

# PERCEPTION OF ACCOUNTING SCIENCES STUDENTS ABOUT INTEGRATED REPORTING: KNOWLEDGE, ACADEMIC RELEVANCE, AND IMPACTS FOR THE ACCOUNTING PROFESSION

## PERCEPÇÃO DOS DISCENTES DE CIÊNCIAS CONTÁBEIS SOBRE RELATO INTEGRADO: CONHECIMENTO, RELEVÂNCIA ACADÊMICA E IMPACTOS PARA A PROFISSÃO CONTÁBIL

### ABSTRACT

The objective of this study was to analyze accounting students' perceptions of Integrated Reporting, considering aspects related to knowledge, academic relevance and impact on the accounting profession. The quantitative research involved 317 students from two public institutions in Ceará, using questionnaires to explore three dimensions: knowledge about Integrated Reporting, its academic relevance and professional impact. The data were analyzed using descriptive statistics and exploratory factor analysis. The results show that students perceive a gap in their knowledge about the structure, concepts and purposes of Integrated Reporting, but recognize the significant importance of academia in its implementation. Despite the lack of knowledge, they value Integrated Reporting as a relevant subject for their training and see it as beneficial for the accounting profession and essential for future professional competitiveness. It is therefore concluded that it is the role of higher education institutions to promote reflection on Integrated Reporting in their curricula, given the relevance of the topic to the current organizational context. The lack of knowledge of Integrated Reporting identified in the research constitutes a competitive disadvantage in the job market and limits the professional scope of graduates. It is therefore suggested that teaching projects be updated to include contemporary guidelines with a focus on sustainability, such as Integrated Reporting.

**Keywords:** Integrated Reporting. Students. Accounting Sciences. Sustainability.

### RESUMO

Este estudo tem como objetivo analisar a percepção dos estudantes de Ciências Contábeis a respeito do Relato Integrado, considerando aspectos direcionados ao conhecimento, relevância acadêmica e impactos para a profissão contábil. A pesquisa, de abordagem quantitativa, envolveu 317 estudantes de duas instituições públicas do Ceará, utilizando questionários para explorar três dimensões: conhecimento sobre Relato Integrado, sua relevância acadêmica e impactos profissionais. Os dados foram analisados por meio de Estatística Descritiva e Análise Fatorial Exploratória. Os resultados mostram que os estudantes percebem uma lacuna em seu conhecimento sobre a estrutura, conceitos e propósitos do Relato Integrado, mas reconhecem a importância significativa da academia na sua implementação. Apesar da falta de conhecimento, eles valorizam o Relato Integrado como um assunto relevante para a sua formação, visto como benéfico para a profissão contábil e essencial para a competitividade profissional futura. Assim, conclui-se que é papel das instituições de ensino superior promover a reflexão sobre o Relato Integrado nas suas estruturas curriculares, tendo em vista a relevância do tema para o atual contexto organizacional. A ausência do conhecimento sobre o Relato Integrado, que foi verificada na pesquisa, configura desvantagem competitiva perante o mercado de trabalho, limitando o escopo de atuação profissional dos estudantes egressos. Desse modo, sugere-se a atualização dos projetos pedagógicos, de modo a incluir pautas contemporâneas com foco na sustentabilidade, como é o caso do Relato Integrado.

**Palavras-chave:** Relato Integrado. Estudantes. Ciências Contábeis. Sustentabilidade.

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## 1 INTRODUCTION

Accounting has been part of human evolution since the dawn of civilization. Since antiquity, even in a rudimentary way, people have used accounting reasoning to control their assets, since at that time it was necessary to count large herds and the control was done through simple records of objects such as stones and sticks (Lopes & Buriola, 2019). Later, when people began to organize themselves in cities and with the development of trade, accounting also advanced until it was structured as a science (Agostini & Carvalho, 2012).

In this sense, over the years, accounting has continued to change according to the needs of its users, becoming an essential tool in the decision-making process inside and outside companies (Alves & Arima, 2006). It should be noted that decision-making in a company is a survival factor, since one wrong decision can jeopardize the entire future of the entity (Almeida, 2018). The information provided by accounting is a reliable source that shows the equity position and financial performance of the entity, thus supporting the correct analysis for more assertive decisions (Soares et al., 2019).

It should also be noted that companies are part of a chain that includes customers, suppliers and investors (Nicolau & Simaens, 2007), so the results obtained affect all users who have different interests in the financial health of the company (CPC, 2019). Currently, in addition to financial information, users are also interested in the non-financial situation of the entity (Teixeira et al., 2021). This need for information is increasingly present, which is why another format for its presentation has emerged: **Integrated Reporting (IR)**.

The combination of financial and non-financial reports provides greater transparency and a more complete view of the entity (Sargaço et al., 2021). From the same perspective, the United Nations (UN, 2012) argues that the statements should not only deal with financial resources, as it is necessary to understand the company's impact on society, whether positive or negative. Therefore, IR represents a new revolution in the way corporate information should be prepared and disclosed (Carvalho & Kassai, 2014). It is argued that accounting professionals who prepare financial information need more holistic training, as they will be key players in this new evolution (Maria et al., 2022).

Thus, it is understood that academia also represents one of the fundamental factors for the effective consolidation of IR in the country, given that higher education institutions (HEIs) are responsible for training students and future professionals who will act directly in this process (Santos et al., 2021). In this context, it is considered relevant to investigate and answer the following research question: What are the perceptions of accounting students regarding IR? Therefore, the objective of this research is to analyze accounting students' perceptions of IR, considering aspects related to knowledge, academic relevance and impact on the accounting profession.

The research is justified by the fact that IR represents a new revolution in the accounting profession (Kassai et al., 2019). In addition, there is little research that addresses IR in relation to the perceptions of accounting students, which is relevant considering that they will be future professionals in the field, that is, key players in this process (Owen, 2013). In fact, it is understood that this academic demand is capable of broadening the discussion on the topic, as it is believed to be a recent issue. In addition, it is hoped that this research will encourage readers to reflect on and contribute to the effective implementation of IR in Brazil, since, according to Marçal et al. (2022), the preparation of IR enables the creation of value and, therefore, leads to a more positive view of the company in society.

## 2 THEORETICAL FRAMEWORK

### 2.1 Integrated Reporting

The interest in disclosing non-financial information began more than 20 years ago. The sustainability report of the Global Reporting Initiative (GRI) had already appeared in 1999, with the aim of disclosing the social and environmental information of a company, but its objective was not yet to show financial and non-financial information together (Campos et al., 2013; Rabelo & Silva, 2021; Maria et al., 2022). Therefore, there was a need for a way of disclosing information that would make it possible to compare financial and non-financial information, identify the relationship between them, and thus avoid certain inconsistencies that could previously have been hidden (Teixeira et al., 2021).

In this sense, the International Integrated Reporting Council (IIRC, 2014), which is a global coalition of regulators, investors, companies, standard setters, representatives of the accounting profession and non-governmental organizations (NGOs), created IR in 2013. For the IIRC (2014), the integrated report is a concise document that promotes communication by the organization about its strategy, governance, performance and opportunities in the external environment, leading to value creation in the short, medium, and long term.

It is clear that IR does not establish performance indicators, methods and disclosure of specific issues, since its purpose is not to be a new report, but to generate integration and alignment of information between the reports that already exist (Freitas & Freire, 2017). Therefore, IR is not simply a collection of reports, but a concise view of the company's strategy, governance and value generation in the face of externalities over time (Carvalho & Kassai, 2014). The authors also point out that while the balance sheet represents a "photograph" of the company in a given period, IR becomes a "video." Thus, the main objective of IR is to explain to financial capital providers how the organization creates value over time (IIRC, 2014).

The development of IR is based on integrated thinking (Bevilaqua et al., 2021). The IIRC (2014) defines integrated thinking as the importance that an organization attaches to the relationships between its various operational and functional units, as well as the capital it uses or influences. Thus, through IR, the company's integrated thinking is communicated to stakeholders to promote value creation in the short, medium, and long term, as information is expressed more clearly and concisely (IIRC, 2014).

According to Sanches et al. (2020), in order to prepare IR, it is necessary to make changes in the company's information behavior in order to comply with what it proposes. In this way, IR aims to promote more efficient communication through the intercommunication of strategy with governance, performance and the company's prospects in the context of its external environment, with the aim of reaching new investors (Leocádio, 2017).

In this regard, the IR structure should reveal six types of capital in the company: financial, manufactured, intellectual, human, social and relational, and natural (IIRC, 2014). Accordingly, it becomes possible for the users to evaluate how the organizational management of the company deals with its capital (Santos, 2021). Similarly, IR is prepared based on seven principles: 1) consistency and comparability, 2) reliability and completeness, 3) strategic focus and future orientation, 4) connectivity of information, 5) relationship with stakeholders, 6) materiality, and 7) conciseness (IIRC, 2014).

Moreover, in addition to prioritizing clear and relevant information, IR has stakeholder relations as one of its fundamental principles (Correa, 2016). Considering that stakeholders need a more concise and less extensive reporting model, it is important that IR is prepared in a way that compiles the essential information, that is, a single report that serves as a support for understanding all the connections that exist within an organization (Pereira, 2016).

Regarding the adoption of IR in a global context, more than 100 companies from different countries are part of the pilot project proposed by the IIRC to test, develop and discuss experiences in its application (Barros et al., 2018). According to Abreu et al. (2016), in South Africa, the only country where the adoption of IR is already mandatory, benefits have been observed, such as increased engagement of executive directors and other board members.

In Brazil, the preparation of IR is already required by law in the public sector, and there are technical guidelines for its preparation in the private sector (Zaro, 2021). In fact, there is a growing adoption of IR by Brazilian companies, which consequently affects the need to adapt the professionals who work on the preparation of IR, the accounting professionals (Mantovani et al., 2017).

## 2.2 The Role of Academia in Consolidating Integrated Reporting

It should be noted that it is the role of educational institutions to develop and improve the critical thinking of academics (Sanches et al., 2021). Gehlen et al. (2021) found that students with access to sustainability knowledge, such as IR, have a greater chance of standing out in the marketplace. The authors also point out that companies are seeking a more transparent relationship with stakeholders and that there is a need for a skilled workforce to prepare and publish sustainability reports, making it relevant to discuss these issues in educational institutions.

In this context, HEIs have a relevant contribution to make to the subject of IR and should promote the dissemination and discussion of knowledge, as well as the role of developing research that promotes closer contact between academics and market professionals, given that professionals graduating from such institutions will work in the labor market (Santos et al., 2021). The authors also add that academia must reinvent itself and go deeper into the subject of IR with academics, in order to avoid the one-sided view of the financial aspect, since financial reports already provide this.

In fact, the accounting curriculum has traditionally focused on the transactional level and not on the tactical or strategic level of the business, since traditional reports have the purpose of recognizing, measuring, and valuing assets, liabilities, income and expenses (short-term metrics), while IR has a greater focus on the long-term, more sustainable vision in the business and the ability to influence and be influenced by the environment (Owen, 2013). In this way, the author shows that the adoption of IR has implications for the training of accountants, as it needs to be more holistic and the topics in the curriculum should address a more strategic focus, include more forward-looking decision-making functions or support the decision-making process.

In a complementary way, Perego et al. (2016) pointed out that academics can make a significant contribution to the development of IR, but that HEIs are not providing sufficient training for their students, so there is need for educational programs to train them. The authors also highlight the importance of involving academics in the development of IR, which would help to explain the "transformative function" of this tool in a theoretical way.

Ciasca et al. (2019) studied the scientific production of IR in national journals and congresses in the fields of management, accounting and sustainability and found that the subject is still quite recent and little explored in academic research. The authors also highlighted the need to advance in the formulation of knowledge about IR, emphasizing that the inclusion of the subject in curricula will have an impact on the graduation cycle of thousands of students. Therefore, by disseminating this knowledge, Brazilian HEIs will train good professionals capable of dealing with current sustainability problems and carrying out transformations in order to preserve future generations (Ciasca et al., 2019).

### 2.3 Impact of Integrated Reporting on the Accounting Profession

According to Molter (2022), the development of IR represents not only an important advance in the way information is disseminated, but also a revolution in the accounting profession. In order to comply with what is proposed by IR, it is necessary to go beyond a change in the structure of the report; what is needed is a method that conveys the integrated management practices of the company and the decision-making processes that affect the resources it uses (Zaro, 2015).

In this context, Kassai et al. (2019) argue that IR is interesting for accounting professionals because they are professionals who already have experience in preparing information that helps in the decision-making process, that is, they play an important role in the implementation of IR. From this perspective, the interest of the accounting profession in the development of IR is clear, considering that more than 50% of the board of directors of the IIRC, which is responsible for the creation of IR, is composed of accounting organizations and professionals (Santos et al., 2021).

Freitas and Freire (2017) investigated the degree of compliance of the Social and Environmental Report of the Federal Accounting Council (CFC) with the conceptual framework of IR. They found that the social and environmental balance sheets published by the CFC were significantly aligned with the model proposed by the IIRC. Freitas and Freire (2017) also point out that this is relevant because the CFC represents the highest body of the Brazilian accounting profession, both nationally and internationally, and is considered a model for other organizations.

It is clear that in Brazil, until 2019, there was no accounting standard that addressed IR. In November 2020, the Technical Guidance of the Accounting Pronouncements Committee (CPC) on IR was approved, as well as Resolution No. 14 of the Brazilian Securities and Exchange Commission (CVM) and General Technical Communication (CTG) No. 09 of the CFC. As of January 1, 2021, Brazilian listed companies have been required to take the IR guidelines into account when preparing their information (Carvalho, 2021).

Thus, Technical Guideline CPC 09 aims to establish guiding principles and content elements that regulate the general content of IR, as well as addressing fundamental concepts (CPC, 2022). With regard to the public sector, Law 13,303/2016 states that one of the transparency requirements for public companies and mixed capital companies is the annual publication of an integrated or sustainability report (Brasil, 2016).

These regulations have emerged in the Brazilian legislative sphere with the aim of promoting the use of IR (Cunha, 2022), which favors more opportunities for accounting professionals. Thus, this new approach leads to a greater appreciation of accounting professionals, who are generally seen as those who only favor compliance with tax and labor obligations within the company (Moreira et al., 2013).

Therefore, for IR to be implemented effectively, accounting professionals must also be trained to work on the preparation of this information. Maria et al. (2022) point out that one of the gaps in the implementation of IR in Brazil is the need for human capital with the necessary skills, knowledge, abilities and attitudes, in line with the new values of organizations required by the IR methodology.

### 2.4 Studies on Integrated Reporting

Senaratne et al. (2022) investigated the institutional pressures and responses to the introduction of integrated reports in accounting curricula in Sri Lankan universities. As a result, the authors found that normative pressure is the dominant force for the introduction of IR in the undergraduate curricula of all the academies in the country and further demonstrated that when there is uncertainty surrounding educational reforms in emerging areas, as is the case with IR, universities demand models to emulate. The authors concluded that all the isomorphic pressures have influenced the country's universities to include the subject in their curricula to varying degrees, and that it is necessary to carry out a comprehensive review of curricula and course offerings in order to meet the expectations of the different groups and stakeholders.

In line with this idea, Anojan (2019) studied the perceptions of accounting experts on the implementation of IR in Sri Lanka. The results showed that it is not an easy task to transform traditional reports into integrated reports, but the Sri Lankan accounting experts confirmed that there are more opportunities and benefits than challenges and disadvantages in the implementation of IR in the country. The author concludes that professional bodies, universities and other relevant public and private institutions should try to provide adequate training to create awareness and knowledge on the subject.

Ibiamke and Ajekwe (2020) examined IR and the implications for the accounting curriculum in Nigeria. They highlighted that Nigerian institutions have not updated their curricula to reflect current thinking on IR and to ensure a pool of future accountants to sustain IR efforts. The authors concluded that as the use of IR becomes commonplace, it highlights the need to review professional and university accounting curricula to comply with the proposed protocols/principles.

Rodrigues and Morais (2021) conducted research on how to challenge university students to work on integrated reports and integrated report assurance. The results showed that the most appropriate methodology for teaching sustainability and IR is experiential learning through challenges. According to the authors, when a situation is new and uncertain, the key to education is the ability to make people think rather than just do. They concluded that universities need to pay attention to the changes brought about by IR in order to adequately prepare their students and increase their chances of a better future and better jobs.

Complementing this, Kamp-Roelands (2013) reviewed the development and implications of IR for the accounting curriculum. The idea was emphasized that if professionals are to fulfill their future role as changemakers, education must

play a key role and IR, in its broadest sense, must be part of the accounting curriculum. The author concludes that accountants are not currently sufficiently qualified to produce this report and highlights the need for discussions about the relevance of the profession today and how accounting can create and sustain value in the long term.

### 3 METHODOLOGICAL PROCEDURES

This study takes a quantitative and descriptive approach, using a survey questionnaire. The population of this research is made up of accounting students from two public and state HEIs in Ceará. The total population in the study was 845 students enrolled at the time the questionnaire was applied, which took place in April and May 2023, in person, in the classroom, with the authorization of the teachers. A total of 330 questionnaires were collected, but 13 had to be discarded because they were not fully completed. The sample therefore ended up with 317 valid responses, corresponding to 37.5% of the population. The questionnaire was anonymous and voluntary.

The questionnaire consisted of two parts. In the first, there were questions about the respondent's profile, such as age, gender, semester, gross family income, institution where they graduated from high school, work in the accounting field, and ethnicity. In the second part of the questionnaire, the respondents were asked to indicate their level of agreement with the statements on a five-point Likert scale: 1, strongly disagree; 2, disagree; 3, neither agree nor disagree; 4, agree; and 5, strongly agree.

Table 1 shows the statements used in the second part of the questionnaire.

**Chart 1 - Statements about Perceptions of Integrated Reporting**

Category	Description
Knowledge of IR	KNOW1. I know about the basic structure of Integrated Reporting.
	KNOW2. I understand the concept of integrated thinking.
	KNOW3. I understand the types of capital present in the Integrated Reporting structure.
	KNOW4. I understand the purpose of Integrated Reporting.
Academic Relevance	ACR1. I think it is important to understand Integrated Reporting during the undergraduate course.
	ACR2. I believe that the topic of Integrated Reporting should be covered during the undergraduate course.
	ACR3. I think it would be important to have a specific subject on Integrated Reporting during the undergraduate course.
	ACR4. I think it would be important to have study groups on Integrated Reporting during the course.
	ACR5. I believe it is essential for higher education institutions to promote discussions and events on the subject of Integrated Reporting.
Impacts on the Accounting Profession	IMP1. I believe that Integrated Reporting could be a revolution in accounting reports and corporate communication systems.
	IMP2. Knowledge of Integrated Reporting can be useful for new job opportunities.
	IMP3. I understand that the accounting professional plays an important role in the preparation of Integrated Reporting.
	IMP4. I believe that the adoption of Integrated Reporting by companies could lead to a greater appreciation of accounting professionals.
	IMP5. I think that knowledge of Integrated Reporting is relevant to professional education that is geared to current market needs.

Source: Prepared by the author based on the theoretical framework and the study by Kassai et al. (2019).

As can be seen in Table 1, three statements were adapted from the study of Kassai et al. (2019), while the others were prepared with the support of the theoretical framework. It should be noted that before responding to the statements related to the categories of academic relevance and impact on the accounting profession, the concept of IR was presented in accordance with Technical Guideline CPC 09.

Once collected, the data were tabulated in Microsoft Excel® spreadsheets. To analyze the data, the profile of the respondents showed the frequency and percentage of responses. Subsequently, an exploratory factor analysis (EFA) was conducted to assess the consistency of the proposed scale by examining communality, factor loadings, and the Kaiser-Meyer-Olkin (KMO) and Bartlett's sphericity tests. Based on the results of the EFA, it was observed that the factor loadings of all the items were greater than 0.5, a value considered adequate (Hair Jr. et al., 2009). With regard to the KMO

test, values below 0.5 are considered unacceptable; from 0.5 to 0.7 are acceptable; from 0.7 to 0.8 are good; from 0.8 to 0.9 are excellent; and above 0.9 are excellent (Hutcheson & Sofroniou, 1999). Bartlett's sphericity test must be statistically significant. These tests are essential for assessing the quality of the scale used and are indispensable for proceeding with the EFA (Pestana & Gageiro, 2008). In addition, the EFA made it possible to identify the grouping of items by dimension. Once the dimensions were extracted, the reliability of the items in each dimension was checked using Cronbach's alpha. According to George and Mallery (2003), Cronbach's alpha values above 0.5 are considered acceptable. However, values above 0.7 are desirable (Hair Jr. et al., 2009). Jamovi software was used for the statistical analysis of the data.

The responses were then organized into percentages of agreement, disagreement, or indifference. The following method was used to determine whether the students agreed with a given statement:

- a) a negative perception was assigned for the responses strongly disagree (1), disagree (2), and indifferent (3); and
- b) a positive perception was assigned for the responses agree (4) and strongly agree (5).

## 4 DATA DESCRIPTION AND ANALYSIS

The data description and analysis section is divided into five parts. The first part deals with the description of the variables related to the profile of the sample, while the second part deals with the analysis of the Cronbach's alpha coefficient. This is followed by an analysis of the knowledge of IR, the perception of the role of academia in the implementation of IR and the impact of IR on the accounting profession.

### 4.1 Description of the Profile of the Respondents

Table 1 shows the frequencies and percentages of the variables gender, age group, ethnicity, family income, high school institution, course completion, shift, current job, and work in the field that characterize the profile of the respondents.

**Table 1 - Profile of the Respondents**

Category	Classification	Frequency	Percentage
Gender	Men	154	49%
	Women	162	51%
	Non-Binary	1	0%
Age group	17 to 20 years old	120	38%
	21 to 25 years old	159	50%
	26 to 30 years old	21	7%
	Over 31 years old	17	5%
Ethnicity	Black	26	8%
	Brown	185	58%
	White	100	32%
	Indigenous	0	0%
	Yellow	6	2%
Family income	Up to one minimum wage	68	21%
	1 to 2 minimum wages	104	33%
	3 to 4 minimum wages	100	32%
	4 to 5 minimum wages	22	7%
	More than 5 minimum wages	23	7%
High school institution	Public	246	78%
	Private	71	22%

Category	Classification	Frequency	Percentage
Semester	1st semester	47	15%
	2nd semester	43	14%
	3rd semester	36	11%
	4th semester	25	8%
	5th semester	11	3%
	6th semester	37	12%
	7th semester	47	15%
	8th semester	71	22%
Shift	Day	70	22%
	Evening	247	78%
Currently working	Yes, in accounting	117	37%
	Yes, but in another field	109	34%
	No, just studying	91	29%
Work in the field	Yes	164	52%
	No	153	48%

Source: Research data (2023).

Table 1 shows that women make up the majority of the population surveyed (51%). The predominant age group is students aged between 21 and 25 years old (50%), with young people making up the largest proportion. In terms of ethnicity, the majority of the respondents identified themselves as brown (58%). Regarding family income, 33% of the students have an income of between one and two minimum wages.

Of those surveyed, 78% completed high school at a public institution. With regard to course completion, there is a balanced distribution, with 52% of the students studying between the 5th and 8th semester, that is, they have completed more than 50% of the course.

In the shift category, 78% of the respondents said that they study in the evenings. In addition, only 29% of the respondents do not work and, of those who do (226 respondents), 52% work in their field of study. Similarly, 52% reported that they have worked or are currently working in accounting.

It is clear, then, that the profile of the respondents is made up of women who are considered young, of brown ethnicity, with a family income of between one and two minimum wages, who attended high school at a public institution, who are in their final semesters of the course, who study at night, who are currently working in the accounting field and who have worked in the field before.

## 4.2 Scale Consistency and Validity

In order to assess the consistency of the scale and verify the grouping of the items, the EFA method was used, analyzing the factor loadings and the results of the KMO and Bartlett's sphericity tests, with varimax rotation. Based on the EFA results, it was found that all 14 items had factor loadings greater than 0.5. In addition, the KMO test showed a value of 0.896, while Bartlett's sphericity test showed statistical significance at the 1% level ( $p$ -value < 0.01), indicating an adequate correlation among the items and ensuring the viability of the EFA. The results showed that the 14 items were grouped into two factors that explained 60.4% of the total variance of the constructs.

Originally, it was expected that the scale would yield three factors (i.e., knowledge of IR, academic relevance, and impact on the accounting profession), but the EFA revealed the subdivision of the items into only two factors, which were named: (i) academic and professional relevance of IR; and (ii) knowledge of IR. The full results of the EFA are presented in Table 2.

**Table 2 - Exploratory Factor Analysis**

Knowledge of IR	Factor 1	Factor 2	Cronbach's $\alpha$
KNOW1.	0.0712	0.8919	0.942
KNOW2.	0.0898	0.8714	
KNOW3.	0.0521	0.8881	
KNOW4.	0.1062	0.9182	
Academic and Professional Relevance of IR			
ACR1.	0.6546	0.1172	0.912
ACR2.	0.7334	0.0255	
ACR3.	0.5838	0.1104	
ACR4.	0.7084	0.0343	
ACR5.	0.7628	-0.0097	
IMP1.	0.7462	0.0801	
IMP2.	0.7262	0.0518	
IMP3.	0.7405	0.1342	
IMP4.	0.7627	0.1342	
IMP5.	0.7504	0.0888	

Note: Total respondents = 317.

Source: Research data (2023).

Table 2 shows that the first factor brings together the statements related to the academic and professional relevance of IR, while the second factor deals with the students' perceptions of their knowledge of IR. After the EFA, Cronbach's alpha was calculated for the constructs under analysis: academic and professional relevance of IR ( $\alpha = 0.912$ ) and knowledge of IR ( $\alpha = 0.942$ ). These results indicate the internal consistency of the items that make up the constructs studied, as all the values obtained exceeded the threshold of 0.7, which is considered good (Hair Jr. et al., 2009). According to Landis and Koch (1977), values above 0.81 indicate a high degree of reliability. Therefore, it is important to note that all the dimensions examined had Cronbach's alpha coefficients above 0.9.

### 4.3 Perceived Knowledge of Integrated Reporting

Table 3 shows the percentage of agreement, disagreement and indifference as well as the perception of each statement related to knowledge about IR.

**Table 3 - Perceived Knowledge of Integrated Reporting**

Statements	Agree (%)	Disagree (%)	Indifferent (%)	Perception
KNOW1. I know about the basic structure of Integrated Reporting.	22	55	23	Negative
KNOW2. I understand the concept of integrated thinking.	26	47	27	Negative
KNOW3. I understand the types of capital present in the Integrated Reporting structure	19	56	25	Negative
KNOW4. I understand the purpose of Integrated Reporting	26	51	23	Negative

Source: Research data (2023).

After applying the mode, as shown in Table 3, it can be seen that none of the statements about knowledge of IR were perceived positively by the students. Analyzing the percentage of agreement, it can be seen that the majority of students disagree with the statements related to knowledge of IR. It is worth noting that the statement about understanding



the types of capital present in the IR structure (CON3) had the highest percentage of disagreement (56%). Thus, these results show that the students believe that they do not have knowledge of the structure, concepts and purpose of IR.

These findings are similar to the study by Kassai et al. (2019), who found that students showed unsatisfactory results prior to experiencing the subject of IR and sustainability, indicating a lack of knowledge on the subject. Similarly, the findings are also in line with the research by Perego et al. (2016), where the authors found that although academics have the potential to contribute significantly to the development of IR through education, HEIs are not providing enough education, making it necessary for them to demand additional educational programs to meet this need.

It is noteworthy that this gap regarding the lack of human capital with the skills, knowledge and abilities required by IR is pointed out by Maria et al. (2022) as one of the obstacles to the effective implementation of IR in Brazil. In addition, Gehlen et al. (2021) found that students who have the opportunity to access such knowledge are more likely to stand out in the job market. Therefore, this lack of knowledge about IR is likely to be a competitive disadvantage for these students. It should be added that this challenge is not an exclusive phenomenon among students, as in Anojan's (2019) study, the author found that accounting professionals face difficulties in implementing this type of report.

An alternative to overcome this challenge, according to Rodrigues and Morais (2021), is the application of a teaching methodology based on experiential learning, which stimulates students' critical and reflective capacities through practical experiences. It is also important for educational institutions to update and adapt their curricula to include this content, providing up-to-date and contextualized training so that future professionals have the necessary skills and abilities to prepare an integrated report (Kamp-Roelands, 2013; Ibiameke & Ajekwe, 2020).

#### 4.4 Perceptions of the Academic and Professional Relevance of Integrated Reporting

Table 4 shows the analysis of agreement regarding the academic and professional relevance of IR.

**Table 4 - Perceptions of the Academic and Professional Relevance of IR**

Statements	Agree (%)	Disagree (%)	Indifferent (%)	Perception
ACR1. I think it is important to understand Integrated Reporting during the undergraduate course.	85	4	11	Positive
ACR2. I believe that the topic of Integrated Reporting should be covered during the undergraduate course.	90	2	8	Positive
ACR3. I think it would be important to have a specific subject on Integrated Reporting during the undergraduate course.	58	13	29	Positive
ACR4. I think it would be important to have study groups on Integrated Reporting during the course.	65	8	27	Positive
ACR5. I believe it is essential for higher education institutions to promote discussions and events on the subject of Integrated Reporting.	76	4	20	Positive
IMP1. I believe that Integrated Reporting could be a revolution in accounting reports and corporate communication systems.	72	5	23	Positive
IMP2. Knowledge of Integrated Reporting can be useful for new job opportunities.	84	3	13	Positive
IMP3. I understand that the accounting professional plays an important role in the preparation of Integrated Reporting.	79	4	17	Positive
IMP4. I believe that the adoption of Integrated Reporting by companies could lead to a greater appreciation of accounting professionals.	79	3	18	Positive
IMP5. I think that knowledge of Integrated Reporting is relevant to professional education that is geared to current market needs.	84	3	13	Positive

Source: Research data (2023).

Table 4 shows that all the statements have a positive perception, indicating that the respondents agree on the relevance of academia in the implementation of IR, as well as its importance for the accounting profession. The statement with the highest level of agreement (90%) is the one on the topic of IR, which should be covered during the undergraduate course (ACR2), reinforcing the importance of updating accounting curricula to include this subject (Kamp-Roelands,

2013; Ibiame & Ajekwe, 2020). This result, when compared to the findings in Table 3, shows that although the students think they have no knowledge of IR, they believe the subject is relevant and should be covered during the undergraduate course. Similarly, 85% recognize the relevance of studying this subject during their undergraduate studies.

Table 4 also shows that 76% of the students agree that it is essential for HEIs to promote discussions and events on IR (ACR5). In addition, 65% of the respondents agree that it would be more relevant to understand the subject through study groups during the course (ACR4) and 58% suggest that it is relevant to have a specific subject on IR in the undergraduate course (ACR3). In this regard, Santos et al. (2021) point out that academia has an important role to play in consolidating IR in the accounting environment and should contribute to discussing and deepening the subject with professionals through the dissemination of knowledge. Owen (2013) also advocates the need to align accounting curricula with the principles of IR, by reviewing and incorporating the subject in line with these principles.

It can be seen that 84% of the respondents agree with the idea that knowledge of IR is useful for new professional opportunities (IMP2). Another statement with a higher level of agreement (84%) was the relevance of IR knowledge for professional training geared to current market needs (IMP5). Thus, the respondents believe that IR is a current issue and that it is relevant to understand this topic in order to better meet the needs of the market in which they will work or are already working. This result is in line with the perspective of Gehlen et al. (2021) and Kassai et al. (2019), who argue that IR has caused changes in corporate disclosures and has affected the demands on accounting professionals. These new demands require specific qualifications from professionals, making those who have had or are seeking training related to the preparation of these reports more competitive in the market context.

The majority of the students (79%) also agree that accounting professionals play an important role in the preparation of integrated reports (IMP3) and that the adoption of IR by companies can help to increase the value of accounting professionals (IMP4). Similarly, 72% of the students believe that IR can be a revolution in accounting reports and corporate communication systems (IMP1). It can be seen, in hoc sensu, that the students' perception is in line with the findings on this topic. Mantovani et al. (2017) argue that with the increasing adoption of IR by Brazilian companies, there is a need to adapt the accounting professionals involved in the preparation of this report. In line with this, Senaratne et al. (2022) highlight the argument that institutional pressures lead educational institutions to react in order to update and modernize their teaching programs, introducing the topic of IR in accounting curricula, resulting in attractive courses capable of meeting the expectations of different groups and stakeholders.

## 5 CONCLUDING REMARKS

The purpose of this research was to analyze accounting students' perceptions of IR, considering aspects related to knowledge, academic relevance, and impact on the accounting profession. It was found that the students felt that they had no knowledge of the structure, concepts and purpose of IR. In addition, it was found that the students believe that academia has a relevant contribution to make to the implementation of IR. Thus, it was possible to verify that although the students consider themselves to have no knowledge of IR, they understand it as a relevant topic that should be addressed during their undergraduate studies as it provides positive inputs to the accounting profession, which represents a gap between knowledge and perceived relevance.

The importance of IR in academia is discussed as a tool for training more competitive professionals. Given the inseparable tripod of teaching-research-extension, some considerations are in order. As far as teaching is concerned, it is the role of HEIs to promote reflection on IR in their curricular structures, given the relevance of the subject to the current organizational context, as well as to promote pedagogical practices mediated by problem-based and project-based teaching methodologies. With regard to research, it is suggested that the requirements to be developed for IR use new approaches that provide opportunities for reflection and discussion on this learning and its impact on the professional environment. It should also be pointed out that the "curricularization" of extension can promote experiential learning through the experience of empirical practices in organizational environments where students are able to understand, reflect and propose interventions on the subject in a real context.

As far as the implications of the study for the professional environment are concerned, the lack of knowledge about IR constitutes a competitive disadvantage in the world of work and limits the scope of professional activities of graduates. It is therefore suggested that teaching projects be updated to include contemporary guidelines with a focus on sustainability, as is the case with IR. As a theoretical-methodological contribution, we highlight the development of the scale used in the survey, which demonstrated consistency and validity. As a managerial contribution, the scale can help university managers in the process of reformulating pedagogical projects, as well as guiding teaching practice in the development of didactic-pedagogical strategies focused on teaching IR.

Limitations include the fact that this demand was applied only to public HEIs and only to face-to-face courses. For future research, we suggest analyzing and comparing the responses of students from HEIs with different modalities (i.e., face-to-face and distance learning) and from HEIs of different types (i.e., public and private), as well as using other statistical tests to see if there are socio-demographic profile variables associated with students' perceptions of IR.

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