

Ease of Communication with Supervisors and Auditors' Information Search Behavior

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Abstract

This study examines whether ease of communication with supervisors has a positive effect on the breadth and depth of information search that takes place in the execution of an audit assignment. 132 auditors with 2-to-5 years of audit experience participate in a questionnaire survey on the information search behavior the last time they performed a typical audit for a for-profit client. The result shows that ease of entering has a positive and significant correlation with both breadth and depth of information search.

Keywords: Ease of Communication, Information Search Behavior, Self-presentation Theory, Audit Judgment

I. Introduction

A typical audit team composes of auditors of different ranks (seniors, managers, and partners). Auditors at lower ranks gather, summarize, and transmit requisite information to higher-rank auditors for final decisions. The information search behavior of lower-rank auditors in the audit team determines the quality and scope of information the team possesses. The information, when summarized by lower-rank auditors and transmitted to senior auditors of the team, forms the bases for decisions by the senior auditors. The information search, summarization, and transmission behavior are likely to have important ramifications for effective decision making at higher levels of the team.

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An inadequate search of information by staff auditors may corrupt the upward flow of information to decision makers and thereby degrade the quality of audit decision making (Belkaoui, 1989). It is important, therefore, that decision makers identify the antecedent team variables that influence the way subordinate auditors conduct information gathering and processing.

Researchers have proposed several antecedent variables that may alter an auditor's information search behavior. As examples, Cushing and Loebbecke (1986) argue that standardized and programmed team activities such as structured audit approaches proposed by Dirsmith and McAllister (1982), may mechanize thinking and desensitize auditors to the need to collect and process information that resides outside the bounds of the structure (Hall, 1996, 70). Biggs et al. (1988) find that experience (seniors versus managers) explains differences in the kinds of information acquired for analytical review judgment. Rudolph and Welker (1998) discover that auditors of mechanistic audit teams tend to enter into fewer boundary-spanning activities for the collection of audit information than auditors of organic audit teams.

Auditors work as a team for the audit task at hand and the work of lower-rank auditors need the approval or acceptance by the senior auditors of the team. We propose that the perceived ease of communicating with supervisors is an important variable that explains differences in the information search behavior of lower-rank auditors. Communication is "any voluntary activity between two parties which has consequences, actual or anticipated, for the realization of their respective goals and objectives" (Levine and White, 1961). The goals and objectives of team members may differ. Supervisors may be interested in obtaining all the important information pertaining to the audit assignment, while staff auditors may choose to focus on gathering and processing information that satisfy some or all the information that may be of interest to the supervisor. Auditors, interested in satisfying supervisors, seek information concerning the supervisor's evaluative structures and idiosyncrasies and the supervisor's expectations relating to task performance, and providing the supervisor information that may not be the optimal set of information for the audit task. The remainder of the paper is organized as follows. Section 2 discusses theoretical background and develops hypotheses. Section 3 describes how the study was conducted. Data analysis and findings are provided in Section 4. Section 5 provides concluding remarks and suggestions.

2. Theoretical Background and Hypothesis

The ease with which auditors communicate with supervisors has implications regarding the amount of task-related information flowing between auditors. Constraints deter formation of communication and fewer constraints facilitate seeking and delivery of information. Constraints that may thwart communication include: (a) the perceived receptiveness of supervisors or auditors to communication. Studies have shown that the communication is less if either party has a standoffish, surly, brusque, or sarcastic personality. And (b) the perception of the degree to which the other party has the available time to communicate. The communication will be lower if the other's workload appears to be particularly burdensome.

The freedom to communicate facilitates flows of information to the supervisor. In an environment with freedom to communicate supervisors will be more apt to convey task-relevant information, and junior auditors are more inclined to initiate communication in order to seek answers to task-related questions surfaced during the course of performing the task. Increases in transfer of task-relevant information among auditors may change the way they perceive the requirements of the task (Campbell and Gingrinch, 1986). Kren (1992), for instance, showed that superior-subordinate discussion during the budgeting process transfers job-relevant information to the subordinate, which in turn improves job performance.

While Kren's findings suggest a cognitive influence, it fails to provide a generalizable hypothesis on the relationship between the ease of communication and information search behavior of auditors. To build such a hypothesis requires knowledge on the pattern in exchanges of task-related information among auditors. It is generally recognized that ease of communication increases seeking and flows of information. However, the connection between increased acquisition of information from a supervisor and the auditor's information search behavior in task performance is not obvious. For instance, some supervisors may weigh the quality of their decisions as most important and convey a preference for the collection of more information. Others may consider efficiency as the primary goal and convey a preference for the collection of less information. Thus, from a cognitive viewpoint, ease of communication has an indefinite effect on the information search behavior of auditors.

While it is difficult to predict the cognitive influence of communication, self-presentation theory (cf., Baumeister, 1982; Schlenker, 1980) provides a framework from which to predict its motivational influence on auditors. A communicating relationship involves a social process in which auditors present themselves, often face-to-face, to supervisors. On these occasions, auditors may experience feelings of pressure to present a favorable appearance of their work to an important evaluator (e.g., Goffman, 1959). Palmer and Welker (1994) show that task workers will go to great lengths to impress evaluators.

They do so by behaving in a manner that maximizes their association with desirable self-images such as competence, intelligence, and skill and minimizes their association with undesirable self-images such as laziness and ignorance (Giacalone, 1987). The self-presentational goal is to construct a certain identity in the evaluator's mind and thereby enhance the possibility of gaining favorable evaluations. Thus, it may not be the communication relationship per se that induces a change in information search behavior, but the prospects of communication. The greater the perceived ease by which communication can be with supervisors, the higher the expectation that communication will occur and the greater the chances that auditors will have to present themselves dramatically to supervisors in order to establish, maintain, or refine self images.

In typical contexts of audit performance evaluations, desired outcomes such as pay and promotion are contingent upon the success with which images of competency and productivity are projected to evaluators (cf. Baumeister, 1989). Strategies that may be used to convey images of competency and productivity involve the collection of task-relevant information in preparation for communication (Chang et al., 2001). The anticipation of pre-task discussions with the supervisor may amplify the motivation to the search for information to gain knowledge about the requirements of audit task.

More task knowledge expands one's ability to speak authoritatively and knowledgeably about the audit task, which may be strategically useful if the goal is to project an image of competence. It also reduces the likelihood of committing presentational blunders, which the supervisor may deem to be a sign of incompetence.

Discussions during task performance may boost the motivation to search for additional information to support audit explanations, assertions, and conclusions. Additional information helps to ensure that judgments are factually based and defensible, which would be paramount concerns of auditors oriented to protecting already gained images. Moreover, the collection of additional information has an added benefit of creating the appearance of diligence and productivity (Palmer and Welker, 1994).

The impetus to search for additional information may manifest itself in task performance as two behaviors: (a) breadth of information search - the search of a greater number of informational sources, and (b) depth of information search - a more in-depth search of information within each source. The self-presentational motive to project desirable work-related images to supervisors increases both the breadth and depth of information search.

In addition, alternative informational sources may be consulted to expand one's knowledge of the audit task or to seek information that provides confirmation of the verity of audit conclusions. A source may be examined in greater depth to gain extra assurance that the information contained in the source has been fully and accurately assimilated. Accordingly, we propose the following:

Hypothesis a: The ease of communicating with supervisors has a positive effect on the breadth of information search that takes place in the execution of an audit task.

Hypothesis b: The ease of communicating with supervisors has a positive effect on the depth of information search that takes place in the execution of an audit task.

3. Method

Seven variables — two criterion variables (breadth and depth of information search), one independent variable (ease of communication), and four control variables (audit time budget, audit risk, formalization of the decision-making process, and client importance) – were measured in the study.

3.1 Breadth and Depth of Information Search

A list of 32 information sources (refer to Appendix for the list) that may have relevance to the performance of a typical audit assignment was developed based on professional standards, auditing textbooks, auditing literature, and firm literature. The list was reviewed by two experienced auditors and used in a recent study (Chang et al., 2001). The list is included in a questionnaire to measure breadth and depth of information search.

Auditors first placed a check mark next to the listed sources that they consulted, either directly or through staff assigned to them, during the most recent audit assignment. Breadth of search was measured as the number of items checked. Next, auditors provided their best estimate of the amount of time (in half-hour increments) that they spent, either directly or through staff assigned to them, gathering information from each checked source. Depth of search was measured as the average time spent on the consulted sources. A log transformation was applied to the depth variable to reduce skewness³ in the distribution of responses.

3.2 Ease of Communication

The independent variable is the ease of communicating with his or her supervisor. It was measured by assessing the degree in which a superior possesses three characteristics that describe the superior's contribution to communicating with subordinates (e.g., Graen et al., 1982). These are the superior's receptiveness to opinions proffered by a subordinate, the superior's involvement of a subordinate in job-related decision making, and the accessibility of the superior for consultation regarding matters of the job. An auditor indicated the degree of agreement or disagreement with each of the following four items:

I am encouraged to speak my mind even if it may disagree with my superior.

I do not play an active role in making most decisions (reverse coded).

My superior often seeks out my advice before a decision is made.

Most people do not have a voice in decision-makings (reverse coded).

³ Skewness is typically present when measurements are bounded on the low end of the measurement scale by zero but have no upper bound.

The items were selected from scales developed by Duncan (1971) and refined by Leifer and Huber (1977). Items were adapted slightly to remove phrases such as "on the job" and "in my work group" that might contribute to misunderstandings of the audit context being assessed. Subjects' responses were obtained as the items relate generally to the typical audit task. Responses were obtained on an agree-disagree, seven-point response scale, and coded such that higher responses indicate greater ease of communication. The average of the four items serves as the score for each subject. The scale ranges from 1 (low ease of entering) to 7 (high ease of entering).

3.3 Control Variables

Several variables that may have effects on auditors' information search behavior are entered as control variables in the model. They are explained as follows.

Audit Time Budget

The budgeted time that an accounting firm allots to a task has a direct bearing on the amount of work an auditor performs the audit assignment. With larger audits require more work and effort, this study expects a positive correlation between the audit time budget and the breadth and depth of information search. We opted to control for the effect through statistical control by including the variable as a control variable in statistical analyses. Answers to a question provide measures of the amount of budgeted time. The analyses use log-transformed measures because the answers to the question have a low-end bound of zero and no upper bound, which produced a skewed distribution of responses.

Audit Risk

The level of work an auditor perceives as necessary to fulfill the requirements of the audit task depends on the audit risk associated with task performance. Auditors are likely to deem it prudent to spend extra effort on assignments for clients with uncertain financial environment (Colbert, 1988; SAS No. 47). This study collects measures of audit risk through responses to the following nine indicators of risk (items d through i were reverse coded), drawn from several authoritative sources (including AICPA 1979; 1983; 1996; McKinley et al., 1996; Schick and Ponemon, 1993): (a) business risk, (b) preference for high-risk ventures, (c) inflexibility in resolving audit problems, (d) operating performance for the next five years,

(e) Adequacy of internal control, (f) cooperativeness with auditors, (g) management integrity, (h) management trustworthiness, and (i) employee competency. Responses were made on a seven-point scale with reference points of "less than average" (=1) to "average client" (=4) to "more than average" (=7). The average of the nine scores is the measure of audit risk. Higher scores indicate greater risk.

Formalization of the Decision-Making Process

A way in which firms coordinate and control the efforts of the team is through formal programs such as systemized audit approaches that specify how teams are to carry out audit tasks (Cushing and Loebbecke, 1986). The constraints placed on behavior in a formal audit program restrict the freedom of auditors to make discretionary choices concerning the collection, analysis, and interpretation of information (Robbins, 1983, 83). Formalization of the decision-making process was therefore added as a control variable to account for differences in the level of constraints imposed on an auditor's information search. Formalization of the decision-making process was measured with a three-item scale (Chang et al., 2001). Auditors indicated their extent of agreement or disagreement with each of the following three items:

There are numerous in-house rules and procedures that must be followed when performing an audit task.

There exist few formal instructions to guide the performance of an audit task (reverse coded).

I have access to in-house guidance that provides explanation on how to perform an audit task.

Auditors responded to the three items in terms of the audit tasks. Responses were provided on a seven-item scale anchored by disagree (=1) and agree (=7). Item responses were coded such that higher scores indicate greater formalization. The average of the responses to these three items is the measure of level of restraints.

Client Importance

An auditor's decision to invest extra effort in a task may also depend on the importance of the client to the firm (Chang et al., 2001). The firm may particularly value clients for financial reasons (e.g., the size of the fee) or because of the closeness of social relationships that have developed over time (e.g., friendships). In the desire not to offend important clients, performance evaluators may impart an expectation--either directly through verbal instructions, or indirectly through evaluative actions--that subordinate team members exert extra care in substantiating the need to expand the audit beyond normal levels. In these instances, team members may execute assigned audit functions more cautiously and, as a consequence, process greater amounts of task-relevant information to reduce the chance of inadequate task performance.

The importance of the client to the firm was measured with three variables. The first was the quality of the firm's informal relationship with the client. It was assessed with a single item that measured the extent to which their firm had informal social interaction with the client. The second variable was the financial importance of the client to the firm. It was assessed with a single item that measured the extent to which the client was important to the firm's profitability. The third variable was the friendship between the firm's partners and the client's owners/managers. Responses to the three items were made on a seven-point scale anchored by "not at all" (=1) and "to a great extent" (=7). Scores were averaged. Higher scores indicate greater importance.

3.4 Sample and Procedure

This study uses a questionnaire to collect data. The questionnaire was constructed in English first and then translated into Chinese by the researcher using a two-stage procedure recommended by Werner and Campbell (1970). A panel of two bilingual accounting educators reviewed the two versions for compatibility and distortions in meaning before the Chinese version was finalized. All Big 4 accounting firms in Taiwan agreed to participate in the study. Thirty questionnaire packets were sent to each of the largest three offices of each firm. Each participating office designated a partner as the coordinator to assist the distribution and collection of questionnaires from auditors with two-to-five years of audit experience.

Follow-up phone calls were made approximately one week after the survey packets were sent. Reminder letters were then mailed to participants about one week later. Usable questionnaires were returned by 132 auditors, a 36.7% response rate.

Table 1 presents the demographic profile of the participants. The participating auditors had an average age of 29.2 years (sd=2.5) and 3.9 years of audit experience (sd=0.9). Most were female (75 percent), not yet certified as a CPA (78 percent), and held the title of senior auditor (40%) or semi-senior auditor (35%).

Table 1: Demographic Profile of Participating Auditors

| | Mean | S.D. | Median | Min | Max |
|------------------------------|------|------|--------|-----|-----|
| Years of Auditing Experience | 3.9 | 0.9 | 3.6 | 2 | 5 |
| Years of Age | 29.2 | 2.5 | 28 | 24 | 35 |

| | | |
|-----------------|---------------|-----|
| CPA: | Yes | 22% |
| | No | |
| Gender: | Female | 75% |
| | Male | 25% |
| Position Title: | Semi-Senior | 35% |
| | Senior | 40% |
| | Asst. Manager | 14% |
| | Supervisor | 11% |

Using the technique suggested by Oppenheim (1966), this study compares responses received before the follow-up reminder (85) with those received after the follow-up reminder (47) to assess if there is any non-response bias. No significant differences were found between these two groups regarding the independent, control, and criterion variables or the demographic data.

4. Results

4.1 Descriptive Statistics and Reliability

Table 2 presents means, standard deviations, and ranges for each variable, pair wise correlations between the variables, and alpha reliabilities of multiple-item scales.

Moderate correlation was found between audit time budget and breadth ($r=.38$) and depth of search ($r=.40$). Both coefficients are significant at $p \leq .05$. The alpha reliability coefficients (Cronbach's alpha) for the three multiple-item scales were above the commonly applied standard of .70 (Nunnally, 1978), suggesting reasonable item convergence.

The dependent variable, ease of communication, is significantly correlated ($p < .05$) with four variables. First, it is negatively correlated with formal decision making, suggesting that less ease of communicating exists in teams that have more rules and guidance for task performance. Second, it is positively correlated with the audit time budget, suggesting that greater ease of communicating exists in larger audits. In line with the hypothesis, the pair wise correlation coefficient for ease of communicating and breadth/depth of information search is positive and significant, suggesting that greater ease of communicating is associated with greater breadth/depth of information search.

Table 2: Descriptive Statistics, Correlations, and Reliabilities

A. Descriptive Statistics

| Variables | Scales's Range | Mean | S.D. | Median | Range Min | Range Max |
|---------------------------|----------------|------|------|--------|-----------|-----------|
| Depth of Search | | 2.9 | 1.4 | 2.3 | 1.0 | 14.2 |
| Log (Depth of Search) | | 0.7 | 0.8 | 0.7 | -2.1 | 2.7 |
| 2. Breadth of Search | 1-32 | 18.4 | 6.9 | 17.0 | 5.0 | 32.0 |
| 3. Ease of Communicating | 1-7 | 5.0 | 1.1 | 4.9 | 1.4 | 7.0 |
| 4. Audit Time Budget | 1-7 | 19.7 | 17.3 | 21.5 | 4.0 | 120.0 |
| Log (Audit Time Budge) | | 2.8 | 0.9 | 2.9 | 1.3 | 4.0 |
| 5. Audit Risk | 1-7 | 4.9 | 0.8 | 4.8 | 2.2 | 7.0 |
| 6. Formal Decision Making | 1-7 | 5.2 | 1.1 | 5.0 | 1.2 | 7.0 |
| 7. Client Importance | 1-7 | 4.3 | 1.5 | 4.0 | 1.0 | 7.0 |

B. PAIRWISE CORRELATIONS AND ALPHA RELIABILITIES

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------------|------|------|-------|-------|-------|------|------|
| 1. log(Depth) | | | | | | | |
| 2. Breadth | .12 | | | | | | |
| 3. Ease of Communicating | .21* | .25* | .82+ | | | | |
| 4. log(Aud Budg) | .40* | .38* | .18* | | | | |
| 5. Audit Risk | .02 | .06 | .05 | .02 | .77+ | | |
| 6. Formal DM | -.06 | -.13 | -.22* | -.18* | -.18* | .81+ | |
| 7. Client Import | .19* | .02 | .10 | .23* | .05 | -.06 | .26* |

+ Cronbach's alpha reliability

* statistically significant ($p < .05$)

4.2 Factor Analysis

A factor analytical technique, with a varimax rotation, was performed to assess the discriminant validity of the multiple-item scales. Discriminant validity is indicated when items have high loadings on their a priori determined variable and low loadings on other variables (Kerlinger, 1986). The loadings of the items on their a priori determined variables were all above .60. Their loadings on other variables were all below .28. This supports the discriminant validity of the scales.

4.3 Regression Results

Other variables, such as the size of audit and the characteristics of the client, may affect correlations between ease of communicating and breadth/depth of information search. To assess the robustness of the ease-of-communicating effect, this study performs a multiple regression with four additional control variables: audit budget, audit risk, formal decision making, and client importance. The regression results are reported in Table 3. Consistent with the hypotheses, the ease of communicating with supervisors has a significant ($p < .05$), positive relationship with breadth and depth of information search.

Table 3: Regression Results

| Breadth | Depth of Search | Of Search |
|--|-----------------|-----------|
| Intercept | 2.57 | -.53 |
| Control Variables | | |
| Log (Audit Budget) | 1.68** | 1.25** |
| Audit Risk | .42 | -.03 |
| Formal Decision Making | .92 | .02 |
| Client Importance | .65 | .06 |
| Ease of Communicating | 1.17* | 1.09* |
| Multivariate test: Wilks' lambda = .94 | | |
| F _(3,130) = 3.97, p < .01 | | |
| F-Statistics _(5,131) 3.42* 5.78** | | |
| R-square | .22 | .33 |
| Adj R-square | .21 | .30 |

* p < .05 ** p < .01

4.4 Specific Search Behavior

To find out the sources of information affected most by ease of communicating, we next perform a logistic regression for each source of information. The criterion variable in the model was whether or not a source was searched (0=not selected, 1=selected). The independent variables were the ease of communicating and the log of audit time budget, which was added as a control variable. A one-tailed statistical test ($p < .05$) was employed to assess the alternative hypothesis that greater ease of communicating is associated with greater selection of a source.

The ease of communicating had a significant regression coefficient ($p < .05$) on seven of the 32 information sources that constitute the breadth scale. Table 4 lists these seven sources. To provide a general indication of the size of the effect on search behavior, we formed a high ease-of-communicating group and a low ease-of-communicating group by splitting the sample at the mean level of communication. The proportion of auditors that searched each source was then calculated for each group. These proportions are included in Table 4.

In each of the seven cases, the proportion of auditors that searched the source for information was higher in the high ease-of-communicating group than in the low ease-of-communicating group. Several of the sources are consistent with the notion that auditors will seek information to prepare themselves for encounters with superiors. For instance, auditing standards, accounting journals, and working papers of another client were searched more frequently in the high ease-of-communicating group. Each of these sources contains information useful in ascertaining how the task should be performed. In addition, a higher proportion of auditors in the high ease-of-communicating group spanned the boundary of the team to consult with staff assigned to other teams, possibly for the purpose of soliciting advice concerning task performance. The remaining sources include the client's personnel and legal documents. These sources contain information that may help auditors to obtain a better understanding of the client and its environment.

Table 4: Sources Searched More Often In A High Ease of Communication (Logistic Regression, Df=1, One-Tail Test) ^A

| Frequency Source was Selected By Auditors with: ^b | | | | |
|---|------------|-----|--------------------|-------------------|
| Information Source | Chi-square | p < | High Ease of Comm. | Low Ease of Comm. |
| Client's personnel: | | | | |
| In operating functions | 6.01 | .02 | 72% | 52% |
| Client's contracts and Other legal documents | 4.87 | .04 | 83% | 69% |
| Staff not assigned to the audit team | 4.96 | .03 | 23% | 6% |
| Permanent working paper file of another client | 6.01 | .02 | 44% | 22% |
| Literature: | | | | |
| Published economic forecasts | 4.41 | .04 | 28% | 14% |
| Statements on Auditing Standards and/or their interpretations | 6.03 | .02 | 81% | 57% |
| Accounting journals | 4.95 | .03 | 43% | 26% |

^a The dependent variable is whether or not source was used. The independent variables are the ease of communication and the log of audit time budget (control variable).

^b The sample was split at the mean level to form high (n=78) and low (n=54) ease-of-communicating groups.

5. Conclusion and Discussion

The general proposition of the study is that the ease of communicating with supervisors will expand auditors' search for task-related information. In the presence of supervisors, a particularly compelling goal is to convey appearances that maximize one's association with personal qualities such as competence (Palmer and Welker, 1994). The collection of additional task-related information may enhance the auditor's ability to appear competent during communication. The finding of positive association between ease of communicating and broader and deeper search for task-related information supports the hypotheses.

The kind of information sources identified in the additional analysis as being more frequently consulted in conditions of high ease of communicating seem to indicate that auditors are attempting to gather information about the task and client. Professional literature contains information about how to perform tasks, and annual working paper files contain historical information about the client. The prospects of meeting with supervisors may be an incentive to consult these sources of information in order to prepare for knowledge displays.

Knowledge gleaned from these sources increases an auditor's chances of projecting an appearance of competency. Other sources found to be consulted more frequently in conditions of high ease of communicating such as legal contracts and documents provide auditors with information concerning the audit client. Again, such information should serve to expand an auditor's ability to conduct self-promotional displays of task-related knowledge (Giacalone and Rosenfeld, 1986), to respond effectively to directives to justify (Ashton, 1990) or account (Johnson and Kaplan, 1991) for one's actions, or to deliver more impressive task products (Palmer and Welker, 1994).

5.1 Implications and Future Research

While the results support a self-presentational interpretation, several alternative explanations for the expanded breadth and depth of search have yet to be ruled out. The broader and deeper search may be a function of learning that takes place as a result of communicating with the supervisor. For instance, supervisors in high ease-of-communicating situations may be more apt to communicate a need to examine certain information sources (e.g., client's personnel and legal documents). In this sense, the effect on the auditor would be cognitive, since it is a consequence of learning.

Auditors' perceptions on the ease of communicating may have similarities with other indicators of the quality of the relationship an auditor enjoys with supervisors. A high quality relationship has been described alternatively with adjectives such as participative, consultative, open, and considerate. Each implies a high degree of access to supervisors, and each has been proposed as a means for increasing an employee's job satisfaction. Thus, the extra effort to consult additional sources may be a reflection of enhanced job satisfaction and its attending motivation to devote extra effort toward accomplishing the goals of the firm, the audit team, and the supervisor (cf., Locke and Schweiger, 1979). The result also indicated an expected motivation to work harder in terms of the effort devoted to glean information from each consulted source.

The consultation of a greater number of information sources suggests higher quality decision making (Bedard and Mock, 1992; Chang et al., 2001). The information collected may further the understanding of task requirements or lead to more informed judgments. However, the research does not allow us to draw conclusions on the effects of perceived ease of communicating on audit quality. An argument that the expanded search of information found in this study is unrelated to decision quality cannot be ruled out. If the objective for the information search is to project the "appearance" of competence to supervisors, not necessarily to augment actual competence, then the information gathered from the additional sources may have little or no bearing on the quality of audit judgment. For example, if the focus is on justifying a decision rather than determining the preferred course of action (Gibbins and Emby, 1985; Libby and Luft, 1993, 441), the audit quality may remain the same with or without the information search.

In fact, an argument can be made that the additional information gathering activities may have a deleterious effect on decision-making quality. The time expended to consult the extra sources, which includes consulting auditors not assigned to the team, may rob audit teams of precious time. Alternatively, auditors may have to make up for the additional audit work on off-hours, suggesting the possibility of exacerbating work-related tension and debilitating task performance. Thus, the relationship between the ease of communication and audit performance is a topic of future research.

5.2 Limitations

The participants of this study are auditors employed in Taiwan, which has a culture low in individualism (e.g., Hofstede, 1980). The results may not generalize to national cultures with a different set of cultural characteristics. Even though this study embraces several steps to eliminate or reduce common-method biases embedded with data collected through questionnaires, some may still lurking around. However, common-method bias may not be a significant problem in our study. The independent variable (ease of communicating) and criterion variables were measured with different kinds of response scales, which reduces the bias. Moreover, the joint variation between control variables and criterion variables, which would include common-method variation, was statistically removed prior to examining the effects of the independent variable. Although the findings should be considered in light of the listed limitations, they are strengthened by the fact that the displayed effects are consistent with predictions of a well-documented framework of human behavior in evaluative settings, which is self-presentation theory.

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Appendix I

Potential Sources of Information for a Typical Audit Assignment

- 1-3. Client's personnel:
 - a. In accounting and finance functions
 - b. In operating functions
 - C. In other functions
4. Client's policies and procedures manuals
5. Client's accounting documents and records
6. Minutes of meetings by client's board, owners or partners
7. Client's contracts and other legal documents
8. Client's legal advisor
9. Client's external parties such as suppliers, customers, leaders and shareholders
- 10-12. Members of the audit team:
 - a. Immediate superior
 - b. Other superiors
 - c. Seniors
- 13-15. Members not assigned to the audit team:
 - a. Immediate superior
 - b. Other superiors
 - c. Seniors
- 16-18. Previous working papers of the client:

- a. Documentation of prior year's audit planning procedures
- b. Permanent file of the client
- c. Other work papers
- 19-21. Previous working papers of another client:
 - a. Documentation of prior year's audit planning procedures
 - b. Permanent file of another client
 - c. Other work papers
- 22. Audit program (last year)
- 23. Firm's technical manuals of policy and procedures
- 24. Prior year's audit reports of the client
- 25-32. Literature:
 - a. Published economic forecasts
 - b. Trade publications
 - c. Statements on Auditing Standards (SASS) and/or other their interpretations
 - d. FASB, SEC, and other CPA association publications
 - e. Documents/publications issued by tax authorities
 - f. Accounting journals
 - g. General business newspapers and 'magazines others.