

PRACTICE NOTE

Fostering Audit Quality through Social Learning from Errors

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KEY TAKE-AWAYS

The findings of this project provide insights into how social learning from errors affects audit quality and how individual, relational, and organizational characteristics shape error learning. Together, these findings point to the following conclusions.

It is not how often an auditor seeks help that improves audit quality; it is how valuable that help is.

The findings show that seeking help frequently is, in itself, linked to lower audit quality. What matters is the learning value auditors derive from the help-seeking interactions they do have. Auditors who have access to a broader network of colleagues and gain more valuable learning from these interactions tend to achieve higher-quality outcomes....

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Project
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AR Foundation for
Auditing Research

Fostering Audit Quality through Social Learning from Errors

Practical Insights for Audit Firms

Is seeking help from colleagues after errors related to learning?

How does learning from errors relate to audit quality?

How do auditors perceive the firm's error climate?



What personality traits make auditors more likely to engage in social error learning?

What role do relational characteristics play in social error learning?

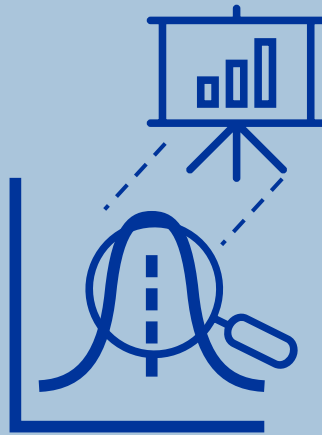
Is the firm's error culture associated with auditors' social error learning?



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Key Takeaways

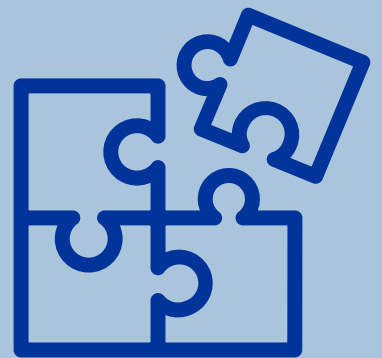
- Findings
- Practical Implications



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Descriptive Results

- Demographics
- Audit Quality
- Social Learning from Errors
- Error Management Culture



03

Pattern Analysis

- Social Error Learning and Audit Quality
- Drivers of Social Error Learning
- Individual and Organizational Characteristics and Audit Quality



Dear reader,

We are pleased to share with you the key findings from our research project "*Fostering Audit Quality through Social Error Learning*", funded by the Foundation for Auditing Research (FAR). This project investigates whether and how social learning from errors affects audit quality, and whether individual, relational, and organizational characteristics shape error learning. During the summers of 2025 and 2026, 496 auditors from five Dutch and Belgian audit firms participated in our study. We sincerely appreciate their collaboration and the valuable time the audit firms dedicated to this research.

Purpose

Based on rigorous academic research, this practice note offers audit practitioners actionable insights from the collected data. These insights may inform discussions and potential interventions within practice.

Methodology

Data were collected through a case-based experiment and a survey. Participants were asked to review working papers from a hypothetical audit file containing 15 common audit errors across three areas (inventory valuation, inventory cut-off, and property, plant, & equipment). Following the case, participants completed a survey measuring personality traits, perceptions of the audit firm's error climate, and error learning behaviors.

Report Structure

The report is organized in three sections. Section 1 presents descriptive results of all participating auditors. Section 2 explores initial patterns and associations between social learning from errors and audit quality, and whether and how individual, relational, and organizational characteristics shape error learning. Section 3 outlines the main conclusions, highlighting the key takeaways and their practical implications.

We hope you find these insights valuable and thought-provoking. Thank you for your interest in our research.

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01

Key Takeways

- Findings
- Practical Implications





Findings

The findings of this project provide insights into how social learning from errors affects audit quality and how individual, relational, and organizational characteristics shape error learning. Together, these findings point to the following conclusions.

It is not *how often* an auditor seeks help that improves audit quality; it is *how valuable* that help is.

The findings show that seeking help frequently is, in itself, linked to lower audit quality. What matters is the learning value auditors derive from the help-seeking interactions they do have. Auditors who have access to a broader network of colleagues and gain more valuable learning from these interactions tend to achieve higher-quality outcomes.

It is not the *personality* of the auditor that drives learning; it is *who the auditor can turn to* and the *error management climate* of the firm.

Personality mainly shapes how many colleagues an auditor turns to, not how often they seek help or how valuable it is. What matters more is who they can turn to. The more accessible and psychologically safe a colleague is, the more auditors turn to them for help. Hierarchy especially drives the value of that help. Auditors learn most from hierarchically superior colleagues. While modest, the climate of the audit firm plays a role too. Help-seeking frequency remains largely the same regardless of whether the climate is open or blame-oriented, but an open error management climate especially improves how much auditors learn from the help they seek.

2. Practical Implications

Three practical implications emerge from these findings:

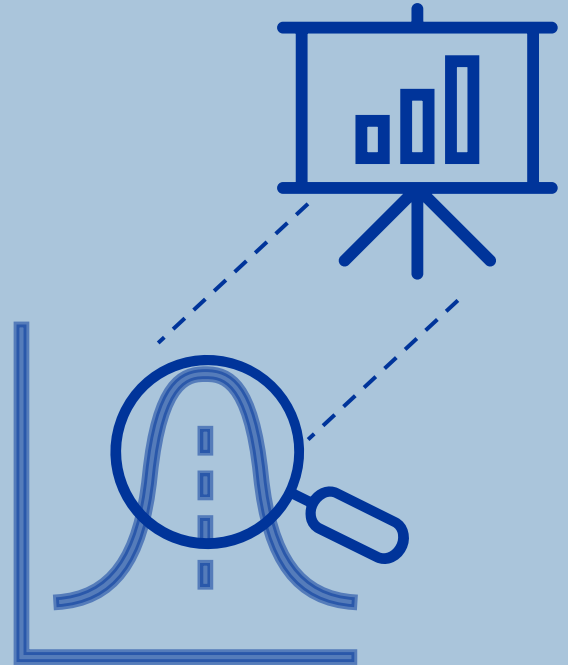
- 1) Invest in professional networks. Encourage mentoring, cross-team collaboration, and regular interaction across hierarchical levels to broaden auditors' access to knowledge and support.
- 2) Focus on the quality of help. The value of help-seeking interactions matters more than their frequency. Creating opportunities for meaningful feedback and reflection is therefore more important than encouraging auditors to seek help more often.
- 3) Foster an open error management culture. Treat errors as opportunities for learning while maintaining accountability. Open discussion of mistakes can help auditors learn not only from their own experiences but also from those of their colleagues.

02

Descriptive Results

The Benchmark

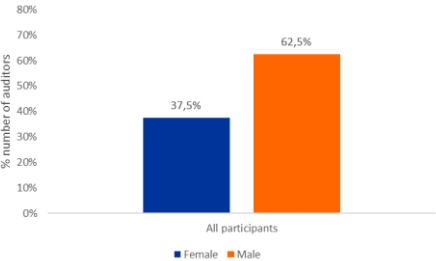
- Demographics
- Audit Quality
- Social Learning from Errors
- Error Management Culture



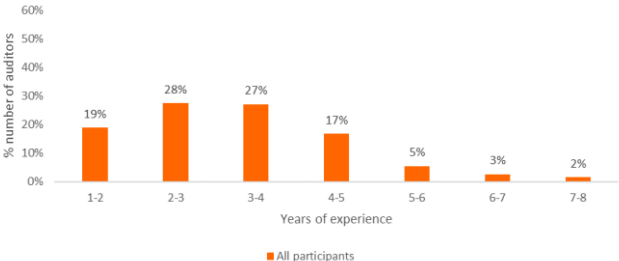


1. Demographics

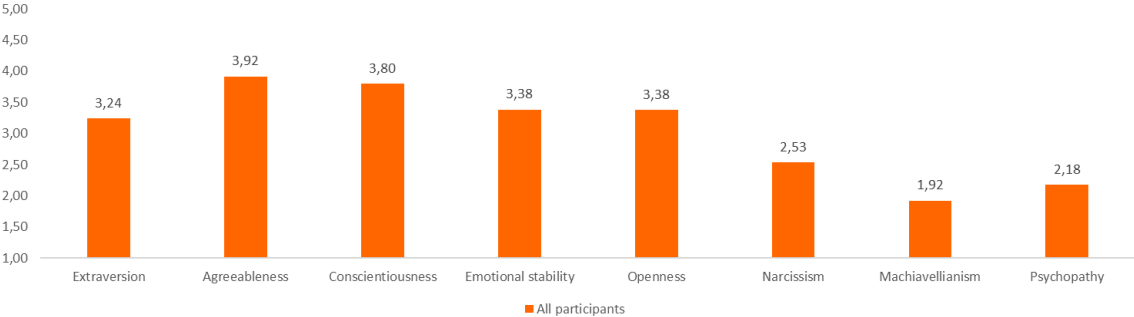
Gender



Experience



Personality Traits



The personality profile of the participants is broadly consistent with findings from previous research on auditors (e.g., Hardies et al. 2025¹; Kerckhofs et al. 2025²). Participating auditors demonstrate high levels of agreeableness and conscientiousness, alongside low levels of psychopathy and Machiavellianism. Their scores on extraversion, emotional stability, openness, and narcissism are near neutral levels.

The particularly high level of conscientiousness is noteworthy. Conscientiousness is widely recognized as one of the strongest personality-related predictors of job performance and is closely aligned with the diligence, reliability, and attention to detail required in the audit profession.

Sidenote: All personality traits are measured on a scale from 1 to 5 with higher scores indicating a stronger presence of that trait. Each trait has both advantages and disadvantages in a work environment; no trait is viewed as superior or inferior.

Gender

All participants: 310 men/186 women

Average age

All participants: 26 years

Average experience

All participants: ~3 years

Bright Personality Traits

Extraversion

Active, assertive, enthusiastic, outgoing, sociable, talkative

Agreeableness

Agreeable, cooperative, fair, forgiving, generous, kind, soft-hearted, sympathetic, trusting, warm

Conscientiousness

Dependable, organized, planful, precise, reliable, responsible, thorough

Emotional stability

Calm, contented, relaxed, secure, stable

Openness

Artistic, creative, curious, imaginative, intelligent

Dark Personality Traits

Narcissism

Grandiosity alongside underlying feelings of insecurity

Machiavellianism

Strategic planning, reputation-building, and coalition formation

Psychopathy

Impulsivity and a notable deficit in empathy

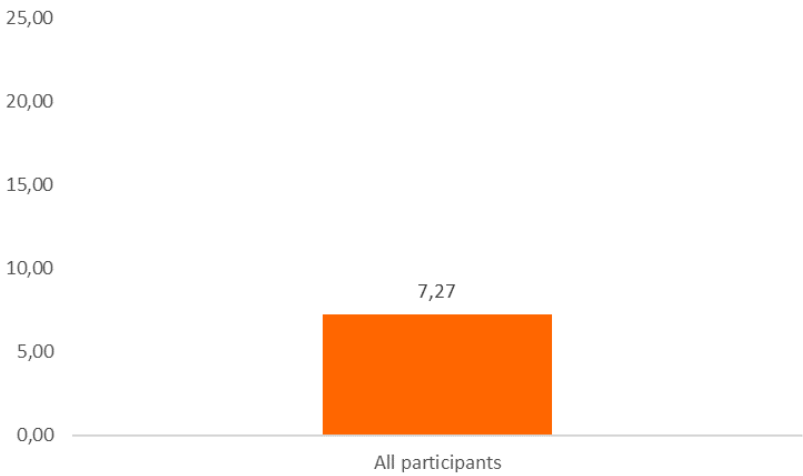
¹ Hardies, K., S. Janssen, A. Vanstraelen, and K. M. Zhems. 2025. "Auditors' Professional Skepticism: Traits, Behavioral Intentions, and Actions." *Auditing: A Journal of Practice & Theory* 44 (1): 105–35.

² Kerckhofs, L., M.-L. Vandenhoute, and K. Hardies. 2025. "Who Wants to Make Partner at an Audit Firm? Drivers and Behavioral Outcomes." *Accounting Horizons*.



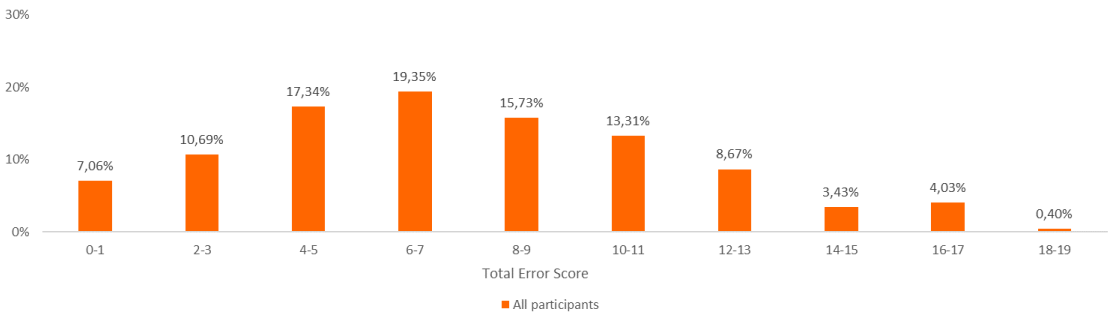
2. Audit Quality

Average Total Error Score



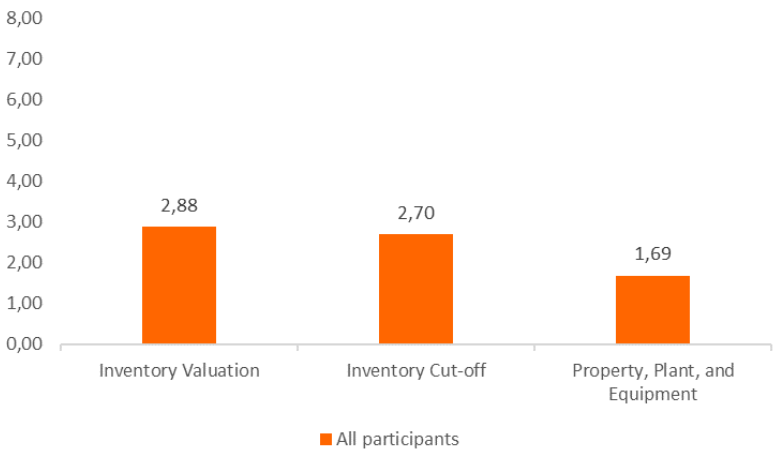
On average, participating auditors achieved a score of 7,27. At first glance, the average error score may appear lower than expected. However, this result is consistent with findings reported in similar case-based studies in the academic literature (e.g., Moroney and Carey 2011³; Mullis and Hatfield 2018⁴). Moreover, the objective was not for participants to identify every error in the case. Rather, the case was designed to generate meaningful variation in our performance metric, enabling us to distinguish between stronger and less strong performers. To achieve this, the case contained more errors than participants could reasonably be expected to identify within the available time.

Distribution of Total Error Score



The distribution of total error scores among participants shows considerable variation in performance.

Average Total Error Score per Area



We find that performance is particularly strong in the area of inventory valuation.

Audit Quality

To measure audit quality, participants reviewed working papers from a hypothetical audit file containing 15 common audit errors across three areas: inventory valuation, inventory cut-off, and property, plant, & equipment. Errors were assigned different weights depending on their criticality. As a result, participants could achieve a maximum error score of 24 points.

Number of (Total Error score)	Critical errors	Less-critical errors
Inventory valuation	3 (6 points)	2 (1 point)
Inventory cut-off	4 (8 points)	1 (1 point)
PPE	3 (6 points)	2 (2 points)
Total	10 (20 points)	5 (4 points)

To ensure a consistent approach, a model solution for the case was developed and subsequently reviewed by experienced auditors at the partner and manager level.

³ Moroney, R., and P. Carey. 2011. "Industry-versus Task-Based Experience and Auditor Performance." *Auditing: A Journal of Practice & Theory* 30 (2): 1–18.

⁴ Mullis, C. E., and R. C. Hatfield. 2018. "The Effects of Multitasking on Auditors' Judgment Quality." *Contemporary Accounting Research* 35 (1): 314–33.



3. Social Learning from Errors

Social learning from errors is the process through which auditors learn from their errors by engaging with colleagues, enabling them to recognize and correct errors and prevent recurrence.

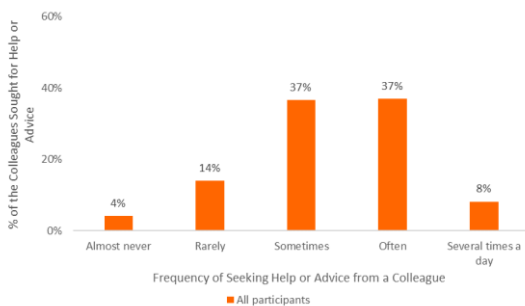
Average Help-seeking Network

Participants identified colleagues they turn to for help or advice after making an error (0-5 colleagues per auditor).

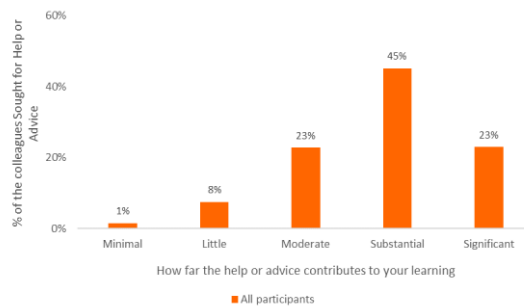


The **496 participating auditors** in our study identified a total of **1,802 colleagues** in their help-seeking networks. This corresponds to an **average network size of 3.6 colleagues** for all participating auditors. In practical terms, this suggests that when something goes wrong at work, auditors tend to rely on a group of approximately three to four trusted colleagues to help them interpret what happened and improve future performance.

Help-seeking Frequency



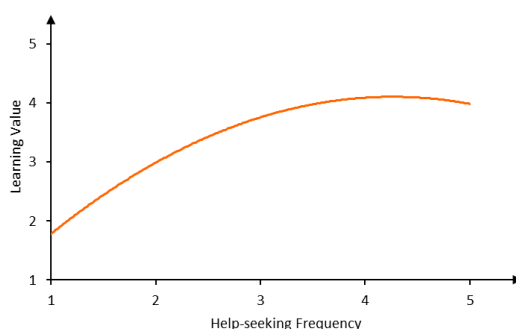
Learning Value



Overall, help-seeking among auditors appears to be a regular and integrated part of daily work. Most participants indicate that they turn to colleagues for support either occasionally or frequently, while very few do so extremely rarely or very intensively on a daily basis.

The perceived value of this support is high. The vast majority of respondents describe the help they receive as meaningful, with many rating it as substantial or significant in improving their understanding and performance. Only a small minority perceive the support they receive as having limited value.

When looking at **how frequency relates to perceived learning value**, a more nuanced pattern emerges. Learning value tends to increase as help-seeking becomes more frequent, but only up to a certain point. Beyond that threshold, additional increases in help-seeking no longer translate into higher perceived learning. In practical terms, this suggests that while seeking support is beneficial, more frequent consultation is not necessarily better and may eventually yield diminishing returns.



Social Learning from Errors

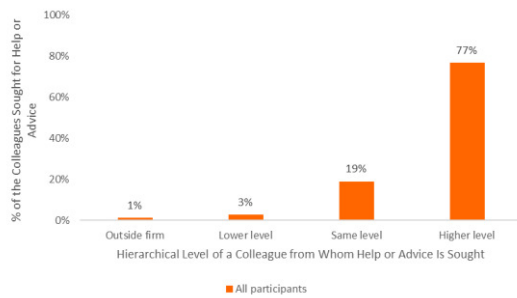
Social learning from errors was measured using a social **network** analysis approach looking at auditors' help-seeking behavior within their egocentric networks.

During the survey, participants were therefore first asked to **list up to five individuals** they typically seek help or advice from after making an error at work. Next, participants indicated *how frequently they sought help or advice* from each person (**Help-seeking Frequency**). Finally, participants rated the extent to which each person's help or advice contributed to their development of knowledge and skills (**Learning Value**).

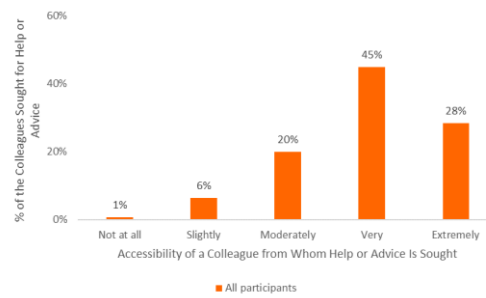


Relational Characteristics of the help-seeking network

Hierarchical Level



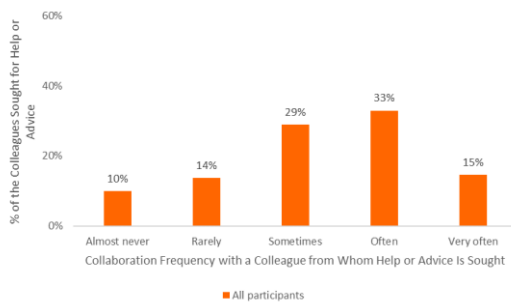
Accessibility



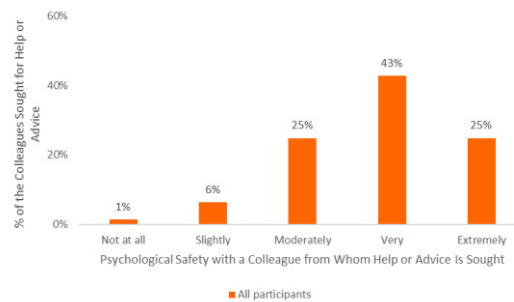
Of the approximately 3.6 colleagues auditors typically consult after making an error, the large majority (77%) are **hierarchical superiors**. This indicates that auditors predominantly seek guidance upwards within the hierarchy rather than laterally or downwards. While prior literature often views hierarchy as a potential barrier to seeking help, this pattern is not unexpected, as superiors are commonly involved in reviewing work and identifying issues that may prompt help-seeking.

Accessibility of the help-seeking network is also generally high. Participants report that the majority of colleagues, approximately 73%, they turn to for help or advice after an error are **very or extremely accessible**.

Collaboration Frequency



Psychological safety



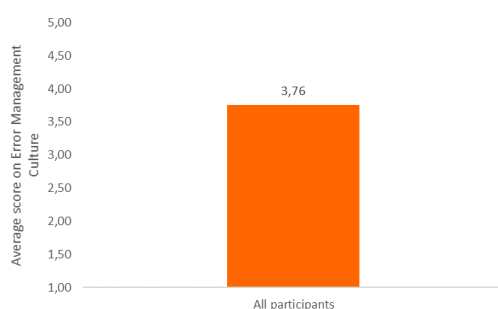
Participating auditors more often seek help or advice after an error from colleagues with whom **they collaborate frequently**. About 48% of the colleagues they consult exists of people with who they work (very) often.

Participants report **very or extremely open and trusting relationships** with the majority of colleagues they consult. Importantly, almost none of these help-seeking relationships are characterized by low levels of openness and trust.

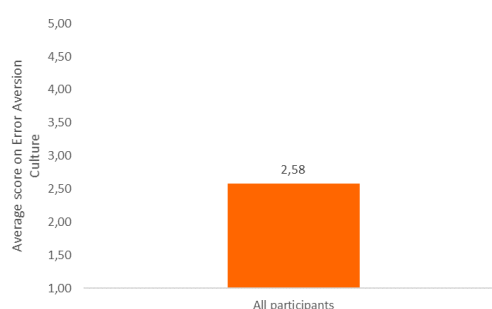
4. Error Management Culture

The collective perceptions of the members of an organization or organizational unit concerning practices, processes, structures, and behaviors that support or hinder the benefit that organizations can draw from errors.

Open Error Management Culture



Blame Error Management Culture



The results suggest that participating audit firms generally foster an environment in which errors are openly discussed, analysed, and used as opportunities for learning. At the same time, concerns about blame appear to be relatively limited, indicating that **auditors generally feel comfortable acknowledging mistakes and learning from them**.

Importantly, a too low level of blame might imply a lack of accountability. Some degree of concern about making errors is healthy, as it helps maintain professional vigilance and supports high-quality performance.

Relational Characteristics of the help-seeking network

Four key relational characteristics can *encourage or create barriers* to effective error learning, influencing both help-seeking behavior and learning outcomes.

- **Hierarchical Level:**
Whether that colleague is at a lower hierarchical level, the same level, a higher level, or outside the firm.
- **Accessibility:**
How accessible that colleague is or the degree to which their expertise and willingness to engage in problem-solving is available in a timely manner.
- **Collaboration Frequency:**
How often they collaborate with that colleague outside of seeking help.
- **Psychological Safety:**
The level of openness and mutual trust in the relationship with that colleague.

Error Management Culture

When assessing organizational culture, it is important to recognize that openness and blame are not simply opposites. Think of a firm that organizes post-error debriefs and encourages open discussion, but where, at the same time, people who make mistakes are quietly passed over for promotion. As a result, a culture can be both open and blame-oriented to some degree, making it important to consider these two dimensions separately.

Open Error Management Culture

(measured on a scale from 1 to 5 with higher scores indicating a more open error management culture)

The degree to which errors are treated as learning opportunities within the audit firm. In an open culture, errors are openly discussed, analyzed, and corrected. Auditors feel safe admitting errors and learning from them together.

Blame Error Management Culture

(measured on a scale from 1 to 5, with higher scores indicating a more blame error management culture)

The degree to which errors create stress and fear within the audit firm. In a blame culture, mistakes lead to embarrassment and concealment rather than open discussion. Auditors may hide errors to avoid criticism.

03

Pattern Analysis

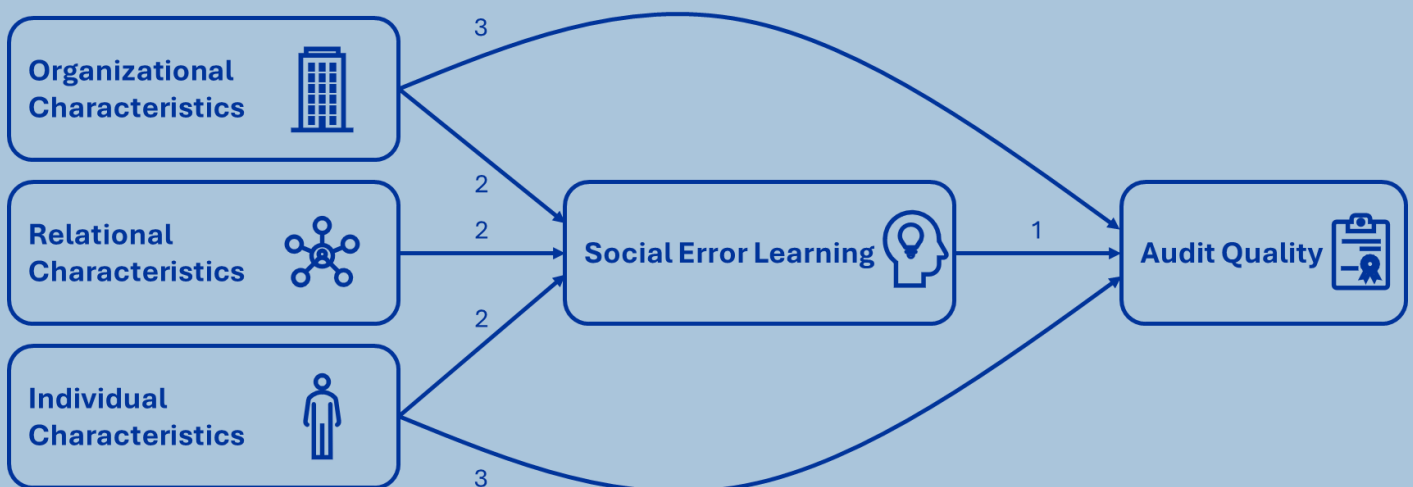
On the Whether and How of Associations between Variables

While Section 1 provides descriptive results of the full sample, this section examines patterns across all 496 participating auditors from the Netherlands and Belgium who identified 1,802 colleagues to whom they turn for help or advice after errors.

By analyzing associations between key variables, we primarily aim to shed light on two central questions:

- (1) Whether and how social learning from errors affects audit quality, and
- (2) Whether and how individual, relational, and organizational characteristics shape error learning.

Additionally, we touch on (3) the effect of individual characteristics and error management climate on audit quality as a complementary lens.





1. Social Learning from Errors and Audit Quality

Whether and how social learning from errors affects audit quality

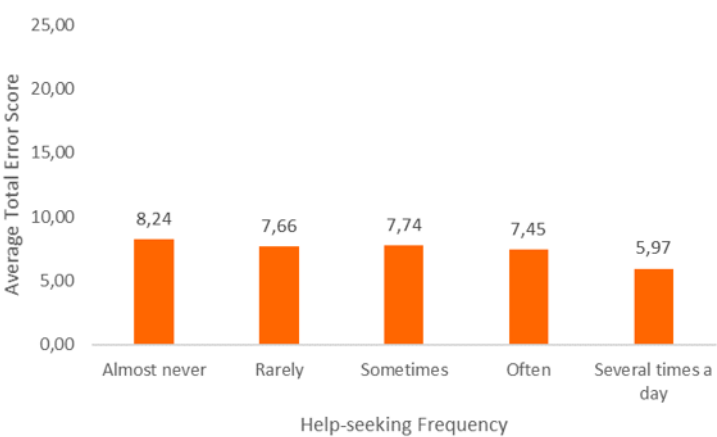


Total Error Score by Help-seeking Network Size

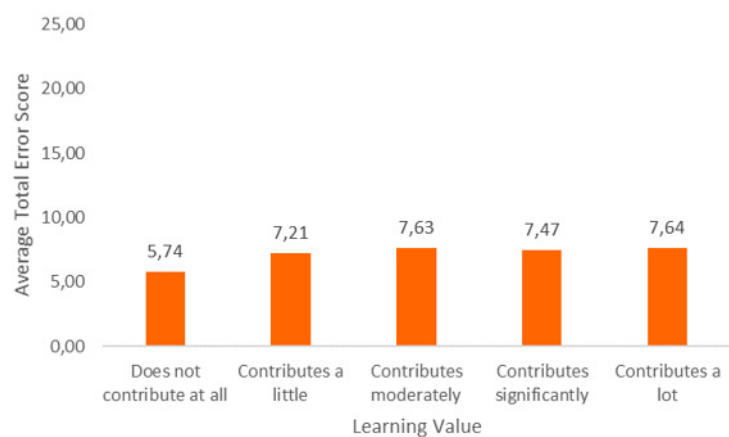


Looking at the relationship between social learning and audit quality, we find a clear positive association. Auditors who identify three or more colleagues to turn to after an error perform better than those with smaller or no help-seeking networks. After encountering an error, they tend to perform better in the case, as reflected in their ability to identify more issues. This suggests that the breadth of an auditor's informal support network plays an important role in audit quality. Accessing input from a wider range of colleagues appears to provide more diverse perspectives and expertise, which in turn supports more effective learning and better performance when problems arise.

Total Error Score by Help-seeking Frequency



Total Error Score by Learning Value

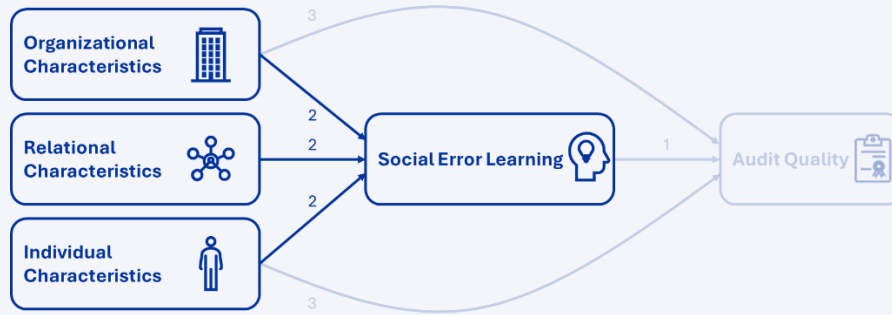


A further look at social error learning reveals two important patterns. First, very frequent help-seeking is associated with lower audit performance. Auditors who turn to colleagues several times a day tend to identify fewer errors than those who seek help less often. This suggests that extremely frequent reliance on others may reflect underlying difficulties in managing tasks independently, rather than effective learning behaviour. In contrast, the perceived value of the help received is positively related to audit quality. Auditors who experience their colleagues' input as genuinely helpful and learning-enhancing tend to perform better than those who report limited benefit from such interactions.



2. Drivers of Social Error Learning

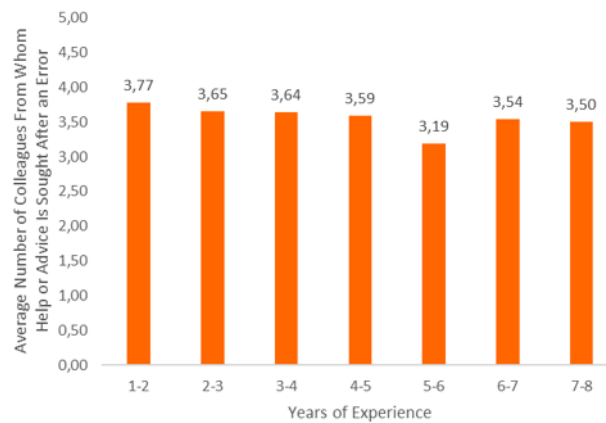
Whether and how individual, relational, and environmental characteristics shape error learning



2.1. The Effect of Individual Characteristics on Social Error Learning

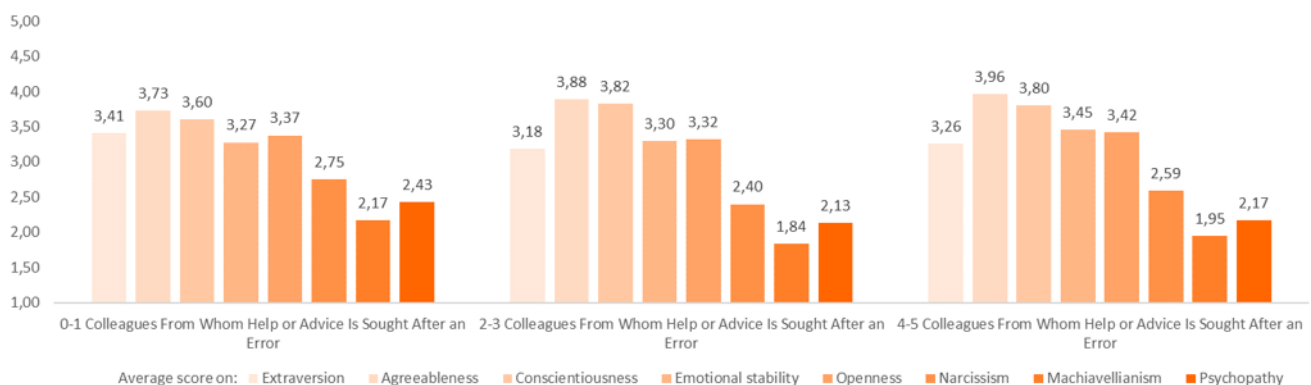
The role of auditor experience and personality traits

Help-seeking Network Size by Auditor Experience



Help-seeking network size remains fairly stable across experience levels. **Even the newest auditors have multiple colleagues to turn to after an error, suggesting that new hires quickly establish help-seeking relationships.**

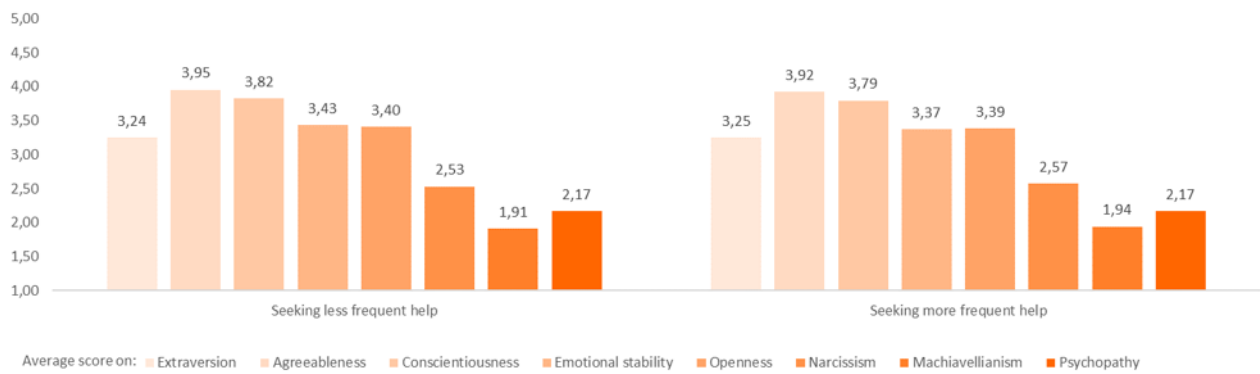
Auditor Personality Profiles by Help-seeking Network Size



Auditors with larger help-seeking networks exhibit slightly different personality profiles than those with smaller networks. Specifically, auditors who have 2 or more colleagues to turn to after an error score lower on narcissism, Machiavellianism, and psychopathy and higher on Agreeableness and Conscientiousness compared to those with a smaller network. **This suggests that auditors with more collaborative, prosocial characteristics build broader support networks, while those with more self-centered or impulsive tendencies maintain smaller networks.**

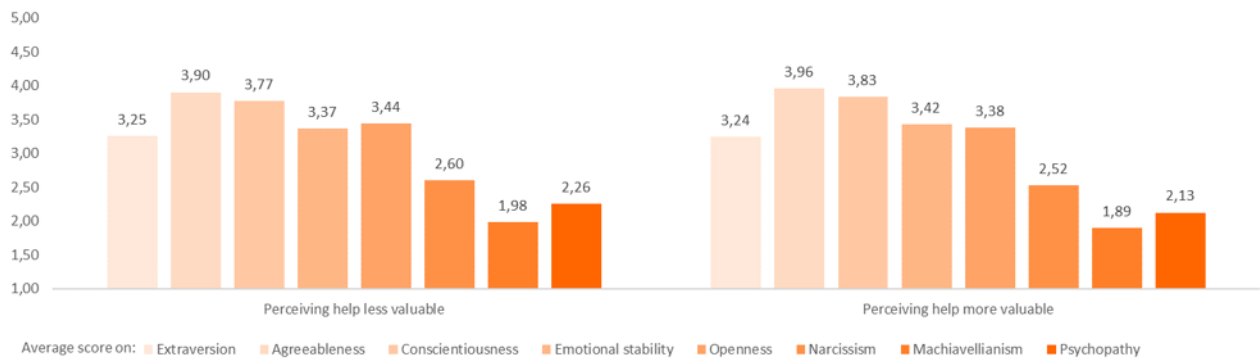


Personality Traits by Help-seeking Frequency*



*Based on average split of help-seeking frequency

Personality Traits by Learning Value of Help Sought*



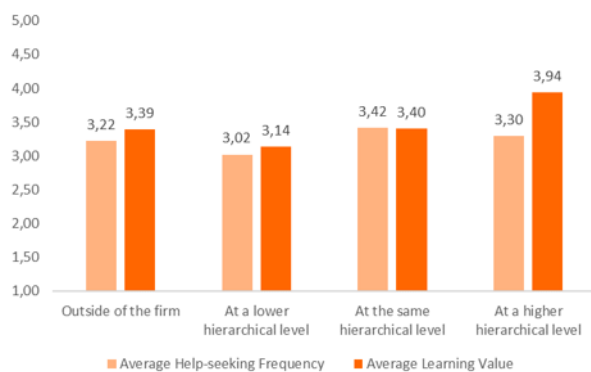
*Based on average split of learning value of help sought scores

No meaningful differences emerge across personality profiles in either the frequency with which auditors seek help or the value they derive from these interactions.

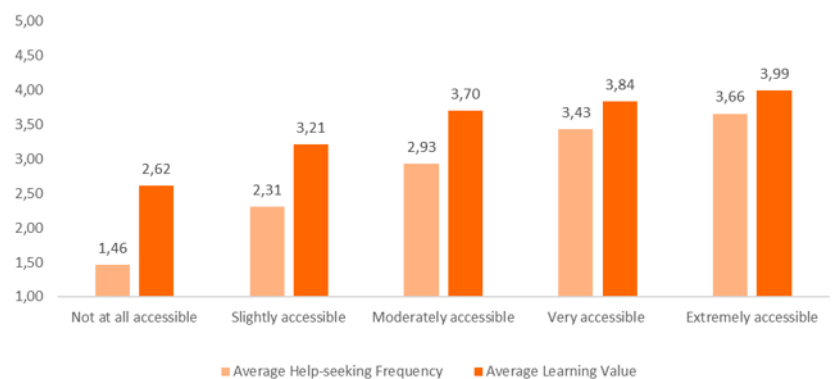
2.2. Relational Characteristics That Shape Social Error Learning

The role of Hierarchical Level, Accessibility, Collaboration Frequency, and Psychological Safety of colleagues

Social Error Learning by the Hierarchical Level of Colleagues

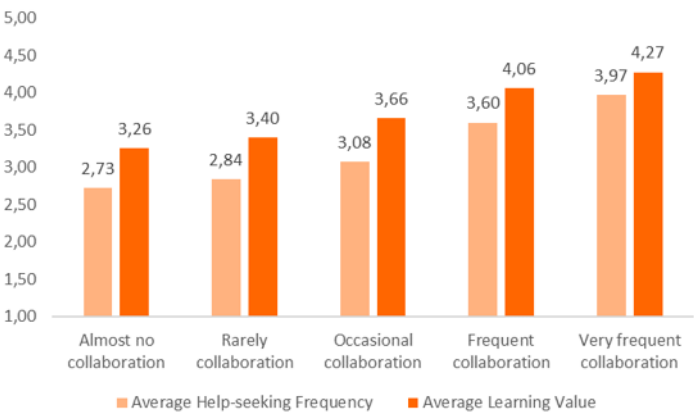


Social Error Learning by the Accessibility of Colleagues

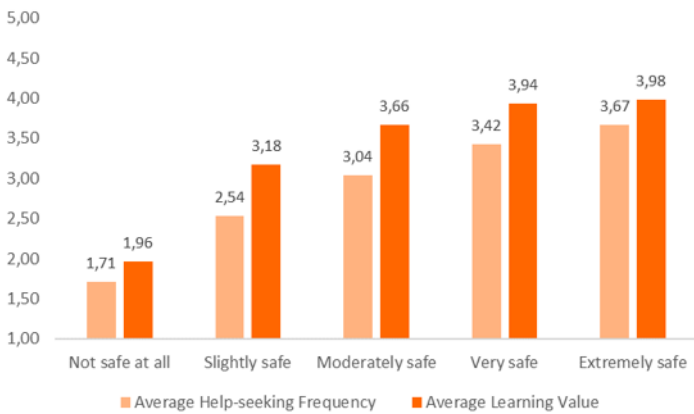




Social Error Learning
by the Collaboration Frequency



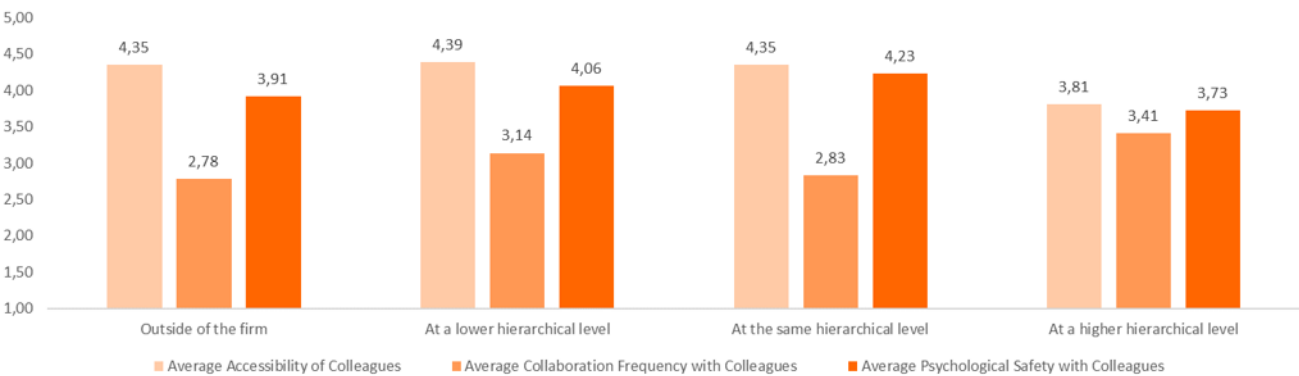
Social Error Learning
by the Psychological Safety



While auditors predominantly include colleagues from a higher hierarchical level in their help-seeking networks (~76%, see Section 1), the frequency with which they seek help does not differ by hierarchical level. Auditors turn to all network members – whether lower, similar, or higher hierarchical level – with similar frequency. **However, participants indicate that the perceived learning value of help increases with the hierarchical level of the colleague consulted. This is not unexpected, as higher seniority typically comes with greater experience and expertise, which can provide more valuable guidance when dealing with errors.**

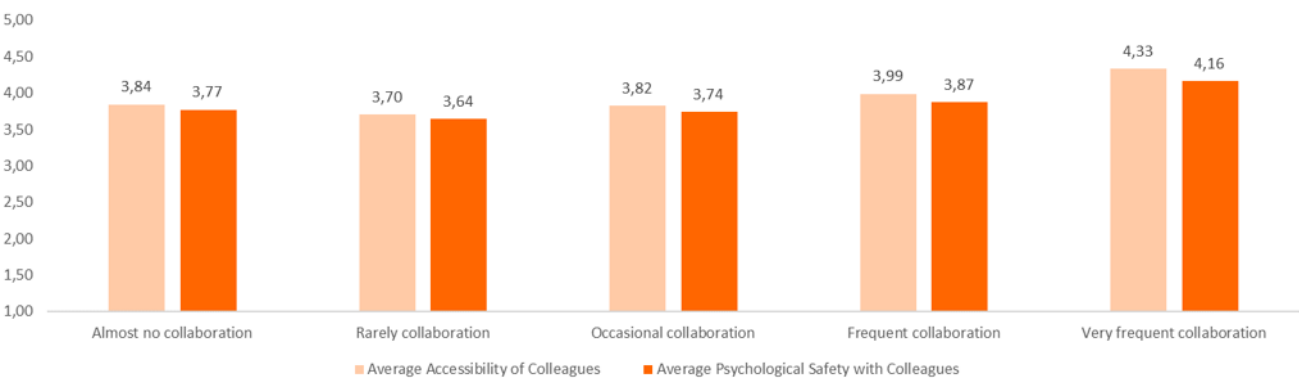
Further, auditors more frequently seek help or advice after an error from colleagues who are accessible, with whom they collaborate regularly, and with whom they share open and trusting relationships. These colleagues are reported to contribute more strongly to auditors.

Relationship Characteristics by Hierarchical Level
Accessibility, Collaboration Frequency, and Psychological Safety



While having an increased learning value, hierarchy also introduces **relational distance**. Colleagues in more senior positions are generally perceived as less accessible, and interactions with them tend to be somewhat less open and trusting. This is in line with what one would typically expect and is not necessarily problematic in itself. A certain level of distance can help maintain the professional nature of the interaction, and, as noted above, **this does not appear to reduce the perceived learning value of their input.**

Relational Characteristics by Collaboration Frequency



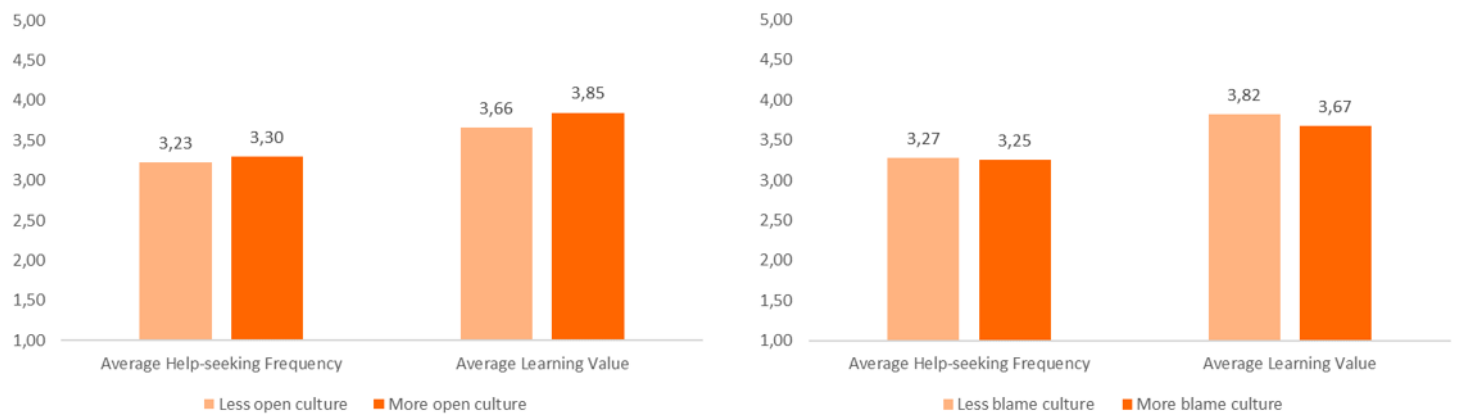
More frequent collaboration with colleagues increases their accessibility and the psychological safety with them. Structured opportunities for increased collaboration (for example stable teams) may strengthen relationships and increase comfort with help-seeking after errors.



2.3. Organizational Characteristics That Shape Social Error Learning

The role of the Error Management culture

Social Error Learning by Error Management Culture*



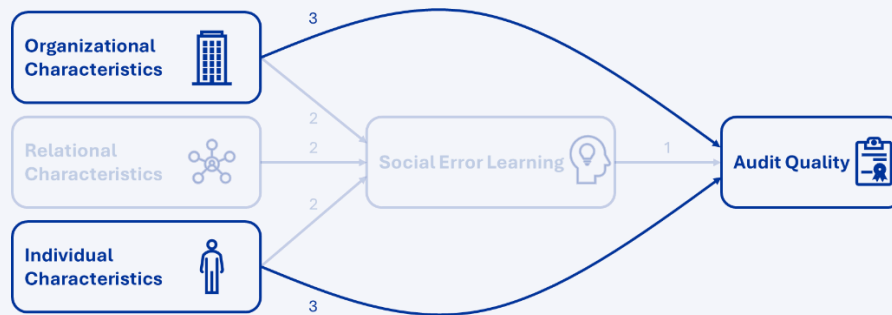
*Based on average split of error management culture

The results suggest that organizational culture influences the effectiveness of help-seeking rather than the frequency with which it occurs. Auditors appear equally likely to seek support from colleagues regardless of the prevailing culture. However, in firms with a stronger learning orientation, auditors report gaining more value from these interactions.

This is consistent with recent research showing that people are more receptive to feedback when errors can be discussed openly and constructively. In a blame-oriented environment, concerns about judgment or negative consequences may shift attention away from learning, towards self-protection. This finding highlights **the importance of creating an environment in which errors can be discussed openly and constructively**. A blame-oriented culture may not prevent auditors from asking for help, but it can reduce the extent to which they learn from the support they receive. This is particularly important because, as shown earlier, audit quality is driven not by how often auditors seek help, but by how much they learn from those interactions.

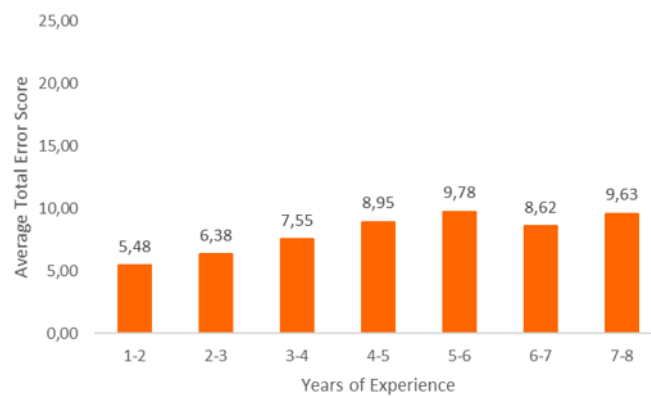


3. Individual and Organizational Characteristics and Audit Quality



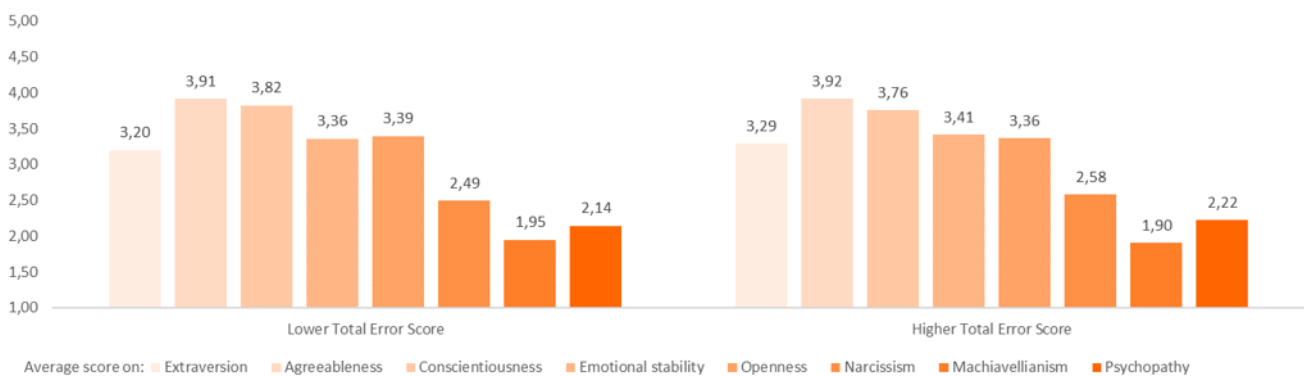
3.1. The Effect of Individual Characteristics on Audit Quality

Total Error Score by Experience



As expected, **audit quality increases with auditor seniority**, with more experienced auditors identifying more audit errors than their less experienced counterparts. This likely reflects the accumulation of expertise and enhanced pattern recognition developed through years of practice.

Personality Traits by Total Error Score*



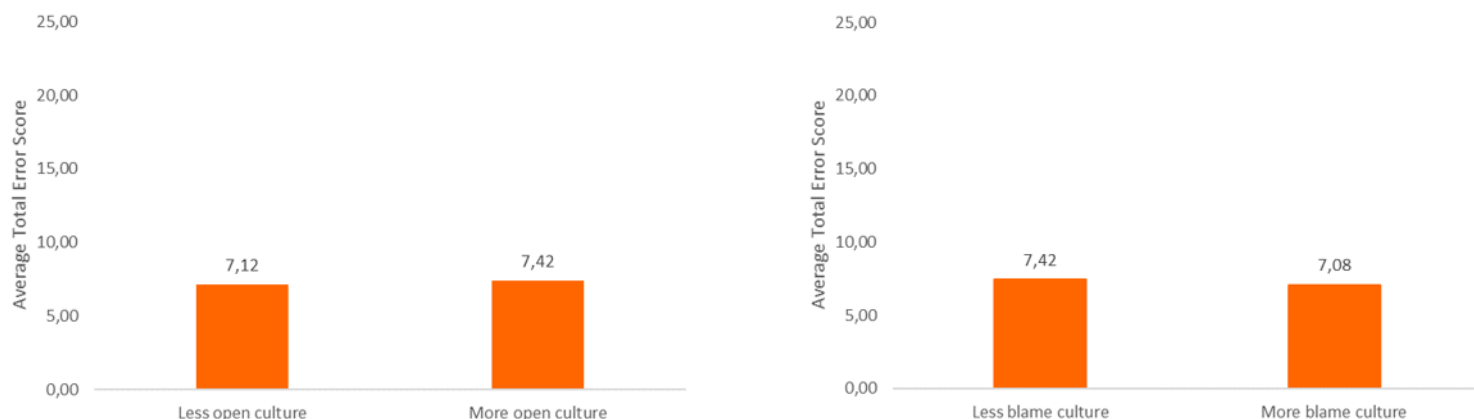
*Based on average split of Total Error Score

Personality traits show no relationship with audit quality, with high and low performers exhibiting nearly identical profiles across all measured traits. This suggests that **audit quality at the junior and senior level is driven primarily by experience, technical skills, learning behaviors, and organizational culture rather than inherent personality characteristics**, reinforcing that **effective auditing at these career stages can be developed through training and supportive environments**.



3.2. The Effect of Error Management Culture on Audit Quality

Total Error Score by Error Management Culture*



*Based on average split of error management climate

Auditors who perceive their organizational culture as **more open tend to detect more audit errors** than those working in less open environments. Conversely, auditors operating in **more blame-oriented cultures identify fewer audit errors** than those in less blame-oriented environments. This pattern suggests that when auditors fear being blamed for mistakes, they may be less inclined to seek help after encountering errors and engage in less learning, which ultimately hinder their performance. A blame-oriented climate can therefore negatively impact audit quality.