The Effect of Junior Auditors' Trust in Superiors and Communication Modes on Auditors' Voice Decisions

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This study examines how staff auditors' trust in superiors and communication modes affect their voice decisions in distributed audit teams. In a 3×2 experiment involving 150 junior auditors from the U.S. and China, trust (higher-level vs. lower-level) and communication modes (face-to-face, traditional remote communication, and live video conference) were manipulated. Results show that greater trust in superiors increases auditors' willingness to speak up. Furthermore, junior auditors exhibit greater willingness to communicate upward in face-to-face condition than in traditional remote communication. While live video conferencing results in the lowest voice. Findings offer practical insights in remote and global audit environments.

Keywords: technology application in auditing, trust, geographic distance, communication modes, upward communication

INTRODUCTION

While the Public Company Accounting Oversight Board (PCAOB) AS1201 requires engagement team members to raise significant accounting and auditing issues to superiors' attention (Public Company Accounting Oversight Board (PCAOB) 2010), auditors do not always speak up, which may jeopardize audit and financial reporting quality (Clor-Proell et al., 2023; Griffith et al., 2020; Kadous et al., 2019; Nelson et al., 2016).

Previous research identified various reasons to explain why auditors do not speak up, such as potential penalization by evaluators (Brazel et al., 2016), fear of negative supervisor reactions (Nelson & Proell, 2018), viewing issues as ambiguous (Kadous et al., 2019), working in an audit firm with a blame-oriented culture (Gold et al., 2014), or simply following peer advice confirming their initial stance (Griffith et al., 2020). However, few studies have examined factors potentially improving upward communication among auditors.

Our study addresses this literature gap by exploring these factors through the lenses of trust theory and construal-level theory, as well as Griffith et al. (2020) call for trust research in audit teams. Among our

sample of 150 junior-level auditors from the U.S. and China, we found a significant interaction between three manipulated communication modes and two manipulated junior auditor trust levels in superiors when considering upward communication at a geographic distance**.** Junior auditors' trust in their superiors was positively related to upward communication but varied by communication mode: face-to-face communication (FTF) was found to be the most favorable mode for raising audit issues, followed by traditional remote communication (TRC), then live video conference (LVC). We found evidence that team size, junior auditor's understanding of the audit issue, and gender influence auditors' upward communication.

Our research contributes to both accounting and management literature by providing evidence on relationships between trust and communication and has implications for practice and standard setters by revealing auditor preferences for face-to-face communication, alongside the diverse adoption tendencies of emerging communication technologies across distinct geographical regions.

THEORY AND HYPOTHESES DEVELOPMENT

Voice and Upward Communication in Auditing Context

Staff auditors' extensive interaction with clients and proximity to operational areas leads to information asymmetry (Parker & Kyj, 2006; Vera-Munoz et al., 2006). Substantial information often indicates potential concerns, requiring decisions about which issue to share. Voice, or informal and prosocial communication aimed at improving the work unit (Klaas et al., 2012), plays a vital workplace role. However, junior auditors often hesitate to communicate upward for fear of challenging audit effectiveness (Nelson & Proell, 2018), concerns about negative outcomes (Brazel, 2019), a blame-oriented firm culture (Gold et al., 2014), or reluctance to report ambiguous issues (Kadous et al., 2019). While research has identified the influence of peer advice and supervisor behavior (Griffith et al., 2020), especially the leader's emphasis on team success (Clor-Proell et al., 2023; Nelson et al., 2016), little research has considered how trust in audit teams encourages voice (Griffith et al., 2020).

Trust Theory Applied in Auditing Teams

Trust is "the willingness of one party to be vulnerable to the actions of another party, based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995). It fosters confidence in exchanges and reduces risk in mutual interactions (Jones & George, 1998). Trust is highly relevant in interpersonal relationships (Nooteboom, 2002), reduces agency and transaction costs (Dyer & Chu, 2003), supports cooperation (Balliet & Van Lange, 2013), helps decision-making in situations where information is scarce (Luhmann, 2000), and facilitates communication, knowledge transfer, innovation, and organizational performance (Beccerra & Gupta, 1999).

Management accounting research has examined subordinate trust in superiors' performance evaluations (Hartman & Slapnicar, 2009; Lau & Tan, 2006) and in inter-firm relationships and strategic alliance partners (Coletti et al., 2005; Dekker, 2004; Langfield-Smith, 2008; Tomkins, 2001). Auditing research has investigated auditor-client relationship trust (Aschauer et al., 2017; Rennie et al., 2010), but little research considers audit teams internally.

While voice entails risk (Detert & Burris, 2007), trust relates to risk-taking behaviors, such as delegation, full disclosure, and rejecting safeguards (Colquitt et al., 2007). While Ng and Feldman (2013) found that organizational trust predicts employee voice, Milliken et al. (2003) found that perceptions of less-trustworthy employers cause reluctance and risk-aversion to voice.

Based on the above literature review, we hypothesize:

H1*: Junior auditors' trust in their auditing team superiors is positively related to their willingness to communicate upward about auditing issues.*

Construal-Level Theory and Communication in Groups

Construal-level theory (CLT) argues that increased psychological distance from referents results in a more abstract level of understanding, while proximal referents result in concrete understandings (Trope et al., 2007; Trope & Liberman, 2010). Psychological distance encompasses temporal, spatial, social, and hypothetical dimensions (Trope et al., 2007). CLT has been applied to auditing such that increased psychological distance predicts lower reliance on outside experts (Wilson et al., 2013), who also noted that a group's communication technology choices correlate with distance and construal level. Technology adaptation research indicates such decisions are associated with fitting group needs, securing cooperation (Thomas & Bostrom, 2008), and developing shared expectations (Majchrzak et al., 2000). Similarly, Amit, et al. (2013) found relationships between psychological distance and communication medium. Finally, reduced psychological distance has been associated with increased trust (Benedicktus, 2008).

Communication medium relates communication media to social cues. Face-to-face (FTF) communication offers richer social cues and in turn increases predictability and mutual understanding (Agoglia et al., 2010; Bennett & Hatfield, 2018) than does traditional remote communication (TRC), such as emails/texts. CLT suggests that richer communication modes, such as a visual channel and a *concrete representation* (Amit et al., 2013), can provide richer social cues and increase psychological proximity, similar to the role of trust. Recent advances in live video conference (LVC) communication, such as Zoom and related software, offer a compromise by providing many visual/social cues beyond TRC. However, technological limitations prevent LVC from capturing the full range of social cues present in FTF.

Based on CLT, communication, and trust, we hypothesize that increased communication medium richness will increase a sense of proximity, reduce ambiguity and psychological distance, and therefore increase trust and upward communication (see FIGURE 1 for the illustration of our model). Thus, we propose:

H2a: *Staff auditors are more willing to communicate with their superiors face-to-face than in traditional remote communication (email, phone, or fax) conditions.*

H2b: *Staff auditors are more willing to communicate with their superiors under live video conference conditions than traditional remote communication conditions.*

RESEARCH DESIGN

Participants and Procedures

We conducted the online experiment using Qualtrics in the U.S. and WJX.com in mainland China[1]. The study was reviewed and approved by the Institutional Review Board (IRB) at the University of Scranton. In China, the survey was distributed via the website wjx.cn and made available in both English and Chinese.

The U.S. participants were recruited from junior auditors at regional CPA firms, staff-level internal auditors from companies, and subjects with auditing experience enrolled in Master of Accountancy (MAcc) programs. The U.S. pool comprised approximately 1,000 possible participants. Data from China were mainly collected from one of the Big 4 CPA firms in China, consisting of 677 professional accountants. Together, 301 responses were received (17.9% =301/1677), with 150 usable (8.9% = 150/1677).

Experiment Design

Our study was a 3 × 2 between-within subjects' design (see Figure 2 for the detailed instrument flow), presenting three auditing issues with three different communication modes (FTF vs. TRC vs. LVC) within the audit team and manipulating two levels (high vs. low) of supervisor trustworthiness.

Three auditing issues regarding fraud, revenue cycle, and inventory (see APPENDIX 2) were developed from auditing literature on voice decisions (Clor-Proell et al., 2023; Griffith et al., 2020; Nelson et al., 2016) and trust in management (Marcy et al., 2020). Participants read about a behind-schedule audit, which is

assessed as low risk, making the audit partner and manager concerned about audit efficiency and describing auditors as “busy and stressed out" (Nelson & Proell, 2018).

Participants, as junior auditors, need to make a decision on how likely they might raise to a senior’s attention for the audit issues. Typically, for each issue, participants were asked: “If you are the staff auditor in this circumstance, how likely are you to raise the issue to the described senior at the condition of [*the communication modes are manipulated]*.” Subjects then read the manipulation question assessing the superior's *trustworthiness* and the case's realism and understandability, all employing a 0-100 sliding scale. Subjects evaluated the survey as realistic (mean = 72.7, significantly higher than the midpoint of 50 at $p < 0.001$) and understandable (mean = 75.0, $p < 0.001$).

Next, the participants were asked demographic questions addressing gender, professional and educational background, and percentage of work conducted remotely.

Variables

The dependent variable was the likelihood of typical staff auditors raising an audit issue to a senior across different communication modes, each on a sliding 0-100 scale anchored “0 = Not at all” to “100 = Completely.”

To assess junior auditors' trust level in superiors, we measured trustworthiness on a 0-100 scale anchored "0 = Not at all" to "100 = Completely." The description of the superiors' trustworthiness is based on ability, benevolence, and integrity (Mayer et al., 1995) and incorporates characteristics such as openness, caring, fairness, promise fulfillment, and team engagement.

We manipulated three communication modes: face-to-face communication (FTF); traditional remote communication (TRC), which includes email, phone, and fax; and live video conference communication (LVC), which contains live conference apps, such as Zoom and others that provide video telephony, chat, and collaboration tools.

Finally, control variables were employed to test our hypotheses and included much of the survey’s demographic data, the extent to which they found the scenarios realistic or understandable, and whether they were from the US or China subsample. These variables are listed as appropriate in the results tables.

RESULTS AND DISCUSSION

Manipulation Checks and Demographics

A manipulation check question assessed the effectiveness of trustworthiness manipulation. In the lower-level trust scenario, 27 responses measured trustworthiness equal to or higher than 80 and were marked with a value of “1,” indicating a failed manipulation check for our manipulation dummy variable. In the higher-level trust scenario, three responses measured trustworthiness lower than 50 and were similarly marked with a value of “1”. Following a similar method in prior research (Hermanson et al., 2017), we included the dummy as a control variable to conduct all tests (see TABLE 1 and TABLE 2).

Demographic information for the 150 participants is shown in Table 3. The participants were 58.0% male, 38.7% female, and 3.3% preferring not to disclose their gender. Ninety-seven percent of participants had less than three years of auditing experience. Most participants held entry-level titles (28.7% associate auditor, 56.0% staff auditor). Respondents varied for the size of their CPA firms; more than 50% of the participants had attained professional certificates or were CPA candidates, 48% had earned only an undergraduate degree, 18% achieved an MBA degree, and 24% had made an M.S. accounting degree.

Furthermore, most participants (74.6 percent) worked remotely for at least 10% of the time each month, with 53.3% working at least 26% of the time remotely.

Effect of Trust (Test of H1)

We employed multiple regression methods to test whether trust in superiors predicted willingness to communicate upwardly for each audit issue. We added all potential control variables and utilized the enter method in the regression to identify and retain any variables with significant effects. Then, we documented the results in Table 4.

In all three regression models (fraud b = 0.27, p < 0.01; accounts receivable b = 0.48, p < 0.0001; and inventory b = 0.45, p < 0.0001), TRUSTWORTHY was positively associated with the dependent variable of upward communication. H1 was supported.

Effect of Communication Modes (Test of H2)

We employed a one-way analysis of variance (ANOVA) to test whether communication modes (FTF, TRC, and LVC) predicted willingness to communicate upwardly for the three audit issues. The descriptive statistics presented in Table 5, panel A revealed that for each audit issue, the mean value of FTF (Fraud = 58.97) was higher than the mean value of TRC (47.45), which was in turn higher than that of LVC (41.96).

Table 5, panel B showed significant differences among the three communication modes across the three issues. For Fraud, F = 16.18 (p < 0.0001); for Accounts Receivable, F = 33.67 (p < 0.0001); and for Inventory, F = 18.56 (p < 0.0001). We further investigated all six pairwise comparisons across communication modes (see Table 5, panel C). The mean differences for each issue showed higher upward communication for FTF vs. TRC (Fraud, p < 0.001; Accounts Receivable and Inventory, p < 0.001). All results support Hypothesis 2a.

However, there were no significant differences for auditing fraud or accounts receivable issues regarding the likelihood of upward communication between TRC and LVC (see TABLE 5, panel C). For the auditing issue of inventory, our result was borderline significant but in the opposite direction of the hypothesis (p = 0.094); thus, Hypothesis 2b was not supported.

Effect of Both Trust and Communication Modes – ANCOVA

We conducted a two-way ANOVA to investigate the trust level of subordinate auditors in their superiors (1= higher level vs. 0 = lower level) and the communication modes used in the audit team (1 = face-to-face, 2 = traditional remote communication, 3 = live video conference), along with all categorial covariances mentioned in the methodology, to test the joint effect in auditors' voice decisions at geographic distance. We tested the descriptive statistics for each audit issue's primary dependent variable, the likelihood of upward communication, and documented the result in TABLE 6, Panel A.

We then performed exploratory analyses using the primary dependent variable, upward communication, with trust level and communication modes as independent variables tested in each audit issue. Then, we added each potential control variable individually as an additional independent variable to identify any variables with significant effects. We identified that gender, team size, and understandability significantly affect one or two audit issues. We then added all three variables with nationality as the control variable and ran the ANCOVA model.

TABLE 6, Panel B presents no significant main effect for trust level for fraud issue (F = 1.043, p = 0.308), accounts receivable issue (F = 2.074, p = 0.151), or inventory issue (F = 0.554, p = 0.457), however, there is a significant main effect for communication modes under all three audit issues at p <0.0001 in this model. FTF leads to the highest upward voice decision, followed by TRC, with LVC being least likely to result in upward communication, regardless of trust level. No significant trust by communication mode interaction was found for the auditing issues of Fraud or Inventory. However, for the Accounts Receivable issue, there was a significant trust level by communication mode interaction (F = 7.269, p = 0.001), indicating when staff auditors trust their superiors more, they are more willing to raise the voice in FTF communication; however, when trust in superiors is lower, auditors are more likely to communicate upwards in TRC and LVC communication modes, with the TRC mode more favorable than the LVC mode. Team size significantly affects upward communication for the issues of Fraud (F = 8.978, p = 0.003) and accounts receivable (F = 8.202, p = 0.004). Understandability is marginally significant in upward communication for audit issues for the accounts receivable (F = 3.746, p = 0.054) and significant for the inventory issue (F =10.422, p = 0.001), which indicates if the staff auditor does not quite understand the auditing question itself, the likelihood of upward communication to the supervisor is lower. It is possible that junior auditors view some issues as ambiguous and thus are less comfortable reporting them.

Next, independent t-tests investigated potential covariate effects in this model (see TABLE 6, Panel C).

For the fraud issue, participants from a small team size (less than six members) had a higher mean value (53.79) than those from a large team (44.87), with $p = 0.001$. A similar result was obtained from the t-tests on the accounts receivable issue. Participants from small teams exhibited a higher mean value (57.92) than large teams regarding the accounts receivable issue (52.58), with $p = 0.030$. This finding may inspire future research to investigate the relationship of team size, trust, and upward communication.

For the inventory issue, male participants had a higher mean value (57.23) than females (52.30), with $p = 0.031$, suggesting that males are more inclined towards upward communication (see Table 6, Panel D).

Estimated Marginal Means and Graphs

FIGURES 3, 4, and 5 depict the interaction between communication mode and trust level in upward decision-making for each audit issue. Across all graphs, upward communication willingness is higher in the face-to-face (FTF) communication mode than in the traditional remote communication (TRC). In contrast, the TRC mode elicits more upward communication willingness than the live video conference (LVC) mode. Non-FTF conditions may be invariant to the trust level, whereas FTF is highly sensitive to the trust level. In this case, the nature of LVC and TRC dominates the trust manipulation, but FTF is what we use when we trust because it is richer in cues.

In summary, the findings from the graphs indicate that the FTF communication mode is the most effective when trust has been established between auditors, as it fosters a greater desire to engage in upward communication. Conversely, the LVC mode is the least effective in eliciting upward communication, whereas the TRC mode lies between these two. Further research can develop deeper into the LVC communication modes in the auditing context.

Limitations and Future Research

Several study limitations affect the interpretation of the results and provide opportunities for future research. The study used an experimental (and survey) design based on case study materials, which include some standard limitations of this type of research, such as external validity, representativeness of the participant group, potential for demand effects, and smaller sample size. The cases involved were limited to only two scenarios, and there was no opportunity to study group decision-making, which is common in practice. Although the survey distributed to one Big 4 CPA firm in China was provided in both English and Chinese, a couple of participants omitted one or two demographic questions.

Our results provide many avenues for future research. The unsupported hypothesis and more granular considerations may suggest (1) further contextual investigation of organizational and individual factors that might correlate with adoption of new communication technologies and upward communication; (2) further investigation of the impact of LVC application protocols, such as conference recording, people beyond web cameras, number of participants, and other confidential factors; and (3) expanded investigation into disparities in the adoption of new communication technologies among auditing context linked to national origin and cultural factors.

CONCLUSION

Our study investigated the effects of trust junior auditors have in their superiors and communication modes at a geographic distance on their upward communication decisions. In support of our hypotheses, we revealed a positive relationship between junior auditors' trust levels and their voice decisions. Face-to-face communication was the most favorable mode for raising audit issues. Results did not support the hypothesis that staff auditors are more willing to communicate upward in LVC than in TRC mode. This could be explained by many factors, such as differing levels of information and communication technology adoption (Teeter et al., 2020), technology adoption varying by local team/firm consensus (Dowling, 2009), and concerns regarding confidentiality in the LVC environment or simply placing less trust in newer, less familiar technologies.

This study contributes to understanding how trust influences communication dynamics in remote work settings and to the literature on remote work, teamwork, and organizational communication, highlighting

the importance of trust-building strategies in distributed auditing teams. The findings emphasize the importance of trust in facilitating upward communication within distributed auditing teams and that desired auditor behaviors may vary as a function of communication mode. Organizations should foster trust-building mechanisms such as transparent communication, supportive leadership, and collaborative work environments to encourage junior auditors' engagement in upward communication. This can enhance the flow of information, knowledge sharing, and decision-making processes, ultimately improving the quality and effectiveness of remote auditing.

A comparative analysis of three communication modes (face-to-face, traditional remote, and live video conference) offers insights into the varying preferences and effectiveness of different modes in remote auditing. Our findings suggest factors like media richness, familiarity, and perhaps confidentiality are important in choosing a communication medium that facilitates upward communication.

From a policy and practice perspective, with the increasing need for auditors' adoption of more technologies to enable "field work" from a home office (Dohrer & Mayes, 2020), and with remote working likely to continue even as COVID-19's impact subsides (Deloitte, 2020), communication technology plays an important role in remote and global audits. The results of this study may be of interest to the standard setters as this research reveals that new communication technology is accepted and adopted at significantly different levels in different countries, which regulators should consider when making policies for remote and global group audit quality. This finding calls for organizations and industry stakeholders to invest in technology adoption and innovation initiatives. By promoting the use of modern communication platforms and providing training resources so that important auditor behaviors are positively impacted, auditing firms can enhance their remote auditing capabilities and remain at the forefront of technological advancement.

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ENDNOTES

1. In this paper, nationality (the U.S. vs. China) is used as a sample characteristic and serves as a control variable in data analysis (see details in the Results and Discussion section).
2. A total of 150 participants' responses are analyzed here. However, the variance in the number is due to some participants not providing answers to each of the questions. For example, one participant did not respond to the upward communication possibility (0-100 scale) for the FTF condition or the LVC mode, but responded under the TRC mode. Consequently, the result is that n is 149 in the FTF mode for questions related to inventory audit.

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APPENDIX 1

TABLE 1
FULLY COMPLETED AND PASSED ALL MANIPULATION CHECKS (N=150)

	FTF *Face-to-face*	**TRC** *Traditional Remote Communication (Email, telephone, or fax)*	**LVC** *Live Video Conference (with video telephony, i.e., Zoom, Microsoft Teams)*
Higher-Level Trust Supervisor's trustworthiness Openness, kindness, caring, highly engaged in the team, etc.	82 participants	82 participants	82 participants
Lower-Level Trust Supervisor's trustworthiness Inconsistent, not transparent, low engagement in the team, etc.	68 participants	68 participants	68 participants

TABLE 2
DESCRIPTIVE STATISTICS FOR TRUSTWORTHINESS

Predictor Variable: Trustworthiness In Superiors	N	Minimum	Maximum	Mean	Standard Deviation
Higher-Level Trust Supervisor's trustworthiness (Openness, kindness, caring, highly engaged in the team, etc.)	82	51	100	81.72	10.47
Lower-Level Trust (Inconsistent, not transparent, low engagement in the team, etc.)	68	20	77	54.19	12.99

Variable Definitions: Trustworthiness in superiors represents junior auditors' trust level in superiors measured on a 0-100 scale (0 = no trust at all, 50 = neither trust nor distrust/neutral, and 100 = complete trust).

TABLE 3
DEMOGRAPHIC INFORMATION (N=150)

Years of Auditing Work	Less than six months	43	28.7%
	Six months to 1 year	43	28.7%
	1 to 2 years	59	39.3%
	3 to 5 years	5	3.3%
Gender	Female	58	38.7%
	Male	87	58.0%
	Prefer not to disclose	5	3.3%
Certificates	CGMA	1	0.7%
	CMA	5	3.3%
	CPA	29	19.3%
	CPA candidate (passed exams but not licensed yet)	7	4.7%
	CFA	1	0.7%
	Other certificates	7	4.7%
	Holding more than one certificates	34	22.6%
	Don't hold any certificates	66	44.0%
Earned Degree	Undergraduate	72	48.0%
	MBA	27	18.0%
	Master of Science (MS)	36	24.0%
	Master of Science and MBA	3	2.0%
	Other master's degrees: Finance, Economics, etc.	12	8.0%
Total number of Employees in the CPA firm you are working for.	Fewer than 20	17	11.3%
	20-49	13	8.7%
	50-99	21	14.0%
	100-499	49	32.7%
	500 or more	44	29.3%

	Not working in a CPA firm	6	4%
Auditing team size	Less than three teammates	22	14.7%
	3-5 team members	59	39.3%
	6-10 team members	23	15.3%
	More than 10 team members	46	30.7%
Current Occupation	Students in the Master of Accounting program	15	10.05
	Internship	4	2.7%
	Staff auditor	84	56.0%
	Associate auditor	43	28.7%
	Other: accountant, credit risk reviewer	4	2.7%
How often do you work remotely each month?	Less than 10%	38	25.3%
	10-25%	32	21.3%
	26-50%	50	33.3%
	51-75%	17	11.3%
	More than 75 %	13	8.7%

TABLE 4
TEST OF H1

Summary Of Multiple Regression Result – Upward Communication In Issues

		Dep. Var. = Upward communication in auditing issues					
		Fraud		**Accounts Receivable**		**Inventory**	
Variable	***Pred.Sign***	***Coef.***	**p-value**	***Coef.***	**p-value**	***Coef.***	**p-value**
Trustworthiness	+	0.27	**	0.48	***	0.45	***
Nationality	(-)	-12.20	**	-5.65	**	-3.60	
Years of Audit	+	3.20	***	2.69	***	1.60	**
Gender		-3.72		-0.32		4.27	**
Certificate		-4.61		-4.12		1.29	
Education		-1.51		-1.32	**	0.01	
Firm Size		0.97		1.30	***	1.25	**
Team Size	+	11.29	***	3.63	*	-1.25	
Occupations	+	2.17	***	1.65	***	-0.08	
Frequency of Remote work		1.07		0.08		-2.07	**
Realistic	(-)	-0.22	*	-0.09		-0.08	
Understandable	+	-0.06		0.20	***	0.22	***
Constant		39.82	***	13.96	**	19.55	***
n		150		150		150	
Adjusted R^2		0.18		0.46		0.35	

*** $p < 0.001$
** $p < 0.01$
* $p < 0.05$

TABLE 5
TEST OF H2

Panel A: Descriptive Statistics By Modes (FTF VS. TRC VS. LVC)

	Dep. Var. = Upward communication in auditing issue		
	Fraud	**Accounts Receivable**	**Inventory**
Comm. Mode	**Mean (S.D.) n[2]**	**Mean (S.D.) n**	**Mean (S.D.) n**
FTF	58.97 (27.15) 148	68.38 (21.38) 146	63.81 (22.36) 149
TRC	47.45 (25.03) 144	50.94 (25.23) 148	53.80 (20.55) 145
LVC	41.96 (25.69) 140	46.53 (25.02) 140	48.12 (23.95) 143

Panel B: One-Way ANOVA – Communication Modes

	Dep. Var. = Upward communication in auditing issue					
	Fraud		**Accounts Receivable**		**Inventory**	
	F	**p-value**	**F**	**p-value**	**F**	**p-value**
Communication Modes	16.18	****	33.67	****	18.56	****

**** $p < 0.0001$

Panel C: Pairwise Comparison Summary (Both China and The U.S. Data)

		Dep. Var. = Upward communication in auditing issue					
Indep. Var.		**Fraud**		**Accounts Receivable**		**Inventory**	
Comm. Modes		**Mean Diff.**	**p-value**	**Mean Diff.**	**p-value**	**Mean Diff.**	**p-value**
FTF	**TRC**	11.52	***	17.44	***	10.01	***
	LVC	17.02	***	21.86	***	15.69	***
TRC	**FTF**	-11.52	***	-17.44	***	-10.01	***
	LVC	5.49		4.41		5.68	
LVC	**FTF**	-17.02	***	-21.86	***	-15.69	***
	TRC	-5.49		-4.41		5.68	

*** $p < 0.001$
** $p < 0.01$

TABLE 6
JOINT EFFECTS
UPWARD COMMUNICATION RESULTS

Panel A: Descriptive Statistics

	Lower-level Trust			Higher-level Trust		
	FTF	**TRC**	**LVC**	**FTF**	**TRC**	**LVC**
Dependent Variables in Audit Issues	**Mean (S.D.) n**	**Mean (S.D.) n**	**Mean (S.D.) n**	**Mean (S.D.) n**	**Mean (S.D.) n**	**Mean (S.D.) n**
Fraud	57.34 (23.24) 68	50.28 (22.30) 65	45.34 (23.67) 65	60.36 (30.16) 80	45.13 (26.97) 79	39.08 (27.13) 75
Accounts Receivable	59.57 (19.85) 67	51.54 (21.80) 67	47.80 (22.68) 65	75.86 (19.82) 79	50.44 (27.88) 81	45.43 (26.99) 75
Inventory	58.72 (19.84) 68	51.51 (19.94) 65	48.14 (22.41) 66	68.09 (23.56) 81	55.66 (29.08) 80	48.10 (25.35) 77

Panel B: ANCOVA Results

	Dep. Var. = Upward communication in auditing issue					
	Fraud		**Accounts Receivable**		**Inventory**	
	F-stat	**p-value**	**F-stat**	**p-value**	**F-stat**	**p-value**
Predictor Variables						
Trust	1.043		2.074		0.554	
Communication Mode	**15.585**	***	**32.579**	***	**18.716**	***
Trust X Communication Mode	1.457		**7.269**	***	1.703	
Covariates						
Nationality	0.428		0.270		2.656	
Gender	2.622		0.911		**4.692**	*
Team Size	**8.978**	**	**8.202**	**	0.355	
Understandability	1.535		3.746		10.422	***

Constant	**6.053**	***	**11.305**	***	**7.214**	***

*** p <0.001
** p <0.01
* p < 0.05

Covariates:
Nationality (China = 1, the U.S.=0)
Gender (female=1, else = 0)
Total professional auditing experience measured in years)
Professional certifications (CPA, CIA, CFA, CFE, CMA, CGMA, and others) (dummy variables)
Education status (dummy variables for different levels)
Firm size (categories based on the number of employees)
Team size (categories based on the number of team members)
Job titles (categorical variable for different titles)
Percentage of remote work monthly (0- 100 scale)
Perception of realistic cases (0-100 scale)
Perception of the understandable case (0-100 scale)

Panel C: Independent T-test for Team Size

Description	Team size less than 6 Mean (S.D.) n.	Others Mean (S.D.) n.	Difference Mean	d.f.	t-stat	p-value
Fraud	53.79 (27.25) 77	44.87 (25.71) 67	8.92	143	3.484	**0.001**
Account Receivable	57.92 (25.41) 76	52.58 (25.74) 69	5.34	144	2.174	**0.03**

Panel D: Independent t-test for Gender

Description	Female Mean (S.D.) n.	Male & prefer not disclosed. Mean (S.D.) n.	Difference Mean	d.f.	t-stat	p-value
Inventory	52.30 (24.67) 55	57.23 (22.10) 90	-4.93	144	-2.166	**0.03**

FIGURE 1
MODEL OF TRUST, COMMUNICATION MODES AND VOICE DECISIONS

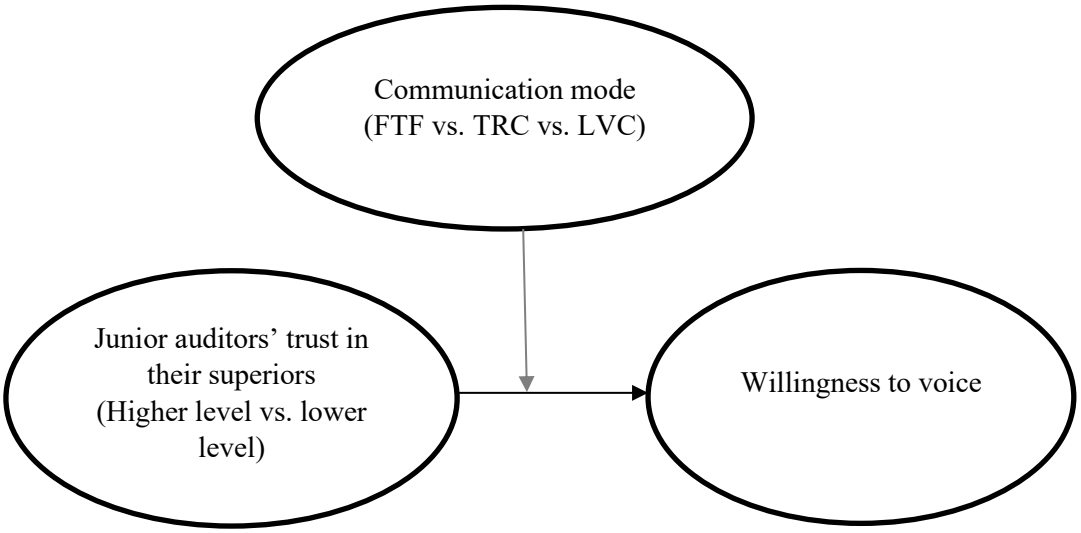


FIGURE 2
EXPERIMENT FLOW

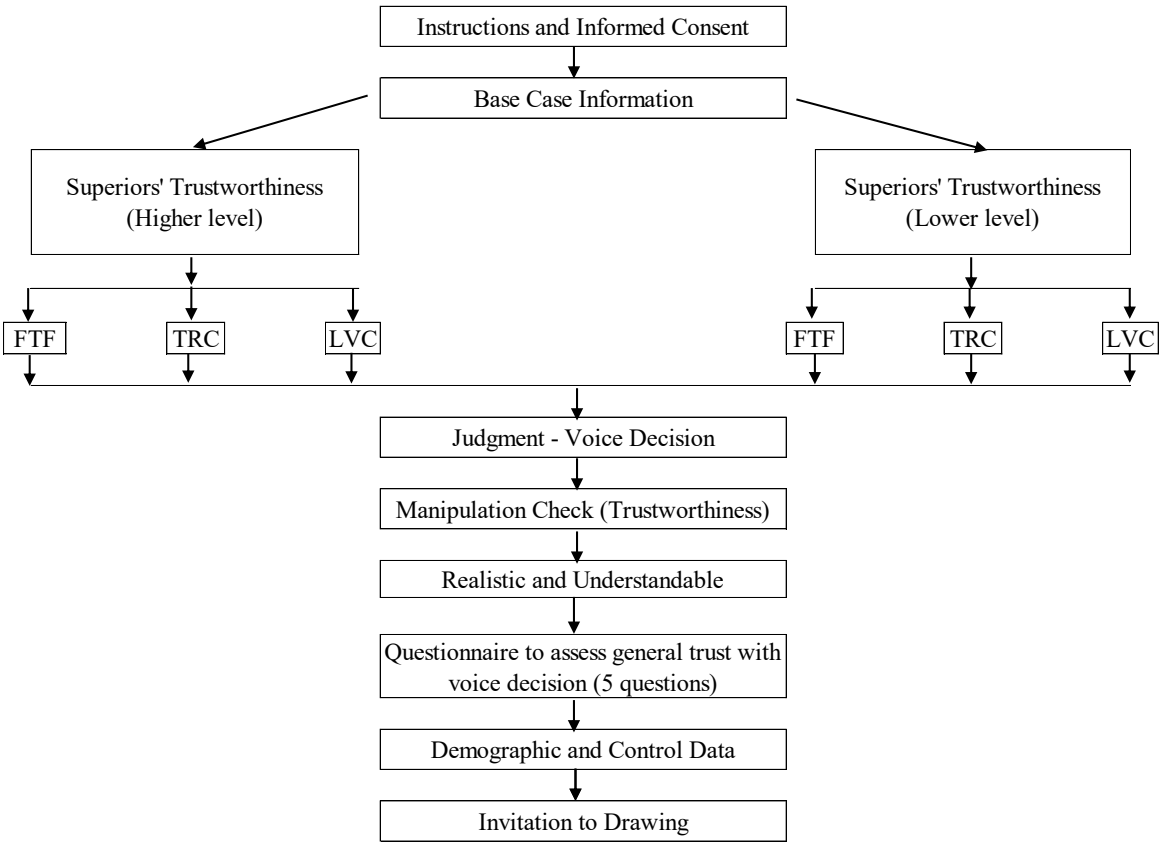
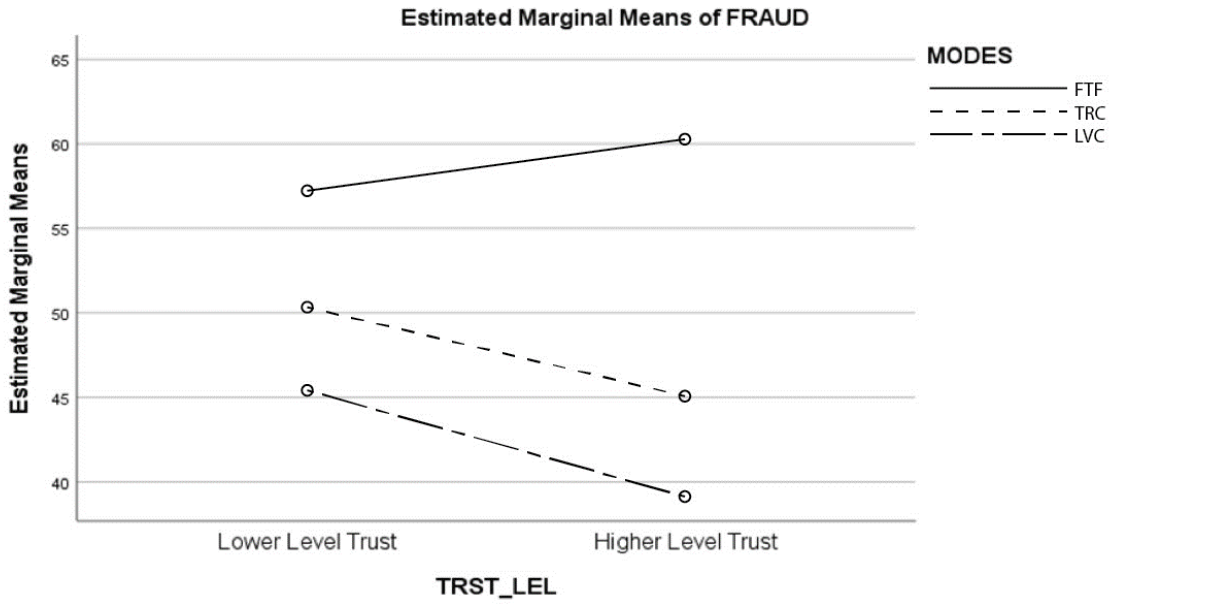
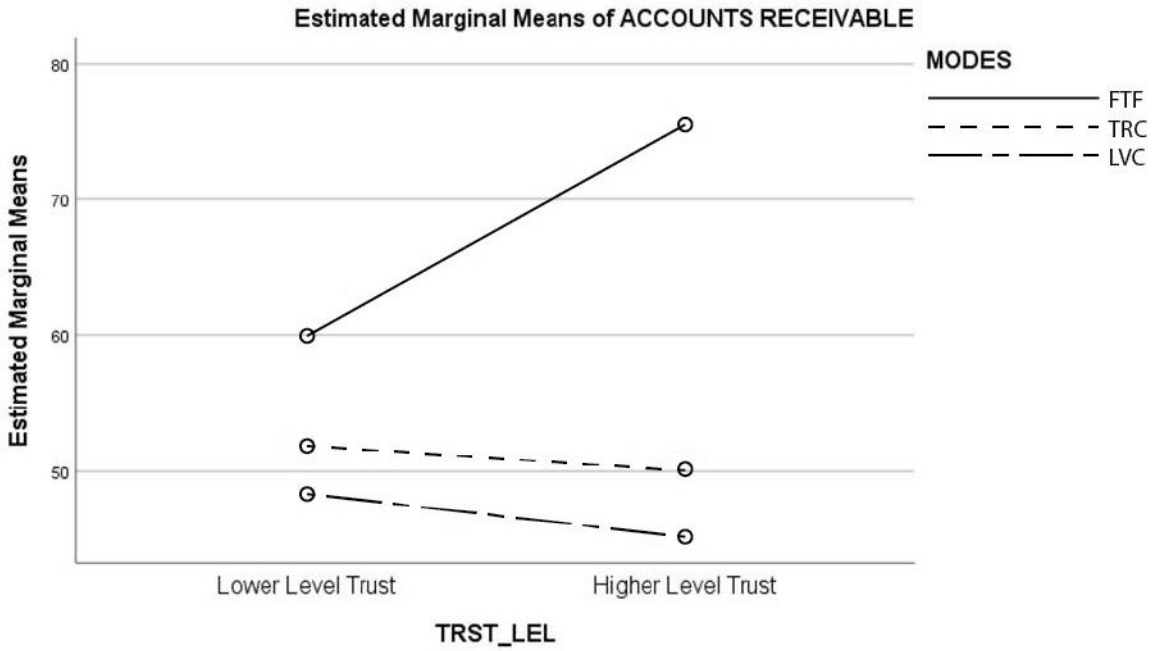


FIGURE 3
TRUST X COMMUNICATION MODE INTERACTION FOR VOICE DECISION– FRAUD ISSUE



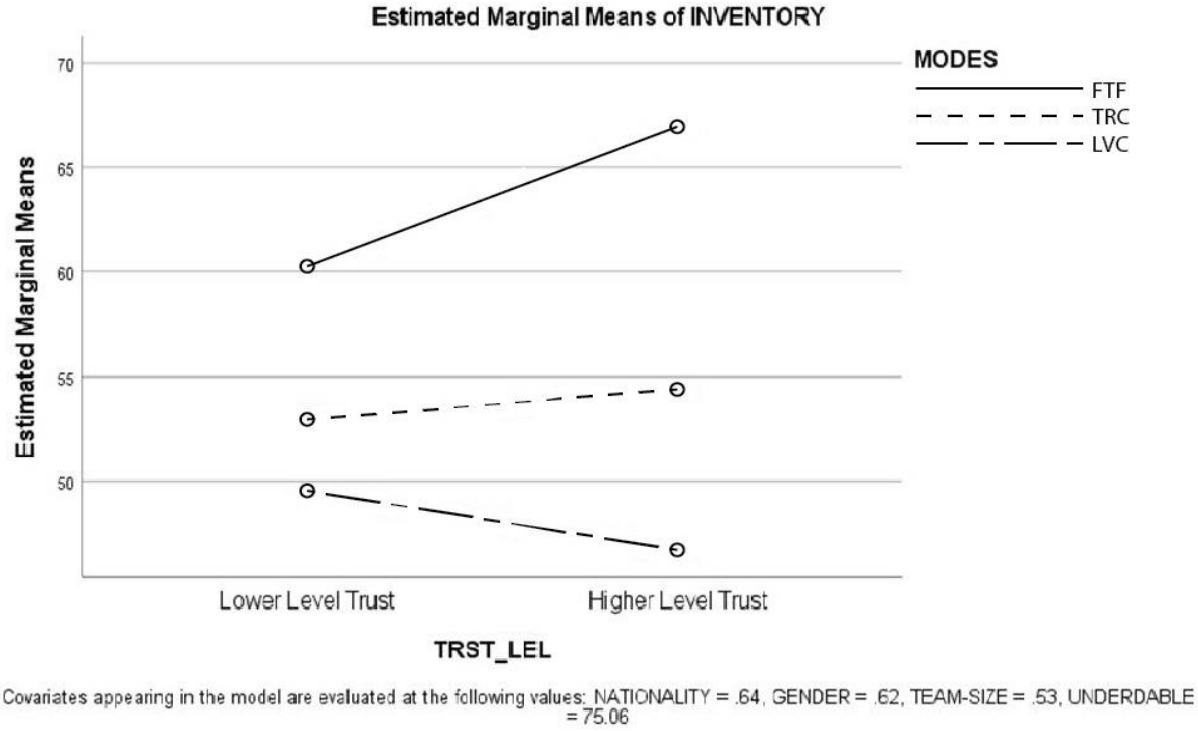
Covariates appearing in the model are evaluated at the following values: NATIONALITY = .65, GENDER = .62, TEAM-SIZE = .53, UNDERDABLE = 74.85

FIGURE 4
TRUST X COMMUNICATION MODE INTERACTION FOR VOICE DECISION – ACCOUNTS RECEIVABLE ISSUE



Covariates appearing in the model are evaluated at the following values: NATIONALITY = .64, GENDER = .62, TEAM-SIZE = .53, UNDERDABLE = 75.01

FIGURE 5
TRUST X COMMUNICATION MODE INTERACTION FOR VOICE DECISION – INVENTORY ISSUE



APPENDIX 2: FULL TEXT OF AUDITING ISSUES DESCRIPTIONS

Issue	Description of Issues
1	Issue #1 When testing cash disbursements in the accounts payable cycle, a low-level client employee mentioned she had suspicions about the controller committing fraud. She provided no evidence, just a suspicion.
2	Issue #2 When performing substantive procedures on accounts receivable, the staff auditor noticed that some customer payments reflected larger discounts than would be indicated by policy. In the follow-up, a sales rep mentioned that some of the larger customers take discounts that are inconsistent with company policy. This statement cannot be verified without the additional costly time and also suggests the potential need to increase the sample size to establish the value of receivables.
3	Issue #3 A low-level client employee casually mentioned instability in revenue distribution within various product lines. The potential implication is that some inventory lines may be subject to write-downs that may not be apparent when using analytic procedures on aggregate inventory numbers. The employee's statement cannot be verified without additional costly time. The staff person is unsure if the amount of inventory analytic procedures might be reduced and potentially replaced with an increase in the sample size of inventory price testing because the prior year may not make a good base year from which to predict relationships.