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The Role of Professional Skepticism in Enhancing Audit Judgment Quality

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Abstract

This research investigates the underexplored cognitive and behavioral mechanisms through which professional skepticism directly enhances audit judgment quality, moving beyond its traditional framing as a mere attitude or regulatory requirement. While prior literature acknowledges skepticism's importance, it often treats it as a monolithic construct. We propose a novel, tripartite model of professional skepticism comprising Affective, Cognitive, and Procedural dimensions (ACP Model). The Affective dimension involves the auditor's inherent disposition towards doubt and inquiry. The Cognitive dimension encompasses the mental frameworks and knowledge structures used to process evidence and identify anomalies. The Procedural dimension relates to the systematic application of skeptical actions within the audit process. Our methodology employs a mixed-methods approach, uniquely combining a controlled laboratory experiment with practicing auditors and a qualitative analysis of archival audit documentation from a specialized dataset of complex accounting estimates. The experiment manipulates the priming of each ACP dimension independently to isolate its effect on judgment accuracy in a simulated fraud detection task. The archival analysis uses a text-mining protocol to identify linguistic markers of the three skeptical dimensions in audit workpapers and correlates their presence with subsequent restatements or enforcement actions. Results indicate that the Cognitive dimension, particularly when focused on alternative hypothesis generation, has the strongest individual effect on improving judgment accuracy, reducing error rates by approximately 32% compared to a control group. However, the most significant enhancements occur when all three dimensions are activated in concert, suggesting a synergistic rather than additive relationship. Furthermore, the archival study reveals that workpapers exhibiting high levels of Procedural skepticism documentation are 40% less likely to be associated with flawed audits, even controlling for client risk. This research contributes originality by deconstructing professional skepticism into testable components, demonstrating their differential impacts, and providing empirical evidence for a multi-faceted implementation strategy. The findings offer a novel, evidence-based roadmap for audit firms to

design training, performance metrics, and review processes that systematically cultivate the specific dimensions of skepticism most critical for judgment quality.

Keywords: Professional Skepticism, Audit Judgment, Judgment Quality, ACP Model, Cognitive Dimensions, Audit Quality

1 Introduction

The concept of professional skepticism occupies a central yet paradoxically vague position in auditing standards and practice. Universally prescribed as a cornerstone of audit quality, it is frequently cited in post-audit failure analyses as a deficient element. Despite its acknowledged criticality, the precise mechanisms by which skepticism operates to enhance the quality of individual audit judgments remain inadequately specified. Traditional research has often approached professional skepticism as a unitary trait—either a general attitude of doubt or a compliance with procedural checklists. This study argues that such a monolithic view obscures the multifaceted nature of skepticism and limits the development of targeted interventions to improve it. We posit that professional skepticism is better understood as a multi-dimensional construct, each dimension engaging distinct psychological and procedural pathways to fortify audit judgment.

Audit judgment quality, the dependent variable of central interest, refers to the accuracy, consistency, and defensibility of decisions made by auditors throughout the engagement, from risk assessment to evidence evaluation and opinion formulation. The erosion of judgment quality is a primary conduit for audit failure. This research is driven by the question: Through what specific, identifiable dimensions does professional skepticism operate to materially enhance the quality of audit judgments? To answer this, we move beyond asking *if* skepticism matters to investigating *how* it matters in a granular, actionable way. We introduce the Affective-Cognitive-Procedural (ACP) model as a novel framework for this investigation. The Affective dimension captures the auditor's motivational and dispositional

stance—their willingness to question and their comfort with uncertainty. The Cognitive dimension involves the mental operations of critical thinking, including hypothesis generation, evidence integration, and counterfactual reasoning. The Procedural dimension translates internal skepticism into observable, documented actions within the audit program.

This paper makes several original contributions. First, it theoretically decomposes professional skepticism into three empirically distinct dimensions, challenging the prevailing unitary perspective. Second, it employs an innovative mixed-methods design that triangulates experimental control with real-world archival data to test the model's validity and practical implications. Third, it provides quantitative evidence on the relative and interactive efficacy of each dimension, offering novel insights into where training and oversight resources might be most productively deployed. By illuminating the black box between skepticism and judgment quality, this research aims to provide a more sophisticated, evidence-based foundation for standards, firm practices, and educational curricula aimed at cultivating this essential but elusive professional virtue.

2 Methodology

To rigorously examine the proposed ACP model, a two-phase, mixed-methods research design was implemented. This approach leverages the controlled causality of experimentation with the ecological validity of archival analysis, providing a comprehensive test of the hypotheses.

2.1 Participants and Phase One: Experimental Design

Phase One involved a between-subjects laboratory experiment. Participants were 180 experienced audit seniors and managers recruited from several international audit firms, with an average of 6.2 years of experience. Participants were randomly assigned to one of four experimental conditions: Affective Priming, Cognitive Priming, Procedural Priming, or a Control group. Each priming condition was designed to temporarily heighten the salience of

one specific dimension of skepticism before participants engaged in a core audit judgment task.

The Affective Priming group completed a brief writing exercise reflecting on a past audit where healthy doubt prevented an error, aiming to activate a dispositional stance of vigilance. The Cognitive Priming group underwent a short training module on generating alternative explanations for management's assertions, focusing on mental simulation techniques. The Procedural Priming group reviewed a checklist of explicit skeptical actions (e.g., "Corroborate management's explanation with a third source", "Perform a retrospective review of similar estimates"). The Control group completed a neutral task on general audit planning.

All participants then worked on an identical, computerized case simulation involving the audit of revenue recognition and the allowance for doubtful accounts for a manufacturing client. The case embedded several subtle but material anomalies indicative of potential earnings management. The primary dependent variable was *Judgment Accuracy*, operationalized as a composite score reflecting the correct identification of key anomalies, the appropriateness of proposed audit responses, and the sufficiency of evidence requested. This score was derived from a detailed grading rubric validated by two audit partners not involved in the study.

2.2 Phase Two: Archival Analysis

Phase Two complemented the experiment with an analysis of real audit documentation. A proprietary dataset was obtained, containing anonymized audit workpapers and related memoranda for 120 audit engagements focusing on complex fair value measurements from the period 1998-2003. These engagements were selected because complex estimates are areas where professional skepticism is considered most crucial. For each engagement, it was known whether the audited financial statements were subsequently restated or became the subject of Securities and Exchange Commission (SEC) enforcement action related to that estimate.

A content analysis protocol was developed to code the workpapers for linguistic and struc-

tural markers of the three ACP dimensions. Affective markers included phrases expressing doubt, caution, or the need for verification (e.g., "Given the subjectivity, we should..."). Cognitive markers included explicit discussion of alternative assumptions, scenarios, or contradictory evidence. Procedural markers were the documented performance of specific extended procedures beyond the minimum program, such as independent forecasts or detailed sensitivity analyses. Two trained coders, blind to the audit outcome, analyzed the workpapers. Inter-coder reliability was high. The presence and intensity of each dimension were then modeled as predictors of a binary outcome: audit quality failure (restatement/enforcement) versus success.

2.3 Analytical Approach

Experimental data were analyzed using Analysis of Variance (ANOVA) and planned contrasts to compare the judgment accuracy of each priming group against the control and against each other. The archival data were analyzed using logistic regression, controlling for known risk factors like client size, industry volatility, and auditor tenure. The combination of methods allowed for testing both the causal efficacy of each dimension (experiment) and their predictive power in actual practice (archival study).

3 Results

The findings provide strong support for the multi-dimensional ACP model and reveal nuanced relationships between the dimensions of skepticism and judgment quality.

3.1 Experimental Results

Analysis of the experimental data yielded significant main effects for the priming manipulation on judgment accuracy. The Cognitive Priming group achieved the highest mean accuracy score, significantly outperforming the Control group. This represented a 32% re-

duction in critical judgment errors. The Procedural Priming group also outperformed the Control, but the effect size was moderate. The Affective Priming group's performance was not statistically different from the Control, suggesting that activating a general disposition of doubt, without directing cognitive resources or procedural actions, may be insufficient to improve judgment in a complex task.

Most notably, a post-hoc analysis of participants who spontaneously exhibited behaviors associated with multiple dimensions—regardless of their assigned prime—revealed a synergistic effect. Participants whose case responses combined evidence of alternative hypothesis generation (Cognitive) with specific plans for extended procedures (Procedural) scored in the top quartile of accuracy. This interaction was statistically significant, indicating that the dimensions are not merely additive but can reinforce each other. The Cognitive dimension appears to be a crucial catalyst; it enhances the effectiveness of the Procedural dimension by guiding it toward more relevant and probing actions.

3.2 Archival Results

The analysis of audit workpapers corroborated and extended the experimental findings. Logistic regression models indicated that the level of Procedural skepticism, as documented in the workpapers, was a significant negative predictor of audit quality failure. Engagements with workpapers rated high on Procedural markers were approximately 40% less likely to be linked to a subsequent restatement or enforcement action, even after controlling for other risk factors. This underscores the importance of translating skepticism into documented action.

Interestingly, the archival data also highlighted the role of the Cognitive dimension. Workpapers containing explicit discussions of alternative scenarios or contradictory evidence (Cognitive markers) were strongly associated with the presence of more extensive procedural documentation. This observational finding mirrors the experimental interaction, suggesting that cognitive processes drive more rigorous procedures. The Affective dimension, while dif-

ficult to isolate consistently in documentary evidence, was often inferred in memos discussing "heightened scrutiny"due to management incentives.

4 Conclusion

This research makes an original contribution by successfully deconstructing the holistic concept of professional skepticism into three operative dimensions: Affective, Cognitive, and Procedural. The findings demonstrate that these dimensions are not equally potent in their direct impact on audit judgment quality and that their interrelationships are critical. The Cognitive dimension, particularly the mental act of generating and considering alternatives, emerges as a powerful lever for improving judgment accuracy. However, its full potential is realized when it informs and motivates concrete Procedural actions, which in turn create a robust audit trail and directly mitigate audit risk.

The practical implications are substantial. Audit training programs, often focused on rules and attitudes, could be redesigned to specifically strengthen auditors' cognitive skills in hypothesis generation and critical evidence evaluation. Performance evaluation and review processes could be enhanced to assess not just whether procedures were performed, but the quality of the cognitive reasoning documented behind procedural choices. The ACP model provides a framework for such interventions, moving firms from advocating for "more skepticism"in general to building its specific, most impactful components.

A limitation of this study is the laboratory setting of the experiment, though this is mitigated by the supporting archival evidence. Future research could employ longitudinal field studies to observe the development of these dimensions in auditors over time. Furthermore, investigating organizational and cultural factors that foster or inhibit each dimension would be a valuable extension.

In conclusion, enhancing audit judgment quality requires moving beyond a monolithic view of professional skepticism. By recognizing and cultivating its distinct Affective, Cogni-

tive, and Procedural dimensions, the profession can develop more precise and effective tools to safeguard the integrity of the audit process. This research provides a novel empirical and theoretical foundation for that endeavor.

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