

**The Effects of Advice Source and Advisor Assurance on Auditors' Propensity to Report  
Questionable Acts Involving Superiors**

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# **The Effects of Advice Source and Advisor Assurance on Auditors' Propensity to Report Questionable Acts Involving Superiors**

## **ABSTRACT**

We conduct an experiment to investigate whether auditors' propensity to report a questionable act is affected by the source of advice received and assurance provided by the advisor about whistle-blowing protection. We manipulate advice source at three levels, namely a colleague, the audit firm's technical department, and an anonymous advice hotline manned by a third-party service provider. We manipulate the presence/absence of advisor assurance by either including or excluding an assurance of whistle-blowing protection in the advice, holding constant the advisor's recommendation. Results indicate that auditors' propensity to report the questionable act is significantly higher when advice is received from a formal source (i.e., the firm's in-house technical department or external advice hotline) than from an informal source (i.e., colleague). An assurance of whistle-blowing protection by the advisor further increases auditors' propensity to report the questionable act, regardless of the advice source.

**Keywords:** Advice source; advisor assurance; questionable act reporting; fraud detection.

## I. INTRODUCTION

In this paper, we investigate the effects of advice source and advisor assurance on auditors' propensity to report a questionable act.<sup>1</sup> As business and accounting issues become increasingly more complex and lacking in clarity (Plumlee and Yohn 2010), auditors face greater challenges evaluating the appropriateness of clients' accounting treatments and entries. In some instances, auditors' superiors may condone the clients' use of aggressive or inappropriate accounting treatments, and the auditors may need some guidance and advice to help them resolve the ethical dilemma of whether to report the questionable act involving his or her superiors. Although avenues for employees to seek advice on ethical issues have been discussed in prior literature (e.g., Weaver et al. 1999; Leibowitz and Reinstein 2009) and suggested in professional codes of ethics (e.g., IFAC 2010), no studies have examined how the source and nature of advice can systematically influence auditors' propensity to report questionable acts.

Understanding these issues is important for the following reasons. First, while professional codes of ethics recommend that auditors should consult with other appropriate persons within the firm to help them resolve an ethical conflict (e.g., IFAC 2010), auditors could potentially, and do, seek advice from a variety of sources (e.g., Gibbins and Emby 1985; Danos et al. 1989), both formal (e.g., the audit firm's technical department) and informal (e.g., colleagues). Although recent research has begun to investigate the effects of advice on auditors' decisions (e.g., Ng and Shankar 2010), whether and how different sources of advice could differentially impact auditors' decisions have not been systematically investigated. Evidence on

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<sup>1</sup> Consistent with prior studies, we define a questionable act as an act which one suspects to "violate a standard of justice, honesty, or economy" (Graham 1986, 2; Schultz et. al. 1993).

this issue could provide a better understanding of the implications of using (and not using) alternative advice sources.

Second, recent research suggests that the nature of advice matters to the recipient's decisions. Specifically, Ng and Shankar (2010) provide evidence that when auditors are provided with advice from the audit firm's technical department that an alternative method is the most appropriate method, auditors' propensity to accept an aggressive method that is preferred and strongly justified by the client is reduced by the presence of an SAS 90-like quality assessment standard, but only when the advice contains an explicit recommendation to use the most appropriate method. Their finding suggests that how advice is communicated by the advisor has important implications for the recipient's decisions. In our study, we hold constant the advisor's recommendation and the presence of the audit firm's policy on whistle-blowing protection, and examine whether the advisor's assurance of whistle-blowing protection could incrementally influence auditors' propensity to report a questionable act. Even when advised to report a questionable act, auditors may eventually decide not to do so due to fear of retaliation (Rocha and Kleiner 2005). A recent survey of 1,300 European employees at multi-national companies conducted by Ernst & Young finds that more than 80 percent of the respondents cited fear of retaliation as the reason they would not whistle-blow (Clemmons 2007). Hence, advisors can play a useful role in alleviating potential whistle-blowers' fear of retaliation by assuring them of whistle-blower protection by the firm. Providing evidence on whether such assurance provided by an advisor can enhance the advisee's propensity to report a questionable act, and whether its effect is contingent on the advice source, would increase our understanding of the role of advisors in influencing whistle-blowing behavior.

Third and more broadly, our study responds to Bedard et al.'s (2008) call for more research to examine factors influencing whistle-blowing behavior in the context of public accounting, which has wide implications on financial reporting quality, audit quality and fraud detection. Providing evidence on factors affecting auditors' whistle-blowing behavior is important given research evidence that whistle-blowing is a useful mechanism for uncovering agency issues (Bowen et al. 2010) and is, indeed, the most common method by which frauds are detected (ACFE 2010).

To investigate the above issues, we conduct an experiment involving 105 auditors from a Big 4 firm in Singapore. We provide participants with a hypothetical scenario in which an audit senior encountered a questionable act involving his superiors, and ask them to assess whether a staff member in the audit senior's position would report the act, as an indirect measure of participants' propensity to report the questionable act to minimize social desirability bias (see e.g., Arnold and Ponemon 1991; Schultz et al. 1993). We manipulate advice source at three levels, namely a colleague, the audit firm's technical department, and an anonymous advice hotline manned by a third-party service provider. We manipulate the presence/absence of advisor assurance by either including or excluding an assurance of whistle-blowing protection in the advice, holding constant the advisor's recommendation and the firm's policy on whistle-blowing protection. Results indicate that auditors' propensity to report the questionable act is significantly higher when advice is received from a formal source (i.e., the technical department or external advice hotline) than from an informal source (i.e., colleague). An assurance of whistle-blower protection by the advisor further increases auditors' propensity to report the questionable act, regardless of the advice source.

Our study contributes to the accounting/whistle-blowing literature by providing evidence on factors that could promote the reporting of questionable acts by auditors. Our findings suggest that audit firms and regulators can promote the reporting of questionable acts by encouraging auditors to consult with formal advice channels such as the audit firm's technical department or an external advice hotline to help them resolve related accounting and whistle-blowing issues. Our results also indicate that advisors can further promote whistle-blowing behavior by assuring potential whistle-blowers of whistle-blowing protection by the firm, thereby alleviating their concerns about the negative consequences of "doing the right thing". We also contribute to the general advice literature by providing evidence on the effects of advice source and advisor assurance on advice recipients' decisions. Our findings suggest that advice from formal sources are perceived to be more reliable, presumably because it allows the advisee to better share responsibility for high risk decisions such as whistle-blowing with the organization. Our study also provides further evidence on how advisors can increase the use of their advice by varying the nature of their communications or advice (e.g., Ng and Shankar 2010).

In the next section, we discuss related prior studies and develop our research hypotheses. This is followed by a discussion of the research method and results. Our paper concludes with a discussion of the study's main findings, limitations and opportunities for future research.

## **II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

Prior literature (e.g., Hooks et al. 1994; Mesmer-Magnus and Viswesvaran 2005; Bedard et al. 2008) indicates that the attributes of the whistle-blower (Arnold and Ponemon 1991; Curtis 2006), the perpetrator (Kaplan 1995; Stefaniak and Robertson 2008) and the organization (Miceli and Near 1985; Granville 1999), as well as contextual factors such as wrongdoing seriousness

and personal costs (Schultz et al. 1993; Ayers and Kaplan 2005) influence whistle-blowing intention. In line with the increasing importance of fraud detection in organizations, recent research has examined mechanisms to improve the reporting of questionable acts. For example, Kaplan et al. (2009) find that respondents' intention to report a fraudulent act is greater when the procedural safeguards surrounding an anonymous reporting hotline are stronger. Xu and Ziegenfuss (2008) find that internal auditors have a greater propensity to report wrongdoings to higher authorities when incentives are provided, suggesting that reward systems improve the detection of wrongdoings and fraud.

Our study extends prior literature by examining whether auditors' propensity to report questionable acts is systematically influenced by the source of advice received and assurance provided by the advisor. Auditors who discover a questionable act involving their superiors and/or clients may find it challenging to resolve the issue for several reasons. First, some accounting issues are complex and lacking in clarity (Plumlee and Yohn 2010), making it difficult to assess the appropriateness of certain accounting treatments. Second, junior auditors who have yet to prove themselves in the public accounting environment are less certain of their judgment (Pratt and Beaulieu 1992). Keenan (1995) suggests that junior employees generally lack sufficient power or knowledge to whistle-blow and effect change. Thus, they might find it difficult to question or challenge the judgment of senior and more experienced colleagues and clients. Third, a perceived conflict between auditors' whistle-blowing obligation and their responsibility to observe client confidentiality adds to the complexities involved in whistle-blowing decisions (Parisi 2009). Fourth, since only audit team members assigned to the client engagement are privy to client information, it might not be difficult for superiors to deduce and identify which staff

whistle-blows on them. Thus, an audit staff might be reluctant to report a questionable act even if an anonymous reporting channel is available.

In practice, auditors can seek advice from different sources, both formal and informal, to address some of their concerns discussed above. Lewis (2006) suggests that firms' whistle-blowing policies and procedures should specifically encourage employees to seek advice at an early stage. Although extant professional codes of ethics similarly recommend that auditors should consult with other appropriate persons within the firm to help them resolve ethical conflicts (e.g., IFAC 2010), they are silent about whether the source of advice matters to auditors' decisions. Prior research suggests that auditors frequently engage in informal consultations with their colleagues (Gibbins and Emby 1985; Danos et al. 1989) and that they tend to trust and rely more on advice received from stronger affiliates, such as colleagues whom they know well (Kadous et al. 2010). At the same time, the audit firm's technical department has also been identified as an important (formal) source of advice for auditors (Salterio and Denham 1997). However, no study has provided evidence on whether auditors' decisions are differentially affected by advice received from different sources.

We argue that, *ceteris paribus*, auditors' propensity to report a questionable act will be greater when they receive advice to do so from the firm's technical department (a formal source) than from a colleague (an informal source). While both sources of advice provide auditors with an avenue to clarify the issue at hand, including whether it constitutes a reportable act, advice from a formal or authoritative source is likely to be perceived as more reliable by auditors, as such advice would better enable auditors to share responsibility for high-risk decisions such as whistle-blowing with the firm, leading them to be more likely to act on the advice (Harvey and Fischer 1997). Our first hypothesis is stated as follows:

**H1:** Auditors are more likely to report a questionable act when they receive advice to do so from the firm's technical department than from a colleague.

In addition to the audit firm's technical department, we include a second formal source of advice, an external advice hotline manned by an independent and reputable third-party service provider (henceforth external advice hotline) that is separate from the agent manning the *reporting* or whistle-blowing hotline. We include the external advice hotline as a benchmark to compare against the firm's technical department, given that such an advice hotline may provide stronger safeguards in protecting the anonymity of the advice-seeker, thereby reducing the perceived likelihood of retaliatory actions (e.g., Kaplan et al. 2009). To the extent that auditors perceive the firm's technical department as being part of the firm and therefore lacking the ability to ensure confidentiality of the advice-seeker, the greater independence and anonymity provided by the external advice hotline could further increase auditors' propensity to report the questionable act. Our second hypothesis is stated as follows:

**H2:** Auditors are more likely to report a questionable act when they receive advice to do so from the firm's external advice hotline than from the technical department.

Prior research indicates that fear of retaliation has a negative effect on reporting intention (Arnold and Ponemon 1991; Near and Miceli 1986). Fear of retaliation has been identified as one of the main reasons why employees do not report questionable acts (Rocha and Kleiner 2005; Near and Miceli 1996; Keenan 1990) and such fear may not be unfounded. Recent press report of Lehman Brothers ousting whistle-blower Matthew Lee just weeks after he had raised concerns with Lehman's auditor about the firm's accounting in 2008 (Corkery 2010) is one example of retaliation against whistleblowers in spite of existing regulations on whistle-blower protection (e.g., Sarbanes-Oxley Act 2002).

Although the firm may have implemented a whistle-blowing protection policy, advisors can play a complementary role in alleviating the potential whistle-blower's concerns by providing an assurance on whistle-blowing protection by the firm. Prior research (Graham 1986; Schultz et al. 1993; Kaplan and Whitecotton 2001) suggests that an individual's resolution of an ethical dilemma is influenced by the perceived dilemma context, which encompasses seriousness of the problem, costs to the individual, and personal responsibility for reporting the incident. The assurance by the advisor can help reduce the advisee's perceived costs of reporting and/or increase the perceived responsibility to report, thereby increasing his/her propensity to report the questionable act. We argue that the effect of such assurance by the advisor may or may not vary with advice source. On one hand, an assurance received from a formal source may be perceived as more credible and reliable, leading to a greater effect on auditors' reporting behavior. On the other hand, auditors may already have a high propensity to report the questionable act when they receive advice to do so by a formal source, and the incremental effect of such an assurance may thus be more limited compared to that provided by an informal source.<sup>2</sup> Therefore, we posit a main effect of advisor assurance on whistle-blowing protection as follows:

**H3:** In the presence of the firm's policy on whistle-blowing protection, auditors are more likely to report a questionable act when the advisor provides an assurance of whistle-blower protection by the firm than when it does not.

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<sup>2</sup> Alternatively, the assurance provided by the advisor may not incrementally influence auditors reporting behavior since it does not convey any new information beyond the firm's policy on whistle-blowing protection.

### **III. METHOD**

#### **Design and Procedures**

We adopt a 3 x 2 between-subjects experimental design, with Advice Source (colleague, technical department, external advice hotline) and Advisor Assurance (assurance, no assurance) as between-subjects independent variables. We manipulate Advice Source by describing the advisor as either 1) a knowledgeable and experienced colleague outside engagement team (i.e., colleague), 2) a knowledgeable and experienced staff from the audit firm's Technical Department (i.e., technical department), or 3) a knowledgeable and experienced staff from Adviceline, described as the audit firm's advice hotline manned by an independent and reputable third-party service provider that is separate from the agency manning the reporting hotline and meant for staff members to seek advice anonymously to help them resolve complex and sensitive issues (i.e., external advice hotline). We manipulate Advisor Assurance by either including or not including an assurance by the advisor about whistle-blowing protection (as described further below).

We conducted the experiment in three stages. In stage 1, participants were provided with a hypothetical scenario in which an audit senior from a Big 4 firm, Peter, discovered a material accounting error that overstated the revenue and earnings of the client, a listed company that is one of the audit firm's largest clients. Specifically, the client has prematurely booked a large sales transaction which was shipped after the balance sheet date. The client's accountant admitted to the accounting error, and Peter proposed an audit adjustment accordingly. However, Peter later found out that the client's CEO succeeded in persuading the audit engagement manager and partner not to book the audit adjustment, as he was concerned that the audit adjustment would result in the company contravening a loan covenant and missing the analyst

consensus forecast. Despite Peter voicing his concerns to the audit manager and partner, the audit partner insisted that the client need not book the audit adjustment. All participants were told that “the audit firm has a reporting hotline for staff members to report questionable acts anonymously. The reporting hotline is manned by an independent and reputable ethics hotline service provider. Staff members who report questionable acts in good faith are assured of confidentiality and protection against wrongful dismissal or other forms of retaliation. All reported cases will be seriously considered and promptly followed-up by the firm’s Ethics and Risk Management Committee”.

After reading the case scenario, participants were asked to assess whether a staff member in Peter’s situation would report the questionable act through the reporting hotline, both on a continuous scale ranging from 0% (definitely not report) to 100% (definitely report), and on a dichotomous scale (Yes or No). They were also asked to briefly explain their reasons for their assessments. In addition, they were asked to assess the likelihood that a staff member in Peter’s situation would seek advice to help him decide whether to report the questionable act, and to list the matters for which advice would likely be sought.

In stage 2, we randomly assigned participants to the six Advice Source/Advisor Assurance treatments. Participants were told to assume that Peter has subsequently consulted and received advice from one of the three advice sources described above. Regardless of the advice source, all participants were told that the advisor advised Peter that the audit client “should not recognize the sales transaction before year-end as it was shipped after the balance sheet date. Allowing the audit client to do so would be a questionable act that should be reported”. Participants assigned to the Assurance condition were further told that the advisor “further assured Peter that should he report the questionable act through the firm’s reporting hotline, he

would be protected by the firm against wrongful dismissal or other forms of retaliation”. This assurance was not provided to participants in the No Assurance condition, although all participants were informed about the firm’s policy on whistle-blowing protection, as described earlier. The participants were then asked to assess again whether a staff member in Peter’s situation would report the questionable act through the firm’s reporting hotline, having sought and received the given advice, and to briefly explain their reasons.

In stage 3, participants completed a debriefing questionnaire. The questionnaire includes manipulation check and demographic questions, as well as additional questions for further analysis (discussed later). The experimental materials for stages 1 to 3 were provided to participants in three separate envelopes marked A to C respectively. Participants were instructed to complete the materials in sequence, and to open envelope B only after they have completed and inserted back the completed stage 1 materials into envelope A, and so on.

Our main dependent variable is participants’ response to the question on whether a staff member in Peter’s situation would report the questionable act through the reporting hotline in stage 2 (henceforth “propensity to report”). We use the indirect questioning approach to measure participants’ propensity to report the questionable act to reduce social desirability bias, consistent with prior studies (Arnold and Ponemon 1991; Schultz et al. 1993). For the same reason, we ask participants to complete the research materials anonymously. We report the results based on participants’ response on the dichotomous scale, as this measure better captures participants’ final decision on whether to report the questionable act. We obtain similar results for the tests of hypotheses when we use the participants’ response on the continuous scale (i.e., likelihood assessment) as the dependent variable.

## **Participants**

Participants comprise 105 audit seniors from a Big 4 firm in Singapore. They participated in the experiment on a voluntary basis during the firm's training session, and were given two complimentary movie tickets for completing the research instrument. Their mean audit experience is 3.21 years with a standard deviation of 1.30 years. Seventy-three percent of the participants are female. Neither audit experience nor gender varies significantly between the experimental conditions at  $p < .05$ .<sup>3</sup> None of these demographic variables are significantly associated with the dependent variables at  $p < .05$ . We obtain similar results for the tests of hypotheses when we include audit experience and gender as control variables in the analyses. Only four participants reported that they had suspected or discovered a person of higher authority engaging in a questionable act in their past or current work experience, and only one of them had reported it. We obtain similar results when these four participants were excluded from the analyses.

## **IV. RESULTS**

### **Manipulation and Other Checks**

We asked participants to indicate from which of the three advice sources did Peter seek and receive advice. The percentage of correct responses is 90.2%. We also asked them to indicate whether the advice provider assured Peter that he would be protected by the firm against wrongful dismissal or other forms of retaliation should he report the questionable act. Eighty-three percent of the participants responded correctly. These results suggest that our manipulation of advice source and advisor assurance has been successful. We obtain similar results for the tests of hypotheses after omitting participants who failed the manipulation checks.

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<sup>3</sup> All p-values are two-tailed unless otherwise specified.

Recall that in stage 1, we asked participants to rate how likely a staff member in Peter's situation would seek advice to help him decide whether to report the questionable act, on a scale ranging from 0% (definitely not seek advice) to 100% (definitely seek advice). Participants' ratings do not vary by experimental conditions at the 5% level. The mean rating is 70.5%, which is significantly higher than the mid-point ( $p < .001$ ). We also asked participants to list the matters that a staff member in Peter's position would likely seek advice on. Seventy-seven percent of participants listed accounting issues (e.g., appropriateness of accounting treatment, materiality of its impact) and 58.1% listed whistle-blowing issues (e.g., consequences of reporting and not reporting, confidentiality issue). Thirty-one percent of participants listed both accounting and whistle-blowing issues. Overall, these results suggest that participants generally view consultation as useful in helping auditors decide whether to report the questionable act in the case.<sup>4</sup>

## **Test of Hypotheses**

We first determine whether auditors' propensity to report the questionable act in stage 1 varies by experimental conditions. Results of categorical ANOVA (un-tabulated) indicate that neither the main effects of advice source and advisor assurance nor their interaction effect is statistically significant ( $p > 0.567$ ). On average across all experimental conditions, only 28% of

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<sup>4</sup> In the debriefing questionnaire, we asked participants to rate how likely they would seek advice from five different sources to help them resolve highly sensitive issues that could potentially implicate their direct and/or indirect supervisors in the audit engagement, on a scale ranging from 0% (definitely not seek advice) to 100% (definitely seek advice). The means are 67% for colleagues inside the audit engagement team, 63% for colleagues outside the audit engagement, 61% for the audit firm's technical department, 59% for the audit firm's advice hotline manned by an independent and reputable third-party service provider for staff members to seek advice anonymously (assuming it is available), and 27% for friends outside the audit firm. Paired-sample t-tests indicate that the means for the first four sources are not significantly different from each other at the 5% level, but are significantly higher than the mean for the fifth source ( $p < 0.01$ ). These results suggest that auditors are equally likely to consult formal and informal sources within the audit firm on ethical issues such as the one used in the experimental case.

participants indicate that an audit staff member in the audit senior's situation would report the questionable act in stage 1.

H1 predicts that auditors are more likely to report the questionable act when they receive advice to do so from the audit firm's technical department than from a colleague, while H2 predicts that auditors are more likely to report the questionable act when they receive advice to do so from an external advice hotline than from the audit firm's technical department. Results of categorical ANOVA, presented in Panel A of Table 1, indicate statistically significant main effects of Advice Source and Advisor Assurance ( $p \leq 0.019$ ), but no significant interaction effect ( $p = 0.459$ ). Panel B of Table 1 presents the proportion of participants who believe that Peter, the audit senior in the case, would report the questionable act in each experimental condition, and tests of comparisons between advice source conditions. Figure 1 provides a graphical representation of the observed effects. Results of comparison tests indicate that a higher proportion of auditors believe that Peter would report the questionable act when advice is received from the technical department than when it is received from a colleague (proportions = 0.76 and 0.47 respectively;  $p = 0.009$ ). When advice is received from the external advice hotline, the proportion of auditors who believe that Peter would report the questionable act (i.e., 0.81) is also significantly higher than when it is received from a colleague ( $p = 0.001$ ), but not significantly higher than when it is received from the technical department ( $p = 0.459$ ). Overall, the results provide support for H1 but not H2, and suggest that auditors' propensity to report a questionable act is systematically higher when they receive advice to do so from a formal source (i.e., the firm's technical department or external advice hotline) than from an informal source such as a colleague.

H3 posits that in the presence of the firm's policy on whistle-blowing protection, auditors are more likely to report a questionable act when the advisor provides an assurance of whistleblower protection by the firm than when it does not. The statistically significant main effect of Advisor Assurance, reported above, provides support for this hypothesis. On average across all three sources of advice, the proportion of auditors who believe that Peter will report the questionable act is significantly higher when assurance on whistle-blowing protection is provided by the advisor than when it is not (proportions = 0.77 and 0.58 respectively;  $p = 0.019$ ).

### **Additional Analyses**

We perform additional analyses on various assessments elicited from participants in the debriefing questionnaire, to provide further evidence on our main findings. To determine whether auditors find advice received from a colleague as less credible than advice received from more formal sources, we ask participants to rate the extent to which they agree that the audit partner's decision to allow the audit client to book the sales before year-end is a questionable act that should be reported, on a scale ranging from 0% (totally disagree) to 100% (totally agree). The mean rating is 68.8%, which is significantly above the mid-point of 50% ( $p < 0.001$ ), suggesting that participants generally agree with the advice that there exists a reportable questionable act. We also ask participants to rate how useful (i.e., relevant, informative and complete) the advice sought and received by Peter was for making a decision whether to report the questionable act, on a seven-point scale (1 = not useful at all; 7 = absolutely useful). The mean rating is 5.1, also significantly above the mid-point of 3.5 ( $p < 0.001$ ). Participants' responses to these questions do not vary significantly across advice source conditions ( $p > 0.753$ ), suggesting that their perceived usefulness of the advice does not vary between advice

source conditions. However, there is a marginally significant effect of Advisor Assurance on participants' perceived usefulness of the advice received ( $p = 0.067$ ), consistent with our main finding for H3 that the advisor's assurance on whistle-blowing protection increases auditors' propensity to report the questionable act.

Even if the perceived usefulness of advice does not differ between formal and informal sources, as argued in our hypothesis development, advice from a formal or authoritative source is likely to be perceived as more reliable, as such advice would better enable auditors to share responsibility for high-risk decisions such as whistle-blowing with the firm. To provide evidence on this issue, we ask participants to rate how reliable (i.e., accurate, trustworthy) the advice sought and received by Peter was for making a decision whether to report the questionable act, on a seven-point scale (1 = not reliable at all; 7 = absolutely reliable). The mean rating is 4.8, and significantly above the mid-point of 3.5 ( $p < 0.001$ ). Results of ANOVA indicate a statistically significant main effect of Advice Source ( $p = 0.017$ ), but neither the main effect of Advisor Assurance nor the interaction effect is statistically significant ( $p \geq 0.604$ ). Tests of comparisons of mean ratings between advice sources indicate that auditors perceive advice received from formal sources (i.e., the firm's technical department and external advice hotline) to be more reliable than advice received from a colleague (means = 5.39, 4.81 and 4.47 respectively;  $p = 0.024$ ). Interestingly, auditors find advice received from the firm's in-house technical department to be marginally more reliable ( $p = 0.063$ ) than advice received from the external advice hotline, although this difference does not result in significantly different reporting decisions, as reported in our main results.

An alternative explanation for our results for advice source is that participants may perceive that the questionable act is more serious when advice is sought from a formal source.

To provide evidence on this issue, we ask participants to rate the degree of seriousness of the questionable act (i.e., the extent to which it is unethical, illegal or harmful), on a scale ranging from 1 (not serious at all) to 7 (absolutely serious). Results of ANOVA indicate a statistically significant main effect of advice source ( $p = 0.046$ ), but neither the main effect of Advisor Assurance nor the interaction effect is statistically significant ( $p \geq 0.169$ ). Tests of comparisons of mean ratings between advice sources indicate, surprisingly, that auditors who receive advice from a colleague perceive the questionable act to be more serious than those receiving advice from the firm's technical department or external advice hotline (means = 6.25, 5.79 and 5.64 respectively;  $p = 0.016$ ). There is no statistically significant difference in auditors' perceived seriousness of the questionable act between the two formal advice sources ( $p = 0.564$ ). While unexpected, these results do not suggest that our main results can be explained by greater perceived seriousness of the questionable act when advice is sought from a formal source.<sup>5</sup>

Recall that all participants were told that “the audit firm has a reporting hotline for staff members to report questionable acts anonymously. The reporting hotline is manned by an independent and reputable ethics hotline service provider. Staff members who report questionable acts in good faith are assured of confidentiality and protection against wrongful dismissal or other forms of retaliation. All reported cases will be seriously considered and promptly followed-up by the firm's Ethics and Risk Management Committee”. Despite this information, we find, in our main results, that the provision of an assurance on whistle-blowing protection by the advisor incrementally increases auditors' propensity to report the questionable act. To examine whether this effect is attributable to an increase in salience of the audit firm's

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<sup>5</sup> Participants' rating of the strategic and/or economic importance of the audit client to the firm does not vary significantly across experimental conditions ( $p \geq 0.610$ ; mean = 5.68, on a scale ranging from 1, not important at all, to 7, absolutely important).

whistle-blowing policies, we elicit various assessments from participants about the likely consequences or outcomes of reporting the questionable act, on seven-point scales (e.g., 1 = not likely at all; 7 = absolutely likely). These assessments include 1) the extent to which the confidentiality of Peter's identity will be ensured; 2) the extent to which Peter will be protected against negative consequences (i.e., dismissal, trouble or risk); and 3) the extent to which the reported questionable act will be seriously investigated. None of these assessments vary significantly across experimental conditions (means = 4.10, 4.44 and 5.26 respectively;  $p > 0.275$ ), suggesting that the advisor's assurance on whistle-blowing protection does not provide any new information or increase the salience of the information on the firm's whistle-blowing policies provided to all participants in the case. We also ask participants to assess the likely consequences or outcomes of *not* reporting the questionable act, including 1) the likelihood that Peter will face negative consequences; and 2) the likelihood that the questionable act could be found out or detected by others. These assessments similarly do not vary significantly across experimental conditions (means = 4.27 and 4.35 respectively;  $p > 0.206$ ), suggesting that they do not explain the main results pertaining to the effects of advice source and advisor assurance.

Although the advisor's assurance on whistle-blowing protection does not provide any new information about the audit firm's whistle-blowing policies beyond what has already been provided in the case, as reported earlier, participants find the advice to be marginally more useful when assurance is provided by the advisor than when it is not. We investigate whether the advisor's assurance may have influenced participants' assessment of Peter's responsibility to report the questionable act. Results of ANOVA indicate a marginally significant main effect of Advisor Assurance, with participants rating the responsibility to report higher when assurance is provided than when it is not provided (means = 5.92 and 5.44 respectively;  $p = 0.055$ ). Neither

the main effect of Advice Source nor the interaction effect is statistically significant ( $p \geq 0.449$ ). These results suggest that the advisor's assurance may work by influencing auditors' perceived responsibility to report the questionable act.

## V. CONCLUSIONS

Our study provides evidence that auditors' use of advice in their decision to report a questionable act is influenced by both the advice source and the nature of advice. Specifically, we find that auditors are more likely to report a questionable act when they receive advice to do so from a formal source than from an informal source, due likely to greater perceived reliability of advice from formal sources. In the presence of the firm's policy on whistle-blowing protection, the advisor's assurance on whistle-blowing protection by the firm further increases auditors' propensity to report the questionable act. Auditors receiving the advisor's assurance perceive greater usefulness of the advice and higher responsibility to report the questionable act. Our findings suggest that audit firms and regulators can promote whistle-blowing propensity among auditors by encouraging them to seek advice from formal sources within the firm to help resolve ethical conflicts, where feasible. Further, advice givers can complement the firm's whistle-blowing protection policy by assuring advisees of whistle-blowing protection by the firm. Such assurance helps alleviate potential whistle-blowers' concerns about negative consequences associated with "doing the right thing" and enhance advice effectiveness.

Our findings should be considered in light of several limitations. First, given the sensitive nature of the issue investigated, participants' responses might be affected by social desirability bias. This concern is alleviated by the fact that the objective of our study is to examine the effects of manipulated variables rather than to establish the level of desirable behavior. Thus, any

social desirability bias that exists would affect all treatment conditions and likely bias against our hypothesis. Furthermore, we have adopted precautionary measures to minimize social desirability bias in our experiment, including phrasing the questions in a third-person perspective and anonymous completion of the research instruments.

Second, as our participants comprise only audit seniors, our results may not be generalized to auditors at other ranks such as audit managers or partners. Pratt and Beaulieu (1992) find that higher audit staff ranks show lower levels of Hofstede's power distance, a measure of staff's recognition and acceptance of unequal power distribution among group members. Higher-ranked employees may prefer less authoritative supervision and be more inclined to express disagreement with their supervisors (Miceli and Near 1984; Pratt and Beaulieu 1992). On the other hand, due to socialization within the audit firm and higher incentive not to jeopardize career advancement, higher-ranked employees may not be as forthcoming in reporting questionable acts perpetrated by their superiors. Future research could investigate whether our findings are sensitive to differences in auditor rank.

Third, as our study focuses on auditors' whistle-blowing decisions in an audit setting, its findings may not be generalized to non-public accounting settings. Future studies could investigate if our findings would apply to non-public accounting settings.

Our study investigates three advice sources comprising a colleague, the in-house technical department and an external advice hotline engaged by the firm. Professional bodies such as the American Institute of Certified Public Accountants (AICPA) and the Institute of Chartered Accountants in England and Wales (ICAEW) appoint a professional ethics team to maintain a hotline for members to make inquiries about the code of conduct and to seek advice in situations that challenge their professional ethics. Future research could compare members'

willingness to seek advice from, and the extent they would use the advice provided by, the employer vs. a professional body.

In addition, we manipulate one of the advice sources as an advice hotline separate from the reporting hotline in our study. Although we are aware that at least one Big 4 firm combine the advice and reporting functions in a single hotline, the behavioral impact of this move on employees is not clear. There might be a concern that some employees who need advice to help them decide whether or not to report might not be as forthcoming in seeking advice when the advice and reporting hotlines are merged as a single channel. Future research could investigate whether combining the advice channel with the reporting hotline as a single advice/reporting hotline will decrease employees' inclination to seek/use advice and/or report a questionable act.

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**TABLE 1**  
**Effects of Advice Source and Advisor Assurance**  
**on Auditors' Propensity to Report the Questionable Act**

**Panel A: Categorical ANOVA Results**

<u>Effects</u>	<u>Df</u>	<u>Chi-sq</u>	<u>p-value</u>
Advice Source	2	11.25	.0036
Advisor assurance	1	5.48	.0192
Advice Source * Advisor assurance	2	1.56	.4594

**Panel B: Percentage of Auditors “Reporting” the Questionable Act and Tests of Comparisons between Advice Sources**

<u>Advisor Assurance:</u>	<u>Advice Source:</u>			
	Colleague	Technical Department	External advice hotline	Total
No assurance	0.33 n = 18	0.63 n = 16	0.78 n = 18	0.58 n = 52
Assurance	0.61 n = 18	0.88 n = 17	0.83 n = 18	0.77 n = 53
Total	0.47 n = 36	0.76 n = 33	0.81 n = 36	0.68 n = 105

<u>Comparisons</u>	<u>Df</u>	<u>Chi-sq</u>	<u>p-value</u>
Technical Department vs. colleague	1	6.84	.0089
External advice hotline vs. Technical Department	1	0.28	.5949
External advice hotline vs. Colleague	1	10.37	.0013

**FIGURE 1**

**Observed Effects of Advice Source and Whistle-blower Protection Assurance  
on Auditors' Propensity to Report Questionable Act**

