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Silence is golden? Disclosure of critical audit matters and auditors' perception of due professional care

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Abstract: Revised auditing standards now require the disclosure of critical audit matters (CAMs) in audit reports. However, these standards do not explicitly specify whether conclusive evaluations should be provided for these matters, leaving it to the discretion of auditors. Our study utilises psychological theories and experimentally tests the impact of CAM disclosure formats (with or without conclusive evaluations) on auditors' perceived due professional care. We find that CAMs with conclusive evaluations lead auditors to perceive a lower level of due professional care compared to CAMs without conclusive evaluations. When considering auditors' experience, our results show that the absence of conclusive evaluations in CAMs leads both less experienced and more experienced auditors to perceive a relatively high level of due professional care. However, the presence of conclusive evaluations in CAMs leads more experienced auditors to perceive a lower level of due professional care compared to their less experienced counterparts.

Keywords: CAM; critical audit matter; conclusive evaluations; perception of due professional care; auditor; experience.

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1 Introduction

The International Auditing and Assurance Standards Board (IAASB) promulgated revised auditing reporting standards in January 2015, which mandate that auditors disclose key audit matters (KAMs) within the audit report. The Public Company Accounting Oversight Board (PCAOB 2017) also passed a standard that requires auditors to disclose critical audit matters (CAMs). Similarly, the Ministry of Finance of China revised the auditing reporting standards by adding CAMs. As a result, the revised audit report now incorporates CAMs, which entail a detailed listing and description of these matters, an explanation of the reasons for identifying them as CAMs, and the corresponding audit procedures. Furthermore, it is suggested that auditors may provide their own evaluation of CAMs. It is worth noting that the new auditing reporting standards do not mandate the inclusion of conclusive evaluations for CAMs; instead, it is at the discretion of auditors to voluntarily disclose such evaluations.

From 2017 to 2023, both the number of listed companies disclosing CAMs and the total number of CAMs disclosed have shown a year-by-year increasing trend.¹ This indicates that listed companies are placing increasing emphasis on the disclosure of CAMs, and the content being disclosed is becoming richer. An analysis of audit reports from Chinese listed companies reveals that, since the implementation of the new auditing reporting standards in 2017, 5335 listed companies have published their audit reports, disclosing a total of 58,943 CAMs as of December 31, 2023. Among them, 3340 audit reports contain conclusive evaluations in the CAMs, accounting for 10.45%. Further examination of these 58,943 matters shows that auditors have provided 8,946 conclusive evaluations, accounting for approximately 15.18% of the total. This situation prompts the question: why do some auditors choose to provide conclusive evaluations for CAMs while others do not? It is worth considering whether the provision of conclusive evaluations reflects differences in auditors' professional judgement and due professional care. These intriguing questions call for a thorough investigation and analysis to develop a comprehensive understanding of the factors influencing auditors' choices in providing conclusive evaluations, as well as the potential implications of these choices.

According to norm theory and Chinese social norms, when the behaviour of others conforms to norms, individuals perceive that the behaviour is the result of a cautious decision-making process and is therefore more correct or justified. Conversely, when others deviate from the norm in their behaviour, individuals perceive the behaviour as incorrect or unjustified and are more likely to attribute responsibility to them. In the context of auditing, we expect that there is a different effect of the CAMs disclosure format on auditors' perceived due professional care. That is, auditors may perceive different levels of due professional care when CAMs include conclusive evaluations compared to when they do not. We also expect that there is an interaction effect between the CAMs disclosure format and auditors' experience. Specifically, both more experienced and less experienced auditors would perceive CAMs paragraphs without conclusive evaluations as conforming to social norms, leading them to perceive a higher level of due professional care. However, when encountering CAMs paragraphs with conclusive evaluations, more experienced auditors would view this behaviour as inconsistent with professional norms and the social norm of "caution in speech and actions", resulting in them perceiving it as less cautious. In contrast, less experienced

auditors may not perceive providing conclusive evaluations as lacking caution. To test our hypothesis, we take accounts receivable and bad debt provisions as a CAM and utilise a 2×2 experimental design to analyse how the inclusion of conclusive evaluations in CAMs paragraphs affects auditors' perception of due professional care.

Our findings demonstrate a significant effect of the CAMs disclosure format on auditors' perceived due professional care. Specifically, auditors perceive a lower level of due professional care when CAMs include conclusive evaluations compared to when they do not. Moreover, we reveal a significant interaction effect between the disclosure format of CAMs and auditors' experience. In cases where CAMs include conclusive evaluations, more experienced auditors perceive a lower level of due professional care compared to less experienced auditors. However, when CAMs do not include conclusive evaluations, there is no significant difference in perceived due professional care between less experienced and experienced auditors.

Our study makes two main contributions. Firstly, it applies social norms theory to explain why there is a limited number of auditors providing conclusive evaluations in the CAM paragraphs. By doing so, our study introduces psychological theories to auditing research, enriching the existing auditing theories. Specifically, individuals who adhere to social norms are often seen as conservative or cautious, leading to fewer questions and less accountability. Auditors not providing conclusive evaluations in the CAMs align with Chinese social norms, such as "silence is golden" and "speaking and act cautiously", which enhances their perceived level of due professional care. Secondly, our study expands the understanding of factors that influence perceived due professional care by examining the disclosure formats of CAMs, specifically whether a conclusive evaluation is included or not. Due professional care is important in practice, but difficult to measure. Existing academic research examines due professional care from the perspective of individual perception, in order to infer the due professional care exhibited by auditors in practice. Therefore, studying the influencing factors of perceived due professional care is also of practical significance. Our findings indicate that the different forms of CAMs can, to some extent, reflect the auditor's due professional care.

The remainder of this paper is organised as follows. In Section 2, we introduce the institutional background, theoretical analysis, and hypotheses development. Section 3 is devoted to our research methodology. Section 4 presents the experimental results and analysis. Section 5 concludes this paper.

2 Background and hypotheses development

2.1 CAMs

CAMs relate to accounts or disclosures that are material to the financial statements and involve especially challenging, subjective, or complex judgement during the audit. To reduce information asymmetry and increase investors' scrutiny over those areas, a reform of audit report standards was initiated in 2012 in UK. This led to the revision of auditing reporting standards, followed by the introduction of updated policies and standards in other countries and international bodies (Elmarzouky et al., 2024). In January 2015, the IAASB issued revised audit report standards, which mandated the disclosure of CAMs in the report. The PCAOB passed a new standard, AS 3101, which requires auditors to

communicate CAMs in their auditing report. China also introduced new auditing reporting standards in December 2016. All standard setting bodies' revised audit standards made it mandatory to include CAMs disclosure in the audit report. As per the requirements of the new standards, the disclosure of CAMs entails providing a detailed description of the matters, explaining why they are deemed CAMs, and outlining the corresponding audit procedures. In addition, the ISA701 issued by the IAASB and the AS3101 issued by the PCAOB state that "the auditor may describe an indication of the outcome of the auditor's procedures, or key observations with respect to the matter in the KAM (CAM)". It is important to note that the inclusion of the outcome of the auditor's procedures, or key observations with respect to the matter in the KAM (CAM) is not mandatory; rather, it is a voluntary decision made by auditors based on their professional judgement. In auditing practice, some auditors do disclose their observations with respect to the CAMs or an indication of the outcome of the auditor's procedures for CAMs in audit reports. Therefore, we refer to an indication of the outcome of the auditor's procedures or these observations as conclusive evaluations.

Following the reform of auditing reporting standards in China, a certain proportion of audit reports (10.45%) now includes conclusive evaluations for CAMs. For example, PricewaterhouseCoopers issued a conclusive evaluation in the audit report of Bank of Communications, stating: *"Based on the aforementioned test results, we find that the evidence obtained during the audit supports the management's assessment of the derecognition of loans that have been transferred"*. The decision of auditors to provide conclusive evaluations is based on their professional judgement and is closely related to their level of due professional care. Recent cases of disciplinary actions by the China Securities Regulatory Commission (CSRC) reveal that a majority of audit failures stemmed from a lack of due professional care. CAMs encompass significant transactions, risks, and management judgements. The identification of CAMs and their effective communication in the audit report necessitate auditors to exercise professional judgement and uphold due professional care. Therefore, we investigate whether the inclusion of conclusive evaluations for CAMs in audit reports has an impact on auditors' perception of due professional care.

2.2 Due professional care

Due professional care originates from the judicial field, initially stemming from court decisions. In the British court case of *Cooley Tort*, the judge believed that due professional care should include three aspects: possessing skills that match the completion of a certain task; exercising those skills with due diligence; and maintaining a necessary attitude of fairness, integrity, and loyalty. Subsequently, this concept was introduced into the field of auditing, where it became known as audit professional care, gradually becoming a fundamental requirement of the auditing profession. It is generally also referred to as due professional care. Currently, due professional care is a key concept in both auditing standards and the judicial field, but there is no unified, universally recognised definition.

The American Institute of Certified Public Accountants (AICPA) believes that maintaining due diligence, objectivity, integrity, and independence in practice is maintaining due professional care. The AICPA's auditing standards for non-public companies directly equate due professional care with professional scepticism.

The PCAOB's AS 1015: *Due professional care in the Performance of Work* defines due professional care as auditors possessing the skills necessary for practice and maintaining a reasonable level of care and diligence in the practice, while maintaining professional scepticism. China's CPA Auditing Standard No. 1101 – *Overall Objectives of the Auditor and Basic Requirements for the Audit* also equates due professional care with professional scepticism in the performance of audit. In the penalty documents published by the CSRC regarding auditors and their firms, professional scepticism and due professional care are used in parallel. Therefore, our paper considers due professional care to be the maintenance of a professional sceptical attitude, which includes reasonable doubt and prudent evaluation of audit evidence, always maintaining a questioning mindset, and being vigilant for signs that may be due to errors or frauds leading to misstatements.

2.3 *Hypotheses development*

2.3.1 *Disclosure form of CAMs and due professional care*

Psychologists define “norms” as rules of social behaviour, which members of society use to constrain their own behaviour by applying various cultural value standards that they have learned over time (Cialdini et al., 1990). Existing literature has confirmed that norms can affect individuals' perception of decision-making, which in turn affects the perception of the legitimacy of actions (Connelly and Reb, 2011; Hilton et al., 1988). Specifically, when the behaviour of others aligns with established norms, individuals tend to perceive such behaviour as the outcome of a deliberate and cautious decision-making process. Consequently, they are more likely to regard it as correct or justified. Conversely, when others deviate from the norm in their behaviour, individuals perceive the behaviour as incorrect and are more likely to attribute responsibility to them, particularly when the norm is considered appropriate in the current environment (Malle et al., 2012; Connolly and Zeelenberg, 2002; Sunstein, 2018).

The social norm of being cautious in speech, as a means of personal development, can also be traced in traditional Chinese culture, as evidenced by various historical references. One well-known saying that reflects this norm is “Silence is golden”, originating from the *Analects of Confucius*, specifically in the chapter “Wei Zheng”. In this passage, Confucius emphasises the value of knowledge, caution, and avoiding mistakes in speech and actions, which leads to prosperity. The interpretation suggests that being well-informed, seeking advice when unsure, and exercising caution in speech are essential to avoid errors and regrets. The *Book of Rites (Li Ji)* also contains a passage emphasising the importance of considering the consequences of words and reflecting on the outcomes of actions. The passage states that a noble person guides others through words and restricts them through actions, emphasising the need for careful consideration and caution in both speech and actions. Other ancient works, such as Zhu Xi's “*Zhu Zi Yu Lei*” and Gui Gu Zi's “*Ben Jing Fu*”, touch upon similar concepts. Proverbs like “Calamity comes from the mouth, illness enters through the mouth” and the idea that “excessive speech will inevitably reveal shortcomings” highlight the significance of discretion in speech. It can be seen from these ancient classic works that being cautious in speech is deeply rooted in traditional Chinese culture. As a consensual social norm, it guides and corrects individual behaviour.

According to our statistics, there are three main statements for conclusive evaluations: the estimated amount of CAMs is reasonable, the estimated amount of CAMs is acceptable, and no significant misstatements have been found in the estimated amount of CAMs. These evaluations are described using positive frameworks or positive language. Using a positive framework or positive language for description leads to a more positive evaluation of an object or attribute by individuals (Levin et al., 1988). When audit reports contain positive conclusive evaluations, users are likely to develop favourable expectations of CAMs. And if there are significant misstatements in these matters subsequently, users are more likely to hold the auditors accountable, accusing them of providing misleading evaluations rather than not providing conclusive evaluations. That is to say, based on the theory of norms, the auditor who provided conclusive evaluations on CAMs may be viewed as violating the social norm of “caution in speech and actions”, while the conclusion is hardly negative and therefore it is inconsistent with the misstatement of facts. This behaviour could be seen as falling into the notion of “calamity comes from the mouth, excessive speech leads to mistakes”, indicating a lack of caution.

In contrast, auditors who choose not to provide conclusive evaluations on CAMs are essentially remaining silent about the observations of those matters. If it later turns out that there was a significant misstatement in those matters, the auditor who refrained from making conclusive evaluations will be perceived as adhering more closely to social norms of “silence is golden” and “caution in speech and actions”. This behaviour, in line with the norms, is seen as a result of a careful decision-making process and is more likely to earn praise from stakeholders and the public.

To summarise, compared with the absence of conclusive evaluations in CAMs paragraphs, auditors perceive a lower level of due professional care when there are conclusive evaluations in CAMs paragraphs. We formally state our first hypothesis below:

Hypothesis 1: *Compared to situations where the critical audit matters paragraphs do not include conclusive evaluations, auditors perceive a lower level of due professional care when the critical audit matters paragraphs include conclusive evaluations.*

2.3.2 Disclosure form of CAMs, auditors' experience and due professional care

In line with the social norm theory discussed earlier, behaviour that aligns with social norms is perceived as more cautious. Caution in speech is deeply rooted in traditional Chinese culture, and as a consensual social norm, it guides and corrects individual behaviour. Auditors who refrain from providing conclusive evaluations on CAMs align with the social norm of “silence is golden” and are regarded as exercising caution. In contrast, expressing opinions and providing conclusive evaluations on CAMs deviates from the norm and is considered relatively less cautious. Building on the above insights, both more experienced and less experienced auditors all agree that silence is golden, believing that less disclosure is in line with social norms. They would perceive CAMs paragraphs without conclusive evaluations as conforming to social norms, leading them to perceive a higher level of due professional care.

Nelson (2009) reveals that more experienced auditors tend to demonstrate a higher level of professional caution when fulfilling their audit responsibilities. Knapp and Knapp (2001) also discover that more experienced auditors naturally exhibit more caution and

employ greater scepticism in their professional judgements, thus reducing audit risks. This finding is supported by Brown and Solomon's (1990) research, which highlights the ability of experienced auditors to identify audit evidence indicating significant misstatement risks and make informed judgements to minimise such risks. Shelton (1999) finds that auditors' experience guides them in selecting relevant audit evidence, avoiding waste of time on irrelevant information, and improving audit efficiency. Asare et al. (2005) argue that more experienced auditors demonstrate higher levels of due professional care and sensitivity in carrying out their assigned tasks. These observations indicate that more experienced auditors adopt due professional caution when dealing with potentially risky matters, devoting closer attention to reducing audit risk. Therefore, the level of auditor experience influences their degree of due professional care, with more experienced auditors generally displaying greater caution.

Based on the context of our research, when encountering CAMs paragraphs with conclusive evaluations, more experienced auditors would view this behaviour as inconsistent with professional norms and the social norm of "caution in speech and actions", resulting in them perceiving it as less cautious. In contrast, less experienced auditors, who may hold the attitude of "the young calf is not afraid of tigers" and have limited exposure to industry norms, may not perceive providing conclusive evaluations as lacking caution. Based on the analysis above, we propose the following hypotheses:

Hypothesis 2a: *In the absence of conclusive evaluations in critical audit matters paragraphs, both less experienced and more experienced auditors may perceive a higher level of due professional care, while the difference may not be significant.*

Hypothesis 2b: *More experienced auditors may perceive a lower level of due professional care compared to less experienced auditors in situations where critical audit matters paragraphs include conclusive evaluations.*

3 Research methods

3.1 Experiment design and participants

To test our hypotheses, we utilise a 2×2 between-participants experimental design. The study involves two independent variables: the disclosure format of CAMs and auditors' experience. The disclosure format has two levels: CAMs with or without conclusive evaluations. Auditors' experience, serving as a measured variable, is categorised into two levels: less experienced and more experienced. According to the answers of the participants to the question "How long have you been engaged in audit work", the years of experience in audit work are counted, and based on the median value of five years of audit work experience, those with more than five years of audit work experience are more experienced auditors, while those with less than or equal to five years of audit work experience are less experienced auditors.

The dependent variable measured in the study is the auditors' perceived due professional care. For the measurement of auditors' perceived due professional care, we ask participants to answer on an 11-point scale in the experimental materials, "To what extent do you think the certified public accountant has maintained due professional care in this case?" with "0" indicating "not at all carefully" and "10" indicating "extremely carefully".

The participants in this experiment are 119 experienced auditors working in Chinese accounting firms. Of the participants, 49 are male (41.2%) and 70 are female (58.8%). The average age of the participants is 33.88 years, and their average tenure in the auditing field is 7.32 years. Among the participants, 63 hold positions as project managers or higher, accounting for 52.9% of the total. Furthermore, 116 participants (97.5%) hold a bachelor's degree or higher, and 73 participants (61.3%) possess CPA certificates. It is important to note that the selected auditors have both auditing knowledge and practical experience, enabling them to make informed professional judgements based on the audit information provided in the experiment, which aligns with the purpose of this experiment.

3.2 Experimental tasks and procedures

The experiment was conducted within a training session organised by the Chinese Institute of Certified Public Accountants (CICPA) for the practitioners of accounting firms. The experimental materials were randomly distributed to the participants before the start of the training course. Once the participants had completed the assigned tasks, the materials were collected promptly. In order to ensure that all participants completed the experiment independently, two measures were implemented. First, participants were explicitly instructed to complete the tasks individually and to refrain from discussing them with others before the experiment began. Second, the researchers and their assistants were present during the experiment to monitor the participants and ensure their independent completion of the tasks.

The process of the experiment unfolded as follows: participants were informed in the provided experimental materials that they would assume the role of a registered accountant responsible for auditing the financial statements of a publicly listed company. Background information about the company was presented, including a concise overview of its performance indicators and the audit situation. Participants were also provided with standard audit reports issued by registered accountants.

The background information encompassed basic details regarding the company's operations and key financial indicators for the past three years. The brief audit situation indicated that an unqualified audit opinion had been issued for the company, accompanied by a description of the CAMs. We had chosen the estimation of bad debt provision for accounts receivable as the CAM because this matter accounted for a relatively high proportion among all CAMs and had certain representativeness.² The CAM paragraphs in the audit report varied between two groups: one group of participants received the CAM paragraphs without conclusive evaluations, while the other group received the CAM paragraphs with conclusive evaluations. For the group receiving the CAM paragraphs without conclusive evaluations, participants were presented with descriptions of the CAM and the audit procedures conducted by the auditors. In contrast, the group receiving the CAM paragraphs with conclusive evaluations encountered descriptions of the CAM and the audit procedures performed by the auditors, along with a conclusion that evaluated the CAM.

After reading the above information, participants were tasked with answering questions pertaining to the dependent variable (i.e., perceived due professional care) and the manipulation check. Additionally, they were requested to provide demographic information, encompassing gender, age, education level, position, tenure in the

accounting firm, years of experience in auditing, and certifications obtained. On average, it took participants approximately 25 min to complete the entire experiment.

4 Results

4.1 Manipulation check

To assess the effectiveness of our manipulation, participants were presented with a question after reading the materials. The question posed to participants was, "In the materials, does the CAM paragraphs of audit report included the statement, "The management's calculation of bad debts provision and the book value of accounts receivable is reasonable'?" Participants were given the options of responding with "Yes" or "No". This manipulation-check question aimed to evaluate participants' careful reading and comprehension of the provided materials.

Out of the total participants, 102 individuals (85.71%) correctly answered whether the CAM paragraphs included "The management's calculation of bad debts provision and the book value of accounts receivable is reasonable". In the group that received the CAM with conclusive evaluations, the accuracy rate was 90.32%, where 6 participants providing incorrect answers. In the group that received the CAM without conclusive evaluations, the accuracy rate was 80.70%, where 11 participants providing incorrect answers.

Based on the analysis of the manipulation-check results, it can be concluded that the manipulation of whether the CAM included conclusive evaluations or not was successful. Although 17 participants did not pass the manipulation check, it is possible that they did not thoroughly read the experimental materials, or their recollection was inaccurate. However, subsequent analyses of the experimental results revealed no significant differences, whether these participants were included or excluded.³ Therefore, all participants, including those who did not pass the manipulation check, were retained in the regression analysis.

4.2 Hypotheses tests

Hypothesis 1 predicts that auditors will perceive a lower level of due professional care when the CAMs include conclusive evaluations compared to the CAMs without conclusive evaluations. Panel A of Table 1 presents descriptive statistics for due professional care, and Panel B presents the ANOVA results. Consistent with our hypothesis, there is a significant difference between the mean levels of due professional care perceived by participants in the group with and without conclusive evaluations (5.742 vs. 6.474, $P = 0.039$), providing evidence in support of H1. The findings suggest that when the CAMs include conclusive evaluations, auditors perceive less due professional care; that is, participants believe that the behaviour of auditors does not conform to the social norms of "silence is golden" and therefore lacks professional caution. Consequently, the results provide support for Hypothesis 1.

Hypothesis 2 explores the interaction effect between the disclosure format of CAMs and auditors' experience on auditors' perceived due professional care. The ANOVA analysis in Table 2, Panel B revealed a significant interaction effect between the CAMs disclosure format and auditors' experience ($F = 5.615$, $P = 0.019$). To further investigate

Hypothesis 2a and Hypothesis 2b, we conducted simple main effects analyses. The results are presented in Table 2, Panel A and Panel C. When the CAMs did not include conclusive evaluations, both less experienced and more experienced auditors perceived relatively high levels of due professional care (mean = 6.4 and 6.556, respectively), and there was no significant difference between the two groups ($F = 0.100$, $P = 0.752$). This finding supports Hypothesis 2a, indicating that when CAMs are disclosed without conclusive evaluations, regardless of their experience level, auditors perceive a higher level of due professional care.

Table 1 Auditors' perceived due professional care

Panel A: Descriptive Statistics					
Disclosure format of CAMs	N	Mean	Std. Dev.		
Without conclusive evaluations	57	6.474	1.7739		
With conclusive evaluations	62	5.742	2.0320		
Total	119	6.092	1.9397		
Panel B: ANOVA Analysis					
	Sum of Squares	Df	Mean Square	F	Sig.
Between groups	15.902	1	15.902	4.346	0.039
Within groups	428.081	117	3.659		
Total	443.983	118			

Furthermore, when the CAMs included conclusive evaluations, auditors' experience significantly influenced participants' perceived due professional care ($F = 9.565$, $p = 0.002$). Specifically, less experienced auditors perceived a significantly higher level of due professional care (mean = 6.424) compared to their more experienced counterparts (mean = 4.966). This finding supports Hypothesis 2b, suggesting that when the CAMs include conclusive evaluations, only more experienced auditors perceive a relatively lower level of due professional care.

4.3 Supplemental analyses

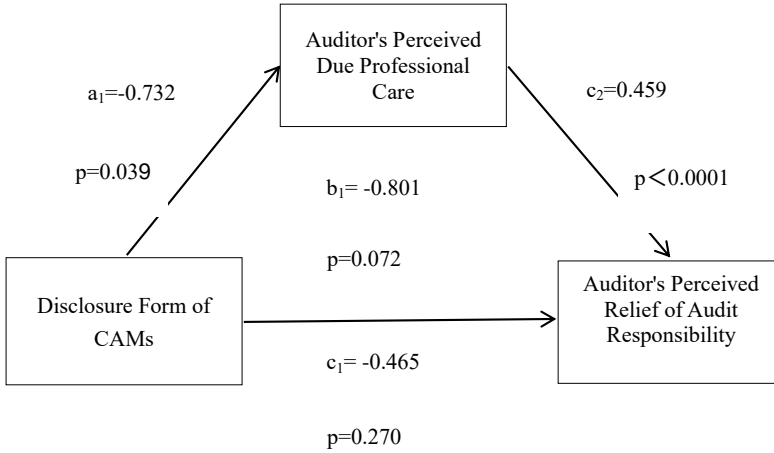
We will further analyse the other questions in the questionnaire to improve the experimental results. Using the three-step method proposed by Baron and Kenny (1986), we examine the mediating effect by taking the disclosure form of CAMs (with or without conclusive evaluations) as the independent variable, the auditor's perceived due professional care as the mediating variable, and the auditor's perceived relief of audit responsibility as the dependent variable. As shown in Figure 1 of the mediation analysis, the disclosure form of CAMs significantly affects the auditor's perceived due professional care ($a_1 = -0.732$, $P = 0.039$); the disclosure form of the CAMs significantly affects the auditor's perceived relief of audit responsibility ($b_1 = -0.801$, $p = 0.072$); finally, when the disclosure form of CAMs and the auditor's perceived due professional care are included in the same model for regression, the impact of the disclosure form of CAMs on the auditor's perceived relief of audit responsibility is no longer significant ($c_1 = -0.465$, $p = 0.270$). This result indicates that the relationship between the disclosure form of CAMs and the auditor's perceived relief of audit responsibility is fully mediated

by their perceived due professional care. This mediation effect not only validates the significant alignment between auditors' perceptions of due professional care and their perceived relief of audit responsibility, but also substantiates the theoretical rationale for selecting auditors' perceived due professional care as a dependent variable in this research. These findings contribute to the existing literature by elucidating the underlying mechanism through which CAMs influence audit responsibility judgements (Backof, 2017; Brasel et al., 2016; Gimbar et al., 2016; Vinson et al., 2019).

Table 2 Auditors' perceived due professional care

Panel A: Descriptive Statistics					
	Without conclusive Evaluations	With conclusive Evaluations	Total		
Less Experienced					
Mean	6.400	6.424	6.413		
(St.dev.)	(1.9046)	(1.9690)	(1.9230)		
N	n = 30	n = 33	n = 63		
More Experienced					
Mean	6.556	4.966	5.732		
(St.dev.)	(1.6486)	(1.8416)	(1.9116)		
N	n = 27	n = 29	n = 56		
Total					
Mean	6.474	5.742	6.092		
(St.dev.)	(1.7739)	(2.032)	(1.9397)		
N	n = 57	n = 62	n = 119		
Panel B: ANOVA Analysis					
Source	Type III Sum of Squares	Df	Mean square	F-value	p-value
Corrected Model	49.090 ^a	3	16.363	4.765	0.004
Intercept	4385.256	1	4385.256	1277.067	<0.001
Disclosure format of CAMs	18.140	1	18.140	5.283	0.023
Experience	12.565	1	12.565	3.659	0.058
Disclosure format of CAMs * Experience	19.281	1	19.281	5.615	0.019
Error	394.893	115	3.434		
Total	4861.000	119			
Corrected Total	443.983	118			
Panel C: Simple Effect Tests					
	df	F-value	p-value		
Without conclusive evaluations less experienced vs. More experienced	1	0.100	0.752		
With conclusive evaluations less experienced vs. More experienced	1	9.565	0.002		

^a $R^2 = 0.111$ (Adjusted $R^2 = 0.087$).

Figure 1 The mediating role of auditor's perceived due professional care

Referring to the approach of Tan and Han (2010), the disclosure form of CAMs is divided into two groups (variables 0 and 1): CAMs with conclusive evaluation and without conclusive evaluation; that is, CAMs with conclusive evaluation is coded as 1, and CAMs without conclusive evaluation is coded as 0.

4.4 Randomised test

The randomisation test is a probability theory-based method that randomly assigns participants to different treatment groups. Theoretically, randomisation represents the optimal approach for controlling additional variables, as its proper implementation ensures that all treatment groups maintain statistically equivalent conditions and probabilities from a statistical perspective. This process effectively achieves matching on additional variables across different treatment groups. According to the experimental design, the study includes two treatment groups: The CAMs with conclusive evaluation group and the CAMs without conclusive evaluation group. In the experiment, participants were randomly assigned to these two treatment groups, ensuring equal opportunities to be assigned to either treatment group. To control for potential confounding effects of demographic characteristics, we implemented randomisation procedure and conducted chi-square tests along with analysis of variance (ANOVA) to verify the balance of participants' gender, age, and professional positions across treatment groups. The statistical analyses confirmed that these variables were evenly distributed and showed no statistically significant differences between groups.

4.4.1 Randomised test of participants' gender and age

The chi-square test results of Table 3 show that there is no significant difference in the male-to-female ratio of participants in different treatment groups (Chi Square = 0.039, $p = 0.844$), indicating that we have successfully randomly assigned participants to two treatment groups, and the participant gender characteristics do not significantly influence the experimental results.

Table 3 Results of chi-square test for gender of participants

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig.(2-sided)</i>
Pearson Chi-Square	0.039 ^a	1	0.844
Likelihood ratio	0.039	1	0.844
No. of valid cases	119		

^a0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.47.

The results of the analysis of variance for the age of the participants in Table 4 show that the age distribution of the participants in different treatment groups is relatively uniform, and there is no significant difference ($F = 2.457$, $p = 0.120$), indicating that we have successfully randomly assigned the participants to two treatment groups, and the participant age characteristics do not significantly influence the experimental results.

Table 4 Results of analysis of variance for age of participants

	<i>Sum of squares</i>	<i>df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig</i>
Between groups	191.666	1	191.666	2.457	0.120
Within groups	9126.317	117	78.003		
Total	9317.983	118			

4.4.2 Randomised test of participants' professional licensure

The chi-square test of participants' professional licensure in Table 5 shows that the distribution of participants' professional licensure among different treatment groups is relatively uniform, and there is no significant difference (Chi Square = 1.364, $p = 0.243$), indicating that we have successfully randomly assigned participants to two treatment groups, and their professional licensure does not affect the experimental results.

Table 5 Chi-square test results for participants' professional licensure

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig.(2-sided)</i>
Pearson Chi-Square	1.364 ^a	1	0.243
Likelihood ratio	1.366	1	0.243
No. of valid cases	119		

^a0 cells (0.0%) have expected count less than 5. The minimum expected count is 26.82.

5 Conclusion

In an effort to overcome the constraints of traditional audit reports and to align with the evolving informational demands of financial statement users, the IAASB, the PCAOB, and the Ministry of Finance in China have collectively undertaken significant reforms to the auditing reporting standards. These reforms primarily involve the inclusion of CAMs disclosures within the audit report. However, the standards do not specify whether the CAMs disclosures should include conclusive evaluations, leaving it to the auditors' judgement. In practice, a relatively small proportion of auditors opt to include conclusive

evaluations in their CAMs disclosures. This observed practice raises important questions regarding whether the presence or absence of conclusive evaluations reflects divergent attitudes toward professional practices among auditors. Our research is grounded in social norms theory and utilises an experimental approach to investigate the influence of the disclosure format of CAMs (with or without conclusive evaluations) on auditors' perceived due professional care. It also explores how auditors' experience interacts with the disclosure format of CAMs.

Our findings demonstrate a significant effect of CAMs disclosure format on auditors' perceived due professional care. Specifically, the inclusion of conclusive evaluations in CAMs leads auditors to perceive a lower level of due professional care compared to CAMs without such evaluations. Moreover, we reveal a significant interaction effect between the CAMs disclosure format and auditors' experience. In cases where CAMs include conclusive evaluations, more experienced auditors perceive a lower level of due professional care compared to less experienced auditors. However, when CAMs do not include conclusive evaluations, there is no significant difference in perceived due professional care between less experienced and more experienced auditors.

Our study contributes to the field of auditing by applying social norms theory and integrating psychological theories into the study of auditors' perceived due professional care. Our findings answer why most auditors do not provide conclusive evaluations in audit practice. This enriches and expands existing auditing theories, providing a deeper understanding of the factors influencing auditors' perceptions and behaviours. Furthermore, our study examines the impact of the disclosure format of audit reports, specifically focusing on the inclusion of conclusive evaluations in the CAMs paragraphs. Additionally, the research investigates how audit report disclosure formats, particularly the inclusion of conclusive evaluations in CAMs paragraphs, influence auditors' perceptions and judgements. The findings advance our understanding of textual information disclosure's role in shaping individuals' decision-making processes and professional attitudes.

Our findings also have important implications for accounting firms and regulatory authorities. First, given that more experienced auditors perceive a lower level of due professional care when CAMs include conclusive evaluations, it is imperative for accounting firms to develop targeted training programs (Mashabela and Ackers, 2022). These programs should focus on reinforcing the principles of due professional care, especially in the context of evaluating and reporting CAMs. Workshops and seminars can be organised to educate auditors on the importance of maintaining a critical and objective stance for conclusive evaluations. Second, accounting firms should enhance their internal quality control mechanisms to monitor and ensure that due professional care is consistently applied in audit engagements. This can be achieved through the development of checklists and guidelines that auditors must follow when dealing with CAMs. These tools should prompt auditors to consider alternative explanations and to critically evaluate the evidence supporting conclusive evaluations. Third, the differential impact of CAM disclosure formats on auditor behaviour underscores the importance of risk assessment. Firms should train their auditors to identify situations where the inclusion of conclusive evaluations in CAMs may pose a higher risk of compromising due professional care. This risk assessment should inform the allocation of resources and the level of supervision required for different audit tasks. Lastly, the interaction effect between the disclosure format of CAMs and auditors' experience suggests that regulatory bodies such as the IAASB and PCAOB may need to provide more detailed guidance on

the presentation and content of CAMs. This guidance should specifically address how auditors should approach CAMs that include conclusive evaluations, emphasising the need for a balanced and nuanced assessment. Regulatory bodies could also consider developing additional disclosure requirements or optional formats that encourage auditors to provide more context and reasoning behind their conclusions.

Our study is subject to certain limitations. Firstly, the experiment focused solely on the provision for doubtful debts on accounts receivable as the CAM. Future research should investigate whether the effects observed in this study generalise to other CAMs and examine potential variations in these effects. Secondly, the participants in our study were recruited from Chinese accounting firms. Cultural differences could potentially lead to variations if the same experiment were conducted with auditors from international firms, despite potential consistency in individual psychological responses. Further verification is necessary to address this concern.

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Notes

¹The number of critical audit matters has increased from 7048 in 2017 to 10435 in 2023.

²We have compiled the categories of all critical audit matters in All Chinese Stock Markets from 2017 to 2023. As a result, it was found that accounts receivable and its bad debt provision account for a relatively high proportion of all disclosed CAMs (12192; 20.68%), ranking second, with revenue recognition ranking first (27332; 46.37%) and goodwill and its impairment Ranked ranking third (7193; 12.20%).

³Our results are similar after we exclude those participants who fail the manipulation check questions or after we control for participants' gender, age, education, professional licensure.

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