# WHAT CAN WE LEARN FROM AUDITING RESEARCH?

Four practice notes JUNE 2023



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# **Table of contents**

Nothing so practical as a good theory Do not value skeptical behavior based on the outcome! Appropriate skeptical behavior should be consistently rewarded Fraud risk brainstorming: the persuasive power of a skeptical minority Willingness to raise audit issues depends on leadership attitude	3 5 9 15	
		19

# Nothing so practical as a good theory

One of the main goals of FAR is to unlock academic knowledge for practical application. Of course, FAR disseminates the knowledge generated by the FAR-projects. However, we would also like to take the dissemination a step further, extending the scope to non-FAR research findings. To that end, we have kindly asked all FAR-researchers to suggest a reference to an academic article that they consider to be of high relevance for audit practitioners and/ or for important stakeholders (e.g., regulators, supervisors and/or audit committee members).

We received 26 recommendations, of which some articles were suggested by more than one researcher. We plan to make concise easy-to-read summaries of the suggested articles and focus on their purpose, main findings and practical relevance. The idea behind these brief summaries is to help practitioners value the role and practical relevance of audit research in conducting audits. In this booklet, we present a selection of four summaries, as a showcase of this idea. The theme of the summaries is closely related to the theme of the 2023 FAR Conference: 'Auditors and their Judgments'. Summaries of the other suggested references will be regularly published in the upcoming year.

We acknowledge that individual studies may not represent universal truths, but we do think that the results of the selected studies warrant experimenting within auditing practice.

Please let us know whether (and how) these summaries present knowledge that you can use, but also how we can improve. We welcome your input and ideas!

#### The FAR-team



# Do not value skeptical behavior based on the outcome!

**Article:** 'The outcome effect and professional skepticism', by J.F. Brazel, S.B. Jackson, T.J. Schaefer and B.W. Stewart. Published in *The Accounting Review.* 2016; 91/6: 1577–1599. DOI: 10.2308/acr-51448

#### 1. Purpose of the study

The aim of this study is to investigate whether the outcome of auditors' skeptical behavior (whether or not misstatements are discovered) influences the performance assessment by their supervisor.

#### 2. Main findings

If auditors behave skeptically but do not identify a misstatement, their performance will be evaluated lower than if they do identify a misstatement, even if the skeptical behavior is identical in both cases. Failure to find a misstatement is therefore unfairly penalized. Auditors also anticipate that this phenomenon will occur. Furthermore, the negative effect on evaluation is not reduced by consulting with the supervisor before exercising professional skepticism.

#### 3. Practical relevance

Internal firm training can contribute to raising awareness about these unproductive patterns in performance assessment systems.

The professional skepticism exercised by the auditor is considered to be essential for audit quality. However, sufficiently applying an appropriate level of skeptical behavior remains a global concern. The desired level of skeptical behavior may become insufficient if it is not rewarded, or even punished. For example, skeptical behavior can lead to budget overruns if it leads to additional audit work. It can also lead to conflicts with client management. If the skeptical behavior does not lead to the identification of misstatements, the skeptical behavior may not be properly appreciated by audit supervisors. The behavior is then often judged as if it should have been obvious beforehand that no misstatements were present.

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#### If no misstatements are identified, skeptical behavior may not be properly appreciated

#### **Research and results**

The study consists of three parts: two experiments and a survey. Three hypotheses are tested:

 Superiors will evaluate skeptical auditors more negatively when they do not identify a misstatement (and more positively when they do identify a misstatement).

- When subordinate auditors consult with their superiors during the course of exercising skepticism, the outcome effect (in the case of not finding misstatements) in auditor evaluations is reduced.
- Auditors perceive that their skeptical behavior is evaluated more negatively when they do not identify a misstatement (and more positively if they do identify a misstatement).

96 practicing auditors (at the senior level) participated in the first experiment. The participants were asked to assess the performance of a fictitious staff auditor, based on the information provided. The case described a situation during an audit engagement in which the client's non-financial information is inconsistent with the revenue balance. The staff auditor chooses to exercise an appropriate level of professional skepticism and conduct further investigation, which means that the budget is exceeded and the relationship with client management comes under pressure. The participants in the experiment each completed a different version of the case and were asked to serve as supervisors and evaluate the staff auditor. The outcome of the extra audit work by the staff auditor varied: one group of participants was presented with the situation in which a misstatement was found, versus a group of participants that was presented with the situation in which no misstatement

was found. There were also three different levels of consultation with the supervisor: no consultation, moderate consultation (the supervisor was 'in the loop') and high consultation (the staff auditor's approach is approved by the supervisor). So, in total there were six different case-situations. The participants rated the performance of the staff auditor on a scale of -5 (below expectations) to +5 (above expectations), with a midpoint of 0 (expectations are met). The results of the first experiment clearly show that the outcome of the staff auditor's skeptical behavior (finding a misstatement or not) is related to the performance evaluation. Failure to find a misstatement results in a lower performance evaluation than when a misstatement is identified. even if the skeptical behavior in both situations is identical. It is particularly striking that the participants in all case variants believed that a skeptical approach was needed.

Further analyses suggest that the outcome of skeptical behavior influences the perceived usefulness of the behavior. The perceived usefulness then influences whether the supervisor judges the additional investigation as wasted time or as a normal cost of performing the audit. This framing by the supervisor impacts their performance assessment. Contrary to expectations, consultation with the supervisor does not have a dampening effect on the negative influence of not finding a misstatement.

## **66** Providing training can be effective

The second experiment of this study involves an examination of 100 corporate managers. This experiment investigates the managers' perceptions concerning time spent by company personnel in response to skeptical questions from the external auditor. This experiment shows that supervisors regard the time spent by their employees as wasted time when their effort does not reveal any misstatements. Then, the corporate managers will also be more inclined to convey negative information about the audit to the audit partner. Hence, the study shows that the outcome effect is also unfavorable for the relationship between the auditor and the client

Finally, a questionnaire was presented to 136 master students, 43 of whom had some experience with audit work. This part of the study investigated whether auditors who are still being educated think that the outcome of their skeptical behavior will influence their own performance evaluation. After all, if they believe that the outcome has no influence, it will probably not have an effect on their behavior. The findings show that students do indeed expect that the outcome of their skeptical work will affect their own performance assessment and several other measures of approval from their audit supervisor and client management.

#### Conclusion

The auditors who participated in the first experiment as supervisors/ evaluators indicated - in all variants of the case - that they believed that the existing inconsistency between revenue and non-financial information should be investigated. Nevertheless, the staff auditors who did not find a misstatement received a lower performance evaluation than those who did find a misstatement. The results regarding the business managers in the second experiment reinforce this finding. In addition, the survey study indicated that auditors themselves already foresee that skeptical behavior that does not identify a misstatement can lead to a lower performance assessment.

An important implication of the study is that anticipating the outcome effect may cause auditors to refrain from skeptical behavior. Given the perspective that auditors' skeptical behavior is essential for audit quality, this is highly undesirable. As described, the outcome effect appears to be determined by the frame through which supervisors view the costs of skeptical behavior: no misstatement being identified implies that the behavior was not useful. Providing training on this fallacy and its possible consequences can be effective in improving both the evaluation and application of professional skepticism.

# Appropriate skeptical behavior should be consistently rewarded

**Article:** 'Do rewards encourage professional skepticism? It depends' by J.F. Brazel, J. Leiby and T.J. Schaefer. Published in *The Accounting Review*. 2022; 97; 4: 131-154. DOI: 10.2308/TAR-2019-0361

#### 1. Purpose of the study

Acting skeptically often does not lead to identifying misstatements, but it may lead to extra costs and conflicts with the client. Auditors therefore regularly expect - and receive - negative performance evaluations for skeptical behavior that does not ultimately identify a misstatement. A logical response would be to reward skeptical behavior, regardless of the outcome. However, the aim of the study is to show that in the current environment such rewards may be ineffective and can backfire.

#### 2. Main findings

The results show that rewarding skeptical behavior can have an adverse effect on future skeptical behavior, even in cases when the skeptical behavior is justified. If auditors are rewarded for skeptical behavior that did not result in the identification of errors, they interpret this as a 'better-than-expected' outcome and will reduce future skeptical behavior, using a 'risk-averse gain frame' (it is better to 'quit while you are ahead'). This way of thinking can compromise audit quality.

#### 3. Practical relevance

Auditors view rewarding skeptical behavior that does not result in identifying misstatements as unusual. The consequence is that flipping to rewarding skeptical behavior, even when it does not find a misstatement, limits the desired skeptical behavior. This calls for a culture shift towards credible, consistent rewards for appropriate skeptical behavior.

Skeptical behavior is essential for high-quality audits. An important question is how this behavior can be stimulated through the quality control systems of audit firms. An essential role is reserved for incentive and performance evaluation systems. Evaluating subordinates is a subjective process. The assessment is based on a combination of objective outcomes and a variety of difficult-to-measure aspects related to the contribution of the subordinate to the audit engagement. The most important objective measures by which auditors are usually assessed relate to billable hours and staying within budget. Subjective dimensions of the assessment are, for example, the adequate application of skeptical behavior, technical knowledge, and functioning in teams. For audit supervisors, it is difficult to assess the correct application of skeptical behavior by their staff, especially because it often conflicts with the objective of meeting time budgets.

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#### For audit supervisors, it is difficult to assess the correct application of skeptical behavior by their staff

Previous research shows that auditors are often not rewarded for their skeptical behavior if it does not lead to the identification of misstatements, even if the supervisors believe their audit staff's skeptical behavior was adequate. This leads to an incentive on the part of audit staff to reduce skeptical behavior. An obvious solution would be to reward skeptical behavior, even if it does not lead to finding misstatements. But the researchers predict that the lack of confidence regarding consistently rewarding skeptical behavior implies that (occasionally) receiving a reward for that behavior can reduce future skeptical behavior (audit staff may decide to "quit while they are ahead.")

#### **Research and results**

This study consists of three experiments in which the effects of rewards and the presence of red flags on subsequent skeptical behavior are tested.

In Experiment 1, about 100 audit seniors were told that they had displayed skeptical behavior during the previous interim procedures, which did not lead to the identification of a misstatement. Half of the participants received a positive evaluation of that behavior (reward) and the other half were given an average evaluation (no reward). Based on a rich set of financial and nonfinancial data from a manufacturing company, the participants had to determine whether they wanted to conduct additional investigation regarding the sales account at yearend. Sales growth was stable, which

was supported by the financial data, but not by the non-financial measures (e.g., the number of customers and employees were declining). So, there was an inconsistency between sales and non-financial measures (red flag). The severity of the red flag was presented in three different ways: minor, moderate and severe. The expectation was that the severity of the red flag would have a positive effect on skeptical behavior (read: as the red flag became more pronounced, the negative effect of the prior reward on subsequent skepticism would be reduced).

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#### Auditors interpret a reward for skeptical behavior that does not lead to finding errors as an unexpected lucky windfall

As expected, auditors interpret a reward for skeptical behavior that does not lead to finding errors as an unexpected lucky windfall, which reduces their future skeptical behavior. Not only are they less inclined to investigate the red flag present, but they are also less willing to report the problem to their audit supervisor, which further undermines quality control. Additional analyses show that auditors often make the appropriate skeptical judgment (they identify the red flag), but do not convert this into skeptical action (they do not investigate the red flag). Contrary to expectations, rewarded auditors do not show more skeptical behavior if the red flags become more serious.

Experiment 2 examines a sample of 36 professional auditors as well as 52 accounting master students (as an approximation for inexperienced auditors). The professional auditors repeat the same behavior observed in Experiment 1. That is, they respond negatively to a one-time reward. The master students do not react with a higher risk aversion when rewarded for their skepticism. This suggests that the dysfunctional response of auditors to rewards evolves over time in practice, to cope with the downside risks of skeptical behavior.

Experiment 3 examines 71 students with audit internship experience and an intent to enter the auditing profession. The experimental participants were all rewarded and told how consistently their supervisor had rewarded skeptical behavior in the past (consistent regardless of outcome, inconsistent, or no mention of consistency). The results show that a history of consistently rewarding appropriate skepticism, regardless of the outcome, reduces risk aversion and increases skeptical behavior.

#### Conclusion

The application of insufficient professional skepticism is a persistent problem in auditing. Solving this problem requires fundamental changes in audit culture and quality controls. This study suggests that reducing auditors' perceptions that they will face personal downside risks from skeptical behavior could be part of the solution. Intuitive solutions, such as ad hoc rewarding of skeptical behavior, can be ineffective and even counterproductive. According to the researchers it is critical to develop performance assessment systems, mentoring programs, and training that encourage credible and consistent rewards for appropriate skeptical behavior, regardless of the outcome





# Fraud risk brainstorming: the persuasive power of a skeptical minority

**Article:** 'Fraud brainstorming group composition in auditing: the persuasive power of a skeptical minority', by M. McAllister, A.D. Blay, and K. Kadous. Published in *The Accounting Review*. 2021; 96/03: 431-448. DOI: 10.2308/TAR-2018-0027

#### 1. Purpose of the study

The purpose of this study is to examine the influence of group composition (based on the number of 'trait professional skeptics') on brainstorming quality.

#### 2. Main findings

Brainstorming groups with a minority of high trait skeptics generate more possible fraud causes than the control groups without high trait skeptics. Also, brainstorming groups with a minority of high trait skeptics assess higher fraud risk. Low trait skeptics who brainstorm in groups with a minority of high trait skeptics tend to view the high trait skeptic as the best member of the group (because of that member's unique insights). The individual fraud risk assessments of those low trait skeptics remain high after the brainstorming session. This indicates an adjustment to the skeptical minority view.

#### 3. Practical relevance

The results suggest that audit firms can promote skeptical judgment by building brainstorming groups based on their skeptical personality traits.

Auditing standards require auditors to discuss the risk of material misstatement due to fraud during an audit engagement. The results of this discussion are important for audit quality. Previous research shows that brainstorming in teams leads to better identification of fraud risks than when individuals assess fraud risks independently. This study examines how the composition of fraud brainstorming groups influences brainstorming performance. The assumption is that auditors with a more skeptical personality (a higher trait skepticism level) will assess higher fraud risks, which will lead to a better audit.

The study is based on so-called 'conversion theory'. According to conversion theory, the influence that an individual has on group judgments depends on whether the individual's point of view reflects a minority or a majority perspective. The opinion of the majority usually normatively influences group members to conform to that opinion (but usually does not change individual private views). However, the minority opinion influences the group through a conversion process, in which the group focuses on a comprehensive evaluation of the validity of the minority opinion. The idea is that this intensive, effortful process eventually moves group members towards the minority viewpoint.

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#### The minority viewpoint will cause the group to more effortfully evaluate potential risks

Analogous to this is the idea that a more skeptical viewpoint is most persuasive during the fraud brainstorming session when that perspective is represented by a minority of the auditors. Then, a conversion process to the minority point of view can take place. The theory predicts that the presence of the minority viewpoint will cause the group to more effortfully evaluate potential risks before reaching a consensus risk evaluation. This positive outcome is not expected to extend to groups with a majority of high trait skeptics because group members then share a high risk norm and their perceived need for effortful evaluation of the information prior to reaching consensus is diminished. The minority contribution is expected to have an effect on the generation of possible fraud causes and result in a permanent change in the fraud assessments of individual team members (i.e., their fraud assessments remain higher after the brainstorming).

#### The study

The expectation is that brainstorming groups with a minority of high trait skeptics generate more fraud ideas than groups without high trait skeptics (and also more than groups with a majority of high trait skeptics). Furthermore, brainstorming groups with a minority of high trait skeptics are expected to assess higher fraud risks than control groups without high trait skeptics. Concerning the individual judgments of the participants (i.e., not the group outcomes), low trait skeptics who are part of a group with a minority of high trait skeptics are expected to estimate higher fraud risks than low trait skeptics who belong to a group without high trait skeptics, and who belong to a group with a majority of high trait skeptics.

The experimental study involved 162 master students in auditing from three major universities in the United States. All participants were aware of the relevant auditing standards (including the fraud brainstorming requirements). The skeptical personality trait of all participants was measured using the Hurtt Professional Skepticism Scale. Based on these scores, the participants were characterized as high or low trait skeptics and 54 groups of three participants were determined: a set of groups without high trait skeptics, a set of groups with a minority of high trait skeptics, and a set of groups with a majority of high trait skeptics. The groups were presented with a case describing a company with relatively strong internal controls. The company operates in a highly competitive, slow growing industry. Hence, the researchers aimed for a setting with an average fraud risk.

Prior to the group process, the participants made an individual fraud risk assessment. During the group brainstorming session, the participants had to identify all possible frauds and also had to agree as a group on the assessment of fraud risk. At the end of the group process, the participants again made an individual fraud risk assessment.

The number of fraud ideas generated was used as a measure of brainstorming performance. The group fraud risk assessments and the final individual fraud risk assessments of low trait skeptics were used to test whether the low trait skeptics adopted the assessments of high trait skeptics.

#### The results

The results clearly show that the composition of the brainstorming group influences the brainstorming performance. Brainstorming groups with a minority of high trait skeptics generate more fraud risk ideas than control groups without high trait skeptics or groups with a majority of high trait skeptics. Groups with a minority of high trait skeptics also rated the risk of fraud higher than control groups without high trait skeptics. This is partly caused by the fact that these groups consider a greater number of fraud ideas before reaching consensus. Groups with a majority of high trait skeptics generate fraud risk assessments that do not differ

much from those of control groups without high trait skeptics.

The results also show that the individual fraud risk assessments of low trait skeptics who brainstormed in groups with a minority of high trait skeptics are significantly higher than the assessments of comparable participants who brainstormed in other group types. The final judgments of low trait skeptics in the minority trait skeptic groups do not differ significantly from the high trait skeptics in the group.

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#### The presence of a minority of high trait skeptics positively influences judgment

#### Conclusion

This study implies that professional skepticism should not only be considered on an individual level, but also in the group context in which audit

teams work together. The study shows that the presence of a minority of high trait skeptics positively influences the judgments of both the brainstorming group and the final individual judgments of the low trait skeptics in the group. If audit teams incorporate the increased risk assessments and specific fraud ideas identified in minority trait skeptic brainstorming sessions into further audit work, this could potentially improve audit quality. If brainstorming groups for the most part consist of high trait skeptics, this does not lead to better decision-making regarding fraud. The research findings suggest a new path that audit firms and regulators can follow to improve audit quality, by strategically assembling fraud brainstorming groups.

The authors also outline implications for corporate governance in general. Companies, too, can leverage the point of view of a minority of highly skeptical individuals to spark more robust discussions about risk within audit committees and boards of directors.

# Willingness to raise audit issues depends on leadership attitude

**Article:** 'Team-oriented leadership and auditors' willingness to raise audit issues' by M.W. Nelson, C.A. Proell and A.E. Randel. Published in *The Accounting Review.* 2016; 91; 6: 1781-1805. DOI: 10.2308/acr-51399

#### 1. Purpose of the study

The purpose of this study is to examine factors that influence audit team members' willingness to raise audit issues.

#### 2. Main findings

Auditors are more willing to speak up to a team-oriented leader, especially concerning issues that are aligned with the focus of the leader (effectiveness versus efficiency). There is also evidence that the effect of team-oriented leadership on the willingness to speak up runs through team members' commitment to the team leader and, to a lesser extent, through identification with their team (but not through concerns about the potential consequences of speaking up).

#### 3. Practical relevance

The willingness of auditors to raise audit issues is influenced by what the auditor has to say and how they think the message will be received. This can affect the effectiveness and efficiency of the audit. Changing the behavior of team leaders can therefore help to adjust the communication of team members.

Auditors usually work in hierarchical teams, in which audit evidence is mainly collected by lower-level team members. Sharing knowledge between team members is essential for an effective and efficient audit. And team members are responsible for selecting and raising important accounting and auditing issues with the team leader. Research shows that leaders can promote knowledge sharing by being open to employee input. Research also shows that employees are more willing to speak up if they believe their message will be received positively by the leader.

Two factors that influence audit team members' willingness to speak up are: (1) whether the issue encountered is consistent with their team leader's audit focus (effectiveness versus efficiency); and (2) whether the team leader is focused on the success of the team as a whole as opposed to being focused on personal success.

#### **Research and results**

This study includes a survey and four experiments. The survey included a sample of nearly 200 staff-level auditors who worked on audit teams of two large audit firms. The participants answered questions concerning: (1) the extent to which they observe that team leaders exhibit behaviors that are indicative of team-oriented leadership: and (2) the extent to which they speak up in the teams. The results show that the participants who rate their team leaders as more team-oriented speak up more about audit issues. However, these results do not clarify whether a causal relationship exists and in which direction it runs. Therefore, several follow-up experiments were conducted.

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#### Participants who rate their team leaders as more teamoriented speak up more about audit issues

In the first experiment, 114 experienced auditors read a hypothetical scenario in which an audit senior discovers a possible inventory valuation problem. The participants were then asked to indicate how comfortable the senior would feel in bringing the matter to the attention of the audit manager. All participants were presented with a situation in which the audit manager is team-oriented and with a situation in which the audit manager is not team-oriented. In addition, for these two situations, the participants were presented with two settings they had to judge: the identified inventory problem is described as cost-increasing in order to maintain audit effectiveness (an effectiveness problem) and described as cost-reducing (an efficiency problem). One group of participants was told that the audit partner emphasizes

that the audit engagement involves a high risk (audit quality is therefore of great importance) and one group was informed that the audit partner emphasizes that the audit engagement has a low risk (focus on possible cost reduction). The effectiveness versus efficiency situation and audit partner's focus reflects whether or not the issue on which the participants need to comment aligns with the audit manager's concern about effectiveness or efficiency.

The results show a statistically significant effect of team-oriented leadership on speaking up regarding the issue at hand. Participants felt a higher level of comfort when speaking up to a more team-oriented leader. Aside from the team-oriented leadership, the results show a relationship between the issue and the manager's focus. An auditor feels less comfortable raising an issue if it is not in line with the manager's focus. For example, when the manager is focused on audit efficiency, auditors are less comfortable discussing effectiveness issues that will increase costs. Experiments 2 and 3 contain robustness tests which further support the findings of the first experiment.

Experiment 4 examines the extent to which the effect of team-oriented leadership on the willingness to speak up is mediated by three variables: (1) the degree to which a team member identifies with the team; (2) the extent to which a team member is committed to and trusts the team leader; and (3) the extent to which a team member has concerns about the consequences of speaking up. One hundred and eighteen experienced auditors from two large audit firms participated in this experiment. All participants were presented with the situation in which the auditor had to determine whether he or she should speak up about improving effectiveness to a manager with a focus on efficiency. Half of the participants was shown a team-oriented leader and the other half a non-teamoriented leader. The results indicate that team-oriented leadership influences all three factors that were examined, but only team identification and leadership commitment subsequently influence the willingness to speak up. A closer analysis reveals a complex relationship: team-oriented leadership influences leadership commitment, which influences team identification, which in turn influences willingness to speak up.

### 66

#### A continuous emphasis on both effectiveness and efficiency can encourage auditors to speak up

#### Conclusion

The results suggest that important information may not be shared within the audit team, both because of how the team is managed and because of concerns that the information is inconsistent with the team leadership's focus. This may undermine professional skepticism. Team-oriented leadership positively influences the extent to which team members commit to the team leader and identify with the team, which affects the communication of important issues. These results have several implications. Training programs can make leaders more aware that a stronger emphasis on team goals can encourage information sharing. A continuous emphasis on both effectiveness and efficiency can encourage auditors to speak up. Performance evaluation systems can also be adapted to stimulate speaking up and team-oriented leadership.



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