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Raising one's voice at accounting frauds in Brazil: an examination on the effect of the existence of multiple reporting channels on employee whistleblowing intention

Levantando a voz em fraudes contábeis no Brasil: um exame sobre o efeito da existência de múltiplos canais de denúncia na intenção de whistleblowing do empregado

Alzando la voz en el fraude contable en Brasil: un examen del efecto de la existencia de múltiples canales de denuncia en las intenciones de whistleblowing de los empleados

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KEYWORDS

Whistleblowing.
Reporting channels.
Accounting fraud.

Abstract: The objective of the study was to provide initial evidence for the Brazilian scenario about the whistleblowing intentions of employees, when multiple communication channels are available. The methodology used was a quasi-experiment, with the application of a questionnaire, which resulted in a final sample of 271 participants, mostly professionals in the accounting area. Respondents were exposed to a simulated scenario of accounting fraud, being asked to sequentially indicate their intention to report the observed fact, without indicating any channel, then to an anonymous channel and finally to a series of non-anonymous channels. Data analyses were performed using the Wilcoxon non-parametric test to compare related groups. The results show that 73% of the participants in the experiment intend to report the reported fraud and only 12% indicate their intention not to report. When participants are informed about the channels, the intention to report decreases, being 42% for the use of anonymous channels and 54% for the use of non-anonymous channels. The results do not reveal the prevalence of the intention to report to the anonymous channel in the case of the Brazilian employee, unlike in other countries. The effect of multiple whistleblowing channels on Brazilian employees' intention points to a preference for non-anonymous channels, with emphasis on the most direct line of

subordination. The results suggest the need to improve internal reporting programs, with training for employees and management members (communicators and receivers), to enhance the effect of the reporting mechanism as a management tool.

PALAVRAS-CHAVE

Whistleblowing.
Canais de denúncia.
Fraudes contábeis.

Resumo: O objetivo do estudo foi prover evidências iniciais para o cenário brasileiro sobre as intenções de Whistleblowing dos empregados, quando múltiplos canais de comunicação estão disponíveis. A metodologia utilizada foi um quase-experimento, com aplicação de questionário, que resultou em uma amostra final de 271 participantes, em sua maioria profissionais da área contábil. Os respondentes foram expostos a um cenário simulado de fraude contábil, sendo solicitado que indicassem de forma sequencial a intenção de denúncia do fato observado, sem indicação de nenhum canal, depois a um canal anônimo e por fim a uma série de canais não anônimos. Foram realizadas as análises dos dados com a utilização do teste não-paramétrico de Wilcoxon para a comparação dos grupos relacionados. Os resultados evidenciam que 73% participantes do experimento demonstram a intenção de denúncia da fraude relatada e apenas 12% indicam sua intenção de não delatar. Quando os participantes são informados sobre os canais, a intenção de denúncia decresce, sendo de 42% para o uso de canal anônimo e 54% para o uso de canais não anônimos. Os resultados não revelam a prevalência da intenção de denúncia ao canal anônimo no caso do empregado brasileiro, diferentemente de outros países. O efeito dos múltiplos canais de denúncia sobre a intenção de Whistleblowing dos empregados brasileiros aponta para uma preferência pelos canais não anônimos, com destaque para a linha mais direta de subordinação. Os resultados sugerem a necessidade de melhorar os programas internos de denúncia, com treinamento dos empregados e membros da administração (comunicadores e receptores), para potencializar o efeito do mecanismo de denúncia como ferramenta de gestão.

PALABRAS CLAVE

Whistleblowing. Canales de denuncia. Fraude contable.

Resumen: El objetivo del estudio fue proporcionar evidencia inicial para el escenario brasileño sobre las intenciones de Whistleblowing de los empleados, cuando están disponibles múltiples canales de comunicación. La metodología utilizada fue un cuasiexperimento, con la aplicación de un cuestionario, que dio como resultado una muestra final de 271 participantes, la mayoría profesionales de la contabilidad. Los encuestados fueron expuestos a un escenario simulado de fraude contable, y se les pidió que indicaran secuencialmente su intención de denunciar el hecho observado, sin indicar ningún canal, luego a un canal anónimo y finalmente a una serie de canales no anónimos. Los análisis de datos se realizaron mediante la prueba no paramétrica de Wilcoxon para comparar grupos relacionados. Los resultados muestran que el 73% de los participantes en el experimento demuestra su intención de denunciar el fraude denunciado y sólo el 12% indica su intención de no denunciarlo. Cuando los participantes son informados sobre los canales, la intención de denunciar disminuye, siendo un 42% para el uso de canales anónimos y un 54% para el uso de canales no anónimos. Los resultados no revelan la prevalencia de la intención de denunciar por el canal anónimo en el caso de los empleados brasileños, a diferencia de otros países. El efecto de los múltiples canales de denuncia sobre la intención de denuncia de irregularidades de los empleados brasileños apunta a una preferencia por canales no anónimos, con énfasis en la línea de subordinación más directa. Los resultados sugieren la necesidad de mejorar los programas de presentación de informes internos, con capacitación de los empleados y miembros de la dirección (comunicadores y receptores), para potenciar el efecto del mecanismo de presentación de informes como herramienta de gestión.

Introduction

The Whistleblowings. With this title, in December 2002, the American magazine Time Life released the personalities of the year: Coleen Rowley of the Federal Bureau of Investigation (FBI), Cynthia Cooper of WorldCom and Sherron Watkins, of Enron. They were so named for denouncing irregular acts by their organizations, their acts and consequences having marked the way in which society, regulators and legislation¹ consider the instrument of internal denunciation as an artifact of control to curb fraud.

The term whistleblowing, whistle-blowers or whistleblowers, in the literal sense, was not new in 2002. According to Dasgupta and Kesharwani (2010), the term Whistleblowing originated from the practice of the English police of blowing their whistles when they observed the occurrence of some crime. The blowing of the whistle was intended to alert other law enforcement officials and the general public that a crime was being committed. From the early 1970s, according to Johnson (2003), it became the common way to describe informants involved in public health, security, abuse of power or fraud issues.

In general, the word Whistleblowing is related to reporting irregularities, and refers to someone who communicates or disseminates information about illegal acts, ethically questionable conduct or illegitimate practices, to a third party, people or organizations, that has independence, capacity, authority and responsibility to effectively investigate and resolve issues (Near & Miceli, 1985; SOX, 2002). On the subject, it is noteworthy that this definition is the most used in the academic field and will be the guide for this research (Bushnell, 2020, Mannion et al., 2018, Culiberg & Mihelic, 2016; Tavakoli, Keenan, & Cranjak-Karanovic, 2003).

Within the scope of scientific literature, for

more than 20 years, studies have been carried out in different areas of knowledge, aiming to examine issues related to whistleblowing (Kaplan & Shultz, 2007). In the business world, a whistleblowing program is a relevant component of a healthy organizational culture and an essential artifact for effective governance, especially in cases of fraud.

According to research by the Association of Certified Fraud Examiners (ACFE, 2014), organizations that have whistleblowing programs are able to detect cases of fraud up to 50% faster, compared to companies that do not have it. This detection speed means that, in organizations with whistleblowing programs, fraud incidents are 41% less costly compared to the others.

The increased pressure to reduce accounting fraud has resulted in new laws, recommendations and standards that seek to improve internal control related to fraud detection (Hooks et al., 1994). Among these, according to Kaplan et al. (2012), the requirement for the availability of an anonymous communication channel stands out (SOX, 2002; OECD, 2008), ensuring that employees have access to communicate questionable acts, with low personal cost and a certain protection against retaliation, however, it has a cost for the organizations that adopt it.

According to ACFE (2012), good practices related to the discovery of fraud in organizations are not restricted to the operation of these anonymous communication channels, but include the existence of multiple channels, so that employees can communicate their concerns about illegal acts or questionable behavior to their superiors in a non-anonymous manner.

Research carried out from the perspective of the employee (Ayers & Kaplan, 2005; Near et al., 2004), has pointed to the benefits of anonymous communication channels, with special emphasis on the reduction of personal costs involved in the decision. However, according to Kaplan et al.

¹ With emphasis on the Sarbanes Oxley Act – section 301 of 2002.

(2012) and Hunton and Rose (2011), the effect on employees' intention to report when organizations make anonymous and non-anonymous channels available is still uncertain or underdeveloped in the literature.

In Brazil, due to a recent phenomenon of investigation of acts of corruption and illicit practices², the discussion on whistleblowing takes on the contours of a legal concern, when bills are processed in the legislative houses³ and also gains relevance in discussions of corporate governance, especially in the integrity or compliance programs, as a form of controlling actions within organizations.

In this scenario of organizational and legal relevance, and considering the cultural peculiarities and legal protection that can impact the judgment of employees of organizations, regarding the decision to report irregularities or questionable acts, depending on their local context, according to Sampaio and Sobral (2013) there is a need to expand knowledge of how the various communication tools or channels can interact and influence this decision, in the context of organizations in Brazil.

Limited knowledge of this issue, specifically for the Brazilian scenario, can bring inefficiency to the regulatory process or to the institutional design of organizations' communication channels, and culminate in a substantial impact on the initial detection of fraud, increasing the potential for losses, resulting from them (Sampaio & Sobral, 2013).

An inadequate design or configuration of the interaction between the different types of communication channels available to employees can inhibit the obtaining of alerts to be generated by potential Whistleblowers in Brazilian

organizations, or bring unnecessary additional costs to the entity, to make the verification of information more effective. declared information, not conferring the effectiveness sought by a Whistleblowing program.

Based on the model for an effective Whistleblowing program proposed by Near and Miceli (1995), this study has the main objective of providing initial evidence for the Brazilian scenario about the Whistleblowing intentions of employees, when multiple communication channels are available.

This paper presents the result of a broad⁴ quasi-experimental study, which provides evidence for the Brazilian scenario on whether the availability of an anonymous channel in relation to several non-anonymous channels improves Whistleblowing intent in an accounting fraud scenario.

To test the effects of the availability and interaction of multiple communication channels available to employees for Whistleblowing, the quasi-experiment involved the participation of 342 respondents, mostly professionals working in the accounting workplace market.

The study is conducted in a scenario of accounting fraud. Such a choice is justified because organizations have sought to implement anonymous reporting channels in search of compliance with the main legal and regulatory recommendations that are directly related to financial statements, such as SOX (2002) and the great impact that these can cause in the social and economic scenario. market, according to ACFE (2015).

The research instrument was applied using the internet. The participants, randomly selected through the researchers' relationship network,

²It is important to highlight the difference between a whistleblower – who participates in the fraud and decides to collaborate with the investigations – and a whistleblower – who only has knowledge of the illicit or questionable act without participating in its execution.

³Bill No. 1701/2011; n° 664/2011; and n° 3,506/2012.

⁴Considering the average respondents of international studies on the topic, which are around 70 respondents, and generally use MBA students, this study can be considered broad as it has a response base of more than 270 respondents, with a prevalence of professionals linked to the accounting market.

were presented with the general scenario of an organization and a situation where an accounting fraud was carried out by another employee. After reading, they were asked to indicate their intention to communicate the observed irregular act to an anonymous channel, and then to a set of non-anonymous communication channels, which were detailed in various institutional management instances.

The responses to the test, analyzed from a quantitative perspective, using the Wilcoxon test, suggest that, in general terms, in the Brazilian scenario, when anonymous and non-anonymous reporting channels are made available, there is no prevalence of the anonymous channel over the others, with greater intention of reporting to non-anonymous channels, with emphasis on the employee's immediate line of subordination.

Even with the limitations inherent to the quasi-experimental design, this study contributes to expanding the theoretical basis, practice and design of regulation, still incipient in Brazil, on the area of corporate governance, specifically related to complaint.

The following sections deal with the development of hypotheses and research questions, detailing the method used, followed by the presentation of results and their discussion.

Theoretical Elements of the Research

According to Burnett, Margolis and Elder (2012), the current business environment has the characteristics of a 'perfect storm' for fraud, especially accounting/financial fraud, which stands out among the types of fraud surveyed by ACFE (2014) – corruption, appropriation of assets and accounting fraud – such as those that generate the greatest financial impact on organizations. The main means of detection being complaints, whose main source (49%) is the employees of the organizations themselves, acting as whistleblowers. Due to this effectiveness for fraud

detection, whistleblowing has become, according to Guthrie and Taylor (2015), an area of interest in the business area, in the public area, and by extension, among regulators.

The increased pressure to reduce accounting fraud has resulted, according to Hooks et al. (1994), in new laws, recommendations and rules that seek to improve internal control. With regard to the positivization of legislation on the subject, there are provisions on the subject in various international conventions and treaties such as the Convention Against Corruption of the United Nations (UN)⁵; the Inter-American Convention against Corruption of the Organization of American States (OAS)⁶; and, within the scope of the Organization for Economic Cooperation and Development (OECD), the Convention on Combating Corruption of Foreign Public Officials in International Business Transactions⁷;, in addition to the existence of several internal legislations of the countries, with emphasis on the United States and the United Kingdom - and, timidly and initially in Brazilian law, within the scope of Law 12,527/11.

According to Fraschini (2007), although the expression whistleblowing has evolved over the last few years, one thing that is certain and widely accepted about it is that it is a situation where someone raises their voice to point something out, raise an alarm. According to Kaplan and Schultz (2007), an effective whistleblowing process serves as an important control mechanism to prevent and detect acts of transgression, violation of norms or questionable acts in general, within organizations, and is based on communication, the reporting or disclosure of an act or conduct of another. Communication is one of the basic pillars of this process.

Communication in the Whistleblowing process, however, is a delicate style, which

⁵arts. 1º, 8º, § 4º, 13, 32 and 33, 36, 39 and 60.

⁶arts. 2º, 3º, §§ 1º, 8º and 11 e 14, §§ 1º and 2º.

⁷arts. 1º, §§ 1º and 2º, 2º, and 3º, § 2º.

requires the communicator to consider the audience to whom it is addressed, its purpose, the language to be used and the type of offense being communicated (King III, 1999). In this decision to report the offense or questionable act, costs and benefits are involved for the whistleblower, and, according to Hooks et al. (1994), the choice of communication recipient, a crucial assessment, with special emphasis on the role of the channel used.

Issues such as legal protection for reporting wrongdoing, confusing or incomplete positive rules, and different cultural norms mean that assessments of reporting wrongdoing are analyzed differently across different countries and cultures.

According to Near and Miceli (1996) the channels available for communication are also considered in the decision to communicate irregular or questionable acts due to the consequences, possible or imaginable, by the whistleblower, which may result from his act.

In a model for an effective Whistleblowing, Near and Miceli (1995) consider that the fact that the available communication channel is anonymous or not, has an influence on the employee's decision to carry out the communication. Kaplan and Schultz (2007) claim that providing an anonymous communication channel encourages whistleblowing, as it reduces personal costs in terms of retaliation or other unfavorable outcomes arising from the act. The preference for an anonymous channel, due to the perception of reduced personal costs involved in the issue, is also corroborated by Ayers and Kaplan (2005) and Gundlach et al. (2003).

The importance of communication channels is highlighted among the control dimensions listed by the framework of the conceptual structure of internal control, outlined by the Committee of Sponsoring Organizations (COSO, 2013), in the element destined to information and communication as one of the bases of an effective

system of internal control.

This discussion leads to the first research hypothesis of this work, tested in a similar way by Kaplan and Scultz (2007):

H1 - considering the existence of multiple reporting channels (anonymous and non-anonymous), it is expected that there is a greater whistleblowing intention in the channels anonymous.

The hypothesis is based on studies by Near and Miceli (1992), Schultz et al. (1993) and Ayers and Kaplan (2005), and is supported by the analysis of the personal costs attributed to whistleblowing, such as retaliation, persecution or legal problems, assumed when using a non-anonymous channel.

Considering that in relation to non-anonymous channels and the various institutional instances that may be available for employee complaints, such as those related to the management, governance, internal and external control structure, and anchored in the study of the Ethics Resource Center (ERC, 2014), which indicates that 98% of whistleblowers, when first communicating, are addressed internally to managers, the second hypothesis investigated in this work arises:

H2 - when multiple non-anonymous institutional channels are available, there will be a preference for reporting whistleblowing to the closest institutional instance of the employee, but to a lesser degree of preference than the anonymous line of communication.

This discussion leads to the following research questions: (1) does the simultaneous availability of an anonymous and other non-anonymous reporting channels reduce the possibility of an employee reporting irregular or

illegal acts directly to a non-anonymous channel?
(2) Does the employee's decision to blow the whistle, when multiple channels are available, vary considering the corporate level at which the report is being filed?

Methodological Elements of the Research

The questions investigated in this study seek to capture a possible cause-effect relationship between the existence of multiple reporting channels and their interaction with employees' intentions to communicate. For this purpose, according to Vandekerckhove et al (2014), the gold standard for these studies with random control, such as experiments, is limited to use in cases of investigation that involve judgments, as in the case of reporting complaints.

The authors indicate that in these cases it is opportune to develop and use research designs where the control of the variables is smoother, while maintaining rigorous methodological control, as in the case of quasi-experimental designs. Allied to this argument, Hunton and Rose (2011) also indicate alternative research designs, when they highlight the lack of data to be cataloged on the employee's intention to report.

According to Cook (1979), a quasi-experiment is a type of research design that does not have random distribution of research subjects into control and treatment groups. In this design, comparisons between treatment and non-treatment conditions are always made with equivalent groups or with the same subjects. The fact of not distributing the subjects randomly between experimental and treatment groups does not prevent having the ability to observe what happens and when it happens, and thus plan a quasi-experiment, making it possible to analyze cause-and-effect relationships.

Several quasi-experimental designs are applicable to a single group, especially in situations where a design with a control group is not possible (Campbell & Stanley, 2015), as in the case of this study. The limitation of the use of experimental design, in this case, is due to the

impossibility of verifying the intention of denunciation in the existence of multiple denunciation channels, in an integrated way, with the use of group comparisons. The cause and effect that we intend to measure are related to the judgments of the same research subjects.

The employee's behavioral intention to blow the whistle is used in this study as an operational proxy, due to the impossibility of investigating real situations of whistleblowing by employees, this procedure is aligned with international literature and research on the topic (Chiu, 2003).

Quasi-Experimental Design

A quasi-experimental design was conducted to verify the study's hypotheses, which consider that there are effects on employees' intention to report when a set of communication options are available (anonymous and non-anonymous) and also related to the different possible institutional levels for this communication, with a prevalence for the anonymous channel option.

A same group of respondents was exposed to a simulated scenario of accounting fraud, being asked to indicate sequentially their intention to report the observed fact, without indicating any channel, then to an anonymous channel and finally to a series of unidentified channels that represented the various organizational instances.

Sequential exposure to channels allows you to simulate a real decision situation, where the employee decides, based on the various possible paths for communication, which channel is most likely to be used to communicate the questionable act.

Additionally, demographic information regarding gender and professional experience was included, to enable additional analysis and categorization of respondents.

The comparability between the intention to report was carried out intra-group based on the intention to report indicated for each channel.

Aspects related to the influence of bystanders (Darley & Latane, 1968) were considered, and in the fraud scenario described to the respondents it

was indicated that only the employee (respondent) would be aware of the fact that accounting fraud had occurred. If there is no diffusion of responsibility, it is expected that the experiment will not be contaminated by the decrease in the perception of responsibility for the reported fraud.

The status of the perpetrator of the irregular act was also controlled in the design of the scenario. According to Cortina and Magley (2003) and Rehg et al. (2008), the intention to report can also be affected when the irregular act observed is perpetrated by a member of a high level of the organization, with the intention to report being lower in this case, and greater when prepared by an employee at a lower level than the complainant. The power of the fraudster's status was controlled in the scenario, an intermediate-level employee being informed as the author of the fraud.

The instrument understanding test was carried out with six respondents chosen by the researchers from accounting professionals, prior to the effective application of the instrument, and made it possible to correct issues related to the clarity and understanding of the questions. These

evaluators did not participate in the research.

Participants

Shanteau (1989) and Smith (2014) state that studies involving professional skills should preferably be carried out with qualified participants and without the use of incentives. Following this guidance, data collection was carried out only with qualified participants, predominantly accounting professionals or students, with voluntary participation.

In total, 342 participants completed the collection instrument forms, however, 20.7% of them were considered lost data due to error or lack of data in the form, resulting in 271 final participants.

As indicated in Table 1, the participants are predominantly active in the professional market, 71%, with an average professional experience of 8.9 years and the majority, 56%, working in the accounting area, 50.5% of whom are male, with an average age of 31 old and, in 73% of cases, they are willing to report illicit acts.

Table 1
Information about participants

Panel A: Sample Information	
Initial Sample	342
Lost Data	71
Analyzed Data	271
Panel B: Profile of Respondents	
Gender	
Masculine	50.5%
Feminine	49.5%
Average of Age	31.5 years
Level of Engagement	
Professional	71%
Student	26%
Others	3%
Average time of professional experience	8.9 years
Professional Activity with Accounting	
Yes	56%
No	17%
Initial Whistleblowing Intention	73%

Source: Authors' elaboration.

Procedures

Data collection was carried out from the availability of the research instrument in an electronic data collector operating in an internet environment, this configuration being defined to provide the capture of data from institutionally and geographically dispersed participants, and their effects similar to face-to-face experiments (Krantz & Dalal, 2000).

The research instrument, after the informed consent form and the information on the demographic variables shown in Table 1, described a hypothetical banking organization to the participants. It informed the general scenario of the organization and reported the scenario of fraud and its discovery by the participant. Subsequently, the respondent was asked to take a position regarding their intention to report, without informing about channels. In a separate tab, they were asked to indicate their intention to report if the organization had an anonymous channel, and to position themselves on this intention for each of the non-anonymous channels available, citing various organizational instances.

Due to the sensitive nature of the information, all participants responded anonymously.

Case

Seeking to place the respondent in a scenario as close as possible to the fraud environment, the case was prepared considering the profile data of fraudsters collected by ACFE (2014) and the following basic characteristics were incorporated:

a) the department where the reported fraud occurs is accounting, which according to ACFE (2014) has been the place where, on average, 22% of fraud cases occurred in organizations in the years 2012, 2013 and 2014; b) the perpetrator of the fraud is an information preparer, who, according to the study, accounts, on average, for 42% of reported cases. Data from ACFE (2014)

for Latin America and the Caribbean show that 39.6% of fraud cases are committed by employees and this was the profile of the fraudster incorporated in the case; c) the sex of the fraudster, according to data for Latin America and the Caribbean, is 75.6% men; d) the case was related to fraud in financial statements, as it was considered, in volume of annual losses, the most representative among the 3 categories studied; e) the organization reported in the case is from the private sector and the banking segment, which according to the study accounts for 38% and 17.8% of fraud cases in the world, respectively; and f) the source of fraud discovery is the complaint made by employees, which corresponds to 49% of complainants, a fact that is incorporated into the respondent's profile.

The research instrument collected the dependent variable, intention to report to channels, using a 6-point scale, ranging from would not communicate to would definitely communicate, and a specific item to indicate their perception that they had no responsibility for the issue. This measurement scale is similar to those used by other studies such as Chiu (2003), Ayers and Kaplan (2005), Kaplan and Schultz (2007), Kaplan et al. (2009) and Kaplan et al. (2012).

Results and discussion

The results are presented in two parts, initially presenting general frequency information about the intention to report, and then the results of the tests for each hypothesis.

The survey collected information from 342 respondents, 271 of which were valid data for processing regarding the effect on the intention to report the interaction between channels. For this purpose, incomplete responses were considered lost data, around 15%, and those who reported not being responsible for this complaint, around 3% of the total, as can be seen in Table 2.

Table 2

Intention to report without indicating a channel

Panel A: Reporting Channels	Intention to Report – Percentage (n=342)			
	Yes	No	Not responsible	No response
No specific channel	73%	12%	3%	11%
Channel for anonymous communication	42%	41%	2%	15%
Non-anonymous communication channels (General)	54%	29%	2%	15%
Panel B: Channels for specific non-anonymous communication	Intention to Report – Percentage (n=342)			
	Yes	No	Not responsible	No response
Direct Reporting Line (Immediate Boss)	66%	18%	1%	15%
Organization Administration (CFO)	54%	30%	2%	15%
Control Entities (Audit Internal)	55%	28%	2%	5%
External Entity (Audit External)	42%	40%	4%	15%

Source: Elaboration by the authors, based on the field study.

Note: Computation intentions to report YES are those marked between scale 4 to 6; NOT responsible for the selected items 1-3 and Not Responsible for those marked with item 7.

Table 2 shows that right after reading the case with the report of the fraud, where there is no indication of reporting channels, 73% of the participants in the experiment demonstrate their intention to report the reported fraud and only 12% indicate their intention not to report.

When participants are informed about the channels, the intention to report decreases, being 42% for the use of anonymous channels and 54% for the use of non-anonymous channels. Table 2 details the percentages of participants' responses for each organizational sphere, highlighting the highest percentage of intention to denounce for communication to the direct subordination line,

the immediate boss. The anonymous line is equivalent in terms of percentages of intention to report that of an external entity (external audit).

With the use of 271 valid data, from obtaining the perceptions of the participants, through measures on an ordinal scale (1-6), about the intention to communicate the reported accounting fraud, data analyzes were carried out using the test non-parametric Wilcoxon for comparison of related groups and discussion of study hypotheses. Tables 3, 4 and 5 present the results of the general tests and those related to the research hypotheses.

Table 3

Reporting intentions without a specific channel and with anonymous and non-anonymous channels.

Panel A: Reporting Channels	Intention to Report (n=271)		Meaningfulness <i>Wilcoxon Test</i> No Specific Channel x With Channel (others)
	Average	(SD)	
No specific channel	4.73	1.17	-
Anonymous Communication	3.62	1.98	0.000
Non-anonymous communication (General)	4.02	1.40	0.000
Panel B: Specific non-anonymous Communication Reporting Channels	Intention to Report (n=271)		Meaningfulness <i>Wilcoxon Test</i>

Direct Reporting Line (Immediate boss)	4.46	1.33	0.001
Organization Administration (CFO)	4.03	1.39	0.000
Control Entities (Audit Internal)	4.05	1.52	0.000
External Entity (Audit External)	3.56	1.69	0.000

Source: Elaboration by the authors, based on the field study.

Note: Due to the format of the collection scale, the higher the average, the more likely the participant is to report the reported fraud, with 6 being the statement that they would certainly report. Values above 4 are considered in this study as propensity to report.

An overview of participants' intention to report shows, according to Table 3, that the propensity to report has the highest average (4.73) when respondents are not given a specific channel to do so. This result is statistically significant in relation to the intention to communicate through anonymous or non-anonymous channels. This behavior may be due to a simple desire to report, without considering the analysis of the possible consequences and procedures involved in this

decision. No studies were found in the literature with similar data for comparison or analysis.

Tables 4 and 5 detail the tests of the study hypotheses. The hypotheses are tested using group comparison tests, by checking the statistical significance of differences in means (Wilcoxon), when interacting between intentions to report to anonymous and non-anonymous channels.

Table 4

Reporting intentions between anonymous and non-anonymous channels

Reporting Channels	Intention to Report (n=271)		Meaningfulness <i>Wilcoxon Test</i> Anonymous Communication x Another Channel
	Average	(SD)	
Anonymous Communication	3.62	1.98	-
Non-anonymous communication	4.02	1.40	0.001

Source: Elaboration by the authors, based on the field study.

Note: Due to the format of the collection scale, the higher the average, the more likely the participant is to report the reported fraud, with 6 being the statement that they would certainly report. Values above 4 are considered in this study as propensity to report.

The first hypothesis argues that the effect of making available to the employee a set of reporting channels, one anonymous and the other non-anonymous, will lead to a greater intention to report to anonymous channels. This hypothesis is accepted as valid by the international literature and serves as the basis for recommendations for the provision of anonymous reporting channels by regulators, as well as control and governance structures.

The results in Table 4 do not confirm the research hypothesis, demonstrating, in a statistically significant way, that in the Brazilian case, when there is a set of anonymous and non-

anonymous channels, the intention to report the fraudulent act to the non-anonymous channel increased by regarding the intention to use the anonymous channel in general. That is, from this result it is possible to infer that the answer to the first research question, in the Brazilian case, reveals that the existence of competing channels for reporting fraudulent acts leads to a greater propensity to use non-anonymous channels to report.

The second hypothesis predicts that the effect on the availability of multiple non-anonymous institutional channels will be a preference for the institutional instance closest to the employee, but

at an even lower level than the non-anonymous line of communication. Table 5 allows you to

view the results of the analyzes of these interactions.

Table 5

Reporting intentions between anonymous and non-anonymous channels by institutional bodies

Panel A: Reporting Channels	Intention to Report (n=271)		Meaningfulness <i>Wilcoxon Test</i> Anonymous Communication x Another Channel
	Average	(SD)	
Anonymous Communication	3.62	1.98	-
Non-anonymous communication (General)			
Panel B: Specific non-anonymous Communication Reporting Channels	Intention to Report (n=271)		Meaningfulness <i>Wilcoxon Test</i>
Direct Reporting Line (Immediate boss)	4.46	1.33	
Organization Administration (CFO)	4.03	1.39	0.004
Control Entities (Audit Internal)	4.05	1.52	0.002
External Entity (Audit External)	3.56	1.69	ns

Source: Elaboration by the authors, based on the field study.

Note: Due to the format of the collection scale, the higher the average, the more likely the participant is to report the reported fraud, with 6 being the statement that they would certainly report. Values above 4 are considered in this study as propensity to report.

The results in Table 5 demonstrate that the averages of intentions to report among the various organizational instances are statistically significant, with the exception of the external audit, when correlated to the anonymous reporting line. The second hypothesis is not fully confirmed for the case of this experiment in Brazil.

As expected, the employee's most direct line of subordination, the immediate boss, has the highest average intention to report among all the channels of the other available organizational instances, however the intention to report to this instance is greater than that to the anonymous channel, contrary to the expectation described in the hypothesis. The second research question related to this hypothesis is confirmed by the data in Table 5, that is, the employee's decision to report varies between the different corporate instances, being, in order of preference, the line of direct subordination, the controlling entity internal, the representative of the governance structure and finally an external entity.

Final Remarks

The purpose of this study was to provide

initial evidence for the Brazilian scenario regarding the effects on employees' intentions to raise their voice about accounting fraud (Whistleblowing) in Brazil, when multiple communication channels are available. As part of the study, evidence was also generated on how the intention to report behaves at the various non-anonymous organizational levels.

The findings suggest that the Brazilian scenario does not adhere to the international findings, specifically regarding the prevalence of the intention to report to anonymous channels. The general results (Table 3) and the hypothesis tests (Tables 4 and 5) do not reveal the prevalence of the intention to report to the anonymous channel in the case of the Brazilian employee.

The effect of multiple whistleblowing channels on the Whistleblowing intention of Brazilian employees clearly points to a preference for non-anonymous channels, with emphasis on the more direct line of subordination (Table 5).

Some factors may explain this effect observed in the Brazilian case. In general, research suggests that anonymity increases the chances of more effective communication of the observed offense, as it encourages the employee to communicate

without fear of reprisals (Ayers & Kaplan, 2005; Hunton & Rose, 2010). However, the scenario of internal denouncement is still incipient in the Brazilian environment, which means that there are few records of occurrences or experiences of reprisals, as well as of negative results resulting from non-anonymous complaints, not making the anonymous channel seen as a necessary or required protection.

Kaplan et al. (2012) show that when there is no previous experience with negative repercussions regarding reporting, intentions to communicate through anonymous and non-anonymous channels do not differ significantly. Another possible explanatory aspect for the prevalence of the intention to report to non-anonymous channels in Brazil may be due to the search for an effective resolution of the reported fact. Considering that Whistleblowing's intention with the communication is to stop the occurrence of the irregular or questionable act, the employee may decide to expose himself more, as the fear of retaliation may seem distant on the national scene, and therefore seek a way to resolve the issue more quickly through direct communication of the fact.

Near and Miceli (1995; 1996) state that an anonymous channel may result in a lower resolving effect on the reported issue than a non-anonymous channel, due to the behavior and credibility perceived by the message receiver, and the possible additional costs arising from the need to expand investigations on its own, since it will not be able to have access to the complainant for further details and clarifications.

Complementing the subject, Kenny, Vandekerckhove and Fotaki (2019) discuss that most Whistleblowing tend to report irregularities internally first, with a view to allowing the organization to resolve the problem. Furthermore, from an organization's perspective, the intention of Whistleblowing is more desirable when done through a non-anonymous channel and internally, which creates a need for companies to encourage employees to be internal Whistleblowing (Berry, 2004, Lee & Fargher, 2014; Jeon, 2017)

Regarding the variation in Whistleblowing intentions among the various non-anonymous channels of organizational instances, the preference for communicating with the immediate boss is consistent with the findings of the Ethical Research Center (2014) and may also suggest a lack of knowledge of Brazilian employees about the operating method of anonymous reporting channels and their guarantees. Even though the lowest mean among all of them is not statistically significant, presented by the intention of communicating the external entity, according to Table 5, it may suggest that locally the employees are not willing to take the problems of the organization to an external entity, or lose the possibility of monitor the progress of your complaint.

Considering the operating costs of anonymous Whistleblowing channels and the incipient regulation of the Brazilian scenario related to the issue of institutional mechanisms and the protection of whistleblowers, the results of this experiment may be useful for decision makers in organizations and for regulators, in the sense greater reflection on the mandatory or institutionalization of anonymous Whistleblowing channels as a tool for corporate governance and internal controls related to fraud.

Given the importance of the Whistleblowing mechanism for governance programs and especially for the reduction of accounting fraud, it is necessary to constantly examine the most appropriate methods to obtain this information effectively for the organization. The results explained here suggest the need to improve internal whistleblowing programs, with training for employees and management members (communicators and receivers), to enhance the effect of the whistleblowing mechanism as a management tool, given the preference for a more direct approach, as evidenced.

Additionally, the lack of initial adherence to international findings on the subject opens up the possibility of carrying out other studies with more detailed or specific scenarios, in a comparative way, so that a possible evolution of perception is

achieved.

Despite the experiment method being pointed out and widely used by the scientific literature for researching employees' Whistleblowing intentions, the results of this study need to be considered in light of the inherent limitations of the method. The experimental approach provides participants with limited information about the scenario under analysis, and does not allow for the emotional interaction that can occur in a real case, such as the effects of fear, anger and work relationships, materiality, locus of control and other factors that can influence intention, and can reduce the method's ability to capture participants' real intentions.

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