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Mitigating Gender-specific Superior Ethical Sensitivity When Assessing Likelihood Of Fraud Risk*

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The emphasis on the importance of ethics in financial reporting and social responsibilities for corporate entities has increased in recent years, such that auditors have been made liable for the assessment of effective controls to detect and prevent fraud as part of their clients' internal control systems (*Statement of Auditing Standards No 82: Consideration of Fraud in a Financial Statement Audit*, (AICPA, 1997); *Committee on the Sponsoring Organizations of the Treadway Commission (COSO)*). Further, *Statement of Auditing Standards No 78*, (AICPA, 1996) advises auditors that their value systems and ability to recognize ethical dilemma issues are very important to the audit. Specifically, SAS No 78 requires auditors to perform procedures to gain an understanding of the client's integrity and ethical values and to recognize that the effectiveness of internal controls cannot rise above the integrity and ethical values of the people who create, administer,

and monitor the controls. Under these responsibilities, auditors, regardless of *gender*, are required to be adequately sensitive to clients' ethical issues and fraud risk when performing the audit. If auditors cannot perceive or assess the ethical issues during the audit, they will fail to incorporate the ethical information when making audit judgment.

One important issue in the ethics, business, and psychology literature is whether women are more ethically sensitive than men in identifying and recognizing ethical versus unethical events or whether women have more moral reasoning and moral development than men. While some studies suggest that there are no gender differences in ethical sensitivity (see Ponemon and Gabhart, 1993), other studies suggest that women are more ethically sensitive than men in dilemma situations. A pervasive element in the studies that report superior female ethical sensitivity is that

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they tend to involve negative ethical dilemma issues. Thus, it remains to be seen whether previously observed superior female ethical sensitivity over male will persist if the ethical dilemma is a positive ethical situation, and the male or female decision maker is experienced versus inexperienced.

The objective of the current study is to examine whether the presence or absence of positive ethical information will mitigate previously observed superior female ethical sensitivity when assessing a client's likelihood of fraud risk. By examining female versus male auditor's sensitivity to positive ethical signals, our understanding of the degree and context in which females may be more ethically sensitive than males will increase. This can provide practice guidance concerning whether to provide additional sensitivity training programs to remedy observed ethical sensitivity deficiency. If female auditors are more sensitive to ethical dilemma situations than male auditors when performing the audit, this disparity can lead to ineffective assessment of fraud risks by the male auditors during the audit. This could lead to the escalation of audit costs at the time when audit firms are finding ways to perform quality audits in a cost-effective manner.

The findings in this study could also have implications for staff training and supervision in that male auditors may need sensitivity training programs to help them pick up the appropriate fraud risk signals when encountered. For example, if a positive ethical signal causes male auditors to give higher (than female) estimates of fraud risk, one implication could be that male auditors may be pursuing irrelevant audit evidence,

especially if the positive ethical signal does not suggest fraud risk. The audit firm could provide male auditors with additional sensitivity training programs to help them to better identify potential fraud risk situations and to pay less attention to positive ethical signals that may be diversionary. In contrast, if female auditors gave lower fraud risk estimates than male auditors, given the same positive ethical situation, one interpretation could be that females maintained their superior ethical sensitivity to ethical situations by not overstating their assessment of fraud risk. It could also mean that females lose their superior ethical sensitivity compared to males, given a positive ethical signal by underestimating the likelihood of fraud risk. Such conclusions will, however, depend on whether the underlying positive ethical signal strongly suggests the presence of fraud risk.

This study examines gender sensitivity to ethical information by asking one group of experienced and inexperienced male and female auditors to review a client's set of audit working papers containing positive ethical information and to assess the likelihood of fraud risk after reviewing the client's audit working papers. A second group of experienced and inexperienced male and female auditors also reviewed an identical set of working papers without the positive ethical information included. Each group estimated the likelihood of fraud risk after reviewing the client's audit working papers. In this study audit managers and seniors are classified as experienced and inexperienced, respectively.

The results show that while auditors were differentially sensitive to the ethical information depending on their level of experience, gender had

no bearing in their sensitivity or fraud risk assessment. This suggests that given positive ethical signals, females may lose their superior sensitivity to ethical dilemmas in fraud risk assessment compared to males.

The article is organized as follows. The development of the research questions is provided in the next session. Then the research method and the results sections are presented. Finally, the discussion of results and conclusions are presented in the last section of the article.

DEVELOPMENT OF RESEARCH QUESTIONS

Ethical Sensitivity and Gender

Female and male auditors face a host of ethical challenges during the audit, from evaluating management's motivations and attitude to understanding the tone at the top in a client's organization. Both the Code of Professional Conduct (AICPA, 1997) and Statement of Auditing Standards No 82: *Consideration of Fraud in a Financial Statement Audit* (AICPA, 1997) also specify clearly the auditor's responsibilities during the audit by requiring auditors to be sensitive to ethical dilemma situations while conducting the audit or while evaluating audit evidence. Therefore, auditors, regardless of gender, are required to attend to ethical issues during the audit.

However, a segment of studies of gender effect in accounting and non-accounting suggests that women attend more to ethical dilemma issues than their male counterparts. For example, Bebeau and Brabeck (1987) found that female dental students were more sensitive than male dental students in reference to dental ethi-

cal dilemma issues. Khazanchi (1995) found that women recognize ethical and unethical issues more accurately than men by identifying more issues concerning disclosure, integrity, and conflict of interest in management information systems. Further, Ruegger and King (1992) found that women are more likely than men to identify ethical situations of great concern and deem them unacceptable. Jones and Gautschi (1988) also suggest that women are likely to demonstrate stronger feelings about ethical issues than men.

In accounting, Cohen *et al.* (1998) reported that in seven out of eight dilemma cases, female students were more sensitive than male students to decisions involving unethical behaviors. Shaub (1994) reported that undergraduate women students and professional women auditors have higher moral development and moral reasoning than their men counterparts. Similarly, Sweeney (1995) and Sweeney and Roberts (1997) found that women at large CPA firms significantly had higher moral development than men, while Bernardi and Arnold (1997) and Etherington and Schulting (1995) also reported that females had significantly higher P-scores than their male counterparts.

In related moral reasoning, ethical values, and ethical behavior studies, women have been found to possess higher moral development and moral reasoning than their male counterparts (Thoma, 1986; Shaub, 1994). Women have been found to rank terminal values of self-respect and inner harmony higher than men (Chusmir *et al.*, 1989) and rank business-related ethical values higher than men (Betz *et al.*, 1989). Women have been found to be less ethically

cynical than men (Ameen *et al.*, 1996), and behave more ethically than men (Sayre *et al.*, 1991).

One explanation for the differential gender sensitivity to ethical situations was the pattern of gender socialization in societies. The gender socialization of sex roles posits that the behavior of men and women in society may be related to the roles they learned; men are more aggressive and women are nurturing (Radtke, 2000; Cohen *et al.*, 1993). As a result, values held by men and women in the workplace, even in the same occupation, could differ with the male being highly aggressive compared to females. For example, the organizational setting in public accounting and individual goals and behaviors within this setting could make male auditors to be aggressive while the female auditors are more likely to exhibit more cooperative non-confrontational behavior (Cohen *et al.*, 1993). Ameen *et al.* (1996), for example, report that female students were found to be less tolerant than male students of unethical behavior. The gender socialization notion also posits that women are more unlikely to perform work that is likely to be harmful to others and are more likely to demonstrate stronger feelings regarding ethical issues than men.

However, with structural socialization patterns in auditing environment, it is doubtful whether previously observed superior female ethical sensitivity will persist when the ethical information is a positive signal. Structural socialization or work-related values in auditing has been defined as the tendency to adopt similar values and behaviors with increased tenure in public accounting profession (Ameen *et al.*, 1996; Mason and Mudrack, 1996). Since auditors

make decisions based on evidential matter, their sensitivity to ethical information or situation will be based on the relevance and diagnosticity of disclosed ethical information. For example, when auditors formulate their judgment about the adequacy or inadequacy of the allowance for bad debt during the audit or when they review audit working papers, they are expected to base their judgment on the relevance and diagnosticity of the evidence gathered during the audit. The appropriate decision rule in arriving at the judgment should be the same whether the auditor is a male or female. Hackenbrack (1992) noted that a piece of information or evidence is diagnostic only if it is important or relevant to a judgment. Therefore, auditors are likely to be sensitive to diagnostic and decision-relevant information, regardless of their gender.

Structural socialization in auditing should also cause female and male auditors to attend to positive ethical information during the audit in the same way. Like clan members, auditors commit to the professional values and traditions that guide accountants in the profession and only those who can conform to the operating conditions in the auditing profession will remain and prosper in the profession. Those who do not or cannot conform to the operating values in the profession will leave the profession. By implication, this suggests that the auditing profession only attracts and retains like-minded individuals who are favorably predisposed to keeping the operating values of the profession, regardless of gender. As a result, these individuals will be affected similarly in their reaction to positive ethical issues, independent

Table 1
Research Design

Audit Experience	Ethical Information		No Ethical Information	
	Male	Female	Male	Female
Managers	A	B	C	D
Seniors	E	F	G	H

of gender, holding experiential differences constant.

In general, audit seniors and managers are known to pay attention to the ethicality of a client when assessing fraud risk and when detecting and communicating fraudulent financial activities (Abdolmohammadi and Owghoso, 2000¹; Arnold and Ponemon, 1991; Ponemon, 1992; and Bernardi, 1994). However, depending on experience, some auditors could differentially attend to positive ethical information if it is disclosed versus undisclosed, independent of whether or not the information is predictive or diagnostic or the auditors are females or males. For example, Hackenbrack (1992) found evidence of dilution effects for audit seniors in a fraud risk assessment task and Shelton (1999) found evidence of dilution effects for audit seniors, but not for managers and partners in a going concern judgment task. In contrast, some auditors may be unaffected by the presence or absence of non-predictive or non-diagnostic information when making audit judg-

ment, regardless of gender (Shome and Ibrahim, 1997; Hoffman and Patton, 1997). Thus, auditors' sensitivity to positive ethical information situation when estimating a client's likelihood of fraud risk may or may not be different due to the auditor's experience or the ethicality of the client, independent of the auditor's gender (Abdolmohammadi and Owghoso, 2000). These assertions lead to the following research questions based upon the research design presented in Table 1.

- RQ1: Are *inexperienced* male and female auditors more differentially sensitive to the presence or absence of positive ethical information than *experienced* male and female auditors when assessing likelihood of fraud risk (or is $(E+F+G+H) > (A+B+C+D)$)?
- RQ2: Are *experienced* male and female auditors differentially sensitive to the presence of positive ethical information when estimating fraud risk (or, is $A = B$)?
- RQ3: Are *experienced* male and female auditors differentially sensitive to the absence of positive ethical information when assessing likelihood of fraud risk (or is $C = D$)?

¹ Abdolmohammadi and Owghoso (2000) asked seniors and managers to rate the likelihood of fraud risk when an ethical issue was provided versus when not provided. They reported that audit seniors were more sensitive than audit managers when the information was provided than when it was not provided.

- RQ4: Are *inexperienced* male and female auditors differentially sensitive to the presence of positive ethical information when assessing likelihood of fraud risk (or is $E = F$)?
- RQ5: Are *inexperienced* male and female auditors differentially sensitive to the absence of positive ethical information when assessing likelihood of fraud risk (or is $G = H$)?

METHOD

The effect of male versus female sensitivity to disclosed versus undisclosed positive ethical information when assessing a client's likelihood of fraud risk was tested in this experiment. The factors manipulated are Positive Ethical Information (Disclosed versus Undisclosed), Auditor Rank (Manager versus Senior) and Gender (Male or Female).

Subjects

Eighty female auditors (39 managers and 41 seniors) and eighty male auditors (41 managers and 39 seniors) from 42 offices of one Big 5 firm participated in this study. The average experience of the managers is 7.30 years and the average experience of the seniors is 3.80 years. The subjects were all industry specialists, half of whom specialized in healthcare (hospital) audits and the other half in banking audits. They were classified as experienced and inexperienced based on the rank of the auditor. The Big 5 audit firm that helped with the study supplied the rank information. Although seniors typically review audit staff working papers, their review would be limited to detailed routine audit, which is a structured task. Audit seniors are therefore not likely to be experienced in effectively solving complex tasks compared to experienced auditors. Sensitivity to ethical information is regarded in this study

as a complex task because the auditor would attend to various aspects of financial and non-financial information cues in arriving at a decision. Abdolmohammadi and Wright (1987) argued and provided evidence that complexity explains experience effect.

Each male and female subject was randomly assigned to two experimental conditions: "Disclosed Ethical information" or "Undisclosed Ethical information." The only difference between the two conditions was that positive ethical information was included in the background information accompanying the working papers presented to those in the "Disclosed Ethical condition"; however, this information was excluded from the case materials presented to the auditors in the "Undisclosed Ethical condition."

Case Material

Two audit working paper cases were presented to the manager and senior subjects for review. One was a banking case and the other was a healthcare case. The banking case involved loan receivables and loan loss reserves, and the healthcare task involved hospital patient service receivable, related accounts receivable, and the allowance for bad debt accounts. The case materials were developed and pilot tested with the assistance of one Big 5 accounting firm. This firm provided the researcher with full access to one specialist each in banking and healthcare audits. Each case included instructions and background information for completing the hospital or banking case. The background information included the positive ethical information, an overview of the company's accounts receivables or loans receivables, audit

Table 2
Summary of Demographic Variables

Audit Experience	N	Male	Female	Age (mean)	Total Experience (mean years)
Managers	80	39	41	32	7.30
Seniors	80	41	39	23	3.80

plans, and the firm's financial data (the balance sheet and income statement for two years). The cases also included working papers that the subjects reviewed. As noted earlier, two versions of the case material were presented to the subjects—one containing the positive ethical signal and the other without the positive ethical signal.

In preparing the cases, care was taken to mitigate an unexpected sensitivity to the ethical information. This was achieved by seeding a finite number of identical errors into the two versions of the case materials. Further, a statement was included in the background information indicating that the CPA firm had assessed top management of client company to be of high integrity with a good reputation in the community. It also stated that the CPA firm had placed some reliance on the companies' internal controls. Since audit managers do not typically review audit staff directly, they were told that the in-charge senior supervising the audit was out sick and was not available to review the working papers. With these controls, every subject faced the same number of errors and identical client environmental

constraints when reviewing the working papers in both information conditions. Many of the seeded errors were industry-specific errors. The industry specialist at the Big 5 firms also reviewed the developed cases and assessed the level that the seeded errors suggested fraudulent financial reporting. They indicated an insignificant level of fraud risk as a result of the seeded errors.

Finally, the cases included demographic materials about gender, age, rank, total audit experience and specialized industry experience. The demographic summary information is presented in Table 2. Each case was reviewed for relevance, appropriateness, and realism by a healthcare or banking industry specialists at the Big 5 firm. After minor revisions, the cases were judged to be realistic and the errors appropriate and relevant. To provide an additional check, each case was sent to an audit partner specializing in the respective industry at the Big 5 firm. The partners proposed minor changes that were communicated to the original industry specialists and incorporated into the case materials.²

² The case materials were pilot tested using six doctoral students, two college professors and two audit seniors in a Big 5 firm. Four of the doctoral students had experience in banking audits while another had experience in hospital audits. The audit seniors had experience in banking or healthcare audits. The two college professors had prior experience in bank audits. Based on the pilot testing, a minor change was made to the rating scales used in this study.

Procedure

The experiment was administered to all male and female audit seniors at on-site meetings that were specifically organized for this study. Audit managers, however, received the case material via the US postal mail because it was impossible to conduct on-site meetings. The instructions were the same for both the on-site and mail administration, except that a sentence in the cover letter for the mail administration requested the subjects to return the completed materials directly to the researcher. The time allowed to complete the cases was 75 minutes. There was no statistical difference in the performance of the on-site and mail administration groups in the self-reported amount of time spent in completing the cases.

For the mail administration, the firm provided the list of names and addresses for the healthcare subjects and the case materials were mailed directly to the subjects. The firm also provided contact persons for the banking subjects at the offices of the firm who distributed the materials and coordinated their return.

Each female and male senior and manager auditor was asked to do three things: (1) to assume the role of an in-charge senior and engagement manager, respectively, (2) to be familiar with each company's background information, and (3) to review individually two sets of audit working papers; one set was prepared by a staff auditor in the reviewer's industry and the other set by an audit staff outside the reviewer's industry. Finally, at the end of the review, each subject was asked to make a likelihood assessment of whether the root cause of errors they identified during the review was due to fraudulent ac-

tivities on the part of the client. For example, a healthcare (banking) senior or manager reviewed healthcare (banking) working papers and banking (healthcare) working papers. Each auditor then made the judgment of the likelihood of fraud risk at the end of each review on a percentage scale (0 to 100%) that was provided. The scale ranges from zero percent (very low likelihood) on the lower extreme to 100 percent (very high likelihood) on the upper extreme. This type of scale is commonly used in behavioral auditing research for simulating subjects' likelihood assessments. The subjects were also asked to indicate the time they started and completed the review task; this information would be used to examine whether there was a difference in the time spent between the two ethical conditions.

The subjects each made the likelihood of fraud risk judgments *only* at the end of each review task, after they had familiarized themselves with the client's background information and reviewed the staff auditor's working papers. This was intentional because it allowed the reviewer to be fully aware of the client's economic and internal control environment and to identify (or fail to identify) errors in the working papers before estimating the likelihood of fraud risk.

Dependent Variable

The dependent variable reported in this article is the likelihood of fraud risk assessed by experienced and inexperienced male and female seniors and managers who reviewed audit staff working papers. Each subject rated his or her likelihood that errors detected while reviewing the working papers were caused by the

Table 3
Auditors' Likelihood of Fraud Risk Assessment
Descriptive Statistics (Mean and Std. Dev.)

Audit Experience	Ethical Information		No Ethical Information	
	Male (N = 22)	Female (N = 18)	Male (N = 19)	Female (N = 21)
Managers	37.56 (7.97)	37.00 (8.34)	39.57 (9.31)	37.76 (10.70)
	Male (N = 22)	Female (N = 18)	Male (N = 17)	Female (N = 23)
Seniors	29.20 (9.75)	29.52 (7.63)	40.82 (13.43)	38.21 (13.43)

fraudulent activities of the client. The likelihood assessments were only made at the end of the review task on a scale that ranged from very low likelihood (0%) to very high likelihood (100%).

RESULTS

The descriptive results are presented in Table 3 and Figure 1. As shown, male and female audit managers estimated fraud risk to be 37.56 and 37.00 percent, respectively, when the positive ethical information was presented. When the positive ethical information was not presented male and female audit managers estimated fraud risk to be 39.57 and 37.76 percent, respectively. At the senior auditor level, male and female auditors estimated fraud risk to be 29.20 and 29.52 percent, respectively, when the ethical information was presented, and estimated fraud risk to be 40.82 and 38.21 percent, respectively, when the ethical information was not presented.

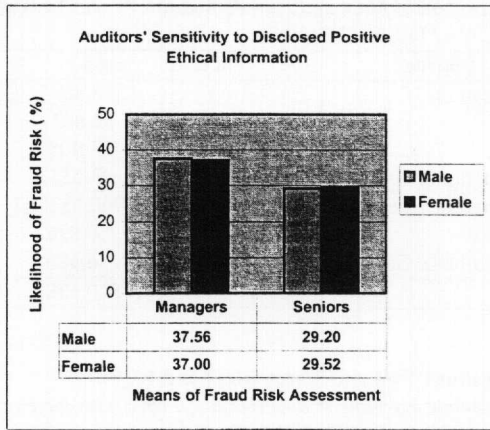
Analyses of Research Questions

Research question (RQ) 1 asks whether *inexperienced* female and male auditors are more

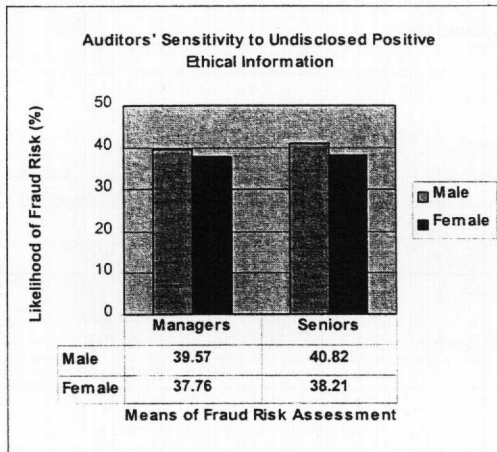
differentially sensitive to the presence or absence of positive ethical information than *experienced* male and female auditors when assessing fraud risk. RQ1 is examined by conducting an overall general level model (GLM) analysis that pools together the information presented in Table 1. RQ1 tests for a three-way interaction of gender, experience, and ethical information and main effects. The results of this analysis are presented in Table 4, panel A. An examination of Table 4, panel A shows a significant main effect of experience ($F = 5.05$; $p < .0261$) and ethical information ($F = 13.45$; $p < .0003$), but not gender ($F = 0.55$; $p < .4594$). The interaction of ethical information, gender, and experience was not significant ($F = .07$; $p < .7898$), nor was an interaction of gender and ethical information ($F = 0.44$; $p > .5077$) or gender and experience ($F = 0.00$; $p > .9870$). These results suggest that male and female auditors do not differ in their sensitivity to positive ethical information signal when assessing fraud risk, even when the auditors' experience is taken into account. However, there was significant interaction of ethical information

Figure I
Male-Female Auditors' Ethical Sensitivity
When Assessing Likelihood Fraud Risk

Panel A Male-Female Sensitivity to Disclosed Ethical Information



Panel B Male-Female Sensitivity to Undisclosed Ethical Information



and experience ($F = 7.76; p < .0060$) consistent with prior research. The means are presented in Table 3 and Figure I. The results seem to suggest that previously observed female superior ethical sensitivity in some stud-

ies might not persist with positive ethical information involving auditors as subjects.

RQ2 asks whether *experienced* male and female auditors are differentially sensitive to the presence of positive

Table 4
General Linear Model (GLM) Test Results

Research Question One (RQ1)

Panel A: Dependent Variable = Overall Likelihood of Fraud Risk for Experienced Versus Inexperienced Male and Female Auditors When Positive Ethical Information was Disclosed Versus Undisclosed

Source	d.f.	SS	MS	F	p-value
Ethical Information	1	1316.809	1316.809	13.45	0.0003
Gender	1	53.863	53.863	0.55	0.4594
Level	1	493.905	493.905	5.05	0.0261
Ethical Information x Gender	1	43.151	43.151	0.44	0.5077
Ethical Information x Level	1	760.083	760.083	7.76	0.0060
Gender x Level	1	0.026	0.026	0.00	0.9870
Ethical Information x Gender x Level	1	6.980	6.980	0.07	0.7898
Error	152	14879.538	97.892		

Research Questions Two and Three (RQ2 and RQ3)

Panel B: Dependent Variable = Likelihood of Fraud Risk for Experienced Male versus Female Managers When Positive Ethical Information was Disclosed Versus Undisclosed.

Source	d.f.	SS	MS	F	p-value
Ethical Information	1	38.197	38.197	0.46	0.5017
Gender	1	28.268	28.268	0.34	0.5632
Ethical Info x Gender	1	7.749	7.749	0.09	0.7619
Error	76	6441.671	83.830		

Research Questions Four and Five (RQ4 and RQ5)

Panel C: Dependent Variable = Likelihood of Fraud Risk for Inexperienced Male Versus Female Seniors When Positive Ethical Information was Disclosed Versus Undisclosed.

Source	d.f.	SS	MS	F	p-value
Ethical Information	1	2028.603	2028.603	18.12	0.0001
Gender	1	25.634	25.634	0.23	0.6337
Ethical Info x Gender	1	42.207	42.207	0.38	0.5410
Error	76	8508.449	111.953		

ethical information when estimating the likelihood of fraud risk while RQ3 focuses on their sensitivity when the positive ethical information is not presented. Similarly, RQ4 asks whether inexperienced female and male audit seniors react differently to the presence of positive ethical infor-

mation when estimating the likelihood of fraud risk, and RQ5 asks the same question if the ethical information is not presented. Unlike RQ1, RQ2 through RQ5 are individual questions that model the sensitivity of experienced and inexperienced female and male auditors separately so

that the dynamics of auditors' ethical sensitivity at each experience level could be better observed. This is essential because the dynamics of inexperienced female or male auditors and their sensitivity to positive ethical information may be different than that of experienced male and female auditors when the information is disclosed or undisclosed. The dynamics with each experience level may not be fully captured with RQ1 alone since the information used in analyzing RQ1 is pooled from all aspects of Table 1.

The results of the individual GLM analyses are presented in Table 4 panel B for managers and in panel C for audit seniors. For RQ2 and RQ3, no significant main effect of ethical information was observed at the manager level ($F = .46$; $p < .5017$), nor was there a main effect of gender ($F = .34$; $p > .5632$). These results suggest that experienced female and male audit managers are not different in how they react to the presence or absence of the positive ethical information when assessing a client's fraud risk. At the senior level, there was a significant main effect of positive ethical information ($F = 18.12$; $p < .0001$); however, this does not depend on gender ($F = .23$; $p > .6337$), as shown in panel C. This result suggests that while audit seniors reacted differently to the presence or absence of the positive ethical signal, their sensitivity was independent of their gender.

DISCUSSION AND CONCLUSIONS

The findings in this article indicate that practicing male and female auditors are not differentially sensitive to the presence or absence of positive

ethical information when assessing a client's likelihood of fraud risk. In some respect, the findings in this article are inconsistent with a segment of studies in psychology and business that reported superior female ethical sensitivity compared to their male counterparts. In another respect they are consistent with another segment of gender effect studies that report no significant difference in superior female sensitivity to ethical situations. Notwithstanding, the results seem to suggest a lack of differential gender sensitivity to positive ethical information at both the experienced and inexperienced auditor levels.

However, experienced and inexperienced auditors, in general, reacted differently to the disclosure or non-disclosure of the positive ethical information according to their level of experience. While experienced auditors (managers) were unaffected by the presence or absence of the positive ethical signal, inexperienced auditors were sensitive to it as they estimated fraud risk differently when the positive information was disclosed versus undisclosed.

The lack of gender effect on the sensitivity to positive ethical information seems to reinforce the notion of structural or work-related socialization in the accounting profession. This implies that auditors, regardless of their gender, have the tendency to adopt similar attitudes when engaged in audit activities. Thus, they seem to follow similar regiments based on evidential matter when conducting an audit, whether or not positive ethical information was disclosed about a client.

Research Implications

As more women are entering the accounting profession, it is comfort-

ing to find a lack of differential sensitivity to positive ethical signal due to gender when estimating fraud risk. However, these results may be due to the nature of the task and auditors' expertise. It will be interesting to examine whether non-accounting subjects would react similarly to the presence or absence of a positive ethical signal. Additionally, further research could examine whether auditors have certain unique characteristics due to their professional training that allow them to be sensitive in a certain manner and whether non-accounting subjects are likely to react similarly.

The results of the current study could also be due to a number of factors that may warrant future research investigation. First, ethical sensitivity training programs in one Big 5 firm may be different from another. The effect of such variation could be examined by using subjects from more than one firm. Second, subjects in this study were all industry specialists who were supposedly familiar with tasks in their industry. Research could investigate the effect of general versus specific audit experience on male-female auditors' sensitivity to fraud issues. Lastly, the positive ethical information in this study was not accompanied by fraudulent financial activities on the part of management.

Auditors' sensitivity to positive ethical information might be different if the underlying errors were also related to fraudulent financial activities. Further research could investigate the impact of positive ethical information and fraudulent financial activities on male-female auditors' or non-auditors' ethical sensitivity when assessing fraud risk.

Managerial Implications

This article also raises some managerial issues. If auditors cannot perceive or assess the positive, negative or neutral ethical issues during the audit, they will fail to incorporate the ethical information in making audit judgment. Similarly, if female auditors are more sensitive to ethical dilemma situations than male auditors when performing the audit, this disparity can lead to ineffective assessment of fraud risks by the male auditors during the audit. This could lead to the escalation of audit costs at the time when audit firms are finding ways to perform quality audits in a cost-effective manner. It also has implications for staff training because male auditors may need sensitivity training programs to help them pick up fraud risk signals when encountered.

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