

•••••

THE INFLUENCE OF CONFIRMATION BIAS ON THE JUDGMENT OF ACCOUNTING INFORMATION PREPARERS FOR SMES: AN EXPERIMENTAL STUDY

LAYZA MATIAS UCHÔA¹

Federal University of Alagoas, School of Economics, Business, and Accounting, Maceió, AL, Brazil

https://orcid.org/0000-0002-7219-1622
layza.uchoa@feac.ufal.br

MARINA YANKA LOPES LIMA

Federal University of Alagoas, School of Economics, Business, and Accounting, Maceió, AL, Brazil

https://orcid.org/0000-0001-8272-6873
marina.lima@feac.ufal.br

RODRIGO VICENTE DOS PRAZERES

Federal University of Alagoas, School of Economics, Business, and Accounting, Maceió, AL, Brazil

https://orcid.org/0000-0002-9888-1330
rodrigo.prazeres@feac.ufal.br

JULIANA GONÇALVES ARAÚJO

University of Pernambuco, School of Law and Business, Recife, PE, Brazil

https://orcid.org/0000-0003-2677-4357
juliana.araujo@upe.br

POLYANDRA ZAMPIERE PESSOA SILVA

Federal University of Cariri, Center for Applied Social Sciences, Juazeiro do Norte, CE, Brazil

https://orcid.org/0000-0002-9520-7826
polyandra@live.com

ABSTRACT

The study examined the influence of confirmation bias on the judgment of accounting information preparers when applying the Technical Accounting Standard for Small and Medium-Sized Entities (CPC PME). It was proposed that prior beliefs, stemming from training and experience with full IFRS, may affect the judgment of the economic substance of similar events within the CPC PME context. Additionally, mechanisms such as the requirement to justify decisions and the provision of guidelines were suggested as potential mitigators of confirmation bias. An experimental design with a between-participants approach was employed, randomly assigning respondents to control, justification, and guideline groups. Two questionnaires addressed the judgment of intangible assets and revenue from customer contracts, yielding 115 and 90 responses, respectively, collected via SurveyMonkey. The results confirmed the presence of confirmation bias in both scenarios and showed that requiring justification was effective in reducing bias in both cases, while the provision of guidelines reduced bias in only one scenario and intensified it in the other. The study makes an academic contribution by expanding knowledge about the cognitive limitations of accounting preparers and the impact of prior beliefs on professional judgment. In practical terms, it demonstrates that specific mechanisms can mitigate cognitive biases and improve the quality of accounting decisions. Socially, it highlights the need for ongoing education and training to ensure that accounting standards are applied more consciously and effectively, thereby enhancing the reliability of financial information.

Keywords: Confirmation Bias. Accounting Judgment. Justification Requirement. Prior Beliefs. Accounting Information Preparers. Provision of Guidelines.

Edited in Portuguese and English. Original version in Portuguese..

Received on 12/16/2024. Revised on 03/04/2025. Accepted on 03/28/2025 by Prof. Dr. Rogério João Lunkes (Editor-in-Chief). Published on 04/28/2025.

Copyright © 2025 RCCC. All rights reserved. Partial citation of articles is permitted without prior authorization, provided the source is properly identified



¹ Correspondence address:: Av. Lourival Melo Mota, S/N | Tabuleiro do Martins | CEP: 57072-970 | Maceió/AL | Brazil.



1 INTRODUCTION

Brazilian organizations adopt international accounting standards aligned with the International Accounting Standards Board (IASB), the entity responsible for developing the International Financial Reporting Standards (IFRS) (Pope & McLeay, 2011). In 2009, the IASB issued the International Financial Reporting Standard for Small and Medium-Sized Entities (IFRS for SMEs), specifically designed for small and medium-sized enterprises (SMEs). In Brazil, this standard was incorporated into the regulatory framework in 2011 through the issuance of the Technical Accounting Standard for Small and Medium-Sized Entities (CPC PME).

The CPC PME aims to simplify procedures related to the recognition, measurement, and disclosure of accounting information, reflecting the lower complexity of SMEs compared to companies that adopt the full set of standards (full IFRS) (Luther & Longden, 2001; Abdel-Kader & Luther, 2008). However, such simplifications may require different judgments regarding the economic substance of similar events, demanding additional effort to comply with CPC PME guidelines, which may, in turn, lead to biased interpretations (Perera et al., 2020).

This bias can be explained by confirmation bias, which occurs when individuals prioritize information that supports their preexisting beliefs while disregarding contradictory evidence (Allahverdyan & Galstyan, 2014; Pompian, 2012). In the context of accounting information preparers, extensive training and repeated use of full IFRS may reinforce certain judgment criteria as beliefs, potentially impairing the assessment of economic substance in SMEs by aligning decisions with these beliefs and neglecting the specific guidelines of CPC PME (Perera et al., 2020).

Although confirmation bias has been widely studied in other fields, its manifestation in accounting remains underexplored particularly with regard to the judgment of accounting information preparers. Recent studies that closely relate to the objectives of this research include those by Costa et al. (2020), Perera et al. (2020), and more recently, Camilli et al. (2024), which identified the influence of prior beliefs on the judgment of economic events, highlighting the cognitive limitations of preparers. However, further investigation is needed into how this bias can be mitigated in the context of accounting judgment, especially in situations involving differing standards such as full IFRS and CPC PME.

Certain mechanisms may assist in reducing confirmation bias, such as requiring justification for the chosen judgment criteria and providing information or guidelines to support the criteria used.

The justification requirement encourages preparers to explain their decisions, promoting more thoughtful analysis and allowing greater flexibility in overcoming prior beliefs. The provision of guidelines, in turn, aims to offer clear information about potential divergences between standards, thereby limiting the automatic application of full IFRS-based judgments and encouraging adherence to CPC PME criteria (Perera et al., 2020).

Studying confirmation bias within the Brazilian context is particularly relevant due to the significant role of micro and small enterprises in the national economy: they account for 99% of all companies, approximately 27% of GDP, and 52% of formal private sector employment (Sebrae, n.d.). Although CPC PME was developed to simplify accounting standards for these entities, the deep-rooted use of full IFRS-based practices may hinder its full implementation. In this context, investigating how confirmation bias affects accounting judgment and how to mitigate its effects is crucial for ensuring the quality of financial information produced by Brazilian SMEs, strengthening their role in the economy and contributing to their long-term sustainability. Analyzing the Brazilian context is particularly relevant, as Brazil was among the developing countries selected to adopt this standard. Despite its mandatory nature, Gonçalves, De Moura, and Motoki (2022) emphasize the lack of enforcement and low level of implementation in the country.



These specificities position Brazil as a meaningful locus of study, suggesting that confirmation bias may be even more pronounced in this context.

To achieve its objectives, this study adopts an empirical approach based on experimental methods, grounded in the protocols developed by Perera et al. (2020), and conducted with financial accounting professionals operating in Brazil, without restrictions on their scope of practice. Two judgment scenarios were developed: the first involving measurement and recognition criteria for intangible assets (CPC 04), and the second related to revenue from contracts with customers (CPC 47). These scenarios assess how accounting standards influence the judgment of the economic substance of events and examine the effects of mitigating mechanisms.

The research findings indicate that confirmation bias influences the judgment of accounting information preparers, even when mechanisms such as justification requirements and the provision of guidelines are employed although the bias is less intense under these conditions. The justification mechanism proved effective in reducing this bias by creating a state of cognitive dissonance that constrains prior beliefs associated with full IFRS. The provision of guidelines, however, yielded mixed results: it reduced bias in the revenue recognition scenario but intensified it in the intangible asset scenario, possibly due to deeply entrenched beliefs and resistance to abandoning the status quo.

As a contribution, this study advances the understanding of the cognitive challenges faced by accounting information preparers, emphasizing the impact of prior beliefs derived from full IFRS in the context of CPC PME. Moreover, it provides evidence on the effectiveness of mitigating mechanisms, offering insights into ways to enhance accounting judgment. The results may inform the development of educational and regulatory strategies aimed at reducing cognitive limitations, as well as broader strategies that consider the specificities of the Brazilian contexto particularly in light of the cost-benefit relationship in applying standards to SMEs, since the relevance and benefits of these standards remain under discussion in several developed countries (Gonçalves et al., 2022).

The following sections present the theoretical framework, detailing the foundations of confirmation bias and its relationship with accounting. Subsequently, the methodological procedures are described, followed by the analysis of results and, finally, the study's conclusions.

2 THEORETICAL FRAMEWORK

2.1 Confirmation Bias in the Context of the Accounting Information Preparer

Confirmation bias occurs when individuals tend to seek out, interpret, and recall information that confirms their initial beliefs, while ignoring or disregarding contradictory evidence (Pompian, 2012). This bias is explained by cognitive dissonance (Festinger, 1957), which refers to the discomfort caused by conflicting information. To avoid this discomfort, individuals tend to prefer information that validates their initial beliefs (Festinger, 1957; Shefrin & Statman, 1985).

When faced with cognitive dissonance, individuals rely on selective information search or biased interpretation (Allahverdyan & Galstyan, 2014). These deviations can be classified into three main types: availability heuristic, loss and regret aversion, and *status quo* bias.

The availability heuristic refers to the tendency to overestimate the likelihood of events based on how easily similar examples can be recalled (Tversky & Kahneman, 1974). Information that is more readily accessible is perceived as more representative of reality, thus influencing judgments and decisions (Kahneman & Smith, 2002; Tonetto et al., 2006). Loss aversion describes the phenomenon whereby the pain of loss outweighs the satisfaction of an equivalent gain, leading individuals to take greater risks to avoid losses (Kahneman & Tversky, 1979). This is often accompanied by regret aversion, which reflects the desire to avoid decisions that may result in



negative emotions, such as guilt (Shefrin & Statman, 1985). *Status quo* bias refers to resistance to change, even when change would be beneficial, due to the perception that the disadvantages of change outweigh the advantages of the new situation (Hammond et al., 1998).

These deviations contribute to the maintenance of initial beliefs, as individuals tend to favor information that confirms their preexisting views rather than conducting an objective and impartial analysis. In the accounting context, confirmation bias has been observed only to a limited extent. Costa et al. (2020) investigated how this bias affects the judgment of accounting information preparers by analyzing a decision-making scenario involving the opening of a new branch. Their results indicated that accountants and managers tend to exhibit confirmation bias regardless of the type and complexity of the information, whereas participants without preestablished beliefs the control group did not.

Perera et al. (2020) also investigated confirmation bias in the judgment of accounting information preparers working with IFRS for SMEs in Sri Lanka. Their study examined whether beliefs related to full IFRS influenced accounting judgment and whether mechanisms such as justification requirements and the provision of guidelines could reduce this bias. The results showed that prior beliefs increased confirmation bias, but both justification and guideline mechanisms helped improve judgments by more accurately reflecting the economic substance of the events.

In summary, confirmation bias together with availability heuristic, loss aversion, and *status quo* bias can significantly impact the judgment of accounting information preparers. Awareness of these effects and the implementation of corrective mechanisms, such as justification requirements and the provision of guidelines, are essential to improving the quality and objectivity of accounting decisions. In Brazil, the adoption of full IFRS and extensive training on these standards have likely generated prior beliefs that may influence judgments regarding the application of CPC PME, reinforcing existing beliefs (Perera et al., 2020). Gonçalves et al. (2022) reforçam que, no Brasil, pouco suporte é fornecido aos preparadores de informação contábil emphasize that, in Brazil, little support is provided to accounting information preparers concerning CPC PME. While full IFRS is accompanied by support materials, the language barrier hinders their applicability to the Brazilian context. This scenario suggests greater familiarity with full IFRS compared to the standards applicable to SMEs. Accordingly, the first research hypothesis investigated is:

Hypothesis 1: The presence of prior beliefs originating from full IFRS exerts a positive influence on the manifestation of confirmation bias in the judgment of accounting information preparers in situations that require the application of CPC PME.

Given that prior beliefs regarding the application of full IFRS are likely to positively influence confirmation bias in the judgment of accounting information preparers, this research aims to contribute to the analysis of justification requirements and the provision of guidelines as mitigating mechanisms. These discussions are grounded in insights from psychology studies, which, according to Sebastian (2024), lack application of seminal works in cognitive psychology to the fields of finance and accounting. This gap helps explain the limited number of studies focused on mitigating confirmation bias in accounting research.

The justification requirement mechanism seeks to induce a cognitive dissonance state in the accounting information preparer strong enough to prevent or minimize confirmation bias as initial beliefs are reassessed (Festinger, 1957; Allahverdyan & Galstyan, 2014). In this context, the primary function of requiring justification is to reduce uncertainty (Emby & Gibbins, 1987), suggesting that the process of providing evidence and explanations to support one's judgments would reduce the influence of prior beliefs on those judgment (Peecher, 1996; Bonner, 1999).



This mechanism is embedded in the process of selecting and interpreting information, potentially leading the preparer to select and interpret information in a less biased manner, with the aim of defending the judgment made (Gibbins & Newton, 1994; Peecher, 1996; Perera et al., 2020). Accordingly, the second research hypothesis investigated is:

Hypothesis 2: The justification requirement regarding the judgment made by accounting information preparers, in circumstances involving the application of CPC PME, exerts a negative influence on the manifestation of confirmation bias.

The guideline provision mechanism refers to the availability of clear and specific information capable of redirecting the attention of the accounting information preparer (Butler, 1985), with the purpose of preventing the activation of their long-term associative memory and, consequently, the recall of prior beliefs related to full IFRS when judging the economic substance of events under CPC PME. Transparent and well-defined guidelines can minimize confirmation bias by assisting the preparer in collecting and interpreting information with minimal influence from preexisting beliefs. Based on this proposition, the third research hypothesis of this study is:

Hypothesis 3: The provision of guidelines to support the judgment of accounting information preparers exerts a negative influence on the manifestation of confirmation bias during the application of CPC PME.

3 METHOD

3.1 Methodological Design and Data Collection Instrument

An experimental design was adopted for this research in order to establish a causal relationship between manipulated independent variables and a dependent variable (Aguiar, 2017). Interventions were conducted in two scenarios presented to accounting information preparers, with the aim of evaluating variations in responses as a result of these experimental manipulations (Lima, 2023).

The study followed a between-participants approach, intended to identify differences among groups exposed to different interventions (Aguiar, 2017). Each group was exposed to only one intervention, allowing for comparisons among three groups: the control group, the justification requirement group, and the guideline provision group.

To ensure the reliability of the results, participant characteristics were balanced across comparison groups, and external variables that could influence the effectiveness of the experiments were controlled (Libby et al., 2002; Aguiar, 2017). Thus, the experiments involved the manipulation of two independent variables and the measurement of their effects on a dependent variable. Participants were randomly assigned to one of the three groups (control, justification requirement, and guideline provision), and strict control of external variables was applied to ensure the internal validity of the experiments (Festinger, 1953; Libby et al., 2002; Leary, 2004; Aguiar, 2017; Aguiar et al., 2022).

The data collection instruments were structured in two sections. The first section gathered demographic information from participants, such as gender, age, education level, and length of professional experience. Familiarity with CPC PME and full IFRS was also measured using a 4-point Likert scale, where 1 indicated "not at all familiar" and 4 "extremely familiar" (Perera et al., 2020). For the data from the first section of the questionnaires, Pearson's Chi-Square tests were applied to qualitative variables and Analysis of Variance (ANOVA) to continuous variables, considering a statistical significance level of 5%, in order to demonstrate that the sociodemographic characteristics and familiarity levels of participants did not differ significantly



across comparison groups. This ensured the effectiveness of the experiments through the equivalence of conditions and characteristics among respondents in the different groups.

In the second section, participants were presented with judgment scenarios in which they were asked to indicate the appropriate accounting treatment, according to CPC PME guidelines. These scenarios addressed the recognition and measurement of intangible assets (Questionnaire 1) and revenue from customer contracts (Questionnaire 2), since the economic judgment of such events differs depending on the requirements of CPC PME and full IFRS.

The first scenario presented the case of a medium-sized, non-listed company engaged in research and development activities related to pharmaceutical patents. After evaluating the financial viability of developing a patent, the company began investing in its production and in the execution of tests. In this context, participants acting as accounting information preparers were required to decide whether the expenditures incurred during the development phase should be recorded as an intangible asset (in accordance with CPC 04/full IFRS) or expensed as incurred (according to CPC PME).

The second scenario focused on revenue from customer contracts, adapted from the study by Perera et al. (2020). It described the case of a medium-sized, non-listed company that develops and sells apartment units. A buyer interested in acquiring a unit would sign a purchase agreement, with installment payments made as the company demonstrated construction progress. Participants were asked to assess which revenue recognition method was most appropriate: the percentage-of-completion method (CPC 47/full IFRS), which recognizes revenue as the project progresses, or the completed-contract method, which recognizes all revenue at the time the property is delivered (CPC PME).

For each scenario, participants were provided with a list of ten recognition and measurement criteria, derived from both CPC PME and full IFRS. They were asked to indicate which criteria they considered relevant or irrelevant to the judgment task, using a Likert scale ranging from 0 to 10 (where 0 meant "irrelevant" and 10 "relevant"). In the intangible asset scenario, three criteria were considered relevant (based on CPC PME) and seven irrelevant (from full IFRS). In the revenue scenario, four criteria were relevant (from CPC PME) and six irrelevant (from full IFRS).

At the end of each questionnaire, participants responded to manipulation check questions, in which they were asked to indicate their level of motivation, effort invested, degree of application of accounting knowledge, perceived complexity, and familiarity with the scenario. Each experiment also included a question to verify whether the justification requirement or the provision of guidelines had influenced their judgment. All of these questions were answered using a 5-point Likert scale, where 1 indicated "none" and 5 indicated "extreme."

Finally, the questionnaires underwent a preliminary validation phase, in which two PhD-level faculty members were invited to assess whether the instruments aligned with the constructs the study intended to measure. Based on their feedback, appropriate adjustments were made, and the questionnaires were then subjected to pretesting. The pretest phase involved applying the intangible asset questionnaire to 14 respondents and the revenue recognition questionnaire to 11 respondents all of whom were professionals working in the field of financial accounting and selected for convenience and accessibility via the LinkedIn platform. It is important to note that pretest participants did not take part in the final data collection. After the pretest, no inconsistencies were identified, and the questionnaires were then distributed for the definitive data collection phase of the study.

No personal identification of participants was collected, as the experiments were conducted in accordance with the guidelines of Resolution No. 510 (2016), which outlines the Ethical Standards Applicable to Research in the Human and Social Sciences issued by the Brazilian National Health Council. Accordingly, all procedures were carried out anonymously, as the study



was classified as public opinion research. Therefore, it did not require registration or review by the Research Ethics Committee system or the National Research Ethics Commission.

3.2 Sample Definition and Data Collection Procedures

The study was conducted with two distinct samples composed of financial accounting professionals working in various states across Brazil. None of the participants responded to both experiments that is, the samples were completely independent. This procedure was adopted to avoid any form of contamination between the experiments, ensuring that respondents would not recognize similarities between them and, therefore, would not bias their responses. Additionally, participants were employed in companies of various sectors and sizes an aspect that was not controlled in the sample definition, representing a limitation of the study. Finally, participant selection followed a convenience and non-probabilistic sampling approach. Although this method facilitates study replication, it limits external validity and restricts the generalizability of the results (Aguiar, 2017; Aguiar et al., 2022).

Data collection was carried out through the administration of structured questionnaires hosted on the SurveyMonkey platform. Two questionnaires were used: the first on intangible assets and the second on revenue from customer contracts. On the initial page of each instrument, the research objective was explained, emphasizing the voluntary nature of participation, the estimated time for completion, and the absence of right or wrong answers, so as not to constrain the participants' intuitive responses, in accordance with the protocols of Perera et al. (2020).

During questionnaire administration, participants were informed that their responses would only be considered valid if the questionnaire was fully completed. Those who agreed to participate were directed to the questionnaires, while those who did not consent were excluded from the process. Data collection was conducted anonymously, ensuring participant privacy, and the data were used exclusively for the purposes of this research.

The data collection period spanned from June 1 to July 31. 2023. and the survey was conducted among professionals with active profiles on the LinkedIn® platform. Table 1 presents a summary of the number of questionnaires collected by type of questionnaire and group.

Table 1Summary of the Number of Questionnaire Respondents, by Topic and Group

	Question Topic			
Participants	Intangible Asset	Revenue from Customer Contract		
Completed	301	286		
(-) Incomplete	(186)	(196)		
Total Participants	115	90		
Group Division				
Control	43	36		
Justification Requirement	32	25		
Guideline Provision	40	29		

Source: Research data.

In the questionnaire on intangible assets, 301 responses were collected, of which 115 were complete. Following randomization, 43 participants were assigned to the control group, 32 to the justification requirement group, and 40 to the guideline provision group. In the questionnaire on revenue from customer contracts, 286 responses were recorded, with 90 complete. After randomization, 36 participants were assigned to the control group, 25 to the justification requirement group, and 29 to the guideline provision group.



The control group consisted of participants who made decisions regarding accounting records without any intervention. The justification requirement group, in turn, responded to the same questionnaire as the control group, but with the addition of an instruction informing them that, at the end of the questionnaire, they would be required to justify the decisions made. The guideline provision group received the same scenario as the control group, but with initial additional information regarding the regulatory guidelines for recording economic events, serving as support during the judgment process.

3.3 Econometric Models and Hypothesis Testing

To identify the presence of prior beliefs regarding full IFRS, the Confirmation Bias Index (CBI) was used as a proxy. The CBI was calculated based on the difference between the average scores assigned to recognition and measurement criteria considered relevant and irrelevant for each judgment scenario. Specifically, respondents were asked to evaluate each criterion by assigning numerical values that reflected the importance of each for the judgment task. Based on these evaluations, an overall CBI score was calculated for each respondent.

Respondents were classified according to the comparison between their individual CBI values and the overall mean. Those with a CBI value below the mean were classified as "biased" and assigned a value of 1. while those with a CBI above the mean were classified as "unbiased" and assigned a value of 0".

The CBI was used as an independent variable in the model testing Hypothesis 1. This model investigated whether the preparers' judgment regarding the application of CPC PME was biased as a result of their prior beliefs about full IFRS, as proposed by Perera et al. (2020). The relationship between the CBI and responses to the judgment scenarios was analyzed to assess the presence of confirmation bias.

For the test of Hypothesis 1. all respondents were included, regardless of experimental group assignment. Accordingly, Equation 1 was estimated based on the full samples from both experiments: 115 respondents for the intangible asset judgment scenario and 90 respondents for the revenue from customer contract scenario.

$$\gamma_i = \log\left(\frac{P(x)}{1 - P(x)}\right) = \beta_0 + \beta_1 IVC_i + \sum_{i=2}^n \beta_i X_i + \varepsilon_i \tag{1}$$

Where:

 γ_i γ_i is the binary dependent variable, taking the value "1" when the response provided by the accounting information preparer is consistent with full IFRS, and "0" when it is consistent with CPC PME;

 β_0 s the intercept of the estimation;;

 CBI_i is the independent variable of interest, assigned the value "1" for respondents classified as biased, and "0" otherwise;

 $\sum_{i=2}^{n} \beta_i X_i$ corresponds to the matrix of control variables, composed of respondent characteristics, namely gender, age, professional experience, academic background, familiarity with CPC PME, and familiarity with full IFRS; and

 ε_i is the error term of the logistic regression estimation.

To test Hypotheses 2 and 3. a dichotomous variable called Experimental Comparison Group (ECG) was created, with the aim of verifying whether participation in a manipulated group could influence respondents' answers to the scenarios presented. This variable was manipulated in two distinct ways: for Hypothesis 2. respondents were required to provide a written justification regarding the criteria used to select the appropriate accounting treatment based on the economic



substance of the event (Perera et al., 2020). When the judgment scenarios were presented, respondents were informed that, at the end, they would need to provide a written justification for their choices. The control and justification requirement groups were then compared to determine whether this requirement helped reduce or prevent the manifestation of confirmation bias.

The analysis focused on 75 respondents in the intangible asset scenario and 61 in the revenue from customer contract scenario. It was expected that the justification requirement would minimize confirmation bias, particularly among respondents classified as biased, according to the Confirmation Bias Index (CBI).

To test Hypothesis 3. the independent variable was manipulated through the provision of guidelines prior to the presentation of the judgment scenarios. These guidelines clarified the differences between full IFRS and CPC PME criteria, specifically regarding the recognition and measurement of intangible assets and revenue from customer contracts. The control and guideline provision groups were compared in order to analyze the influence of this manipulation on participants' responses. For this test, 83 respondents were analyzed in the intangible asset scenario and 65 in the revenue recognition scenario. Accordingly, Hypotheses 2 and 3 were tested using Equation 2:

$$\gamma_i = \log\left(\frac{P(x)}{1 - P(x)}\right) = \beta_0 + \beta_1 IVC_i + \beta_2 GCE_i + \beta_3 IVC_i * GCE_i + \sum_{i=4}^n \beta_i X_i + \varepsilon_i$$
 (2)

Where:

 γ_i is the binary dependent variable, taking the value "1" when the response provided by the accounting information preparer is consistent with full IFRS, and "0" when it is consistent with CPC PME:

 β_0 is the intercept of the estimation;

 CBI_i is the independent variable of interest, assigned the value "1" for respondents classified as biased, and "0" otherwise;

 GCE_i is the independent variable that captures whether respondents were part of the manipulated groups, taking the value "1" for those in the justification requirement or guideline provision groups, and "0" for those in the control group;

 $CBI_i * GCE_i$ is the main parameter of interest, intended to capture the influence of experimental manipulations on the manifestation of prior beliefs by accounting information preparers;

 $\sum_{i=2}^{n} \beta_i X_i$ corresponds to the matrix of control variables, composed of respondent characteristics, namely gender, age, professional experience, academic background, familiarity with CPC PME, and familiarity with full IFRS; and

 ε_i is the error term of the logistic regression estimation.

To estimate the parameters of Equations 1 and 2. logistic regressions with clustered robust standard errors were employed. This method allows for the examination of the relationship between independent variables and a binary dependent variable, while adjusting the results for potential violations of homoscedasticity and within-cluster dependencies, thereby ensuring greater statistical precision. Additionally, the Variance Inflation Factor (VIF) was calculated to identify and mitigate potential multicollinearity issues among the explanatory variables in the model, ensuring the stability of the estimations and the reliability of the results.

The quality of the fitted models was assessed using multiple performance metrics to ensure the adequacy of the results given the limited number of observations. Initially, McFadden's R^2 and the Log-Likelihood were used to evaluate the overall model fit. Although McFadden's R^2 typically yields lower values than the conventional R^2 , it is widely accepted for logistic regressions and



provides a relative measure of model fit quality (Hosmer et al., 2013). The Log-Likelihood, in turn, evaluates the overall fit by comparing the likelihood of the model with the observed data (Hair et al., 2019).

Predictive performance was assessed using the ROC (Receiver Operating Characteristic) curve, accuracy, sensitivity, and specificity. The ROC curve allows for a visual representation of the model's ability to correctly discriminate binary outcomes, while accuracy indicates the overall proportion of correct predictions. Sensitivity reflects the model's ability to correctly identify positive cases, and specificity measures the proportion of negative cases that are correctly predicted. These metrics are particularly recommended for studies with small samples, as they provide a more granular evaluation of the models' predictive power (Hair et al., 2019).

Model fit was further assessed through a Goodness-of-Fit test, which evaluates whether the models adequately explain the observations in a manner consistent with the empirical structure of the data. To validate model fit, the Hosmer-Lemeshow test was applied, comparing predicted probabilities to actual outcomes across risk groups. The results showed no statistically significant differences (p > 0.05), suggesting that the models exhibit an adequate fit, even with a limited number of observations (Hosmer et al., 2013).

The combined use of these metrics reinforces the robustness of the results, in line with best methodological practices in behavioral accounting research. Although the number of observations constitutes a limitation, experimental studies in this field frequently rely on small samples without compromising the internal validity of the findings (Libby et al., 2002; Perera et al., 2020). Therefore, the set of analyses employed ensures that the sample size does not undermine the inferences drawn, providing consistent results to support the continuation of the study.

4 PRESENTATION AND DISCUSSION OF RESULTS

4.1 Respondent Characteristics

Table 2 presents the sociodemographic and familiarity characteristics of the survey respondents, analyzed according to the subdivisions of the experimental comparison groups, as well as the corresponding research samples. The data indicate a predominance of male respondents, with an average age close to 30 years across all scenarios and groups. Most respondents hold an undergraduate degree, and the average professional experience exceeds five years, with some variation depending on the group analyzed. These findings align with the demographic profile of the participants in the study by Perera et al. (2020) on companies in Sri Lanka. Regarding familiarity with CPC PME and full IFRS, it is observed that, except for the guideline group, familiarity with full IFRS consistently exceeds 2.0 the midpoint of the Likert scale used suggesting a greater level of knowledge about the full set of standards.

 Table 2

 Summary of Respondent Characteristics

	Samples		Intangible Asset		Revenue from Customer Contract		
Exper	imental Groups	Control Group	Justification Group	Guideline Group	Control Group	Justification Group	Guideline Group
Gender	Male	29	20	21	22	13	19
Gender	Female	14	12	19	14	12	10
Age (mean in years)	31	30	31	30.77	30.65	29.04
A 1 '	Undergraduate Degree	32	21	25	15	15	19
Academic	Specialization	11	9	15	19	10	9
Background	Master's Degree	0	2	0	1	0	1
	ional Experience ean in years)	7.9	7.75	6.92	8.75	8.75	5.68
Familiari	ty with CPC PME	2.32	2.28	1.95	2.27	2.48	2.16
Familiar	rity with full IFRS	2.67	2.56	2.52	3.22	3.31	3.16

Source: Research data.



Subsequently, Chi-square and Analysis of Variance (ANOVA) tests were conducted to verify whether the characteristics of respondents differed statistically across the experimental comparison groups for the two samples analyzed, considering a 5% significance level. Based on the Chi-square test, the distribution of gender across the experimental comparison groups was found to be homogeneous in both scenarios: intangible asset [$\chi^2 = 1.9919$; p = 0.369] and revenue from customer contract [$\chi^2 = 1.0530$; p = 0.591], thus not allowing the rejection of the null hypothesis that gender is equally distributed among the groups. The same result was obtained through ANOVA regarding participants' age: intangible asset [F = 0.19; P = 0.8295] and revenue from customer contract [P = 0.38; P = 0.6844], which does not reject the null hypothesis that the mean ages are equal across groups.

The distribution of academic background was also found to be homogeneous among the experimental comparison groups, as evidenced by the Chi-square test: intangible asset [χ^2 = 6.6981; p = 0.153] and revenue from customer contract [χ^2 = 5.0811; p = 0.279], indicating that the null hypothesis of equal academic background distribution among the groups cannot be rejected.

Regarding professional experience, the ANOVA results indicated that the mean experience does not differ across groups: intangible asset [F = 0.26; p = 0.7692] and revenue from customer contract [F = 1.77; p = 0.1761], thus maintaining the null hypothesis of homogeneity.

Finally, the analysis of familiarity levels with CPC PME and full IFRS revealed that respondents were more familiar with full IFRS and less familiar with CPC PME, corroborating the findings of Perera et al. (2020). Specifically, the ANOVA results indicated that, for CPC PME, familiarity scores were: intangible asset [F=1.67; p=0.1933] and revenue from customer contract [F=1.07; p=0.3490]; and for full IFRS: intangible asset [F=0.42; p=0.6609] and revenue from customer contract [F=0.14; p=0.8659]. No statistically significant differences were found between groups, thus not allowing the rejection of the null hypothesis. These results support the validity of the experiment by demonstrating the homogeneity of respondents' characteristics. In summary, the Chi-square and ANOVA test results indicate that the respondents' sociodemographic characteristics and familiarity levels are similar across the experimental comparison groups. These findings confirm that both experiments were conducted under equivalent conditions, in terms of both demographic characteristics and respondents' familiarity with the accounting standards, thereby ensuring the internal and external validity of the experiments through the control of these variables.

4.2 Testing of Research Hypotheses

This section presents the results of the tests of the research hypotheses. Estimations were conducted using clustered robust standard errors by experimental comparison groups, following the identification of heteroskedastic residuals. No signs of multicollinearity were detected based on the Variance Inflation Factor (VIF). Additionally, no issues were observed regarding model fit or performance metrics, and none of the statistical assumptions analyzed were violated.

4.2.1 Hypothesis 1

To test Hypothesis 1. logistic estimations were conducted in accordance with Equation 1. using the full sample obtained from both experiments: 115 respondents for the intangible asset group and 90 for the revenue from customer contract group. In these estimations, the main parameter of interest was the CBI variable, used as a proxy for the set of prior beliefs derived from full IFRS.



Table 3 presents the results of the logistic estimations used to test Hypothesis 1. where positive and statistically significant coefficients are observed for the CBI variable: 0.6285 (5%) and 2.5555 (1%) for the intangible asset and revenue from customer contract scenarios, respectively. These results are consistent with the theoretical prediction that prior beliefs derived from full IFRS influence the judgment of the economic substance of events by accounting information preparers in situations involving the application of CPC PME. Therefore, Hypothesis 1 is accepted, confirming the manifestation of confirmation bias in the judgment of accounting information preparers under CPC PME in both experiments.

Tabela 3 *Logistic Estimations for Hypothesis 1*

Variables/Errespieserts	Intangil	ole Asset	Revenue from Customer Contract		
Variables/Experiments	Coefficient	Odds Ratio	Coefficient	Odds Ratio	
Intercent	0.0918		-3.5081		
Intercept	(1.6031)	-	(0.7393)	-	
CBI	0.6285**	1 07/10	2.5555***	12.8782	
СЫ	(0.5975)	1.6/46	(0.2869)		
Gender	-0.2013	0.9176	-0.1264	0.0011	
Gender	(0.3254)	Odds Ratio Coeffice -3.50 -3.50 (0.739 2.5555 1.8748 (0.286 0.8176 -0.12 (0.63° 0.090 1.0175 (0.07° 1.0584 (0.07° 1.2764 0.930 (0.49° -0.555 (0.22° 0.35 (0.24° 115 0.0609 -74.1633 0.6759 0.6759	(0.6371)	0.8811	
Ago	0.0173	1.0175	0.0900	1.094	
Age	(0.0688)	0.8176 (C) 1.0175 (C) 1.0584 (C) 1.2764 (C) 0.8309 (C) 0.7870	(0.0734)	1.094	
Professional Experience	0.0567	(0.1120) 1.0584	-0.0313	1.0601	
Floressional Experience	(0.1120)		(0.0771)	1.9691	
Academic Background	0.2441	1 2764	0.9308*	2.5366	
Academic Background	(0.4832)	1.2704	(0.4977)	2.3300	
Familiarity with CPC PME	-0.1853**	0.8300	-0.5550**	0.57404	
Tanimanty with CTCT ME	(0.0673)	0.6309	(0.2222)	0.37404	
Familiarity with Full IFRS	-0.2396***	0.7870	0.3511	1.4207	
Failinanty with Futt IFKS	(0.0226)	0.7870	(0.2424)	1.4207	
No. of Observations	1	15	9	00	
McFadden's R ²	0.0	609	0.2577		
Log likelihood	-74.	1633	-40.1639		
ROC Curve			0.8335		
Accuracy	11.44		8.10		
Sensitivity	0.7188		0.8750		
Specificity	0.5	686	0.5385		
Hosmer-Lemeshow Chi ²	11	.44	8.	10	

Source: Research data.

Note: Statistical significance level 10% (*); 5% (**); 1% (***).

The analysis of the results supports the conclusion that extensive training and the use of full IFRS stemming from the internalization process of international standards (Pedroza, 2013) lead to the formation of prior beliefs that result in the manifestation of confirmation bias by accounting information preparers when applying CPC PME, as also observed in the study by Perera et al. (2020). Specifically, in the present study, for respondents classified as biased (CBI = 1), regardless of the experimental group to which they were assigned, significantly higher odds of confirmation bias manifestation were identified: 1.8747 times in the intangible asset scenario and 12.8782 times in the revenue from customer contract scenario, compared to respondents classified as unbiased.

Regarding respondent characteristics in the intangible asset experimental scenario, the variables measuring familiarity with CPC PME and full IFRS showed negative coefficients of 0.1853 (5%) and -0.2396 (1%), respectively. These results indicate that greater knowledge of each set of standards contributes to the ability to distinguish between them, thereby facilitating the



selection of relevant criteria for judging the economic substance of events and limiting the influence of prior belief systems derived from full IFRS.

In the revenue from customer contract experimental scenario, the variables academic background and familiarity with CPC PME presented positive and negative coefficients, respectively: 0.9308 (10%) and -0.5550 (5%). This suggests that a higher level of academic education is associated with a more robust set of prior beliefs derived from full IFRS, while greater familiarity with CPC PME contributes to a more critical analysis of the relevant criteria for judging the economic substance of the event.

These results highlight that a deep understanding of both sets of standards full IFRS and CPC PME is essential to minimizing biased judgments. Knowledge of the differences between them allows accounting information preparers to select the most appropriate criteria for evaluating the economic substance of similar events, thereby avoiding distortions caused by prior beliefs. In this context, academic education plays a crucial role, as it should provide a balanced approach to both normative systems. By ensuring that preparers have a comprehensive and critical understanding of both frameworks, it becomes possible to reduce the influence of biases stemming from the exclusive application of a single set of standards, promoting more accurate and unbiased accounting analysis.

4.2.2 Hypothesis 2

To test Hypothesis 2, logistic estimations of Equation 2 were conducted using a sample of 75 respondents for the intangible asset scenario and 61 for the revenue from customer contract scenario. In this model, in addition to the variable of interest (CBI), the variables ECG (Experimental Comparison Group) and the interaction term CBI*ECG were included. These variables represent key parameters of interest and capture, respectively, the presence of respondents in the justification requirement group and those classified as biased within that experimental group.

Table 4 highlights the manifestation of confirmation bias, as evidenced by the observation that the influence of prior beliefs on the judgment of accounting information preparers occurs regardless of the experimental intervention. The CBI variable presented positive coefficients in both experimental scenarios: 0.5211 (1%) for the intangible asset scenario and 3.1591 (1%) for the revenue from customer contract scenario. Similar results were reported by Perera et al. (2020), who found that accountants in Sri Lanka tend to base their judgments on cognitive schemas formed through prior experience with full IFRS, influencing their decisions when applying IFRS for SMEs. This demonstrates that confirmation bias is not exclusive to Brazilian accountants, but rather a recurring phenomenon across different contexts. As for the ECG variable, its inclusion in the model aimed to investigate whether simply being assigned to the justification requirement group would be sufficient to mitigate the manifestation of confirmation bias. In the intangible asset scenario, this variable presented a negative coefficient of -0.3933 (1%), indicating that respondents in the justification group had 0.6747 times lower odds of making biased judgments. This suggests that the requirement to justify decisions may trigger a state of cognitive dissonance strong enough to soften the preparers' initial belief systems.



Table 4 *Logistic Estimations for Hypothesis 2*

Variables/Experiments	Intan	gible Asset	Revenue from C	ustomer Contract	
variables/Experiments	Coefficient	Odds Ratio	Coefficient	Odds Ratio	
Intercept	-0.7561 (2.3782)	-	-5.4614*** (0.4865)	-	
CBI	0.5211*** (0.0828)	1.6838	3.1591*** (0.2378)	23.5513	
ECG	-0.3933*** (0.0875)	0.6747	0.4882*** (0.4983)	1.6294	
CBI *ECG	-0.3000*** (0.0107)	0.7407	-0.5540*** (0.9456)	0.5746	
Gender	-0.2221 (0.5198)	0.8008	0.7150*** (0.2444)	2.0443	
Age	0.0765 (0.0885)	1.0795	0.2168*** (0.0049)	1.2443	
Professional Experience	-0.0536 (0.0835)	0.9477	-0.1430*** (0.1568)	0.8667	
Academic Background	0.6555 (0.4423)	1.9262	0.6363 (0.6453)	1.8895	
Familiarity with CPC PME	-0.1508*** (0.0152)	0.8599	-0.4939 (0.7562)	0.6101	
Familiarity with Full IFRS	-0.2420*** (0.0028)	0.7849	0.0150 (0.0582)	1.0151	
No. of Observations		75	6	1	
McFadden's R ² Log likelihood		0.0618 -48.2654		0.2876 -23.4076	
ROC Curve Accuracy	0.6573 13.64		0.8511 4.91		
Sensitivity Specificity	0.7381 0.4545		0.8936 0.5000		
Hosmer-Lemeshow Chi ²		13.64	4.91		

Source: Research data.

Note: Statistical significance level 10% (*); 5% (**); 1% (***).

On the other hand, in the revenue from customer contract experimental scenario, the ECG variable showed a positive coefficient of 0.4882 (1%), indicating that respondents in this group were 1.6294 times more likely to make biased judgments. This result suggests that the mere assignment to the justification requirement group was not sufficient to trigger a level of cognitive dissonance strong enough to alter the judgment of the economic substance of the event. This behavior, in line with the positively signed CBI and its stronger coefficient compared to that observed in Hypothesis 1, suggests that confirmation bias persists regardless of the experimental manipulation, due to the influence of the belief system derived from full IFRS (CPC 47).

The interaction term CBI*ECG the main parameter of interest for testing Hypothesis 2 showed negative coefficients of -0.3000 (1%) and -0.5540 (1%) for the intangible asset and revenue from customer contract scenarios, respectively. This indicates that the justification requirement may be an effective mechanism to minimize the manifestation of confirmation bias (Perera et al., 2020), as it stimulates a state of cognitive dissonance (Festinger, 1957; Peecher, 1996; Bonner, 1999; Allahverdyan & Galstyan, 2014). The analysis suggests that biased respondents (CBI = 1) who were required to justify their judgment of the economic substance of events were 0.7407 and 0.5746 times less likely to exhibit confirmation bias in the intangible asset and revenue recognition scenarios, respectively. This reinforces the hypothesis that the justification requirement is, in fact, an effective intervention for reducing confirmation bias, thereby supporting Hypothesis 2.



In terms of respondent characteristics, in the intangible asset experimental scenario, the variables Familiarity with CPC PME and Familiarity with full IFRS showed negative coefficients of -0.1508 (1%) and -0.2420 (1%), respectively. These results are consistent with the idea that knowledge of the differences between the two sets of standards contributes to reducing confirmation bias, enabling respondents to select more appropriate criteria for judging the economic substance of events.

In the revenue from customer contract experimental scenario, the variable Gender presented a positive coefficient of 0.7150 (1%), indicating that men are more likely to make biased judgments due to overconfidence in their prior beliefs (Ludenberg et al., 1994; Barber & Odean, 2001). Similarly, the variable age showed a positive coefficient of 0.2168 (1%), suggesting that older respondents are more likely to rely on prior beliefs related to full IFRS when making judgments.

Conversely, the variable Professional Experience exhibited a negative coefficient of -0.1430 (1%), suggesting that longer professional experience contributes to a reduced influence of prior beliefs derived from full IFRS. A plausible explanation for this result is that, due to the justification requirement, accounting information preparers with more professional experience may have a greater ability to adjust their judgments by selecting and interpreting information in a less biased manner, thus allowing for more flexible thinking (Gibbins & Newton, 1994; Peecher, 1996; Perera et al., 2020).

Finally, Table 5 presents the results of the intervention checks conducted to ensure the validity of the intervention effects for the justification requirement group in comparison to the control group. For all checks, average values above 2.5 were expected, as this represents the midpoint of the Likert scale (1 to 5) used. ANOVA was employed to investigate differences between the control and justification groups. No statistically significant differences were found between the groups for any of the items, at a 5% significance level.

Table 5 *Intervention Check Results for Hypothesis* 2

	Inta	ngible Asset	Revenue from Customer Contract		
Tests/Experiments	Control Group	Justification Requirement Group	Control Group	Justification Requirement Group	
Motivation	3.72	3.81	3.64	3.68	
Effort Invested	2.90	3.09	2.67	2.60	
Level of Knowledge about Accounting Standards	3.65	3.09	3.14	2.92	
Perceived Scenario Complexity	3.39	3.37	3.17	2.92	
Familiarity with the Scenario	2.55	2.75	2.69	2.68	

Source: Research data.

Although it was expected that the justification requirement would lead to increased respondent motivation and effort, thereby enhancing the internal validity of the experimental protocols and the external validity in terms of response reliability, this effect was not observed. However, the lack of statistically significant differences does not invalidate the findings of this study, as other factors, such as respondent characteristics, may have influenced the results.

Finally, respondents were asked whether the justification requirement contributed to making a more appropriate judgment. The results showed average scores of 3.18 for the intangible asset scenario and 3.24 for the revenue from customer contract scenario. These values suggest that the requirement to justify responses contributed to more appropriate judgments in the experimental scenarios, even though it was not sufficient to produce significant changes in all aspects of the decision-making process.



In conclusion, the results of this study confirm that the justification requirement can serve as an effective mechanism to reduce confirmation bias in accounting judgments, particularly in the context of intangible assets. Although the intervention did not lead to significant changes across all aspects of judgment, it proved to be an important factor in promoting more critical and less biased evaluation, highlighting the relevance of including this practice in the training of accounting information preparers. Moreover, the findings reinforce the importance of knowledge of accounting standards and professional experience as mitigating factors for the influence of prior beliefs, contributing to more informed and consistent decision-making.

4.2.3 Hypothesis 3

To test Hypothesis 3, logistic estimations of Equation 2 were performed, in which the parameters of interest are the variables CBI, ECG, and the interaction term CBIECG. The comparison involved the control and guideline provision groups, comprising 83 respondents for the intangible asset experiment and 65 respondents for the revenue from customer contract experiment. In these estimations, the ECG variable captures the presence of respondents in the guideline provision group, and the interaction term CBIECG identifies biased respondents within that experimental group.

As shown in Table 6, the CBI variable displayed positive coefficients of 0.4413 (1%) and 3.1265 (1%), capturing the manifestation of confirmation bias. Thus, regardless of the experimental intervention involving the provision of guidelines, it can be stated that prior beliefs influence the judgment of accounting information preparers in both the intangible asset and revenue recognition experimental scenarios.

Table 6 *Logistic Estimations for Hypothesis 3*

Variables/Evneriments	Intangible Asset		Revenue from Customer Contract			
Variables/Experiments	Coefficient	Odds Ratio	Coefficient	Odds Ratio		
Intercent	-0.1705		-3.6541***			
Intercept	(2.3624)	-	(0.6828)	-		
CBI	0.4413***	1.5547	3.1265***	22.7954		
СЫ	(0.1634)	1.3347	(0.0677)	22.1934		
ECG	-0.5084***	0.6014	-0.3662***	0.6022		
ECG	(0.1308)	0.6014	(0.1057)	0.6933		
CBI*ECG	1.0376***	2 9224	-0.5086***	0.6013		
CBLECG	(0.0945)	1.2482	(0.0554)			
Gender	0.2217***	-0.5263	0.5907			
Gender	(0.0373)	1.2482 (0.8287)	0.3907			
Idade	0.0317	1 0222	0.8008	1.0833		
raace	(0.1118)	1.0322	(0.0790)	1.0055		
Professional Experience	0.0756	1.0785	-0.0066	0.9934		
Professional Experience	(0.1919)	1.0765	(0.0774)	0.7734		
Academic Background	-0.0589	0.9427	1.3259***	3.7657		
Academic Background	(0.1214)	0.5427	(0.5824)	3.7037		
Familiarity with CPC PME	-0.3005	0.7404	-0.6701***	0.5116		
Tammanty with CI CI ME	(0.2292)	0.7404	(0.0715)	0.5110		
Familiarity with Full IFRS	-0.2107**	0.8099	0.4020	1.4948		
Tammarity with Fun IFRS	(0.1074)	0.0099	(0.3868)	1.4546		
No. of Observations	83		65			
McFadden's R ²	0.1107		0.3217			
Log likelihood	-50.2	557	-27.7378			
ROC Curve	0.71	.37	0.8626			
Accuracy	2.7	15	4.2	24		
•						



Sensitivity	0.7500	0.8864	
Specificity	0.5429	0.6667	
Hosmer-Lemeshow Chi ²	2.75	4.24	

Source: Research data.

Note: Statistical significance level 10% (*); 5% (**); 1% (***).

The ECG variable showed negative coefficients of -0.5084 (1%) and -0.3662 (1%) for the intangible asset and revenue from customer contract scenarios, respectively. These results indicate that respondents in the guideline provision group had 0.6014 and 0.6933 lower odds, respectively, of making biased judgments in both experimental scenarios. This suggests that the provision of guidelines may effectively redirect the preparer's attention, as suggested by Butler (1985) and observed in the study by Perera et al. (2020).

The interaction term CBI*ECG, the main parameter of interest for testing Hypothesis 3, showed a positive coefficient of 1.0376 (1%) in the intangible asset scenario, which diverges from expectations. This result suggests that biased respondents (CBI = 1) were 2.8224 times more likely to exhibit confirmation bias. A possible explanation is that the accounting information preparers in this specific group hold strong beliefs derived from extensive training and use of full IFRS, which may have been powerful enough to override the support provided in the experimental scenario. This would result in the manifestation of confirmation bias through reliance on long-term associative memory, maintaining the status quo belief that internally generated intangible assets should be recognized as assets rather than expensed. Therefore, Hypothesis 3 is rejected for this scenario.

However, in the revenue from customer contract scenario, the CBI*ECG interaction showed a negative coefficient of -0.5086 (1%), consistent with expectations. This suggests that the provision of guidelines may be effective in reducing the manifestation of confirmation bias, as proposed by Butler (1985). The guidelines inhibit the use of long-term associative memory, reducing the likelihood that biased respondents (CBI = 1) will make biased judgments (Perera et al., 2020). Therefore, in this scenario, Hypothesis 3 cannot be rejected.

Rearding respondent characteristics, in the intangible asset scenario, the variable Familiarity with full IFRS showed a negative coefficient of -0.2107 (5%). This suggests that the provision of guidelines may have helped respondents with greater familiarity with full IFRS to better distinguish between the two sets of standards, reducing the likelihood of making biased judgments based on prior beliefs.

In the revenue from customer contract scenario, the variables Academic Background and Familiarity with CPC PME showed positive and negative coefficients, respectively: 1.3259 (1%) and -0.6701 (1%). One possible explanation for these findings is that the provision of guidelines may have triggered cognitive dissonance in participants with higher academic background, due to their strong familiarity with full IFRS, which could have increased the manifestation of confirmation bias. On the other hand, Familiarity with CPC PME, consistent with previous findings, suggests that when clear guidelines are provided (Butler, 1985), accounting information preparers are less likely to exhibit confirmation bias, as the process of information selection and interpretation avoids reliance on long-term associative memory and, consequently, minimizes the influence of beliefs derived from full IFRS.

Finally, manipulation check tests were conducted to ensure the validity of the intervention results for the guideline provision group in comparison to the control group. The results of these tests are presented in Table 7. For all intervention checks, mean values above 2.5 were expected, since this is the midpoint of the Likert scale (1 to 5) used. Analysis of Variance (ANOVA) was applied to investigate differences between the control and guideline provision groups, but no statistically significant differences were found between the groups for any of the assessed items, considering a 5% significance level.



Although it was expected that the provision of guidelines would enhance respondents' motivation and effort thereby contributing to greater internal and external validity these outcomes were not achieved. Nevertheless, this does not undermine the validity of the study's results.

Table 7 *Intervention Check Results for Hypothesis 3*

Tosts/Ermonimonts	Int	angible Asset		Revenue from Customer Contract		
Tests/Experiments	Control Group	Guideline Provision Group	Control Group	Guideline Provision Group		
Motivation	3.72	4.05	3.64	3.66		
Effort Invested	2.90	2.90	2.67	3.3		
Level of Knowledge about Accounting Standards	3.65	3.17	3.14	3.21		
Perceived Scenario Complexity	3.39	3.33	3.17	3.14		
Familiarity with the Scenario	2.55	2.82	2.69	2.66		

Source: Research data.

Finally, respondents were asked whether the assistance provided contributed to making a more appropriate judgment. The results indicated average scores of 3.60 for the intangible asset experimental scenario and 3.55 for the revenue from customer contract scenario. In the first scenario, despite respondents perceiving that the assistance contributed to a more appropriate judgment, an increase in the intensity of confirmation bias was observed. This suggests that the provided guidelines were not sufficiently effective in inhibiting the manifestation of prior beliefs derived from full IFRS. For the second scenario, however, it can be stated that the provision of guidelines had a positive impact, as expected.

Overall, the results indicate that the provision of guidelines had distinct effects on accounting judgments depending on the experimental scenario. In the case of intangible assets, the guidelines were unable to reduce confirmation bias, likely due to the strength of prior beliefs formed through full IFRS training. However, for the revenue from customer contract scenario, the guidelines proved effective in minimizing confirmation bias. Furthermore, respondent characteristics, such as academic background and familiarity with accounting standards, influenced the results. Although the intervention did not lead to the expected increases in motivation and effort, it did have a positive impact on judgments, particularly in the context of the second scenario.

5 CONCLUSIONS

This study analyzed the influence of confirmation bias on the judgment of accounting information preparers when applying CPC PME, considering the influence of prior beliefs associated with the use of full IFRS. The results confirmed the presence of confirmation bias in both scenarios analyzed intangible assets and revenue from customer contracts demonstrating that preparers' judgments were significantly influenced by already established beliefs. This influence highlights the difficulty in adapting to CPC PME guidelines, even in the face of economic events that require distinct normative treatment.

The proposed mitigation mechanism justification requirement and guideline provision showed varied performance. The justification requirement was effective in both scenarios, creating a state of cognitive dissonance that led preparers to reevaluate their prior beliefs and make judgments more aligned with CPC PME. This mechanism seems to induce a deeper reflective process, promoting greater awareness of the applicable normative criteria.



On the other hand, the provision of guidelines yielded mixed results: while it was effective in the revenue from customer contract scenario successfully redirecting preparers' attention to CPC PME criteria and reducing confirmation bias in the intangible asset scenario, the intervention was not only ineffective but, in some cases, intensified the bias. This outcome suggests that deeply rooted prior beliefs, particularly regarding well-established standards such as those associated with full IFRS, may be resistant to interventions that do not promote greater reflective engagement.

Theoretically, this study contributes to a deeper understanding of the cognitive limitations faced by accounting information preparers, demonstrating how beliefs formed through training in international standards can negatively affect professional judgment. By exploring mitigation mechanisms, the research provides evidence that can support the development of more effective strategies to reduce the impact of such beliefs.

From a practical standpoint, the findings highlight the importance of targeted training programs that clearly differentiate the contexts of application for full IFRS and CPC PME, emphasizing the development of skills that foster more objective judgments grounded in the appropriate normative guidelines. Socially, by reinforcing the need for more reliable financial information from SMEs, this study underscores the importance of preparing professionals to apply accounting standards consciously, thereby contributing to economic credibility and transparency.

Despite its contributions, the study presents econometric limitations, particularly related to the relatively small sample sizes used in the logistic regression estimations, ranging from 61 to 115 cases. Nevertheless, all statistical assumptions were verified and found to be adequate, including the absence of multicollinearity, acceptable confidence intervals a critical factor in small samples and robust performance tests such as ROC Curve, Sensitivity, Accuracy, Specificity, and Goodness-of-Fit. As such, the results can be considered reliable within the dataset analyzed. However, the limited sample size must be acknowledged, requiring cautious interpretation of the findings and recognition of the potential impact that a larger sample might have on the stability and generalizability of the results.

The study also presents other limitations. The use of a non-probabilistic sample restricts the generalization of the findings to broader populations of accounting information preparers. Moreover, the scenarios analyzed were limited to two specific contexts, which may not capture the full complexity of accounting judgment in varying normative situations. Future research could expand the scope by investigating additional accounting scenarios, such as liability recognition or the assessment of financial instruments, to evaluate the robustness of the proposed mitigation mechanisms.

Additionally, it would be relevant to examine how individual characteristics such as age, academic background, and professional experience influence the effectiveness of interventions aimed at reducing confirmation bias. Longitudinal studies evaluating the impact of continuous training, as well as research exploring the combined use of multiple mitigation mechanisms, may offer new insights for improving accounting practice and minimizing cognitive limitations.

REFERENCES

Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*, 40(1), 2-27. https://doi.org/10.1016/j.bar.2007.11.003

Aguiar, A. B. (2017). Pesquisa experimental em contabilidade: propósito, desenho e execução. *Advances in Scientific and Applied Accounting*, 224-244. http://dx.doi.org/10.14392/asaa.2017100206



- Aguiar, A. B. D., Mucci, D. M., & Lima, M. M. (2022). Pesquisa empírica quantitativa em contabilidade gerencial: uma proposta de tipologia e implicações para validade interna versus validade externa. *Revista de Educação e Pesquisa em Contabilidade-Repec*, *16*(3), 318-337. http://dx.doi.org/10.17524/repec.v16i3.3155
- Allahverdyan, A. E., & Galstyan, A. (2014). Opinion dynamics with confirmation bias. *PloS one*, 9(7), e99557. https://doi.org/10.1371/journal.pone.0099557
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, 116(1), 261-292. https://doi.org/10.1162/003355301556400
- Bonner, S. E. (1999). Judgment and decision-making research in accounting. *Accounting Horizons*, 13(4), 385-398. https://doi.org/10.2308/acch.1999.13.4.385
- Butler, S. A. (1985). Application of a decision aid in the judgmental evaluation of substantive test of details samples. *Journal of Accounting Research*, 513-526. https://doi.org/10.2307/2490824
- Camilli, R., Cristofaro, M., Hristov, I., & Sargiacomo, M. (2024, December). Cognitive biases in accounting judgment and decision making: a review, a typology, and a future research agenda. In *Accounting Forum* (pp. 1-30). Routledge. https://doi.org/10.1080/01559982.2024.2434340
- Costa, D. F., Carvalho, F. de M., Moreira, B. C. de M., & Silva, W. S. (2020). Viés de confirmação na tomada de decisão gerencial: um estudo experimental com gestores e contadores. *Revista de Contabilidade e Organizações, 14*, e16420. https://doi.org/10.11606/issn.1982-6486.rco.2020.164200
- Emby, C., & Gibbins, M. (1987). Good judgment in public accounting: Quality and justification. *Contemporary Accounting Research*, 4(1), 287-313. https://doi.org/10.1111/j.1911-3846.1987.tb00668.x
- Festinger, L. (1953). An analysis of compliant behavior.
- Festinger, L. (1957). Social comparison theory. Selective Exposure Theory, 16, 401.
- Gibbins, M., & Newton, J. D. (1994). An empirical exploration of complex accountability in public accounting. *Journal of Accounting Research*, 32(2), 165-186. https://doi.org/10.2307/2491280
- Gonçalves, F. J. A., De Moura, A. A. F., & Motoki, F. Y. S. (2022). What influences the implementation of IFRS for SMEs? The Brazilian case. *Accounting & Finance*, 62(2), 2947-2992. https://doi.org/10.1111/acfi.12917
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate Data Analysis (8^a ed.). Pearson.



- Hammond, J. S., Keeney, R. L., & Raiffa, H. (1998). The hidden traps in decision making. *Harvard business review*, 76(5), 47-58.
- Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). Applied Logistic Regression (3^a ed.). Wiley.
- Kahneman, D., & Smith, V. (2002). Foundations of behavioral and experimental economics. *Nobel Prize in Economics Documents*, *I*(7), 1-25.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263-292.
- Leary, M. R. (2004). *Introduction to behavioral research methods*. Pearson Education New Zealand.
- Libby, R., Bloomfield, R., & Nelson, M. W. (2002). Experimental research in financial accounting. *Accounting, organizations and society*, 27(8), 775-810. https://doi.org/10.1016/S0361-3682(01)00011-3
- Lima, M. M. (2023). Experimental scenarios in accounting research: Highlights in methodological development. *Revista Contabilidade & Finanças*, *34*, e1594. https://doi.org/10.1590/1808-057x20231594.en
- Ludenberg, M. A., Fox, P. W., & Puncochar, J. (1994). Highly confident but wrong: Gender differences and similarities in confidence judments. *Journal of educational psychology*, 86, 114-121.
- Luther, R. G., & Longden, S. (2001). Management accounting in companies adapting to structural change and volatility in transition economies: a South African study. *Management accounting research*, 12(3), 299-320. https://doi.org/10.1006/mare.2001.0163
- Pedroza, J. K. B. R. (2013). *IFRS para PMES: uma investigação quanto ao nível de compreensão de contadores amparada na Teoria de Resposta ao Item.*
- Peecher, M. E. (1996). The influence of auditors' justification processes on their decisions: A cognitive model and experimental evidence. *Journal of Accounting Research*, 34(1), 125-140. https://doi.org/10.2307/2491335
- Perera, D., Chand, P., & Mala, R. (2020). Confirmation bias in accounting judgments: the case for International Financial Reporting Standards for small and medium-sized enterprises. *Accounting & Finance*, 60(4), 4093-4119. https://doi.org/10.1111/acfi.12523
- Pompian, M. M. (2012). Behavioral finance and wealth management: how to build investment strategies that account for investor biases (Vol. 667). John Wiley & Sons.
- Pope, P. F., & McLeay, S. J. (2011). The European IFRS experiment: Objectives, research challenges and some early evidence. *Accounting and business research*, 41(3), 233-266. https://doi.org/10.1080/00014788.2011.575002



- Resolução nº 510, de 07 de abril de 2016 (2016). Normas Aplicáveis a Pesquisas em Ciências Humanas e Sociais. http://conselho.saude.gov.br/resolucoes/2016/Reso510.pdf
- Sebastian, A. (2024). Two minds and double entries: an application of cognitive psychology to corporate reporting. *Meditari Accountancy Research*, 32(2), 613-629. https://doi.org/10.1108/MEDAR-03-2022-1625
- Sebrae. (n.d.). *Micro e pequenas empresas geram 27% do PIB do Brasil*. https://sebrae.com.br/sites/PortalSebrae/ufs/mt/noticias/micro-e-pequenas-empresas-geram-27-do-pib-do-brasil%2Cad0fc70646467410VgnVCM2000003c74010aRCRD
- Shefrin, H., & Statman, M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of finance*, 40(3), 777-790. https://doi.org/10.1111/j.1540-6261.1985.tb05002.x
- Tonetto, L. M., Kalil, L. L., Melo, W. V., Schneider, D. D. G., & Stein, L. M. (2006). O papel das heurísticas no julgamento e na tomada de decisão sob incerteza. *Estudos de Psicologia* (*Campinas*), 23, 181-189. https://doi.org/10.1590/S0103-166X2006000200008.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *science*, *185*(4157), 1124-1131. https://doi.org/10.1126/science.185.4157.1124

CONFLICT OF INTERESTS

The authors declare no conflict of interest regarding this submitted work.

AUTHOR CONTRIBUTIONS

Roles	1st Author	2nd Author	3rd Author	4th Author	5th Author
Conceptualization	•	•	•		
Data curation			•		
Formal analysis	•	•	*	*	*
Funding acquisition			*		
Investigation	•	*	*	*	*
Methodology	•	*	*	*	*
Project administration	•	•	*		
Resources			*		
Software			*		
Supervision	•	*	*	*	*
Validation	•	*	*	*	*
Visualization	•	•	*	*	*
Writing – original draft	•	*	*		
Writing – review & editing	•	•	*	*	*