liability and (or) harmed reputation of the accounting firm.
3. There is a lack of guidelines for auditors to follow concerning this important decision.
4. Research in this area has been sparse.

First, this decision is common to all audit engagements. Although the occurrence of an actual withdrawal by the auditor may be fairly infrequent, the decision to withdraw or not may arise at any time. In the course of any relationship between an auditor and a client there will be disagreements. Usually these disagreements can be settled without the threat of withdrawal. In extreme cases, or in case of recurring differences, withdrawal is an alternative for solution to the problem.

Second, the withdrawal decision is important to the auditor due to the potential risk of legal liability and/or possible marred reputation of the accounting firm resulting from such a decision. As mentioned previously, the risk of legal liability is very much present given the current economy. Also, due to the function of the auditor of attesting to management's financial statements, it is imperative that he consider each decision which may impact on his reputation.

The third reason this study may be justified is the current lack of formal guidelines that auditors may use in making the withdrawal decision. Therefore, the auditor still is left to make subjective

decisions. These decisions are made on a case by case approach.

Fourth, there has been little research in this area. The few studies dealing with the topic have primarily addressed the legal implications. These studies present various engagements which an auditor may encounter which may give rise to withdrawal. The liabilities of withdrawing from such engagements are then outlined. Generally Accepted Auditing Standards relay examples of such situations which logically or legally require the auditor to withdraw from the engagement. These guidelines outlined in the standards are very general.

No research has dealt with why the auditor would withdraw from an engagement as opposed to why he should withdraw. No previous attempt has been made to model his thought process and determine which characteristics of the client indicate that a withdrawal is necessary by the auditor. This information cannot be derived from standards within the profession.

Research Questions

The research questions surrounding the auditor's decision of whether or not he would withdraw from an engagement include the following:

1. Determining which variables are utilized by auditors in the process of determining whether to withdraw or not.
2. Analyzing how individual auditors utilize these variables.
3. Determining how these variables were utilized by auditors as a group.

4. Analyzing whether firm differences exist in the usage of the variables.
5. Determining if differences exist in the usage of the variables in relation to firm size differences.
6. Determining if auditors are consistent internally in their usage of the variables.

The increase in the scope of auditors' legal liability and the resultant increase in the frequency of lawsuits implies a need for research to answer these questions. As mentioned previously, few studies have dealt with the process of agreeing to engagements and even fewer studies have addressed the process of deciding to withdraw from an audit engagement.

Studies that have addressed the withdrawal issue have examined the problem purely from a legal viewpoint. The thrust of these studies has been the legal implications to the auditor resulting from a potential withdrawal. This study assumes the possibility of legal liability is closer at hand to the auditor contemplating withdrawal than those contemplating a new client. Therefore, the growth in the number of cases and extent of legal liability to the auditor should more severely impact on this decision of withdrawal than on the decision of accepting or not accepting a client.

This study addresses the process utilized by auditors in the withdrawal versus nonwithdrawal decision. This area is left open for the development of a structured model to be used by the auditor in making this decision. Such a model could prove a valuable aid in future decisions encountered by the auditors.

Some firms do have written guidelines dealing with the withdrawal decision, but these are usually an extension of the Generally Accepted Auditing Standards. Like the standards, they are general and still require a good deal of judgement on the part of the auditor. The auditors presently have no vehicle available to change this process. No joint sharing and learning is being demonstrated within or across accounting firms. This knowledge would be to the advantage of all firms.

The study will 1) identify the relevant criteria (variables) considered by a sample of auditors in making this decision and 2) analyze the usage of the variables by the sample. The identification and weight assignment of the relevant variables is the important first step into the research of the complex problem of deciding to withdraw or not withdraw from an audit engagement.

In summary, the research questions this study will address may be stated as follows:

1. What are the potential variables utilized by auditors in the decision of withdrawing or not withdrawing from engagements?
    a. How can these variables be condensed to a manageable set?
2. How do auditors utilize these variables?
    a. Do all auditors utilize the same variables?
    b. Do auditors from different sized firms utilize the same variables similarly?

These questions will by analyzed in detail in the chapters that follow.

Definition of Terms

The following terms will be used frequently throughout the study.

1. Audit: Process by which the fairness of financial statements are determined by the accountant.
2. Attest Function: The affirmation of the fairness of financial statements by the accountant.
3. Audit Withdrawal: The process by which the auditor disengages himself from the client and terminates the client/auditor relationship.
4. "Big 8" Accounting Firms: Eight international accounting firms who have distinguished themselves from all other large firms in terms of a combination of professional achievements and profitability. They are no longer the largest in terms of their numbers of partners and employees or the most profitable of all accounting firms. They have, however, maintained a separate and distinct professional image not common to the other large firms.
5. Other International/National Accounting Firms: Large national and international firms not including the "Big 8" firms.
6. Local/Regional Accounting Firms: Accounting firms neither international nor national.

CHAPTER II

REVIEW OF THE LITERATURE

Withdrawal from Audit Engagements

Very little research has been done in the area of the auditor's decision process in contemplating withdrawal from engagements. The few studies which have dealt with the auditor withdrawal problem have generally studied only its professional and legal implications. The implications addressed have originated in the auditing standards published by the American Institute of Certified Public Accountants. Consequently, these studies have bypassed some of the situations resulting in withdrawal. Inasmuch as the research in this area has previously addressed legal aspects, not much information is available concerning the specific situations which lead to withdrawals from audit engagements.

Two studies have dealt directly with the withdrawal decision. The first study, by Andrews and Pany (1979), addressed specific problem areas included in the profession's standards and illustrated the instances where an auditor should withdraw. The second study, by Collins and Porter (1979), examined general relationships between the auditor and client, and outlined the legal implications involved.

Andrews and Pany (1979) conducted a survey on the literature available on the withdrawal problem from Generally Accepted Auditing Standards. Seven problem areas which an auditor is likely to encounter were identified. The areas were indicated in the auditing standards and involved the following:

1. Disagreements over Generally Accepted Accounting Principles.
2. Refusal of client to disclose unasserted claims.
3. Illegal acts.
4. Errors or irregularities.
5. Inconsistency of financial statements with other information.
6. Lack of auditor competence.
7. Past due audit fees.

In each area, the possibility of withdrawal was discussed and the professional and legal implications involved in the potential withdrawal were outlined. A practical analysis of the legalities of withdrawing in each case was then summarized. For instance, past due audit fees in some cases make mandatory a withdrawal from the engagement; therefore, the auditor cannot be held liable. The practicality of seeking legal counsel was advised in all cases. There are two major limitations of this study. First, the survey included only a few circumstances encountered by auditors directly addressed by the existing professional standards and did not encompass all problems which the auditor may face. Second, there was no study of how auditors may actually weigh the importance of the several areas.

Collins and Porter (1979) studied the general legalities of engagement withdrawal. They addressed the general problems inherent in any withdrawal on the part of the auditor. They summarized three major legal problem areas encountered by auditors in contemplating withdrawal.

The first problem summarized by Collins and Porter outlines the legalities involved when an auditor wishes to terminate an engagement but the client wishes to maintain the relationship. In this case, for whatever the reason, the auditor no longer wishes to continue the engagement. The client, however, wishes that the auditor remain and complete the engagement as is stated in the engagement letter. The second problem comes about when the auditor actually withdraws. Does the auditor have the right to bill and collect from the client fees earned for completed services to date? Third, who gets custody of the work papers prepared by the auditor throughout the engagement?

The first problem deals with disagreement between the auditor and client over the withdrawal decision. This problem addresses contractual liability. When a withdrawal seems appropriate, the auditor must take into consideration several factors: 1) Which party initiated the withdrawal process? 2) Do both parties agree to the withdrawal? 3) If both parties have not agreed, has either party violated the contractual agreement? 4) Is the withdrawal mandated by ethical considerations or is it required by professional pronouncement? If the answer is yes to any of these questions, the auditor should feel confident in his decision to withdraw and optimistic as to any negative legal repercussions.

In the event rescission is possible (i.e., both parties agree on the withdrawal), then they simply agree to end the relationship. This is the most peaceful manner in which to withdraw from an engagement. In many cases this situation arises. Both parties would be much happier not to deal with the other. Whether the problem be

personality or a more deeply rooted conflict, each party has agreed to terminate the relationship. Therefore, in effect, they have a new oral contract overriding the old written contract.

At the onset of any engagement the auditor generally draws up an engagement letter describing the work he is about to perform. Typically an engagement letter does not spell out clearly what is expected to be done by the auditor and the exact depth in which he will perform the task. The reason these items are not mentioned at the time of the engagement acceptance is because the exact information is unknown at that time. Most often the agreement identifies the ends to be reached; however, the means to achieve these ends are unclear. That is, the exact amount of work necessary to complete the audit is unknown at the initial engagement date. Also, often the fee is not stated other than as an estimate of the work to be done. The fee is a function of the work to be performed. If the auditor finds the financial records or controls inadequate, he needs to rectify the situation with more work of his own. Consequently, the audit fee grows in proportion to the increased need for auditor services.

Although the engagement letter has many deficiencies, it is the written contract that serves as the reference point when future disagreements arise. The client may claim one interpretation of the audit engagement letter and the auditor may claim another interpretation. A solution to this problem is the inclusion of a separate paragraph in the engagement letter identifying the circumstances under which withdrawal may be expected to take place.

For instance, the auditor may add a paragraph to the engagement letter noting that he shall withdraw from such engagement should he determine that he no longer has the expertise to handle such an engagement. Additionally, the billing policy, should such circumstances arise, should be spelled out clearly. For instance, the letter may indicate that if certain disagreements transpire between the client and auditor, then the auditor is to be paid for any work to date. Unfortunately, these paragraphs usually are not utilized, whether for business reasons or otherwise.

The second major issue addressed by Collins and Porter is that of the fees involved for the work already performed. That is, does the auditor have the right to collect the fees earned to date even if he is not going to complete the engagement? The answers to these questions are often dependent on 1) why the withdrawal took place, and 2) who initiated the withdrawal. If professional pronouncements have been followed or ethical considerations have forced withdrawal, then the auditor is entitled to collect for services performed. Also, any unrealized gain potentially realized by continuance of the engagement could be claimed. The criteria for this is simply that the auditor be able to show that the client was at fault and the damages cannot be avoided.

When an auditor wishes to withdraw through no fault of the client the situation becomes more complex. This may be the case where the auditor no longer feels he has the expertise to handle the engagement. The client can counter the damages claimed by the auditor for past fees with damages caused by the auditor's

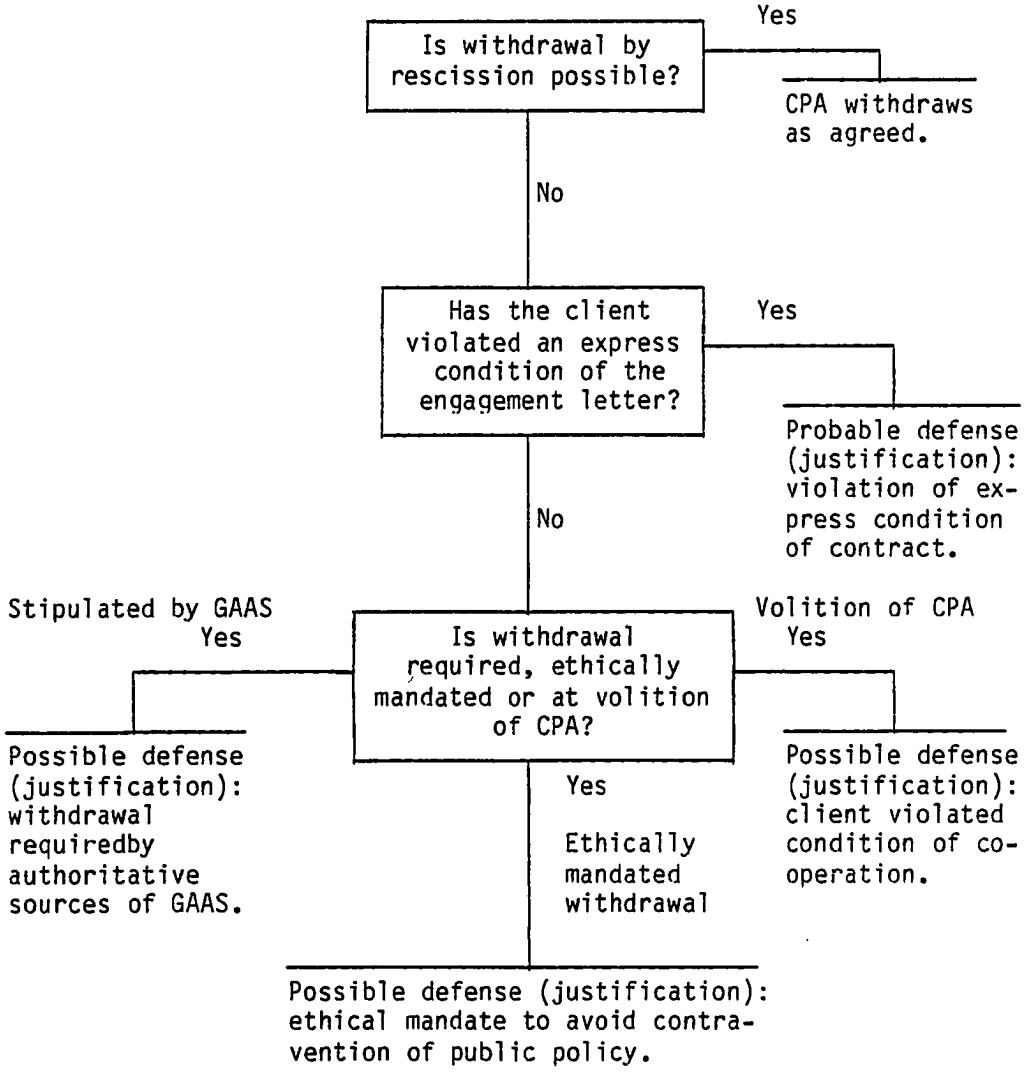
withdrawal. The client must now find another auditor. Auditor changes are expensive to the client. The auditor is strongly urged by Collins and Porter to obtain legal counsel in this instance.

The third issue addressed by Collins and Porter concerns the custody of the audit working papers. In general, the working papers are the property of the auditor and do not belong to the client (Hermanson, et al., 1976). Any workpapers placed in the custody of the auditor by the client, however, are property of the client and must be returned to the client. Additionally, any records of the client utilized during the audit by the auditor must also be returned to the client once their usefulness is no longer required. A flowchart of the legal considerations addressed in this study can be found in Figure 1.

In summary, a withdrawal agreed on by both parties is the least harmful situation for both parties. In this case the auditor simply withdraws and the client retains another auditor. Additionally, if the client has violated a condition of the engagement letter, the auditor is justified in withdrawing. On the other hand, if the withdrawal is required, ethically mandated, or desired by the auditor, then the auditor still has possible defenses against possible legal liability. These defenses include the following: 1) authoritative sources of Generally Accepted Auditing Standards, 2) ethical mandate to avoid contravention of public policy and 3) client violated condition of cooperation respectively. In any of the cases illustrated it appears prudent on the part of the auditor to seek legal counsel.

Figure 1

Auditor Considerations Pertaining to Legal Counsel



(Collins & Porter, 1979, p. 69)

Legal Liability

The decision to withdraw from an engagement may be related to legal liability in two general ways. First, the auditor may become involved in legal liability because he has chosen to withdraw from an engagement.

In this case the client may bring suit against him because of the reasons he withdrew. Second, the auditor may face legal repercussions because he did not withdraw from an engagement. Cases of a continued auditor-client relationship ending in a lawsuit are generally common in cases of insolvency of the client or a client's lack of integrity. The following paragraphs address these types of situations in detail.

Legal liability as a result of functioning in a professional capacity currently is a hazard in most professions and auditing is no exception. As previously mentioned, a decline in the economy is generally accompanied by a rise in bankruptcies. When bankruptcies occur, creditors wish to reduce the amount of their loss. The auditor is often the only solvent survivor. Therefore, when auditors agree to any engagement they are risking potential legal liability. The rising costs of professional insurance premiums is evidence of this fact.

Several studies have dealt with the accountant's legal liability and the study of risk evaluation in the audit function of public accounting firms. Although not directly related to this study, these studies indicate clearly the increased problems faced by accountants.

There exists a need for more research as to why auditors' liability is expanding and why the number of cases filed against them is increasing.

Studies on legal liability in public accounting practice such as those by Berrymore (1958), Randall (1972), Clark (1973) and Davies (1975) illustrate both the growth in the number of suits which have taken place recently and the severity of the claims and punishment incurred in the suits. Unfortunately, no study has gone beyond reporting the results of these suits. Typically, these studies address only one area of accountants' legal liability and describe a few cases dealing directly with that particular problem. Therefore, the studies tend to be disjointed and any conclusions drawn are narrow.

A general study of auditor legal liability by Bakay (1969) concluded that the auditor currently exhibits two main deficiencies. The first deficiency includes the extent of care utilized in both the investigative and reporting phases of the audit. Secondly, she concluded that there was a lack of professional alertness on the part of the auditor in completing the two phases of the audit. These conclusions were reached after reviewing and summarizing the claims filed by auditors with two major insurance companies. From the information contained in the claims, Bakay concluded that if the auditor took greater care and exhibited more professional alertness in both the investigative and reporting phases of the audit, then he would be less susceptible to liability from suits. Bakay did not justify the problem as being inherent to the profession due to the

increased auditor responsibility and subsequent increased risk from legal liability.

A dissertation by Label (1971) supported the belief that accountants' legal liability has expanded over the past thirty years. He attributed this expansion of legal liability to three major problems encountered by the auditing profession. These problems include 1) increased use of financial statements, 2) failure of auditors to educate the public as to their roles, and 3) lack of responsiveness to changes in the environment.

The first problem is the increased use of financial statements in the business world. This increased use results in additional problems. Problems encountered are due to 1) the diversification of the users, and 2) the need for the generation of an adequate package of financial statements to please the majority of their needs.

Second, the profession has failed to educate the public as to the role of the auditor and the actual implications of his attest function. The uneducated reader of the financial statements may erroneously believe that certification of statements by an auditor implies absolute truth and accuracy. The attestation function and ultimate certification of financial statements are meant to convey only a message of "fairness" of presentation of the statements based on the findings of the auditor.

Finally, Label (1971) faulted the auditing profession for a lack of responsiveness to change in the environment. He felt that the auditors have not adequately assessed the current demands for types

of financial information and extended financial information and tried to meet these demands.

Booker (1971) sought to develop a relative risk function to identify the major variables influencing the risk of an audit engagement. An evaluation was made at the local level and home office levels to find the extent the risk evaluation process has been rationalized by the auditing profession. Through open-ended interviews, Booker defined relative risk as basically the probability that an audit engagement will eventually do some damage to the reputation of the accounting firm. Each subject was asked to comment on the relative risk function. The study concluded that relative risk of an audit engagement can approximately be determined by the reputation and stability of client's management, the client's system of internal control, the type of financing used by the client, the nature of the client's business, the client's rate of growth, the independence of the auditors and the longevity of the engagement. The findings of the study indicated a process of risk evaluation conducted by the auditor prior to each audit engagement. In this evaluation the auditor would determine the amount of risk the engagement represents. He would then determine if the risk outweighs the advantages of keeping the client.

Although there is a good deal of risk associated with each audit acceptance, the risk is not limitless. A few cases have bounded the legal responsibilities of the auditor. For example, although the Ultramares v. Touche & Co. (255 N.Y., 170, 1931) case stated that public accountants are liable for deceit to third parties, it also

held that accountants cannot be held liable to unidentified third parties for negligence. In this case the presiding Judge Cardoza responded to the needs of the accounting profession. He summarized the implication of allowing liability of the auditor for negligence to third parties as follows: "If liability for negligence exists, a thoughtless slip or blunder, the failure to detect a theft or forgery beneath the cover of deceptive entries, may expose accountants to a liability in an indeterminate amount for an indeterminate time to an indeterminate class."

Another case study by Causey (1979) suggested that the auditor should always assume he may be held liable to third parties. His caution is evidenced by citing cases where third parties have been clever enough to sue the client for misrepresentation and at the same time the client files a third-party complaint against the accountant for negligence. The end result is liability to third parties by the auditor.

Auditors' liability has expanded in two directions. The first expansion has been the number of parties to whom auditors may be held liable. The second expansion is the extent to which they may be held liable. Another problem area now common in the auditing profession is the possibility of management fraud and extent of the auditor's responsibility in detecting such fraud.

The profession has taken the initiative to deal with the ever-increasing responsibility in our current economy of detecting fraud. Touche Ross & Co. developed new SEC-approved "Touch Ross Manual for Spotting Fraud" (1980) which now applies to all audits:

1. Scrutinize "all material transactions", especially those which affect income of a corporation or division by five percent or more,

2. Be skeptical of major transactions bunched at the end of the quarter or year (euphemistically called "the New Year's Eve parties"), and watch for backdated documents,

3. Scrutinize numerous transactions with the same firms for possible non-arm's-length transactions,

4. Review any internal corporate conflict of interest reports,

5. Check the reasonableness of figures and ratios for the most recent five years,

6. Require the board of directors to approve each transaction in which management has a vested interest,

7. Beware of the following factors which may indicate incentive for management fraud:

    1. Inadequate working capital.

    2. Management pressure for earnings to support stock price.

    3. Earnings which result from few transactions, customers, or products.

    4. Decline in the industry.

    5. Lawsuits (especially by stockbrokers).

    6. Mergers and acquisitions.

    7. Collection problems.

    8. Highly diversified operations.

    9. One person (or few-person) management.

    10. Different auditors for different divisions.

    11. Inadequacy of controls or internal audit.

    12. Turnover of legal counsel and key financial positions.

The profession must also be realistic about the near impossibility of detecting fraud if large amounts of collusion exist.

In such cases, all parties involved in the collusion would be misrepresenting facts to the auditor. The consistency of their stories could be convincing. The auditing profession is moving toward educating the public as to their role in detecting fraud. At this time, however, different perceptions are held concerning this role of the auditor.

The American Institute of Certified Public Accountants (AICPA), the Securities Exchange Commission and the courts hold differing views concerning the function of the auditor in terms of detected fraud. The AICPA contends that the auditor primarily is retained to conduct audits. He is not hired to seek out fraud. In conducting an audit in accordance with generally accepted standards he may or may not uncover fraudulent acts.

If the audit results in the discovery of fraud, the auditor's duty, as viewed by the AICPA, 1) does not require the auditor to divulge the fraudulent acts, and 2) does not require disclosure of the fraud to investors if it is not required under the profession's standards. In summary, the AICPA suggests that adherence to the professional standards is sufficient to ensure a quality audit. It is not the function of the auditor to be seeking out fraud on a daily basis. If through the course of the audit evidence arises as to the possible existence of fraud, then sufficient care should be taken. Additionally, the burden of proof should be equivalent to that of the medical profession in malpractice cases.

In contrast to the AICPA view of the function of the auditor is the position held by the SEC. Causey (1979, p. 8) summarizes the SEC view of the function of the auditor as follows:

> The SEC positions on the standard of communication and conclusiveness of expert testimony are as follows:
>
> 1. The auditor has an obligation that goes beyond specific GAAP and GAAS or professional custom to effectively communicate material information.
>
> 2. If GAAP or GAAS are found lacking, the SEC will not hesitate to invoke its authority to establish meaningful standards of performance regardless of expert testimony as to professional standards.

This position taken by the SEC is contrary to that of the AICPA. The SEC feels that the auditor must divulge any discovery of fraudulent acts not only to the SEC but to the public. In addition, this disclosure to the public should adequately and effectively communicate the acts such that a lay investor could understand the ramifications.

The SEC wants the auditing profession to adhere to the standards of the profession as tools for conducting audits. These standards, however, are nothing more than tools and cannot and should not be mistaken for rate procedures and processes. Such procedures and processes may singularly comply with the profession's standards yet collectively fall short of a quality audit due to the nature of the client. Therefore, auditors must look beyond the standards for guidance in the completion of some audits.

The courts' opinion differs from that of the SEC and AICPA. Their interpretation of the role of the auditor is twofold. First,

when Generally Accepted Auditing Standards exists for a particular problem, the professional duty of the auditor revolves around the adherence to that standard. This adherence to a particular standard is conclusive providing the audit results in financial statements that are fairly and meaningfully stated. On the other hand, if the standard is not adhered to, the auditor's liability becomes a function of damage caused to the financial statements by not adhering to this standard. In such cases, if the auditor has been found to act in a manner which is willful, fraudulent, or wanton and reckless, exemplary (punitive) damages are awarded. Misleading financial statements usually imply the misuse of the profession's standards or principles. However, if the standards are adhered to and misleading results are material, the courts will generally find guilt regardless of adherence to standards.

Brunswik's Lens Model

This study deals with a decision process. Specifically, this study deals with the decision of whether or not to withdraw from audit engagements. The Brunswik lens model approach to human information processing is utilized in this study. The following studies illustrate the use of the lens models in similar types of studies attempting to assess the impact of several variables on a decision process. Although now familiar in the accounting literature, the lens model has innumerable unexplored uses.

In classifying information processing variables, it is necessary to find characteristics of the set (i.e., input) which affect the way

decision makers use information. Also sought are pieces of information such as scaling characteristics of the individual cues, statistical properties of the information set, information content or relationship of the cue (set) to a criterion, and the method of presentation and context. For example, auditors make overall internal control evaluations from cue usage and the form of the decision rule. The input component is the information set which is evaluated or processed by a decision maker. This produces the output in the form of a judgment, prediction, or decision.

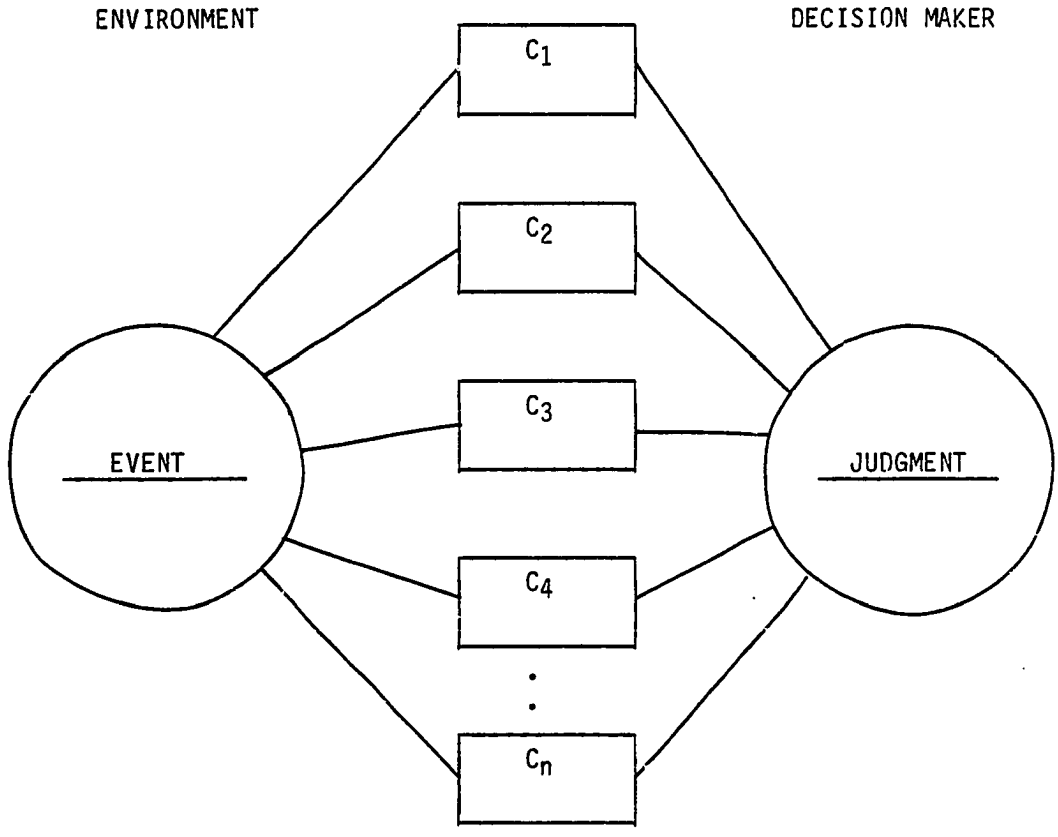
An illustration of the simple lens model is presented on the following page in Figure 2. The boxes in the center of the diagram represent the cues utilized by the decision maker. The judgment is represented on the right side of the figure. This judgment is a function of the cues relevant to the decision. The actual outcome is shown on the left side of the diagram. The decision maker attempts to utilize the cues to predict the event that occurs in the environment. The right side of the model represents the thought process of the decision maker.

Some studies utilize the lens model to draw comparisons between the judgment and the actual event. These studies then analyze the predictability of the decision makers with actual outcomes. Another type of study utilizes only the right side of the diagram. In these cases the results of actual events are not available. Therefore, no conclusions of predictive ability can be found between the judgments and the actual outcomes.

Libby and Lewis (1977) encourage behavioral researchers in

Figure 2

The Simple Lens Model



(Libby, 1981, p. 51)

accounting to draw from the specific practical problems to the underlying issue. They also suggest a utilization of other disciplines for relevant theory, methodology and analogous situations. The lens model's origin is in the psychological literature. Libby and Lewis (1977) reviewed the lens model approach to analyze judgmental situations where humans make decisions or predictions based on a set of pieces of information from the environment. The pieces of information are probabilistically related to a relevant environmental event or criterion. A review of several studies on expert judgment which utilized the lens model follows.

Ashton (1974) studied the perceived strength of internal control over payroll. His sample consisted of sixty-three practicing auditors from four firms varying in size. Each subject was asked to judge the strength of a payroll internal control subsystem on a six point scale. Thirty-two cases represented by six dichotomous cues of internal control were presented to each subject. Six to thirteen weeks later the cases were administered again to test for consistency. They were found to be very consistent over time. There was considerable agreement or consensus among the auditors. Their decision rule form proved highly linear and their predictability high. Individual consistency was also very high. The utilization of the cues indicated the two most important cues were related to separation of duties.

Libby (1975) used the Lens model approach on the task of determining a firm's probability of bankruptcy. His sample consisted of forty-three commercial loan officers. Their task was to utilize

five ratios from sixty real cases and make a judgment of "bankrupt" or "nonbankrupt" of the sixty cases. He found through the use of discriminant analysis that their decision rule was highly linear and their predictability high. He also discovered their accuracy, consistency, and consensus was high.

Gibbs and Schroeder (1979) evaluated the competence of internal audit departments. They noted that there previously had been a lack of adequate description of the important criteria used by external auditors in arriving at judgements regarding the internal audit departments. Also, they recognized the need for a formal process to be used in evaluating the internal audit staff. In evaluating evidence an auditor is often faced with the problem of deciding the appropriate degree of reliance to be placed upon the work of the internal auditors. Statement of Auditing Standard No. 9 described competence as one of the factors to be evaluated in making this decision. The authors first attempted to compile a list of all of the relevant variables, they then attempted to reduce the list of relevant variables by using a group of experts and the Delphi technique. After several rounds, they were able to reduce the relevant variables to a manageable set of five variables. They then used this set of variables to create hypothetical scenarios about internal audit departments. A new sample of auditors was then asked to determine the degree of competence to place on these hypothetical cases. A four point scale was used to determine the competence level and a Lens Model approach was used to analyze the responses.

Gibbs and Schroeder concluded that knowledge of the company's

operations, processes, and procedures, and the quality of supervision were the most important factors affecting an external auditor's judgment of internal audit competence. In addition, they concluded that a structured model could be developed which will systematize the internal audit evaluation process.

Joyce (1980) found several criticisms with the Gibbs and Schroeder methodology. Firstly, he found it unnecessary to use as large a sample as they had used. Joyce defended the use of a smaller sample because the questions required time on the part of the auditors. He felt their professional time was being poorly utilized.

Secondly, Joyce objected to the subjective reduction of the variables gathered. Gibbs and Schroeder reduced their set of variables to a manageable set of five. This reduction allowed them to examine in more detail the chosen variables. Joyce felt that important information was lost due to this reduction. He suggested including more variables in the study but getting fewer responses to the new set of variables.

Hofstedt and Hughes (1977) studied the probability of loss affecting the disclosure decision from three materiality factors. Their subjects included nineteen M.B.A. students acting as auditors. They found the subject's decision rule form to be highly linear. High predictability was also displayed by the subjects and the cue found to be the most important was relative income effect. Finally, like most studies dealing with the lens model approach, they found little consensus among the subjects. The extent of external validity

was also very limited due to their use of surrogates and the problem of the task being situation specific.

Schultz and Gustavson (1978) studied actuaries' perceptions of variables affecting the independent auditor's legal liability. It was recognized that professional liability insurance is a must for accountants, therefore a riskiness measurement is necessary. However, relevant historical data were impractical and impossible to obtain. Therefore, as an alternative, this investigation asked experts knowledgeable in cases involving malpractice suits against auditors for their judgments to determine relevant variables in assessing the degree of risk of an audit engagement.

Schultz and Gustavson questioned five out of the six issuers in the United States who actually set premiums for accountants' professional liability insurance. Each actuary was requested to make a judgment on thirty-six cases utilizing a 2^5 factorial design and four repetitive cases.

The data revealed inconsistency as a group concerning the direction of risk for each variable, effects of individual variables, and decisions themselves. Each issuer, however, did display personal consistency in the treatment of the variables. There was, however, complete agreement on the importance of one item - the financial position of the clients.

Libby (1979) examined the perception of thirty "Big 8" audit partners and twenty-eight "money center" commercial lenders of the information contained in audit reports. The presence of differing perceptions of the audit report suggested, perhaps, a revision of the

reporting framework. Similar messages were conveyed in ten different audit reports (unqualified and qualified by different types of uncertainty and scope qualifications and disclaimers).

Differences between the qualified and disclaimer opinions were found to be double the differences between unqualified and qualified reports. The source of the scope limitation (whether it be client imposed or circumstance imposed) was found to be important. Sources of uncertainty appeared virtually irrelevant.

Casey (1980) like Libby studied the ratios considered important in determining whether or not a firm will go bankrupt. He, too, utilized the lens model approach to Human Information Processing. Specifically, he used six ratios as indicators to a firm's financial position. These ratios were generally accepted as indicators of a firm's potential of bankruptcy. Casey then used a sample of forty-six loan officers to make a judgment on thirty real cases utilizing these ratios and classifying them into "fail" or "not-fail" categories. He utilized discriminant analysis and concluded the following. First, he found the decision rule form of each loan officer was highly linear. Secondly, he found that the consensus among the loan officers was high. Finally, and most importantly, he found accuracy of the loan officers to be only a little above average. This suggests that the ratios in fact may not be as good at predicting bankruptcy as had previously been suggested (Libby, 1975).

Zimmer (1980) utilized a methodology similar to Casey and Libby in a Lens model study of the same problem of predicting bankruptcies. The difference between the Zimmer and Casey studies

was that Zimmer chose only five ratios whereas Casey had chosen six. Libby had also used only five ratios. A three year period was examined by both Zimmer and Casey. Zimmer's sample consisted of forty loan officers and part-time accounting students. They were asked to classify forty-two real cases utilizing the five ratios. Again a selection was to be made to determine whether the case was to be classified as "failed" or "non-failed". His accuracy was comparable to Libby (1975) and greater than Casey. The predictability displayed by the sample was only slightly greater than was Libby's sample. The group consensus found by Zimmer was higher than Casey and lower than Libby. The results implied that the usage of five variables by loan officers may be more effective than six.

In summary, an analysis of the literature in the area of the auditors' withdrawal decision has indicated two major conclusions. First, due to the increased risk of legal liability the decision is a timely one as is indicated by the literature. Second, no study has attempted to model this judgment decision. The few studies addressing the problem dealt only with incidences cited in the Generally Accepted Accounting Standards.

The studies in the accounting literature utilizing the lens model approach illustrate its usefulness as a methodology in the research of humans making judgments or predictions. The following chapter explains in detail the manner in which the lens model will be utilized and provides a description of the appropriate analytic techniques used in this study. The positive aspects and limitations

of the previously mentioned studies have impacted on the exact methodology chosen as well as the statistics employed.

CHAPTER III

METHODOLOGY

This study is divided into two stages. Part one, entitled the Variable Gathering Stage, involved identifying the relevant set of variables considered by auditors in the decision to withdraw from an audit engagement. In this stage, semi-structured interviews of a sample of audit partners were used (as described below).

In stage two, entitled the Variable Utilization Stage, a questionnaire was developed to determine how the set of variables identified in stage one were used by auditors in making the withdrawal decision. The questionnaire transposed the variables into characteristics describing hypothetical client situations (or scenarios) that the auditor may encounter. Each of the scenarios then required the repondent to make a withdrawal decision. Respondents to this questionnaire were a second sample of audit partners.

An illustration of these two stages is found on the following page in Figure 3. A detailed summary of the methodology, Figure 4, follows the flowchart.

Variable Gathering Stage

The first step in this research involved the gathering of the relevant variables considered in this decision to withdraw from engagements. This was termed the Variable Gathering Stage. An initial search of the literature revealed that the only list of

Figure 3

Two Stages of Methodology

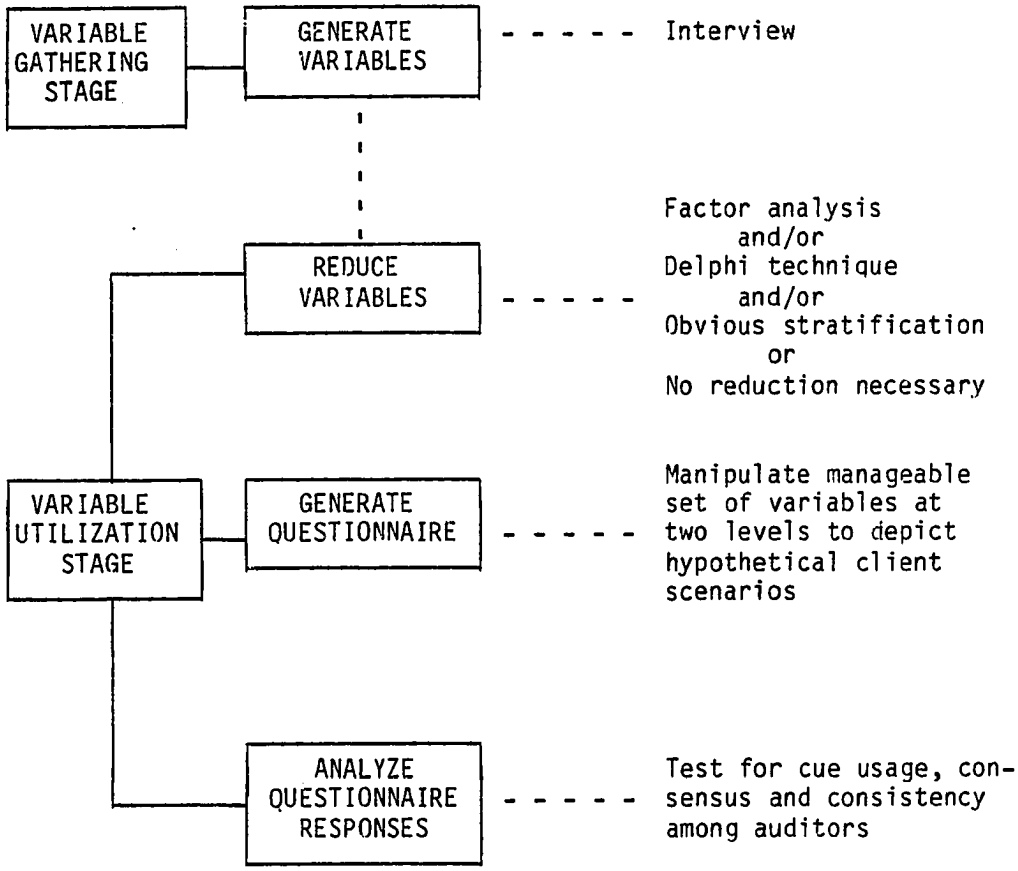
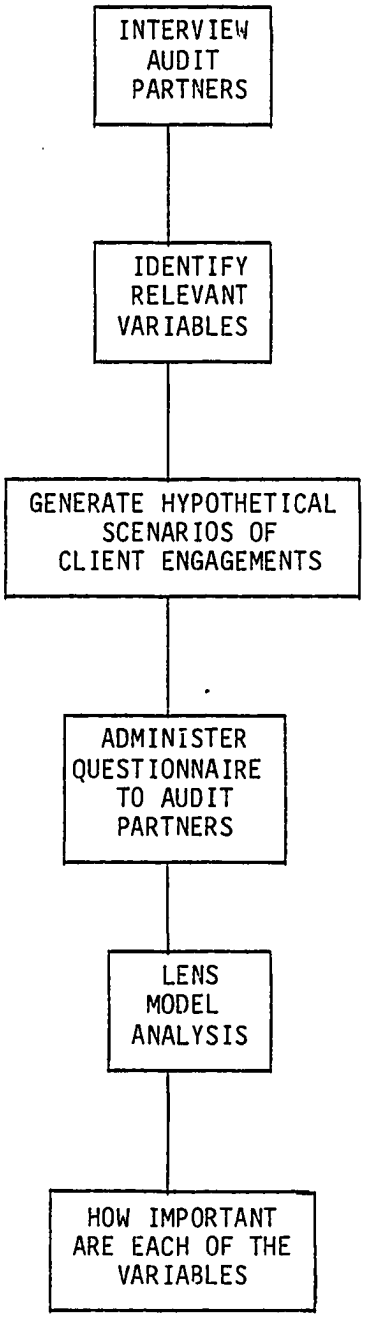


Figure 4

Summary of Methodology



potential variables were cited in reference to possible legal liability situations. These studies dealt mainly with the legal implications of withdrawing under various situations. Consequently, no reliable list was available to determine when withdrawal from an audit engagement was in the best interests of a CPA firm. However, subsequent inquiries reveal that firm guidelines do exist even though they may differ across firms and are nonexistent in some cases.

Inasmuch as the review of the literature revealed no complete list of the important variables, another means for compiling such a list was necessary. Therefore, a more direct approach was decided upon. A sample of individuals knowledgable in the area of engagement withdrawal decision was attempted. The research methodology utilized in this portion of the study was a semi-structured open-ended interview which simply addressed the question of why auditors withdraw from engagements.

The Sample

The sample of individuals interviewed was chosen on the basis of their familiarity with the withdrawal decision. Audit partners from various accounting firms were approached and asked to participate in the interviews. These individuals were desired due to their expertise in the field and their working knowledge of the problem. That is, it is at the partner level of accounting firms that the decision of whether or not to withdraw from engagements are made. Therefore, this was the appropriate level of individuals to address.

The desired characteristics of the sample were easily

identifiable. As mentioned previously, each member of the sample group was to be an audit partner. However, a list of the population from which to draw the sample did not exist. Consequently, the possibility of drawing a simple random sample from a population did not exist, and a different approach was necessary.

Ideally, any researcher would prefer a list of the elements of the population from which to draw a random sample. Unfortunately, as in any case such as this, it is not feasible in terms of the loss of time and money in determining such a population. In such situations, it is instead more practical to simply gather a convenience sample (Cochran, 1957). This method identifies a sample of individuals, auditors in this case, with the required characteristics and makes no attempt to generalize their results to the unknown population.

Statistical problems evolve due to the use of a convenience sample. One cannot conclude in a convenience sample that the members sampled are fully representative of the population. The statistics derived from this sample may overestimate or underestimate the population parameters. In other words, the characteristics of the convenience sample may differ from the population characteristics. The advantage of the random sample is that biases tend to counteract each other. The resultant statistic of the sample is then close to the parameter of interest in the population (Isaac and Michael, 1977).

This study is not the first to face the dilemma of using a convenience sample in an accounting setting. Similar circumstances of unknown populations were encountered in studies reported by

Sorensen (1967), Sorensen and Sorensen (1972), Montagna (1968), and Loeb (1971). Each of these studies were similar in that they wished to generate information from a group of experts, and also in that a list of the population of these experts was not available. Additionally, the costs involved in generating the list of elements of the desired population was undoubtedly considered excessive in relation to the benefits derived from the use of a random sample. Consequently, a convenience sample was utilized in each of these studies.

The sample selected in the first part of this study consisted of eleven audit partners. These partners were all from the greater Boston area. The Boston area was chosen for several reasons. First, the researcher was from the Boston area; therefore, contacts with these individuals had been made previously and the participants were more willing to devote the necessary time for the interviews. Second, the Boston area houses all of the major firms and a variety of smaller sized firms. Third, there was no reason to believe that a geographic bias was present and in fact several of the participants had worked in other geographic locations.

After a potential sample of audit partners was identified, their cooperation in the research was sought. Cooperation at the onset of the study was very important, because poor or inadequate participation could have impacted negatively upon the entire study.

The resultant sample consisted of eleven audit partners. A sample of this size was deemed appropriate because of the following reasons: 1) the Gibbs and Schroeder (1980) study previously cited

was criticized by Joyce (1980) for the excessive demands placed on professionals; 2) Joyce suggested that a sample of five to ten individuals should be sufficient to generate initial information about a topic with which the participants are familiar; 3) no statistical sampling formula exists which could generate a sample size for studies of this type. That is, little information is available about the population, and the size and variance of the population is unknown.

A sample of ten was initially considered adequate although during the course of the interviews an additional audit partner in one of the firms unexpectedly volunteered his services. The result was a sample population of eleven for the variable gathering stage.

The Interview

As discussed above, the first part of the study was designed to generate the relevant variables considered in the decision to withdraw from or continue an audit engagement. The technique used to identify these variables was an interview of each of the individuals of the desired sample. An open-ended semi-structured interview was considered the proper technique to implement under these circumstances because the nature of the topic required flexibility in generating responses. Each auditor was familiarized with the project at the onset of the interview and then was asked to describe each of the circumstances in which he would withdraw from an audit engagement. The subjects were then allowed broad responses to the question, and the interviewer tried not to aim the direction of the response by the subject. This flexibility reduced the possibility of

bias introduced by the researcher during the course of the interview.

Advantages and disadvantages of the interview. The advantages of an interview over a questionnaire as a means for gathering data are numerous (Isaac and Michael, 1977). These advantages are primarily due to the contact made by the researcher with the sample. This personal contact 1) permits greater depth into the topical area, 2) allows additional probing to obtain more complete information on a topic, 3) allows the establishment and maintenance of rapport with the sample which is not available when a questionnaire is used, and 4) provides a mechanism for checking and continually assessing the effectiveness of communication between the respondent and the interviewer.

Nevertheless, certain disadvantages of the research interview may also accrue (Isaac and Michael). The research interview is costly, time consuming, inconvenient, and may introduce bias in that it lacks structure.

Most of the costs incurred by the researcher are time losses. The time involves not only each individual interview, but arranging appointments and travel to and from the interview. Also the time spent by the respondent may well exceed the time spent on completing a questionnaire. Subjective and personal bias may be introduced in the interview. These disadvantages were weighed against the advantages and the benefits of the interview were still considered to outweigh such costs.

Interview structure. Interviews may be generally partitioned into three major types. The first type, the unstructured interview,

is the most vulnerable to subjective bias or errors of inexperience on the part of the researcher. In interviews of this type, the respondent is given broad freedom of expression to be handled in his own way and in his own time. This lack of structure is generally used for topics which are highly personal or potentially threatening in nature (Isaac and Michael, 1977).

The second type of interview available to the researcher is the semi-structured interview. In interviews of this type complete detailed information is required as in the unstructured interview. However, it was desired to reduce the subjective bias inherent in the unstructured interview. This type of interview still allowed for sufficient probing for underlying factors or relationships. These underlying factors tend to be ignored or unobtainable in a completely structured interview. Therefore, this semi-structured interview allowed for an adequate probing of the question under consideration and sufficient structure to avoid some of the potential bias.

The third and last type of interview available to the researcher is the structured interview. The structured interview typically has standard questions to which the respondent must choose structured answers. The advantage of this type of interview is the relative lack of bias. This is due to the structuring of the interview. The problem with the structuring is the limitation it places on complete information. This type of interview is appropriate when the type of information sought fits easily into a structured format.

A summary of the advantages and disadvantages of the three types of interviews follows on the next page in Figure 5. As noted in this

Figure 5

Advantages and Disadvantages of Interview Types

TYPES OF INTERVIEWS	ADVANTAGES	DISADVANTAGES
1. UNSTRUCTURED	RESPONSE FLEXIBILITY	POSSIBLE SUBJECTIVE BIAS INTRODUCED
	NO TIME CONSTRAINT ON RESPONDENT	
	DETAILED RESPONSES POSSIBLE	
	INTERVIEWER CAN PROBE FOR MORE COMPLETE ANSWERS	
2. SEMI-STRUCTURED	DETAILED RESPONSES POSSIBLE	LESS SUBJECTIVE BIAS INTRODUCED
	RESPONSE FLEXIBILITY	
	NO TIME CONSTRAINT ON RESPONDENT	
3. STRUCTURED	INTERVIEWER CAN PROBE FOR MORE COMPLETE ANSWER	NO RESPONSE FLEXIBILITY
	NO BIAS INTRODUCED	TIME CONSTRAINT USUALLY TO ANSWER QUESTIONS
		DETAILED RESPONSES IMPOSSIBLE
		PROBING FOR COMPLETE ANSWERS IMPOSSIBLE

summary, the semi-structured interview tends to maximize advantages and minimize the inherent bias in an interview method.

Reduction of the Variables Gathered

In order to carry out the goals of this research it was necessary to obtain a manageable set of variables from the first stage of this project. However, it had been previously decided that if the individual set of variables was too large, two techniques might be used to reduce the variable set. These techniques are factor analysis and the Delphi method.

The use of either method assumes statistics may be used to determine the more relevant variables of the set. If, however, an obvious stratification of importance was indicated or a small amount of variables were generated, it was determined that neither of these techniques would be necessary.

Each of the above techniques require time and energy on the part of another sample of experts, and as Joyce (1980) pointed out, the cooperation of professionals should not be abused or taken for granted. Therefore, if an obviously manageable set of variables existed at the completion of the first stage of the research, it was determined that no further reduction of the variables need be attempted.

On the other hand, if an unmanageable set of variables was initially derived, it was determined that the potential reducing would first be attempted before more sophisticated statistical consensus techniques would be attempted. At this time it was also

determined that the maximum number of variables that could be utilized in the next stage of the research was six. Due to the nature of the design, the number of combinations of factors increases exponentially, making any design with more than six variables unmanageable.

Variable Utilization Stage

The second stage of the research, termed the Variable Utilization Stage, was designed to assign relative weights to the variables obtained from the Variable Gathering Stage. This stage of the research was aimed at determining which of the variables were the most important in the decision to withdraw or continue a particular audit engagement. Once the variables from step one had been identified, a questionnaire was constructed consisting of hypothetical cases depicting client engagements. The variables generated from stage one were transposed into characteristics of these hypothetical clients and were indicated at one of two levels (i.e., high or low). For example, the variable of integrity of management was used to describe managements where integrity was either at a high or low level.

The reason only two levels were chosen is for simplicity (Gibbs and Schroeder, 1980). If more levels were used the number of combinations necessary to include all possibilities of combinations grows exponentially, as was mentioned previously. For example, a 2^5 factorial has 32 combinations where a 2^6 expands to 64 combinations. Therefore, to keep the questionnaire at a reasonable size only two

levels of the characteristics were chosen. The respondents to this questionnaire were asked to determine the level of probability of withdrawal from each hypothetical situation. An example of a hypothetical case is on the following page in Figure 6.

The questionnaire was designed to contain one page of instructions and all possible combinations of variables at the two levels along with four repeated cases. The pages were randomly ordered in each questionnaire so that no pattern of cases existed.

The respondents to the questionnaire included another sample of audit partners. This sample was from the greater Houston area. The Houston area was chosen for similar reasons that the Boston area was chosen in the first step in the study. The areas each contained most of the large accounting firms and were accessible to the researcher. This group of auditors, like the Boston group, was identified to the researcher by parties interested in the study. The individuals were contacted and requested to participate in the study.

The questionnaires were delivered to each firm agreeing to participate in the study and were held in the firm until they were retrieved by the researcher. The personal delivery and retrieval method was used to encourage timely response from the sample.

Scaling

Scales used in questionnaires vary in format. In this questionnaire the main objective was to reveal how the respondents perceived the different scenarios. A correlary objective was to measure any perceived differences among the individual respondents or a group of respondents.

Figure 6

Hypothetical Scenario

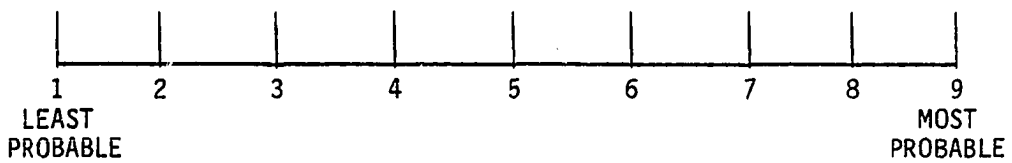
The characteristic of variable 1 is major in this client.

The characteristic of variable 2 is major in this client.

The characteristic of variable 3 is major in this client.

The characteristic of variable 4 is major in this client.

The likelihood of withdrawal from the engagement is:



In general, scales may be defined as either "rating" or "ranking" (Emory, 1980). A rating scale asks the respondent to make a judgment on a certain characteristic on a numerical scale. The ranking scale asks the respondent to list (rank) the various items in terms of importance, etc. This study used a rating scale because the subjects were asked to make a decision in terms of degree ratner than choose between alternatives.

The questionnaire and scaling device utilized in any study may also be defined as either a consensus scale or an arbitrary approach. The consensus approach was used in this study (Isaac & Michael, 1977). That is, a panel of experts have reviewed the cues chosen in the instrument and determined the relevant cues to be relevant from step one in the study (Emory, 1980). After the questionnaire was constructed, it was again reviewed by more experts. At this point the readability of the questionnaire is examined, and ambiguity inherent in the wording of the questionnaire eliminated.

A consensus scale differs from the usual arbitrary approach. Although the arbitrary approach is the more widely used approach, it contains deficiencies. In the arbitrary approach the scale is developed on an ad hoc basis and the researcher assumes that the chosen scale measures the concepts for which it has been designed (Emory, 1980). This study went one step further to test the questionnaire on a few individuals before implemention.

Rating scales. Rating scales are utilized to judge properties of objects without reference to other similar objects. These ratings

may be in such forms as "like-dislike", "approve-indifferent-disapprove", or lower classifications using even more categories. The use of a two-point, three-point, or multipointed scale is a subject of much debate and is little conclusive support for the use of any particular scale length exists (Emory, 1980, p. 261).

The most frequently used scales contain the three to seven points. However, Emory (1980) has noted that more scale points usually make the scale more sensitive to the measurement process. On the other hand, some researchers argue that the increased points on the scale do not serve to generate any better information even though they do not detract from the study.

Problems in using rating scales. The quality of response to a rating scale is dependent on the ability of the respondent and the use of this ability. Three common types of errors exist in using rating scales. They are errors of leniency, central tendency, and halo effect.

Leniency errors result when the respondents are either excessively "easy" or "hard", the latter case resulting in negative leniency. This problem is frequently encountered when the respondent is ego-involved and asked to make judgments on individuals or situation well known to him. This problem may also result when the respondent is aware of a leniency problem and then tends to attempt to counteract this leniency with lower ratings.

The second problem inherent in rating scales is the tendency of the respondents not to make extreme judgments. This results in an error of central tendency. This happens usually when the respondent

is not particularly knowledgable of the person or situation being evaluated.

A final problem encountered using this scaling technique is the "halo effect". This results when the respondent carries a generalized perception of the subject questions from one rating to the next and biases the responses. Halo is one of the most pervasive errors; it is especially difficult to avoid when the property being studied is not clearly defined, is not easily observed, is not frequently discussed, involves reactions with others, or is a trait of high moral importance (Isaac and Michael, 1977).

The first two problems mentioned do not apply directly to this study due to the general nature of this study. The respondents are not being asked to rate other individuals.

The third problem may introduce bias in this study. However, steps were taken to minimize this bias: including an expert sample in this topical area and personally instructing these individuals as to the proper completion of the questionnaire. A major advantage of this study is that the respondents generally demonstrated a great deal of interest in this research and were enthusiastic about participating in the study.

The respondents to this questionnaire consisted of a sample of CPA's containing similar characteristics to the sample used in the variable gathering stage. That is, these individuals were all audit partners familiar with the engagement withdrawal dilemma. The second sample came from the greater Houston area. The Houston area was

chosen because it contained many of the desired accounting firms and was accessible to the researcher.

This sample consisted of approximately sixty auditors. These auditors came from three sizes of accounting firms. The first group came from the largest size firms, the so called "Big 8". The second group of auditors came from a group of Other International/National firms that are generally smaller than the "Big 8" firms. The final group consisted of Local/Regional firms. This was the smallest level examined. This study attempted to determine if any differences exist in the usage of the variables gathered among the three different sized firms.

The function of the second stage of this study was to determine how the auditors utilized the variables considered important in the first step of this study. A larger sample was sought in this phase in order to properly evaluate the use of the variables depicted in the questionnaire.

A sample of approximately twenty auditors in each group was considered sufficient. Most other studies in expert judgment have used samples which were much smaller than this suggested sample (Schultz and Gustavson, 1978, Ashton, 1974a). Therefore, the size of the sample was viewed as acceptable in comparison to the samples used in previous accounting literature, although not statistically proven. In summary, this sample size could not be statistically generated but instead, was justified through a review of the accounting literature dealing with similar studies.

Justification for Use of the Lens Model

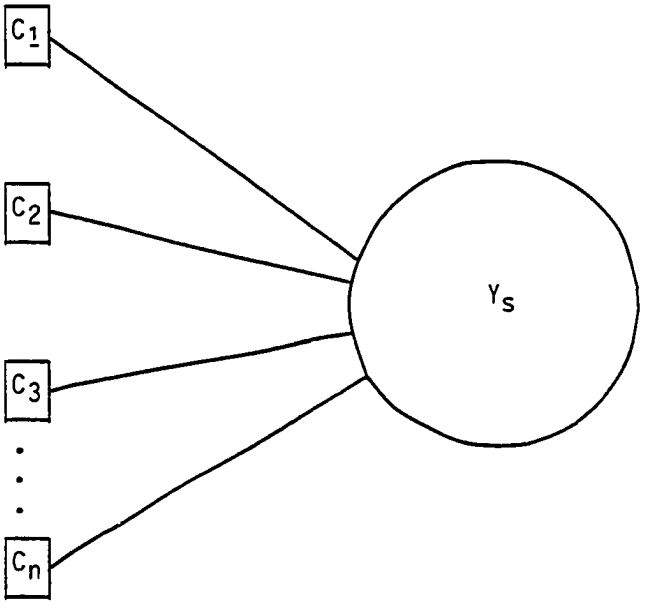
In classifying information processing variables, it is necessary to find characteristics of the set (i.e., input) which affect the way decision makers use the information. In the lens model approach decision makers, auditors in this case, evaluate a large number of cases based upon the same set of cues. The cases in this study were the scenarios generated describing the characteristics of firms using the variables considered important in the interviews and first questionnaire. Their judgment, whether to withdraw from or retain the client, was dependent on the cues, which are independent variables. These cues (or independent variables) were manipulated at two levels to analyze their impact on the dependent variables, probability of withdrawal. Therefore, a model derived from the functional relationship between the cues and the responses does not necessarily represent 'real' cases.

Libby and Lewis have found that this method of modeling judgement provides a compromise between the overly simplified approach of asking subjects to describe the weights they place on information and the more complex and expensive process of tracing models that have been used in the study of judgment (Libby and Lewis, 1977). Each auditor (decision-maker) evaluates the scenarios (cases) and responds with a judgement. This model is illustrated on the following page in Figure 7.

This figure represents only the right side of the simple lens model. As mentioned previously, this application of the model is utilized when actual outcomes are unknown to the researcher.

Figure 7

Cue Utilization



Where: Y_S = The individuals' judgement of the state of the variable under consideration. (The distal variable, which in this case is probability of withdrawal.)

$C_1, C_2, \ldots C_n$ = Cues (Variables affecting the decision)

(Libby and Lewis, 1977)

Therefore, the information for the application of the left side of the model does not exist or is not at the disposal of the researcher. Predictive ability, in this case, cannot be estimated.

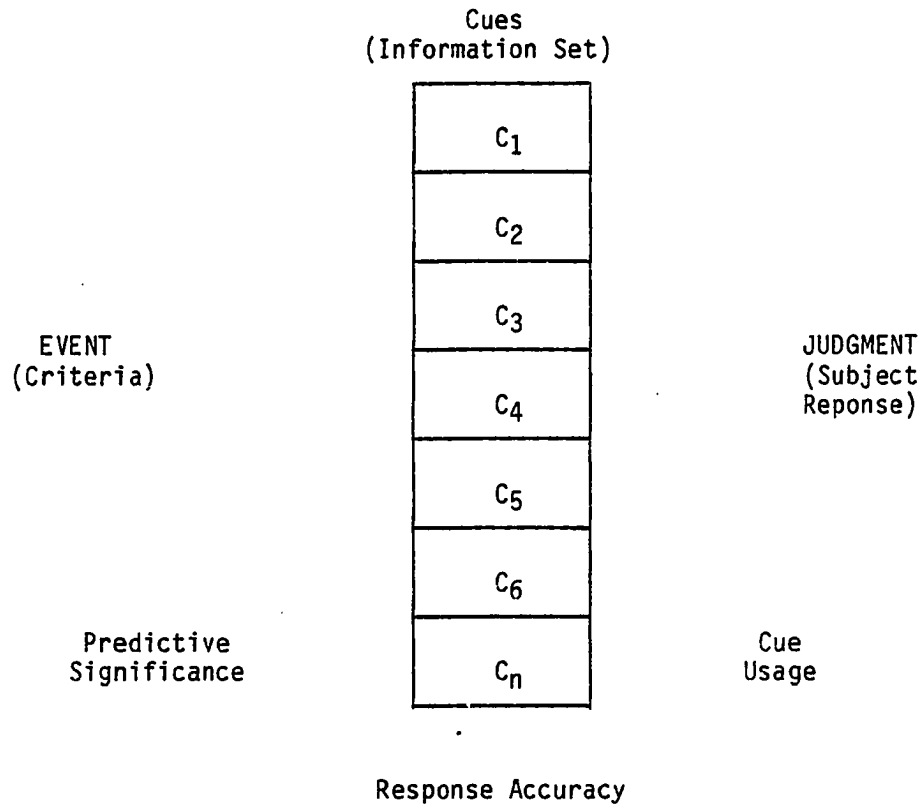
In the lens model approach, regression equations and correlation statistics are used to describe the relationships which exist in the model. These relationships are between the criteria and the information set (predictive significance), the information set and the subject response (cue usage), and the subject response and criterion (response accuracy). A diagram of these relationships is illustrated on the next page in Figure 8. Previous studies have demonstrated that the lens model is a frequently employed and commonly accepted analytical tool in accounting research.

This research used hypothetical cases describing the characteristics of clients. The decision-makers, auditors in this case, were then asked to decide on the probability of withdrawal from these hypothetical cases. The cases depicted the cues or variables considered important in this decision. Ideally, true cases would be sought for this phase of the study. As they do not exist, the hypothetical cases are an adequate substitute (Libby and Lewis, 1977).

The use of only the right side of the model precludes any inferences to predictive ability measures. Therefore, this study avoided any mention of predictive ability on the part of the decision makers. As an alternative, more emphasis was placed on the consistency of the subjects. In other words, do they repeatedly

Figure 8

Libby's Model



use the cues the same way? A few cases were repeated to check for consistency.

As indicated previously, the lens model was an appropriate analytic technique in this type of study. The cues were indicated to the second sample, the decision makers, in the form of the hypothetical scenarios. The decision required of the sample of respondents was the probability of withdrawal from each hypothetical case. An illustration of the process is depicted on the following page in Figure 9.

Unfortunately, actual decisions were not available to the researcher. The auditors in this study were asked to make judgments on hypothetical cases. Consistency and consensus, however, were examined.

The following research questions were addressed in this study. 1) What are the variables? 2) How were they used? 3) Did the auditors utilize the variables similarly? 4) Did the auditors within the same firm utilize the variables similarly? 5) Did the auditors within similar size levels of accounting firms use variables similarly?

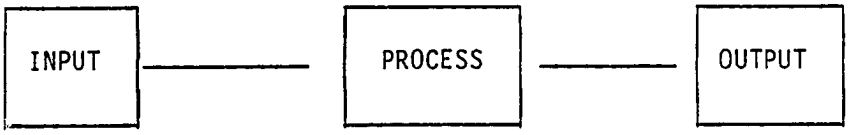
Additionally, the consistency aspects were examined. Were the individual auditors consistent in their use of the variables?

Research Design

Figure 10 illustrates the research design. The design may extend to a 2^6 factorial study. A 2^5 factorial is illustrated to simplify the design. The top rows of the design reflect the five

Figure 9

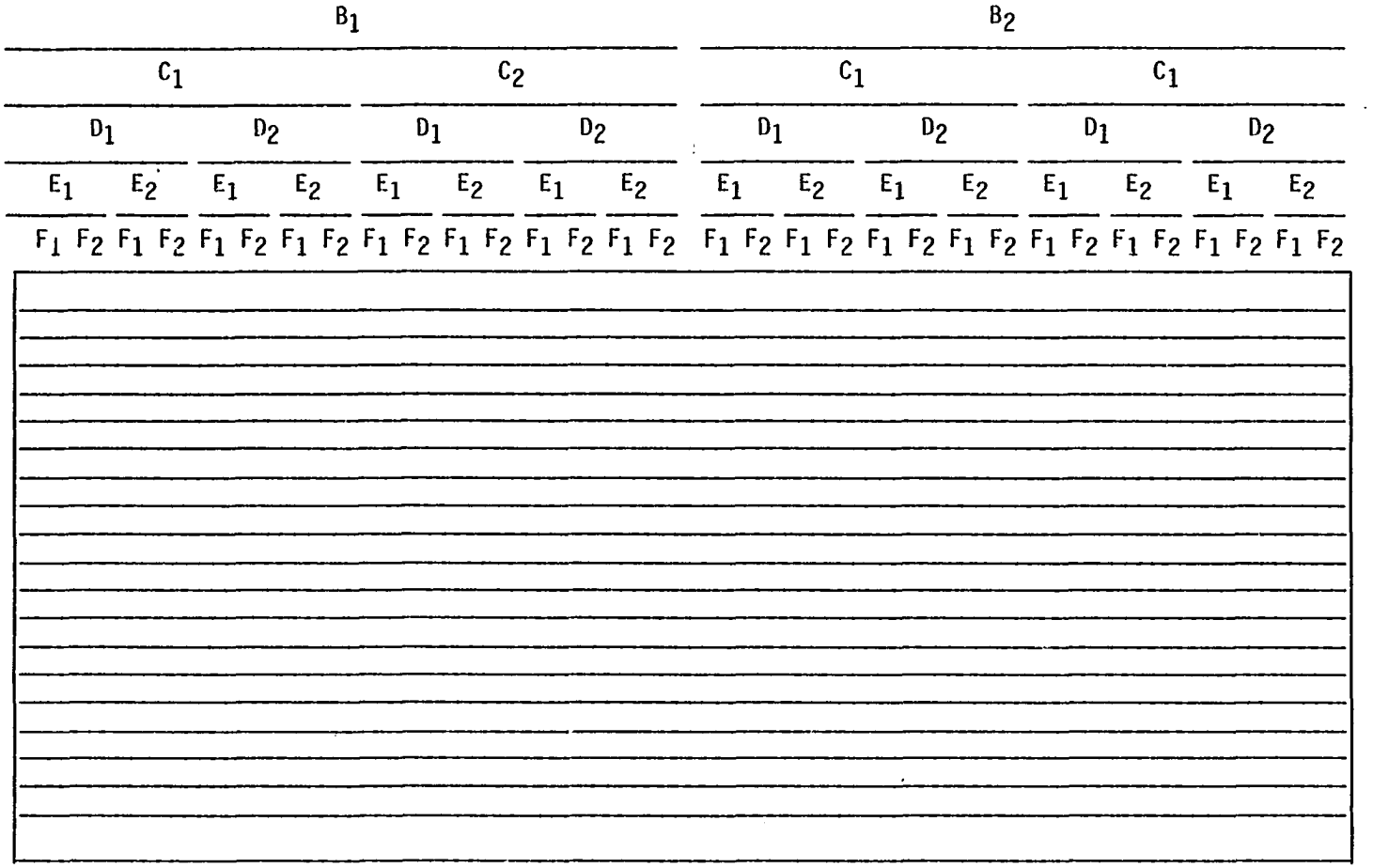
Information Processing



I	II	III
I. Information Set (Cues) Questionnaires in this case.	II. Judge (Decision Maker) Utilization of cues - characteristics of clients in this case.	III. Judgment (Prediction or decision) Probability of withdrawal in this case.

Figure 10

Factorial Design



variables at one of two levels. The sample chosen to implement the design had some nesting. The individuals were nested within groups.

Each of the respondents were required to make a judgment on all combinations of the cues. Four of the questions were also complete replicates of other questions. Each of the variables has repeated measures from each respondent as the group cases were answered by the same individuals. This implies that there was not independence between the responses of any of the individuals. This occurs whenever the same person is answering more than one question in a design such as this.

Methods of Analysis

Analysis of variance was the proper analytical technique to be utilized in this study. As the variables took on only two levels, they are discrete in nature. If they had been continuous, they would require the use of regression analysis. In this study two levels (minor and major) were chosen to manipulate the variables. These variables could not take on more than two values in the study or the number of combinations of the variables manipulated would have been unmanageable.

Specifically, the use of analysis of variance generated the following information. The percentage of variance explained by the main effects (i.e. each individual cue) were indicated. Second, the percentage of variance explained by the interaction of the cues was generated.

It was not expected that the higher order interactions would be

statistically significant in this study. Studies similar to this in the accounting literature have rarely found higher order interactive effects to be significant. Instead, the results of similar statistics as analysis of variance have indicated that most of the judgment variance has been accounted for by the linear additive components (main effects) (Yntema and Torgerson, 1961, Dawes and Corrigan, 1974).

Cue Usage

Initially, the actual usage of the cues by the auditors was analyzed in this study. Specifically, how did the auditors use the individual cues and how did they utilize combinations of the cues? The ω^2 values were generated from an overall ANOVA to answer these questions. This ANOVA model treated each variable (cue) as an independent variable. The dependent variable was the probability of withdrawal from each scenario presented. The F-statistic relates to the significance levels. The relative contribution of each main or interaction effect to the variation present in the dependent variable is indicated by the ω^2 for the auditors (Hays, 1963). The total of the ω^2 values for the auditors indicated the overall percentage of variance contained in the dependent variable (probability of withdrawal) accounted for in the auditor's usage of the independent variables (cues). Unexplained variance was due to between subject differences (Hays, 1963).

Therefore, an analysis of the relative weights of each of the five cues used by the auditors was utilized. The summed ω^2 values score indicates the total percentage of variation of the five

cues on the variation in the decision to withdraw from engagements. This score also indicates the fit of the ANOVA model (Hays, 1963).

As a supplement to the ω^2 analysis, the mean responses of the auditors were examined. Specifically, the thirty-two cases were separated into cases containing similar number of cues at the negative level. For instance, the cases in which only one cue was at a negative level were grouped together. Additionally, all cases in which the cues were at a negative level were grouped together, as were all cases containing three, four and five cues at the negative levels.

A graph was then constructed with the nine point scale of the questionnaire on the y-axis and the groups of cues on the x-axis. The dispersion of the points was analyzed as was the relation between the groups of points.

Another graph was constructed with a similar format. In this case the average for each group was plotted to emphasize any possible relation between the groups.

Group Cue Usage

The analysis of the cue usage for each group was done similarly to the analysis of the overall cue usage. The ANOVAs in this case were simply run on the different groups of firms. Similar graphs were also constructed for each group as were constructed for the overall cue useage of the sample.

Consensus Results

This study was also interested in the consensus displayed by the sample in their use of the variables. Specifically, this study was

interested in the impact of each independent variable (cue) on the dependent variable (probability of withdrawal). To study consensus the overall ANOVA was implemented. This ANOVA and the ω^2 indices were used to test the cue weighting of the importance of each cue. Consensus was examined through inspection of the unexplained variance in the dependent variable. For example, if the ω^2 values explain 42% of the variance in the dependent variable the residual value of 58% would represent unexplained variation due to between subject differences. Such a value, 58% unexplained variance, would indicate a lack of consensus between the auditors.

Consistency Test

Finally, an analysis was done to test the consistency of the individuals' responses to the replicated questions. A narrative summary described the occurrences of differing levels of consistency. A contingency table illustrating the frequencies of occurrence of the differing levels of consistency was included to emphasize the actual consistency displayed by the auditors in their judgments to the cases.

CHAPTER IV

VARIABLE GATHERING STAGE RESULTS

The Boston interviews generated the results which are summarized in this chapter. First, the enthusiasm demonstrated by the individuals in this sample warrants some mention. In general, they perceived the withdrawal problem as important and infrequently addressed. Each of the individuals contacted readily agreed to participate in the study, and their enthusiastic response indicated a high degree of interest in the project and generated a great deal of confidence in the reliability of their conclusions. This interest in the study is further evidenced by the fact that another auditor from a New York office, on hearing of the project, called to volunteer his services as participant in the study. Due to his geographic location he could not participate as a respondent in an interview.

In summary, the study was well received by the individuals contacted to participate. None refused to cooperate in the study. Instead, they willingly participated and encouraged the research. Also, most of the auditors were interested enough to request a summary of the findings from not only the interviews in which they participated but from the entire study.

Variables Generated

A summary of the eleven responses by the auditors to the interview question indicated nine variables considered important by the sample. The variables generated from the interviews and their response frequency are tabulated on the next page in Figure 11.

Figure 11

Initial Set of Variables the Interviews Generated

VARIABLES	AUDITOR										
	1	2	3	4	5	6	7	8	9	10	11
1. Disagreements over application of GAAP	X	X		X	X		X				
2. Related party disclosure problem	X							X			
3. Management integrity and illegal acts	X	X	X	X	X	X	X	X	X	X	X
4. Disagreements over audit report or opinions		X									
5. Fee disagreements	X	X	X	X	X	X	X	X	X	X	X
6. Weak internal controls				X							
7. Inability to prepare accurate financial statements				X							
8. Unreliable client estimation process				X							
9. Restricted scope				X						X	

From Figure 11 it can be seen that the variables of management integrity and fee disagreements were considered important by all eleven auditors interviewed. There was a great deal less consensus on the importance of the other variables. Disagreements over the application of Generally Accepted Accounting Principles (GAAP) was considered an important variable by five of the eleven respondents. Related party disclosure problems and client-imposed restrictions of scope were each considered important by two of the members of the sample. Also, the other four variables mentioned were considered important by only one individual. These variables included 1) weak internal controls, 2) inability to prepare accurate financial statements, 3) unreliable client estimation process, and 4) disagreements over the audit report or opinion.

Definitions of Variables Generated

Once a variable was identified during the course of the interviews, each respondent's definition of the variables was sought to obtain a clear understanding of its meaning. An analysis of the interview summaries follows and more clearly defines each of the variables.

Disagreements Over the Application of GAAP

These disagreements are between the auditor and management. They were considered wide in range and major in depth. There are many opportunities for disagreements over GAAP to occur in any engagement. For example, several inventory techniques are accepted in the Generally Accepted Accounting Principles in the costing of

inventory. Also, there are several depreciation methods accepted in the Generally Accepted Accounting Principles which are available for implementation by the accountant. No particular accounting procedure was mentioned by the auditors as impacting to cause a disagreement. This problem is clearly understood by auditors and needed no further explanation during the interviews.

Related Party Disclosure Problems

These problems relate to the adequate recording and/or disclosing of transactions between related parties. "The term related parties means the reporting entity; its affiliates; principal owners, management, and members of their immediate families, entities for which investments are accounted for by the equity method and any other party with which the reporting entity may deal when one party has the ability to significantly influence the management or operating policies of the other, to the extent that one of the transacting parties might be prevented from fully pursuing its own separate interests." AU Section 335.02 AICPA Codification of Statements on Auditing Standards, 1980. The discussions by the sample, as indicated by the interview summaries, indicated a link between the integrity of management and their willingness to adequately disclose related party transactions.

Management Integrity

This variable deals with the overall feeling of trust the auditor is able to place in the client and received the most discussion in the interviews. Each auditor indicated emphatically

that without the feeling of high management integrity the auditor should withdraw from the engagement.

The integrity issue dealt with many of the problems encountered by auditors. If management lacked integrity, they may deceive the auditor whenever convenient. They may deal in illegal acts and/or questionable transactions. The sample indicated a belief that once the auditor goes beyond the point of uneasiness and is convinced of a lack of integrity on the part of management, he should immediately withdraw.

Disagreement Over the Audit Report or Opinion

The one individual who mentioned this variable felt it to be extremely important. It arises when the audit is in process or complete and the auditor discloses to the client the nature of his audit opinion and finds that the client disagrees. If this is a major disagreement he felt the auditor may be required to withdraw. The disagreement may be over the type of audit report or opinion or the wording of the report or opinion.

Disagreements Over Fees

Fees are typically a function of the amount of work to be performed by the auditor. He may have underestimated at the onset of the engagement the amount of work necessary to complete the audit. Therefore, the final fee may exceed his initial estimate. In some cases the initial estimate may far understate the actual fee. These would be instances where problems are discovered in the client's records or controls that were not thought initially to exist.

The profession also makes mandatory the withdrawal from an audit

if material fees from the last year's audit are unpaid. The implication is the auditor cannot be independent of the client if the client owes him past fees. Therefore, the auditor should not be attesting to the fairness of management's financial statements.

Weak Internal Control

The one individual that mentioned this variable felt that in some cases it may be possible that the internal control is so poor that the audit cannot be adequately performed. Therefore, the auditor should withdraw from this engagement.

Inability of the Client to Prepare Accurate Financial Statements

The one respondent mentioning this variable felt that if the client could not prepare adequate statements the auditor could not possibly conduct the audit. This problem revolves around the competence of the client to prepare the statements.

Unreliable Client Estimation Process

The one auditor to introduce this variable referred to it in the context of management integrity. He used the example of a client continually underestimating bad debts, losses, etc. He felt that repeated unreliable estimates from the client would result in a suspicion of lack of integrity on the part of management. In this case he felt it would be prudent on the part of the auditor to withdraw from this engagement.

Restricted Scope

This restriction was considered by both auditors mentioning it to be client-imposed. That is, management was not allowing the auditors access to records or information perceived necessary by the

auditor to properly conduct the audit. This restriction by the client may result for a number of reasons. The client may not want the auditor confirming a payable or receivable or may not wish to make available certain documents, etc. This does not imply a lack of integrity on the part of management but a disagreement on what the auditor has a right or need to examine in the performance of his audit.

Variable Reduction

The nine variables were then examined for possible reductions or combinations without the loss of information. Variable two, related party disclosure problems, was addressed by the auditors in the context of management integrity. Therefore, the combination of related party disclosure and management integrity seemed appropriate and did not result in lost information.

Unreliable client estimation process also was addressed in the context of the integrity of management. A review of the interview citing this variable indicated that it was in fact one clear indication of a lack of integrity by management. Therefore, this variable was also included in the integrity of management variable.

The table in Figure 12 illustrates the reductions to this point. As was mentioned in the methodology, statistical reductions using either factor analysis on Likert questionnaires asking importance of these variables could be done at this point. This procedure would require another sample of about twenty auditors to indicate on a scale how important they felt these variables to be.

Figure 12

First Reduction of the Variables
the Interviews Generated

VARIABLES	AUDITOR										
	1	2	3	4	5	6	7	8	9	10	11
1. Disagreements over application of GAAP	X	X		X	X		X				
2. Management integrity, estimation process, illegal acts and related party disclosure	X	X	X	X	X	X	X	X	X	X	X
3. Disagreement over audit report or opinion		X									
4. Fee disagreements	X	X	X	X	X	X	X	X	X	X	X
5. Weak internal controls				X							
6. Inability to prepare accurate financials				X							
7. Restricted scope				X						X	

Alternatively, a similar sample could be asked through repeated questionnaires (Delphi process) to attain a consensus as to the most important variables.

Inasmuch as only seven variables remained to be analyzed, neither of these alternatives was deemed necessary. Therefore, a decision rule was adopted to eliminate all remaining variables receiving mention by fewer than two members of the sample. However, the subjectivity of this process was lessened by asking a small sample of auditors to review the variables eliminated by this rule and to render comments.

These auditors agreed that variables five and six, weak internal controls and inability to prepare accurate financials, should be excluded from the study becuase they were not that important in this decision. However, they suggested retaining disagreements over audit report or opinion. Therefore, a final summary of the variables included in the study may be found on the following page in Figure 13.

The questionnaire was then constructed using the five variables at one of two levels (i.e., minor versus major) in the hypothetical cases, resulting in a total of thirty-two combinations of client scenarios. Four repeat cases were also included to test for consistency. After the questionnaire was complete it was tested by two audit partners and an audit manager for clarity and completeness. Minor editing changes were made and the questionnaire was completed. One page of a summary of the task and instructions for proper

Figure 13

Final Reduction of the Variables
the Interviews Generated

VARIABLES	AUDITOR										
	1	2	3	4	5	6	7	8	9	10	11
1. Disagreements over application of GAAP	X	X		X	X		X				
2. Management integrity, illegal acts and related party disclosure	X	X	X	X	X	X	X	X	X	X	X
3. Disagreements over audit report or opinion		X									
4. Fee disagreements	X	X	X	X	X	X	X	X	X	X	X
5. Restricted scope			X							X	

completion was attached and is included in Appendix A. A condensed definition of each variable used in the study was included in the instructions page. These definitions were meant to aid the audit partners in their responses to the questionnaire.

The thirty-six scenarios were randomly ordered to reduce the likelihood of the sample perceiving a pattern to the combinations. Also, the repeat cases were randomly distributed throughout the questionnaire.

The task was conservatively estimated to take half of an hour to complete. This point was emphasized in the instruction page at the suggestion of the reviewing sample. Actually, it was felt that less time would be taken on the average to complete the questionnaire.

The following chapter reviews the results of the questionnaire.

CHAPTER V

VARIABLE UTILIZATION STAGE RESULTS

In this study, ANOVA was the appropriate statistical technique to utilize in analyzing the main effects and the two-way and three-way interaction effects of the five independent variables (cues) on the dependent variable (probability of withdrawal). Input to the ANOVA model included 1,856 cases. This number is the result of 58 respondents x 32 scenarios/respondent.

Table 1 illustrates the results of this analysis. From this table it can be seen that each of the five cues was significant at the .01 level of probability in the analysis of the dependent variable. Nine of the ten 2-way interactions involving only cues were found significant at the $\alpha = .05$ level.

An analysis was undertaken to determine any difference by firm size. The three different groups were the Local/Regional accounting firms, Other International/National accounting firms, and the "Big 8" accounting firms. This group effect also was considered significant at the $\alpha = .05$ level in the ANOVA results. This indicates that there was a significant difference in the judgments made by auditors among groups. Only one of the five two-way interactions involving the group was significant at the $\alpha = .05$ level. This main effect, integrity of management, was utilized differently among the three groups.

A graph of this interaction, integrity x group, follows on the next page in Figure 14. The manipulation of the levels of integrity

Table 1

Analysis of Variance for All Auditors[a]
(n = 58)

Source		Sum of Sources	Degrees of Freedom	Mean Square	F	Tail Prob.
G	(Group)	177.908	2	88.954	4.38	0.017
R	(Fees)	536.479	1	536.479	82.24	0.001
S	(Scope)	1459.175	1	1459.175	132.37	0.001
T	(Integrity)	1603.825	1	1603.825	107.47	0.001
U	(GAAP)	615.885	1	615.885	161.69	0.001
V	(Opinion)	928.464	1	928.464	97.37	0.001
RG		27.007	2	13.503	2.07	0.036
SG		20.730	2	10.365	0.94	0.397
TG		160.304	2	80.152	5.37	0.007
UG		4.755	2	2.377	0.62	0.539
VG		14.289	2	7.144	0.75	0.477
RS		20.678	1	20.678	11.55	0.001
RT		19.682	1	19.682	10.11	0.002
ST		36.497	1	36.497	23.91	0.001
RU		16.566	1	16.566	19.23	0.001
SU		35.753	1	35.753	18.20	0.001
TU		26.356	1	26.356	32.94	0.001
RV		24.930	1	24.930	15.73	0.001
SV		47.142	1	47.142	28.52	0.001
TV		36.813	1	36.813	22.61	0.001
UV		7.705	1	7.705	3.98	0.051
RSG		0.044	2	0.022	0.01	0.988
RTG		16.744	2	8.372	4.30	0.018
STG		23.269	2	11.635	7.62	0.001
RST		0.710	1	0.710	0.42	0.519
RUG		4.896	2	2.448	2.84	0.066
SUG		1.003	2	0.502	0.26	0.776
RSU		0.194	1	0.194	0.28	0.601
TUG		0.707	2	0.354	0.44	0.645
RTU		0.444	1	0.444	0.46	0.498
STU		0.286	1	0.286	0.49	0.486
RVG		9.273	2	4.636	2.92	0.062
SVG		13.499	2	6.750	4.08	0.022
RSV		1.088	1	1.088	1.95	0.168
TVG		2.280	2	1.140	0.70	0.501
RTV		1.818	1	1.818	2.30	0.135
STV		1.068	1	1.068	1.63	0.207

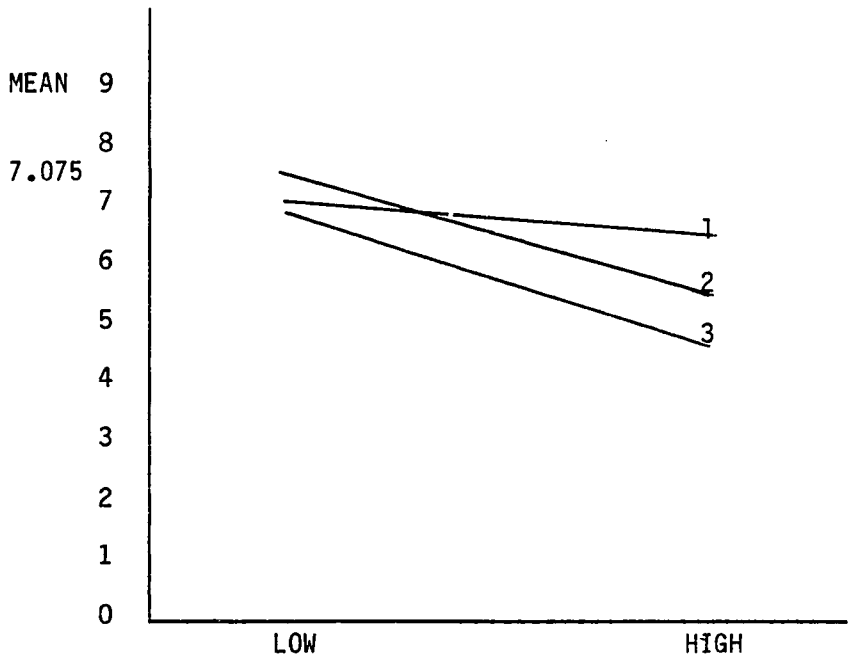
Table 1 (continued)

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	Tail Prob.
UVG	10.532	2	5.206	2.72	0.075
RUV	0.287	1	0.287	0.39	0.537
SUV	2.551	1	2.551	2.09	0.154
TUV	1.481	1	1.481	2.53	0.117
RSTG	1.417	2	0.709	0.42	0.659
RSUG	0.082	2	0.141	0.06	0.944
RTUG	1.031	2	0.516	0.54	0.586
STUG	4.939	2	2.469	4.25	0.019
RSTU	0.355	1	0.355	0.63	0.431
RSVG	2.744	2	1.372	2.46	0.095
RTVG	3.362	2	1.681	2.12	0.129
STVG	3.864	2	1.932	2.95	0.060
RSTV	0.029	1	0.029	0.05	0.824
RUVG	6.975	2	3.487	4.69	0.013
SUVG	2.287	2	1.143	0.94	0.398
RSUV	0.097	1	0.097	0.16	0.694
TUVG	2.665	2	1.332	2.28	0.112
RTUV	0.110	1	0.110	0.13	0.722
STUV	0.006	1	0.006	0.01	0.928
RSTUG	0.308	2	0.154	0.27	0.762
RSTVG	2.278	2	1.139	1.96	0.151
RSUVG	1.084	2	0.542	0.88	0.422
RTUVG	1.454	2	0.727	0.85	0.433
STUVG	3.215	2	1.608	2.23	0.117
RSTUV	2.034	1	2.034	3.49	0.067
RSTUVG	1.442	2	0.721	1.24	0.298

[a]Error terms calculated in the Analysis of Variance for All Auditors are found in Appendix B.

Figure 14

Integrity X Group Interaction



1 = Local/Regional Firms
2 = Other International/National Firms
3 = Big 8

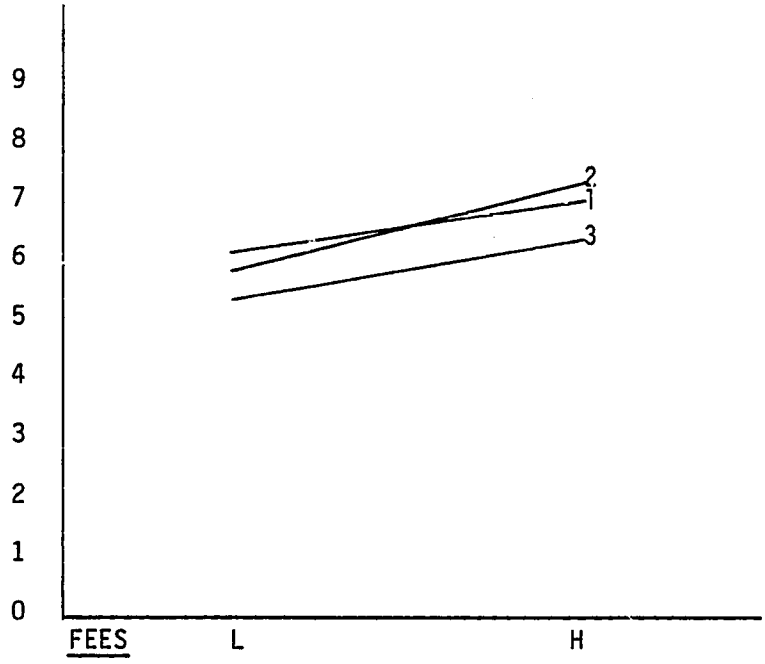
had significantly less effect on the small firms' decisions to withdraw than it did on the medium sized and large sized firms. Therefore, it can be stated that these Local/Regional firms, taken as a group, did not perceive the variable, integrity of clients' management, as relevant in the decision process of whether to withdraw from engagements or retain the engagement as did the larger sized firms.

The previous statistically significant interaction of group x integrity in Figure 14 can be contrasted to a nonsignificant two-way interaction which follows in Figure 15. The graph in Figure 15 illustrates similar perceptions between the firms of the significance of the variable fees. The slopes of these lines are not significantly different from each other indicating that each firm found manipulation of the fees variable comparably relevant in altering their judgment on the probability of withdrawal.

As a supplement to the ANOVA which included all of the auditors, three more ANOVAs were performed to analyze each group of firm sizes separately. Tables 2, 3 and 4 illustrate the results from these ANOVAs. In each ANOVA the five cues were again found to be significant. In addition, an examination of each exhibit indicates that the groups utilized significantly differing combinations of the cues. These three additional ANOVAs were performed primarily to facilitate the calculation of ω^2 for each group. Table 5 summarizes the results of the ANOVAs performed on the separate groups as well as the overall ANOVA. This table includes all interactions significant at the $\alpha = .05$ level. An analysis of these interactions

Figure 15

Fees X Group Interaction



FEES

1 = Local/Regional Firms
2 = Other International/National Firms
3 = Big 8

Table 2

Analysis of Variance for Local/Regional Firms[a]
(n = 19)

Source		Sum of Squares	Degrees of Freedom	Mean Square	F	Tail Prob.
R	(Fees)	111.184	1	111.184	43.50	0.001
S	(Scope)	458.526	1	458.526	39.51	0.001
T	(Integrity)	166.322	1	166.322	9.47	0.006
U	(GAAP)	257.921	1	257.921	50.59	0.001
V	(Opinion)	424.447	1	424.447	36.49	0.001
RS		7.605	1	7.605	5.68	0.028
RT		1.480	1	1.480	0.58	0.454
ST		1.112	1	1.112	0.72	0.406
RU		15.158	1	15.158	13.97	0.001
SU		17.789	1	17.789	6.79	0.018
TU		9.007	1	9.007	12.42	0.002
RV		8.526	1	8.526	4.99	0.038
SV		48.658	1	48.658	20.53	0.001
TV		9.007	1	9.007	5.46	0.031
UV		17.789	1	17.789	5.95	0.025
RST		1.112	1	1.112	0.63	0.439
RSU		0.237	1	0.237	0.21	0.655
RTU		1.112	1	1.112	1.18	0.292
STU		1.901	1	1.901	4.07	0.059
RSV		3.789	1	3.789	7.16	0.015
RTV		0.007	1	0.007	0.01	0.943
STV		4.796	1	4.796	6.00	0.025
RUV		4.447	1	4.447	4.48	0.048
SUV		4.447	1	4.447	2.14	0.160
TUV		2.375	1	2.375	3.04	0.098
RSTU		0.007	1	0.007	0.01	0.926
RSTV		0.796	1	0.796	0.93	0.347
RSUV		0.105	1	0.105	0.08	0.775
RTUV		0.533	1	0.533	0.39	0.541
STUV		1.480	1	1.480	2.49	0.132
RSTUV		0.007	1	0.007	0.01	0.928

[a]Error terms calculated in the Analysis of Variance for Local/Regional Firms are found in Appendix B.

Table 3

Analysis of Variance for Other International/National Firms[a]
(n = 16)

Source		Sum of Squares	Degrees of Freedom	Mean Square	F	Tail Prob.
R	(Fees)	129.002	1	129.002	19.42	0.001
S	(Scope)	554.861	1	554.861	97.44	0.001
T	(Integrity)	772.736	1	772.736	57.02	0.001
U	(GAAP)	160.877	1	160.877	86.09	0.001
V	(Opinion)	232.470	1	232.470	17.91	0.001
RS		5.080	1	5.080	2.40	0.142
RT		0.439	1	0.439	0.46	0.508
ST		4.314	1	4.314	4.36	0.054
RU		0.330	1	0.330	0.50	0.489
SU		6.346	1	6.346	3.78	0.071
TU		4.689	1	4.689	7.53	0.015
RV		0.439	1	0.439	0.62	0.445
SV		4.314	1	4.314	4.32	0.055
TV		6.799	1	6.799	4.44	0.052
UV		0.096	1	0.096	0.07	0.793
RST		0.236	1	0.236	0.15	0.703
RSU		0.018	1	0.018	0.06	0.812
RTU		0.158	1	0.158	0.11	0.742
STU		2.127	1	2.127	1.85	0.194
RSV		0.096	1	0.096	0.15	0.702
RTV		0.002	1	0.002	0.01	0.944
STV		0.236	1	0.236	0.34	0.568
RUV		2.674	1	2.674	3.21	0.093
SUV		0.236	1	0.236	0.36	0.556
TUV		1.033	1	1.033	1.27	0.278
RSTU		0.564	1	0.564	1.15	0.300
RSTV		0.002	1	0.002	0.01	0.942
RSUV		0.564	1	0.564	1.36	0.261
RTUV		0.158	1	0.158	0.42	0.526
STUV		0.018	1	0.018	0.03	0.869
RSTUV		2.393	1	2.393	3.33	0.088

[a]Error terms calculated in the Analysis of Variance for Other International/National Firms are found in Appendix B.

Table 4

Analysis of Variance for "Big 8" Firms[a]
(n = 23)

Source		Sum of Squares	Degrees of Freedom	Mean Square	F	Tail Prob.
R	(Fees)	361.761	1	361.761	37.34	0.001
S	(Scope)	447.658	1	447.658	31.57	0.001
T	(Integrity)	839.397	1	839.397	61.25	0.001
U	(GAAP)	210.918	1	210.918	51.73	0.001
V	(Opinion)	297.587	1	297.587	54.37	0.001
RS		8.696	1	8.696	4.48	0.046
RT		40.196	1	40.196	18.74	0.001
ST		62.223	1	62.223	33.06	0.001
RU		2.848	1	2.848	9.58	0.005
SU		14.136	1	14.136	8.70	0.007
TU		15.266	1	15.266	15.54	0.001
RV		30.571	1	30.571	14.72	0.001
SV		8.696	1	8.696	5.74	0.025
TV		26.630	1	26.630	15.89	0.001
UV		1.065	1	1.065	0.72	0.406
RST		1.065	1	1.065	0.62	0.438
RSU		0.022	1	0.022	0.04	0.853
RTU		.348	1	.348	0.53	0.476
STU		1.571	1	1.571	5.48	0.029
RSV		0.049	1	0.049	0.09	0.764
RTV		5.918	1	5.918	8.36	0.008
STV		0.022	1	0.022	0.04	0.838
RUV		0.440	1	0.440	0.92	0.349
SUV		0.022	1	0.022	0.02	0.878
TUV		0.348	1	0.348	1.30	0.267
RSTU		0.021	1	0.021	0.05	0.832
RSTV		1.571	1	1.571	3.09	0.093
RSUV		0.440	1	0.440	1.82	0.191
RTUV		0.918	1	0.918	1.20	0.285
STUV		1.761	1	1.761	1.99	0.173
RSTUV		0.918	1	0.918	2.76	0.111

[a]Error terms calculated in the Analysis of Variance for "Big 8" Firms are found in Appendix B.

Table 5

Summary of the Significant Effects of the Total Group and Each Subgroup for Main Effects and First Level Interactions

Factor		All Groups	Size of firm: Local/Regional Group	Size of firm: Other International/ National Group	Size of firm: "Big 8" Group
R	(FEES)	.001	.001	.001	.001
S	(SCOPE)	.001	.001	.001	.001
T	(INTEGRITY)	.001	.006	.001	.001
U	(GAAP)	.001	.001	.001	.001
V	(OPINION)	.001	.001	.001	.001
G	(GROUP)	.017			
RS		.001	.028		.046
RT		.002			.001
RU		.001	.001		.005
RV		.001	.038		.001
ST		.001			.001
SU		.001	.018		.007
SV		.001	.001		.025
TU		.001	.002	.015	.001
TV		.001	.031		.001
TG		.007			
UV		.051	.025		
UG		.054			

indicates a considerably different usage of the combinations of cues by the three groups. The Other International/National group differed considerably from the other two groups in their lack of usage of combinations of the cues. For the Other International/National group only the Integrity x GAAP interaction was statistically significant whereas the other two groups averaged eight statistically significant two-way interactions. The following paragraphs address the research questions directly utilizing these ANOVA results.

Cue Usage

This research addressed the question of "How do auditors utilize the cues in the decision of whether or not to withdraw from engagements?" This question was answered in the following two ways. The ANOVA model results of significant findings were not surprising as the initial variable gathering stage sought cues that were considered relevant by the first auditors and would probably result in statistical significance. In this case the ANOVA was a tool utilized to compute ω^2 values to measure the usage of the cues. Each ω^2 indicates the relative amount of variation in the dependent variable explained by a manipulation of the main effect or interaction effect associated with it. Therefore, a comparison of the relative strength, or ω^2, for each of the five cues was achieved. The summed ω^2 values for all the auditors was useful in evaluating and addressing the total variation of the dependent variables explained by all of the cues.

The ω^2 analysis was extended to ANOVAs performed on the

individual groups. A summary of the results of the ω^2 values is presented in Table 6. This summary supplements a comparison of cue usage between groups. Overall the percentage of the variation in the auditor's decision to withdraw from an engagement or retain the client was fairly well explained (51%) by the main effects and interactive effects of the cues. Within the groups the total percentage of variation accounted for by the cues ranged from 39% to 60%.

An analysis of the individual cues indicates a significant difference in the extent to which the different groups used the cues. The cue, fees, explained over 8% of the variation in the judgment made by auditors of the "Big 8" accounting firms, while only contributing less than 3% of variability in the Local/Regional group's judgment. The Other International/National group utilized the variable, limitation of scope, considerably more than did the Local/Regional group and the "Big 8" group. In fact the variable explained over 5% more in the judgment made by the Other International/National group than the smaller and larger group. The final and most significant discrepancy in the usage of the cues by the auditors revolved around the integrity variable. The Local/Regional group's ω^2 value for integrity averaged 18% less than the other two larger groups. This indicates a very significant difference in the perceptions of this variable integrity among the groups.

The results of these ω^2 values indicates an overall emphasis by all auditors to use the variable of integrity of management more

Table 6

ω^2 Values for the Total Group and Each Subgroup for Significant Main Effects and Interactions

Factor		All Groups	Local/Regional Group	Other International/ National Group	"Big 8" Group
R	(FEES)	.0476	.0286	.0402	.0834
S	(SCOPE)	.1299	.1173	.1807	.1026
T	(INTEGRITY)	.1424	.0388	.2492	.1955
U	(GAAP)	.0549	.0664	.0524	.0491
V	(OPINION)	.0824	.1083	.0721	.0693
RS		.0017	.0016		.0016
RT		.0016			.0090
RU		.0014	.0037		.0017
ST		.0031			.0143
SV		.0040	.0122		.0017
TU		.0023	.0022	.0013	.0034
TV		.0032	.0019		.0059
UV		.0020	.0039	———	———
G		.0123			
TxG		.0117			
RxTxG		.0012			
SxTxG		.0018			
SxUxG		.0009			
TOTAL		.5078	.3889	.5959	.5405

heavily than the other cues. The "All Groups" column indicates that this variable alone accounts for over 14% of the variation in the dependent variable probability of withdrawal. Upon closer inspection of the usage of this variable by each group, a discrepancy is apparent. The larger sized firms utilized this variable more than any other variable while the smallest group, the Local/Regional firms, did not weight this variable as heavily. This finding is not surprising as the ANOVA indicated that there was a significant effect in the group x integrity interaction. This indicated that one of the groups utilized the variable significantly differently from the other two firms. The previous graph of this interaction also indicated that the group that, in fact, was utilizing this variable differently was the Local/Regional group. Therefore, the results of the ω^2 support this conclusion.

An analysis of the ω^2 indicates the variable considered second in importance was limitation of scope. An analysis of the separate group usage indicates no significant difference in their usage of the cue. The ω^2 for all groups of this cue indicated that this cue explained almost 12% of the variation in the dependent variable.

The remaining variables ranked in differing orders of importance among the three groups. The total variation in the dependent variable in the "All Groups" ANOVA explained by the independent variables (cues) was almost 51%. This indicates that these five cues and their interactions explain over half of the variation in the dependent variable. These cues, therefore, are very valuable in this decision of whether or not to withdraw from an audit engagement.

The remaining percentage is the result of between subject variation.

Consensus

The 49% of the variation in the dependent variable that could not be explained by the independent variables indicates a large amount of unexplained variance. This unexplained variance or between subject variance, indicates that there was little consensus among the auditors in the usage of the cues.

An analysis of each group indicated similar results in the summed ω^2 values for each individual group. The average of the summed ω^2 values was .5084 with a high value of .5959 for the Other International/National group and a low value of .3889 for the Local/Regional group. In summary, the ω^2 indicates that little consensus was displayed by the auditors in the usage of the cues. Although the cues contributed heavily to explain the variation in the dependent variable, the usage of the cues by the auditors differed dramatically.

A Closer Analysis of the Responses of Auditors

To date, the results of this research indicate little consensus in the usage of the variables by the sample of auditors taken as a whole. An examination of the different sized group utilizations of the variables indicates that the Local/Regional firms differed significantly from the larger sized firms in the weighting of the cue integrity of management. Additionally, inspection of the three ANOVAs illustrated differences in the usages of the combinations of

the variables. In summary, there were many differences in cue utilization illustrated by the auditors.

To supplement the ANOVA and ω^2 results an inspection of the mean responses to the cases by group was performed. Table 7 summarizes the response means by each group of auditors. The medium sized group, the auditors from Other International/National firms, on the average responded lower in the questionnaire than did the Local/Regional group and the "Big 8" group. As was indicated in the overall ANOVA model, a statistically significant difference exists between the response of the groups. The middle group is responsible for this significant difference in that their responses to the questionnaire were significantly lower than the other two groups. This indicates that, in general, they were less likely to withdraw from the engagements depicted in the scenarios than were the other groups of auditors.

As a final analysis of the responses to the questionnaire, the auditors' judgments were graphed in groups according to the number of characteristics at a negative level. This analysis was initially done with the overall mean responses of all auditors. Figure 16 illustrates the plotting of the thirty-two case mean responses by groups of negative characteristics. It is apparent that the columns of plots are relatively close together. This indicates that there is relatively little dispersion among the responses to the cases containing similar numbers of cues at negative levels.

A second source of interest illustrated by this graph is the suggestion of a linear relationship among the different groups of

Table 7

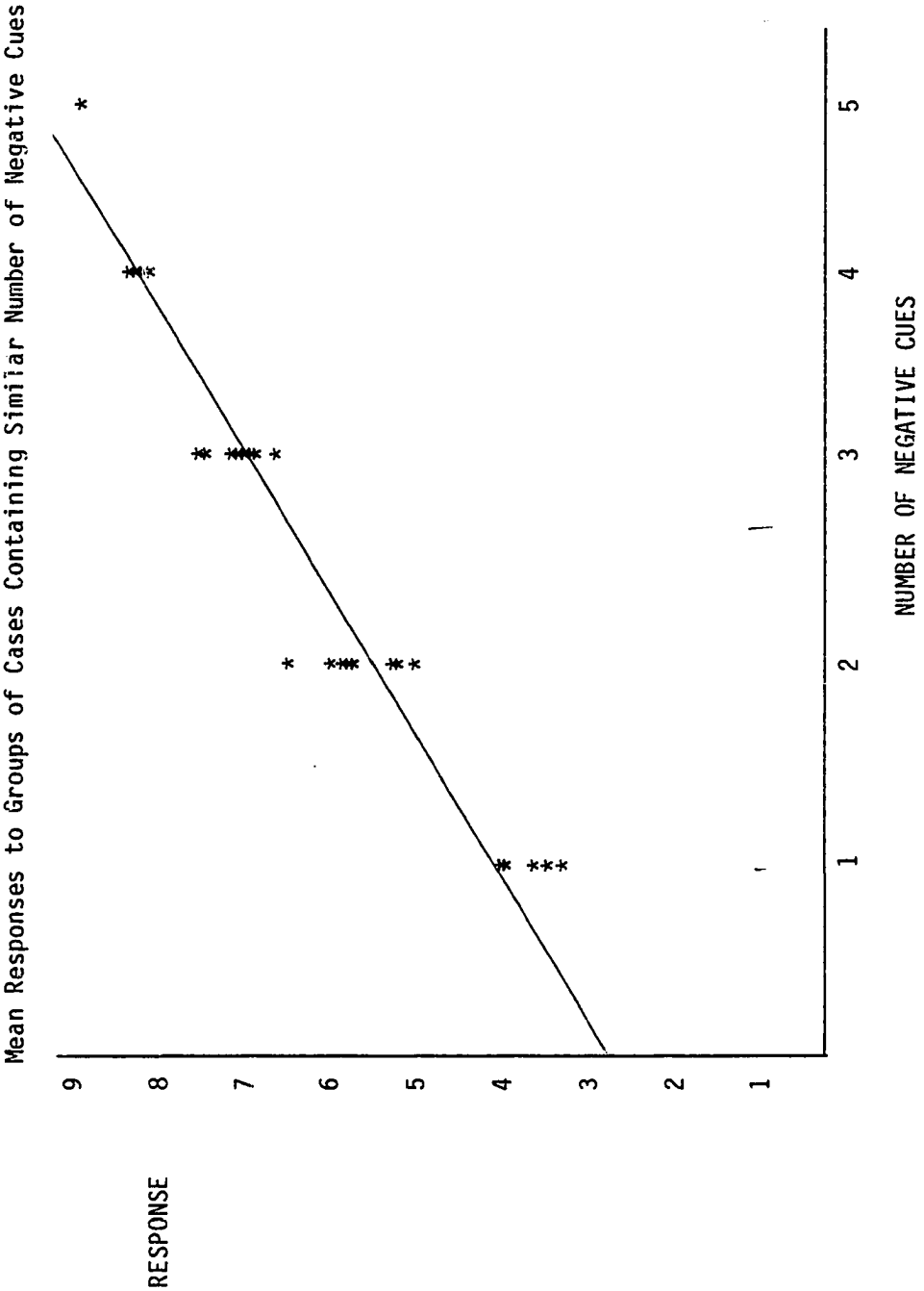
Response means by group for all combinations of cases.
(Each case contains five variables at one of two levels)
(n = 58)

	R	S	T	U	V	Group = SMALL	MEDIUM	LARGE
1	1	1	1	1	1	3.68421	4.31250	5.17391
2	1	1	1	1	2	6.36842	5.37500	6.69565
3	1	1	1	2	1	5.78947	5.31250	6.39130
4	1	1	1	2	2	7.36842	7.00000	7.73913
5	1	1	2	1	1	1.26316	1.12500	1.00000
6	1	1	2	1	2	5.26316	3.06250	3.47826
7	1	1	2	2	1	4.57895	2.81250	3.08696
8	1	1	2	2	2	6.84211	4.37500	5.39130
9	1	2	1	1	1	6.31579	6.93750	6.78261
10	1	2	1	1	2	7.84211	7.62500	7.69565
11	1	2	1	2	1	7.68421	7.37500	7.65217
12	1	2	1	2	2	8.52632	8.62500	8.34783
13	1	2	2	1	1	5.15789	4.06250	3.91304
14	1	2	2	1	2	6.63158	5.31250	6.21739
15	1	2	2	2	1	6.89474	4.93750	5.34783
16	1	2	2	2	2	7.78947	6.75000	7.21739
17	2	1	1	1	1	5.42105	5.31250	6.60870
18	2	1	1	1	2	6.94737	6.81250	7.73913
19	2	1	1	2	1	6.47368	6.75000	7.78261
20	2	1	1	2	2	7.94737	7.87500	8.17391
21	2	1	2	1	1	3.57895	2.56250	4.08696
22	2	1	2	1	2	6.36842	4.25000	5.26087
23	2	1	2	2	1	5.73684	3.87500	5.34783
24	2	1	2	2	2	7.31579	5.56250	6.91304
25	2	2	1	1	1	7.47368	7.75000	7.95652

Table 7 (continued)

	R	S	T	U	V	Group = SMALL	MEDIUM	LARGE
26	2	2	1	1	2	8.31579	8.50000	8.43478
27	2	2	1	2	1	8.05263	8.12500	8.30435
28	2	2	1	2	2	9.00000	9.00000	8.95652
29	2	2	2	1	1	6.26316	4.68750	6.47825
30	2	2	2	1	2	7.52632	6.37500	7.26087
31	2	2	2	2	1	7.10526	6.31250	7.26087
32	2	2	2	2	2	8.15789	7.31250	8.00000
			MARGINAL			6.55263	5.81445	6.45924
			COUNT			19	16	23

Figure 16

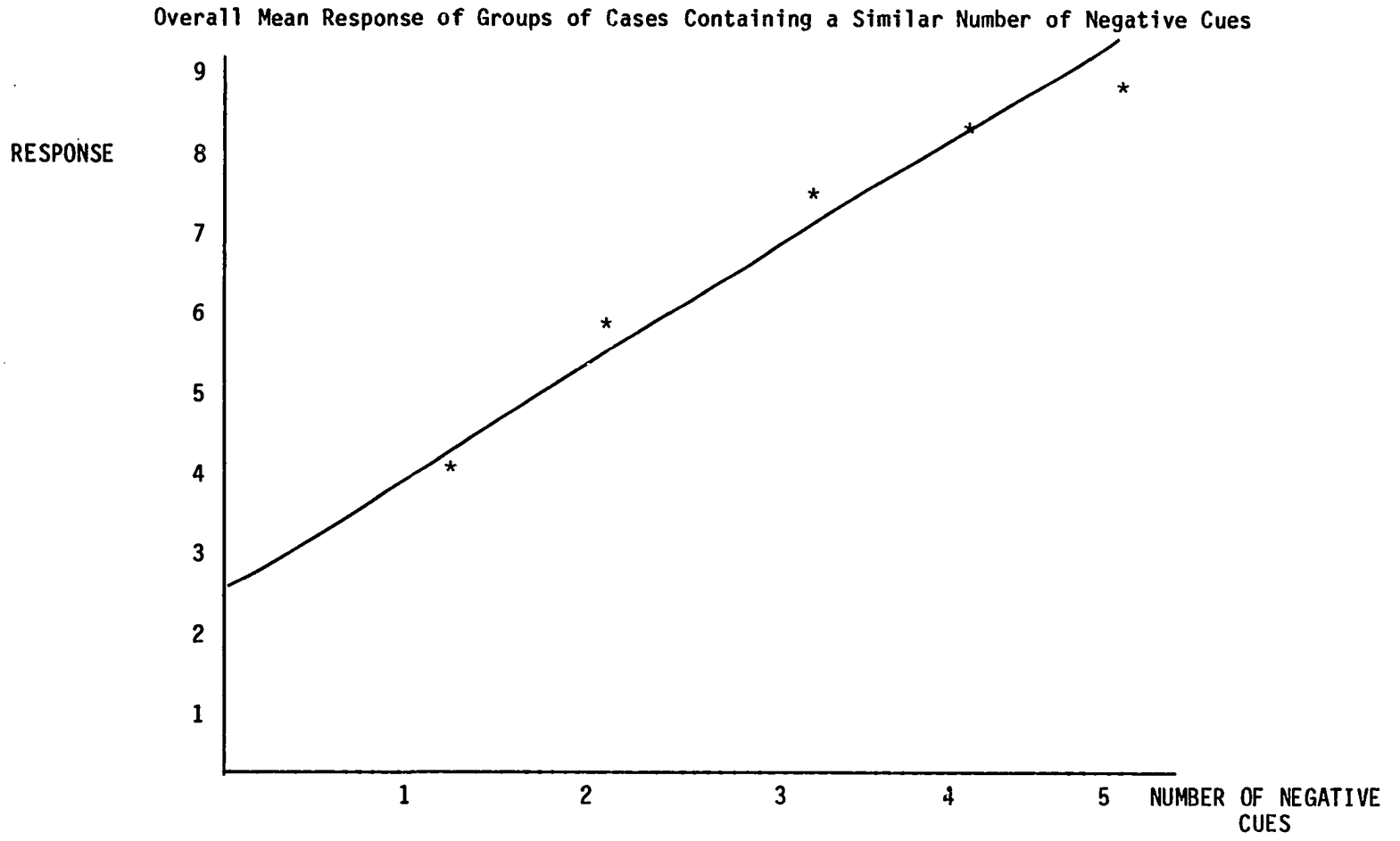


cases. A calculation of the η index indicated a value of .978 which strongly supports the linearity assumption of these values. Another graph, Figure 17, was therefore constructed to facilitate this examination. The five points on the graph are the average responses to the different groups of cases containing similar numbers of cues at a negative level. A regression line was then drawn through the points depicting the linear relationship of the responses.

An analysis of these graphs suggests a different interpretation of the usage of the cues by the sample of auditors. It appears from 1) the dispersion of the points in each column in Figure 16 and 2) the suggested slope in the line in Figure 17 that the specific cues introduced make little difference in the response of the auditors. Instead, the auditors perceive information about the cues as either positive or negative. Therefore, if any of the possible pieces of information introduced is negative, they perceive this as increasing the probability of their withdrawal from the client similar to the introduction of any other piece of negative information. The cues are not equally additive. In other words, any two pieces of bad information do not result in twice the probability of withdrawing than one bad piece of information generated.

In this study, however, regardless of the ω^2 results, it appears as though the sample is impartial as to which piece of negative information is introduced in the cases to generate a significantly different reaction than the other possible combinations. Although these graphs are simple and concise, their meaning is as significant as the other analyses generated in this study.

Figure 17



It would appear that this type of direct analysis may in fact be more appropriate in analyzing the data from a study of this nature. The past significance attributed to the ω^2 values traditionally computed in lens model studies may be deceiving. In this case it would appear misleading, for instance, to conclude that because the overall ω^2 for integrity is higher than any other cue, that the auditors weight this cue more heavily than the other cues. The graphs indicate that basically the differing weights indicated by the ω^2 are less meaningful than literal interpretation of the weights.

Consistency Measure

The subjects were asked to respond to four random repeat questions in the questionnaire. These repeat questions were included in the study, as mentioned previously, to help generate a feeling for the consistency displayed by the sample of auditors in responding to the questionnaire. Consistency measures are meaningful not only in the literal sense of measuring the consistency of the sample but as an indication that something may be wrong with the questionnaire. If poor consistency is displayed, a number of explanations may be possible. First, the sample may not have understood the subject matter the questionnaire was trying to test and therefore failed to be consistent in their decisions. Second, it may indicate that the sample became disinterested in the project and failed to adequately answer all the questions. Third, inconsistency may indicate that problems existed in the questionnaire and the sample was getting confused and could not be consistent in their judgments.

All of the above problems were addressed indirectly in an analysis of the levels of consistency displayed by the sample. A table summarizing the results is displayed in Figure 18. As the table indicates, 56% of the repeated questions were answered identically by the sample of auditors. Another 33% of the repeated questions were answered within one level of the first answer by the respondents, and 8% of the repeated questions were answered within two levels of the first response. Finally, 3% of the repeated questions were answered differently by at least two levels from the first response of the auditors.

In summary, 97% of the repeated questions were answered within two levels of each other. Therefore, the structure of the project did not appear to cause the sample any confusion. Also, the consistency of the responses of the sample indicate that ample time and concentration were used in the completion of the task.

The following chapter will briefly summarize the results of this study. In addition, future research questions will be outlined.

Figure 18

Frequencies of Consistency of Responses by All Auditors[a]
(n = 58)

TYPES OF RESPONSES	RESPONSE %
CONSISTENT RESPONSES	56%
RESPONSES WITHIN 1 LEVEL	33
RESPONSES WITHIN 2 LEVELS	8
RESPONSES WITHIN > 2 LEVELS	3
TOTAL RESPONSES	100%

[a]These responses were generated from a 9-point scale.

CHAPTER VI

SUMMARY AND CONCLUSION

The results of this research may be briefly outlined in two sections. The first area of results was the identification of the relevant variables considered in this decision of whether to withdraw from audit engagements or retain the client. The variables found most important by the initial sample of auditors follow:

1) Disagreement over fees
2) Client imposed limitation of scope
3) Management integrity
4) Disagreements over GAAP
5) Disagreements over the audit report or opinion.

These variables were generated and reduced using a consensus of the initial sample of audit partners. They later served to explain a good deal of the percentage of variation in the dependent variable which indicates that they are very relevant in the decision process of deciding whether or not to withdraw from an audit engagement.

The usage placed on these variables is impressive in its literal sense and in the sense that none of the second sample of 58 audit partners indicated that there are more relevant variables which they would consider as possibly being more important than any of these five variables. Although the second sample of auditors was not directly asked to address the issue of indicating other potentially important variables, any strong objections to the five selected could have been voiced either 1) in the body of the questionnaire, 2) to

the contact partner in the particular firm, or 3) in a direct discussion with the researcher over the phone.

The second section of this research dealt with the use of these variables by the auditors. The variables, after being identified, were then utilized to model the judgments of auditors using the lens model approach to Human Information Processing. The ways in which the cues were weighted by the sample were analyzed using the ω^2 values from the ANOVA. The ω^2 values indicated that the variable ranked first in importance by the auditors was integrity of management. Client imposed limitation of scope was considered second in importance by the sample of auditors. Disagreements over the audit report, opinion disagreements over the application of GAAP, and disagreements over fees were considered third, fourth and fifth respectively, in importance in this decision of whether to withdraw or not to withdraw from an audit engagement.

The ANOVA results indicated that there was a statistically significant difference among the groups of auditors from different sized firms in their judgments with respect to the cases presented. Also, there was a significant group x integrity interaction uncovered by the ANOVA. A deeper analysis indicated that the smaller Local/Regional firms perceived the integrity of management as being less important than the larger sized firms perceived that same variable.

The reasons why the integrity of the client are perceived differently by the smaller accounting firms have not been addressed in the accounting literature. One reason this discrepancy may occur

is that the extent to which the Local/Regional auditors may be held liable for any repercussions or a lack of integrity by the client is less than that of the larger sized firms. In other words, the larger auditing firms, rather than smaller auditing firms, are conducting audits on larger businesses. This implies that there are more people relying on the financial statements generated by the larger firms. Also, the profit or loss dollar range potentially manipulated by the management of the larger clients is far greater than the profitability range of the clients audited by the Local/Regional auditors. Therefore, a lack of integrity in a larger client can result in a large monetary manipulation which can ultimately impact on a large number of creditors and investors. The Local/Regional auditors, on the other hand, deal with smaller clients with smaller profitability margins to be potentially manipulated. More importantly, the Local/Regional auditors deal with fewer interested parties, such as creditors and investors, in each audit engagement.

As a supplemental test the responses of the auditors were graphed by cases containing similar numbers of cues at negative levels. This simple analysis suggested that the results of the ω^2 may in fact be misleading in this case. The graphs indicated that the sample of auditors did not perceive any discernible differences between which cue was introduced at a negative level. Instead, they had similar responses to the groups of cases containing the same number of negative characteristics. This result implies that the weighting of the variables indicated by the ω^2 values may lead, in this situation, to misleading results.

This additional procedure of analyzing the variables in terms of simple positive or negative pieces of information is an extremely useful and direct way to analyze any study such as this. The linearity indicated by the n index implies that these variables are exchangeable in the opinion of the auditors. This additive effect of the presense of negative variables on the response of the auditor implies that the particular variable introduced at a negative level did not matter to the auditor. Instead, they perceived any one piece of negative information similarly to any other one piece of negative information. Perhaps in studies of this nature, in the future an emphasis should be placed on the linearity of the responses rather than the ω^2 values traditionally generated.

Future Research

This study generated new findings into the accounting literature. Specifically, relevant variables were identified and weighted in the decision of whether or not auditors should withdraw from engagements or retain the client. In addition, the weights of these variables were analyzed by differing sized accounting firms. The findings indicated that the auditors from the varying sized firms utilized the variables differently.

This study needs to be extended to adequately conclude why these differences in the utilization of the cues occur between the firms. Specifically, this study should be replicated to verify the results. Second, a model of this thought process would be useful in this area of judgment. Third, the methodologies utilized in this study lead to

confounding results. The ω^2 values indicate the varying percentages of variation in the dependent variable explained by these independent variables. These ω^2 results indicate that the variable contributing the most to explain the variation in this decision is integrity of management. The results, however, indicate the responses follow a linear model. This linearity implies that the cues are interchangeable in the auditor's decision process. Future studies might search for more cues resulting in extreme ω^2 values which could possibly result in a nonlinear model.

The discrepancies found in the research methodologies indicate a need for further research into the appropriateness of the methodologies utilized in this study. Specifically, the validity of the use of ω^2 with a study such as this containing repeated measures must be examined. Second, the use of more simple methods of analysis such as the graphing of the responses may be explored as a possible solution to the ω^2 discrepancies. In addition to research into the methodologies inherent in a lens model study such as this are the research questions still left unanswered dealing with the withdraw topic.

Specifically, further research could identify other variables of importance in relation to this topic. Second, a need for more information about this topic would be useful to the profession. Are there differences between firms in relation to their decision to withdraw from a client or not to withdraw? Are there geographic differences inherent in such a decision? Could more and better information be made available to the auditor to supplement his

decisions and improve on them? Finally, could a model be constructed to replace the fallable human decision process currently employed in making this important decision? As mentioned previously, most research in this area would be welcomed by the profession and would be found very timely.

REFERENCES

Andrews, W. T. and Kurt Paney, "When and How to Withdraw from an Audit Engagement," Practical Accountant (October 1979), pp. 23-30.

Ashton, R. H. "An Experimental Study of Internal Control Judgments," Journal of Accounting Research (Spring, 1974), pp. 143-47.

Bakay, Virginia Hicks, The Liability of Certified Public Accountants Related to the Auditing and Accounting Functions As Indicated By A Review of Selected Claims, Unpublished dissertation University of Alabama (1969).

Bedingfield, James P. and Stephen E. Loeb, "Auditor Changes-An Examination," The Journal of Accountancy (March 1974), pp. 66-69.

Benson, Benjamin, "Lawyers' Responses to Audit Inquiries - A Continuing Controversy," The Journal of Accountancy (July 1977), pp. 72-78.

Berrymore, R. G., "Legal Liability in Public Accounting Practice," Unpublished Doctoral Dissertation, University of Illinois (1958).

Boatsman, J. and J. C. Robertson, "Policy-Capturing on Selected Materiality Judgments," The Accounting Review (April 1974), pp. 342-352.

Booker, Jon Alexander, A Study of Risk Evaluation In the Audit Function of Public Accounting Firms, Unpublished dissertation, University of North Texas State (1971).

Campbell, Donald T. and Julian C. Stanley, Experimental and QuasiExperimental Designs for Research (American Educational Research Association, 1963).

Casey, Cornelius J., "Variations in Accounting Information Mode: The Effect On Loan Officers' Predictions of Bankruptcy," Accounting Review, Volume 55 (January 1980).

Causey, Denzil Y, White v. Guarente; New York Extends the Ultramarious Rule, Michigan CPA, Volume 30, March-April 1979, pp. 13-16.

Clark, J. L., "Some Aspects of Changing Concepts of the Accountant's Legal Liability," Unpublished Doctoral Dissertation, University of Georgia (1973).

Cochran, William G., Sampling Techniques, (2nd ed.; New York: John Wiley and Sons, Inc., 1963).

Collins, Frank and James L. Porter, "Engagement Withdrawal; The Legal Perils," The Journal of Accountancy (February 1979), pp. 66-71.

Commerce Clearing House, Inc., AICPA Professional Standards Volume 1 - Auditing, Management Advisary Services, Tax Practice (American Institute of Certified Public Accountants, Inc., 1978).

Conover, W. J., Practical Nonparametric Statistics (John Wiley and Sons Inc., 1971).

Davies, J. J., "Accountants' Civil Liability to Third Party Financial Statement Users - A Case for Uniformity," Unpublished Doctoral Dissentation, The Louisiana State University and Agricultural and Mechanical College (1975).

Dawes, R. M. and B. Corrigan, "Linear Models in Decision Making," Psychological Bulletin (February 1974), pp. 95-106.

Einhorn, H. "A Synthesis Accounting and Behavioral Science," Journal of Accounting Research, 14 supp., pp. 159-95.

Emory, C. William, Business Research Methods (Richard D. Irwin, Inc., Homewood, Illinois, 1976).

Gibbs, E. and Richard G. Schroeder, "Evaluating Internal Auditing Departments Under SAS No. 9," Ohio CPA, Volume 36 (Summer 1977), p. 73-6.

Gibbs, T. and R. Schroeder, "Evaluating the Competence of Internal Audit Department," Internal Auditor (December 1980), pp. 34-42.

Gibbs E. and Richard G. Schroeder, "Evaluating the Competence of Internal Audit Departments," Symposium of Auditing Research III, Department of Accountancy, University of Illinois at Urbana-Champaign (1979), p. 207-25.

Hampson, J. Jay, "Accountants' Liability: The Significance of 'Hochfelder,'" The Journal of Accountancy (December 1976), pp. 69-74.

Hays, W. L., Statistics For Psychologists (New York: Holt, Rinehart and Winston, 1963).

Hermanson, R., S. Loeb, and R. Strawser, Auditing Theory and Practice (Richard D. Irwin, Inc., 1976).

Hilton, R. W., "Integrating Normative and Descriptive Theories of Information Processing," Journal of Accounting Research (Autumn 1980), pp. 477-505.

Hoffman, P. J., P. Slovic, and L. G. Rorer, "An Analysis-of-Variance Model for the Assessment of Configural Cue Utilization in Clinical Judgment," Psychological Bulletin (May 1968), pp. 338-349.

Hofstedt, T. and G. Hughes, "An Experimental Study of the Judgment Element in Disclosure Decision," The Accounting Review (April 1977), pp. 379-95.

Hooper, H. P., "A Study of the Evolution of the Legal Liability of Accountants with Implications for the Future of the Profession," Unpublished Doctoral Dissertation, Tulane University (1976).

Isaac, S., and W. B. Michael "Handbook in Research and Evaluation," (Edits Publishers, San Diego, California 1977).

Isbell, David B., "The Continental Vending Case: Lessons for the Profession," The Journal of Accountancy (August 1970), pp. 33-40.

Joyce, E. J., "Expert Judgment in Audit Program Planning," Journal of Accounting Research (Supplement 1976), pp. 29-60.

Joyce, Edward J., "Discussant's Response to 'Evaluating the Competence of Internal Audit Departments'" The Internal Auditor, Internal Auditor (December 1980), pp. 232-235.

Kennedy, H., "A Behavioral Study of the Usefulness of Four Financial Ratios," Journal of Accounting Research (Spring 1975).

Kerlinger, Fred N., Foundations of Behavioral Research (Holt, Rinehart, and Winston, Inc., 1973).

Label, Wayne Allen, The Accountant's Legal Liability; Its Impact Upon The Profession (Unpublished dissertation, University of California, Los Angeles 1971).

Libby, Robert, Accounting and Human Information Processing; Theory and Applications, (Englewood Cliff, New Jersey, Prentice Hall 1981).

Libby, Robert, "Bankers' and Auditors' Perception of the Message Communicated by the Audit Report," Journal of Accounting Research, Volume 17 (Spring 1979), pp. 99-122.

Libby, Robert, "Accounting Ratios and the Prediction of Failure: Some Behavioral Evidence," Journal of Accounting Research (1975), pp. 150-61.

Libby, Robert, "The Use of Simulated Decision Makers in Information Evaluation," Accounting Review (July 1975).

Libby, R. and B. L. Lewis, "Human Information Processing Research in Accounting: The State of the Art," Accounting Organizations and Society, Vol. 2, No. 3 (Pergamon Press, 1977), pp. 245-268.

Loeb, Stephen E., "A Survey of Ethical Behavior in the Accounting Profession" Journal of Accounting Research, IX (Autumn 1971), pp. 287-301.

McGhee, W., D. Shields, and J. Birnberg, "The Effects of Personality on a Subject's Information Processing," The Accounting Review (July 1978), pp. 681-97.

Montagna, Paul D., "Professionalization and Bureaucratization in Large Professional Organizations," American Journal of Sociology, LXXIV (September 1968), pp. 138-145.

Nie, Norman H., C. H. Hull, J. G. Jenkins, K. Steinbrenner and D. H. Bent, Statistical Package For The Social Sciences (McGraw-Hill, Inc., 1975).

Randall, B. C., "Criminal Liability in Public Accounting Practice," Unpublished Doctoral Dissertation, University of Minnesota (1972).

Roberts, Karlene H., Charles L. Hulin, and Denise M. Rousseau, Developing an Interdisciplinary Science of Organizations (Jossey-Bass, inc., San Francisco, California 1978).

Rohde, David W. and Harold J. Spaeth, Supreme Court Decision Making (W. H. Freeman and Company, San Francisco, California 1976).

Sayad, J., "Opportunities for the Coordination of the Activities of the Internal Auditor and the Independent Accountant," Haskens and Sells Selected Papers, New York, New York (1963), pp. 165-72.

Schultz, J. and S. Gustavson, "Actuaries' Perceptions of Variables Affecting the Independent Auditor's Legal Liability," The Accounting Review, Vol. LIII, No. 3.(July 1978), pp. 626-41.

Shoenthal, Edward R., "Contingent Legal Liabilities," The CPA Journal (March 1976), pp. 30-34.

Slovic, P., "Analyzing the Expert Judge: A Descriptive Study of A Stockbroker's Decison Processes," Journal of Applied Psychology (August 1969), pp. 255-263.

Slovic, P. and S. Lichtenstein, "Comparison of Bayesian and Regression Approach to the Study of Information Processing in Judgement," Organizational Behavior and Human Performance, Vol. 6, No. 6 (November 1971), pp. 649-744.

Sommer, A. A., "What Are the Courts Saying to Auditors?" Auditing Looks Ahead (May 1972), pp. 23-35.

Sorensen, James E., "Professional and Bureaucratic Organization in the Public Accounting Firm," The Accounting Review, XLII (July 1967), pp. 553-565.

Sorensen, James E. and T. Sorensen, "Comparison of 1965 and 1970 Organizational and Professional Profiles and Migration Plans of Large-Firm CPAs," Behavioral Experiments in Accounting, ed. Thomas J. Burns (Columbus, Ohio: The Ohio State University, 1972).

Stoppelman, John S., "Accountants and Rule 10b-5: After 'Hochfelder,'" The Journal of Accountancy (August 1977), pp. 49-54.

Sweiringa, R., M. Gibbons, L. Larsson, and J. Sweeney, "Experiments in the Heuristics of Human Information Processing," Journal of Accounting Research, 14 supp., pp. 196-206.

Tiedemann, F., "Reliance of Independent Public Accountants on the Work of the Internal Auditor," Haskins and Sells Selected Papers (1963), pp. 165-172.

Van Dalen, Deobold B., Understanding Educational Research (McGraw-Hill, Inc., 1979).

Winer, B. J., Statistical Principles in Experimental Design (New York: McGraw-Hill, 1962).

Wojdak, J., "Levels of Objectivity in the Accounting Process," The Accounting Review (January 1970), pp. 88-97.

Yntema, D.B. and W.S. Torgerson, "Man-Computer Cooperation in Decisions Requiring Common Sense," IRE Transactions of the Professional Group on Human Factors in Electronics (January 1961), pp. 20-6.

Zimmer, Ian, "A Lens Study of the Prediction of Corporate Failure by Bank Loan Officers," (Capsules and Comments), Journal of Accounting Research (Autumn 1980, pp. 629-36.

APPENDIX A

ENGAGEMENT WITHDRAWAL DECISION

RESEARCH PROJECT

Kathryn M. Verreault
Texas A&M University

June 1982

ENGAGEMENT WITHDRAWAL RESEARCH PROJECT

The auditor must accept some degree of risk when agreeing to accept any engagement. After acceptance the auditor may desire to continue the engagement or terminate the relationship. This study deals with the decision of whether or not to withdraw from engagements as opposed to being terminated by the client.

I would like for you to determine the level of probability of withdrawal from several hypothetical audit clients. THIS TASK SHOULD TAKE NO MORE THAN HALF AN HOUR.

The five variables chosen for this study are 1.) Disagreements over fees 2.) Restricted scope 3.) Disagreements over the audit report or opinion 4.) Integrity of management and 5.) Disagreements over the application of Generally Accepted Accounting Principles. The following brief descriptions are meant to aid in understanding exactly what these variables mean. Read these definitions carefully as they will not be repeated.

Disagreements over fees include such problems as fees in arrears and friction caused by estimate revisions by the auditor due to the discovery of poor internal control, etc. requiring more work on the auditor's part. This increase in work performed by the auditor results in a greater fee than would be desired by the client.

Restricted scope may be interpreted as primarily client imposed. Management is unwilling to make available to the auditor certain pieces of information necessary in conducting the audit.

Disagreements over the audit report or opinion include differences as to the form of the opinion issued and wording of any modifications included therein.

The integrity of management issue deals with the amount of trust you can place in management. Contained in this definition are such possible problems as related party disclosure problems and the presence of illegal acts.

Disagreements over the application of Generally Accepted Accounting Principles include any differences arising over the treatment of transactions in the preparation of the company's financial statements.

INSTRUCTIONS

For each of the 36 hypothetical cases which follow, read the five statements in the section labeled I and form an opinion regarding the probability of withdrawal from the described engagement. Circle the level which best describes the level of probability of withdrawal from the engagement.

I.

Disagreements over fees (i.e. fees in arrears or low fees) with the company are *minor*.

Client-imposed limitations of scope to this auditing firm by management are *minor*.

The integrity of management is considered *low* in this company.

Disagreements over the application of Generally Accepted Accounting Principles in the preparation of the financial statements of this company are *minor*.

Disagreements over the audit report or opinion rendered in respect to this company's financial statements are *minor*.

Circle the number which indicates how probable it is that this accounting firm will withdraw from this engagement.

1	2	3	4	5	6	7	8	9
Least Probable								Most Probable

I.

Disagreements over fees (i.e. fees in arrears or low fees) with the company are *minor*.

Client-imposed limitations of scope to this auditing firm by management are *minor*.

The integrity of management is considered *low* in this company.

Disagreements over the application of Generally Accepted Accounting Principles in the preparation of the financial statements of this company are *minor*.

Disagreements over the audit report or opinion rendered in respect to this company's financial statements are *major*.

Circle the number which indicates how probable it is that this accounting firm will withdraw from this engagement.

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Disagreements over the audit report or opinion rendered in respect to this company's financial statements are *minor*.

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Disagreements over fees (i.e. fees in arrears or low fees) with the company are *major*.

Client-imposed limitations of scope to this auditing firm by management are *minor*.

The integrity of management is considered *high* in this company.

Disagreements over the application of Generally Accepted Accounting Principles in the preparation of the financial statements of this company are *major*.

Disagreements over the audit report or opinion rendered in respect to this company's financial statements are *major*.

Circle the number which indicates how probable it is that this accounting firm will withdraw from this engagement.

1	2	3	4	5	6	7	8	9
Least Probable								Most Probable

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Client-imposed limitations of scope to this auditing firm by management are *major*.

The integrity of management is considered *low* in this company.

Disagreements over the application of Generally Accepted Accounting Principles in the preparation of the financial statements of this company are *minor*.

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APPENDIX B

Table 1

Error Terms for Analysis of Variance for All Auditors (n = 58)

Error	1115.93476
Error	358.77172
Error	606.29850
Error	98.46276
Error	820.76331
Error	107.10338
Error	83.94463
Error	92.93036
Error	209.50227
Error	47.38295
Error	108.07270
Error	38.81759
Error	44.00641
Error	52.60088
Error	31.99483
Error	31.00098
Error	524.46372
Error	87.18233
Error	90.92575
Error	30.65966
Error	89.53291
Error	43.54174
Error	36.03963
Error	31.97509
Error	106.51836
Error	40.90734
Error	67.13831
Error	33.98382
Error	32.21272
Error	47.10917
Error	39.58504
Error	32.02611

Table 2

Error Terms for Analysis of Variance for Nonnational Firms (n = 19)

Error	718.75329
Error	46.00329
Error	208.91118
Error	24.08224
Error	315.99013
Error	45.58224
Error	27.70066
Error	31.95066
Error	91.76645
Error	19.52961
Error	47.14803
Error	20.70066
Error	13.05592
Error	16.95066
Error	8.41118
Error	13.30592
Error	209.36513
Error	30.78618
Error	42.65461
Error	9.52303
Error	29.68092
Error	22.18092
Error	14.39145
Error	15.39145
Error	53.77303
Error	17.86513
Error	37.36513
Error	22.45724
Error	14.06250
Error	24.65461
Error	10.70724
Error	13.93092

Table 3

Error Terms for Analysis of Variance for National Firms (n = 16)

Error	183.77930
Error	99.65430
Error	85.41992
Error	31.70117
Error	203.29492
Error	14.34180
Error	14.84180
Error	23.41992
Error	28.02930
Error	9.82617
Error	25.18555
Error	4.51367
Error	9.34180
Error	21.12305
Error	17.27930
Error	7.34180
Error	194.68555
Error	10.71680
Error	14.96680
Error	9.43555
Error	22.98242
Error	5.77930
Error	10.41992
Error	5.40430
Error	20.06055
Error	12.48242
Error	9.79492
Error	6.21680
Error	12.24805
Error	5.62305
Error	9.38867
Error	10.76367

Table 4

Error Terms for Analysis of Variance for "Big 8" Firms (n = 23)

Error	213.40217
Error	213.11413
Error	311.96739
Error	42.67935
Error	301.47826
Error	47.17935
Error	41.40217
Error	37.55978
Error	89.70652
Error	18.02717
Error	35.73913
Error	13.60326
Error	21.60870
Error	14.52717
Error	6.30435
Error	10.35326
Error	120.41304
Error	45.67935
Error	33.30435
Error	11.70109
Error	36.86957
Error	15.58152
Error	11.22826
Error	11.17935
Error	32.68478
Error	10.55978
Error	19.97826
Error	5.30978
Error	5.90217
Error	16.83152
Error	19.48913
Error	7.33152

VITA

Kathryn Mary Verreault
(617) 369-4247
791 Old Marlboro Rd.
Concord, Massachusetts 01742

Education	Degree	Dates
Texas A&M University College Station, Texas	Ph.D	May 1979 to December 1982

Major in Accounting and minor in Statistics with a tool in Research
Dissertation title was "Audit Partners' Perceptions of the Variables Associated With the Decision to Withdraw from Audit Engagements"

Texas A&M University College Station, Texas	MBA	May 1978 to May 1979

Major in Accounting with an Emphasis in Taxation

University of Lowell Lowell, Massachusetts	BSA	Sept 1976 May 1978

Major in Accounting

Work Experience

Bentley College
Waltham, Massachusetts
Sept 1980 to present

Assistant Professor
Teach Financial and Cost Accounting

Daniel A. Verreault, CPA
Methuen, Massachusetts

Assistant - Duties included write-up work through preparation of financial statements, tax returns and payroll returns