

INFORMATIONAL SILENCE AND SYMBOLIC LEGITIMACY: A DIAGNOSIS OF THE DISCLOSURE OF OCCUPATIONAL HEALTH AND SAFETY IN FEDERAL INSTITUTES OF EDUCATION, SCIENCE AND TECHNOLOGY

**SILÊNCIO INFORMATIVO E LEGITIMIDADE SIMBÓLICA: UM DIAGNÓSTICO
DA DIVULGAÇÃO DE INFORMAÇÕES SOBRE SAÚDE E SEGURANÇA DO
TRABALHO NOS INSTITUTOS FEDERAIS DE EDUCAÇÃO, CIÊNCIA**

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ABSTRACT

This article analyzes how the Federal Institutes of Education, Science and Technology disclose occupational health and safety (OHS) information in their Management Reports, using the indicators of the international standard GRI 403 as an analytical reference and institutional theory as an interpretative lens. The research, of a qualitative, descriptive and applied nature, examined the Management Reports for the 2022 fiscal year of ten Federal Institutes, subjected to content analysis of fifteen GRI 403 indicators, classified into three adherence categories: adherent, partially adherent and non-adherent, through independent double coding and subsequent harmonization by consensus. The results reveal a marked inequality between institutions, with average adherence ranging from 0.97 to 0.07 on a scale of zero to one, and a systematic pattern of divergence between indicator categories. Declarative and normative indicators, such as impact prevention and health promotion, achieve greater disclosure than indicators that require objective and measurable data, such as accident records and the formal scope of the management system. This discussion interprets this pattern in light of the concepts of coercive, mimetic, and normative institutional isomorphism (DiMaggio; Powell, 1983) and institutional decoupling and symbolic legitimacy (Meyer; Rowan, 1977; Suchman, 1995), arguing that the disclosure of OSH in the analyzed Management Reports corresponds predominantly to formal, rather than substantive, transparency. The study contributes with a replicable empirical diagnosis, a theoretical discussion on the limits of adopting Integrated Reporting in the Brazilian public sector, and a Technical-Technological Product, a practical guide intended to support public managers in improving the disclosure of OSH.

Keywords: occupational health and safety; disclosure; GRI 403; institutional theory; Integrated Reporting; public sector.

RESUMO

Este estudo analisa a divulgação de informações sobre Saúde e Segurança no Trabalho (SST) nos Relatórios de Gestão dos Institutos Federais de Educação, Ciência e Tecnologia, utilizando os indicadores da norma internacional GRI 403 como referência analítica e a teoria institucional como lente interpretativa. A pesquisa caracteriza-se como qualitativa, descritiva e aplicada, fundamentada em análise documental dos Relatórios de Gestão referentes ao exercício de 2022 de dez Institutos Federais brasileiros; Foram examinados quinze indicadores da GRI 403; classificados em três níveis de aderência; parcialmente aderente e não aderente; mediante análise de conteúdo; dupla codificação independente e posterior harmonização por consenso; Os resultados evidenciam expressiva heterogeneidade entre as instituições; com médias de aderência variando de 0; 07 a 0; 97. Verificou-se maior divulgação de indicadores de natureza declarativa e normativa; relacionados à comunicação e participação dos trabalhadores; promoção da saúde e prevenção de impactos; enquanto indicadores dependentes de dados objetivos e mensuráveis; como acidentes de trabalho e abrangência formal do sistema de gestão de SST; apresentaram menor evidenciação; À luz da teoria institucional; os achados indicam a presença de pressões isomórficas; desacoplamento institucional e busca por legitimidade simbólica; revelando uma transparência predominantemente formal em detrimento de uma transparência substantiva; Como contribuição prática; o estudo subsidia a proposição de um guia técnico-tecnológico destinado ao aprimoramento da gestão; mensuração e divulgação das informações de SST nos Institutos Federais.

Palavras-chave: saúde e segurança no trabalho; divulgação; GRI 403; teoria institucional; relato integrado; setor público.

1. INTRODUCTION

Occupational health and safety (OHS) occupies a central place in contemporary debates on public governance, social responsibility, and institutional transparency. The systematic disclosure of OHS information is simultaneously a mechanism for accountability and an indicator of institutional maturity in people management, insofar as it reveals the capacity of organizations to translate normative commitments into verifiable results (Manes-Rossi et al., 2020; Abu Al-Haija et al., 2021). In the private sector, this disclosure has found its main international reference in the Global Reporting Initiative, through the GRI 403 standard, defining objective criteria for the existence of management systems, risk identification, worker participation, and the communication of results on accidents and severity indicators (GRI, 2018; 2021).

In the Brazilian public sector, this movement towards greater transparency gained particular momentum starting in 2018, when the Federal Court of Accounts (TCU) began to encourage, through normative instruction, the adoption of the Integrated Reporting format in the Management Reports of federal institutions. Integrated Reporting, proposed by the International Integrated Reporting Council (IIRC, 2013), advocates a disclosure logic that articulates organizational capital, performance, risks, and strategy, shifting institutional communication from an accountability focused on documentary compliance to one oriented towards demonstrating public value. Recent studies, however, indicate that the adoption of Integrated Reporting by the Brazilian public sector has been partial, incorporating terminology and formal structures without necessarily internalizing its structuring principles (Barbosa, 2020; Marques et al., 2020; Sonnerfeldt, 2023).

Alongside the transparency agenda, a regulatory framework focused on the occupational health of federal public servants was consolidated in Brazil, materialized in Decree No. 6,833/2009, which established the Integrated Subsystem for Attention to the Health of Public Servants (SIASS), and in the Policy for Attention to the Health and Safety of Public Servants (PASS). Although these instruments foresee systematized actions for health promotion, surveillance, and risk prevention, the literature has documented structural difficulties for their full implementation, including resource limitations, concentration of activities in the expert axis, and unequal institutional maturity among public bodies (Andrade; Martins; Carvalho, 2012; Torres; Silva, 2022; Imamura; Pereira; Pilatti, 2024).

The Federal Institutes of Education, Science and Technology constitute a particularly relevant object of investigation for this problem. Unlike public bodies of a predominantly administrative nature, the Federal Institutes operate in complex and heterogeneous work environments, with teaching staff, technicians, outsourced workers and students involved in laboratory, operational, maintenance, extension and research activities, which increases exposure to various occupational risks and, correspondingly, the relevance of highlighting occupational safety and health as a component of the public value produced by these institutions.

Given this scenario, a significant research gap is evident. Although studies on transparency, Integrated Reporting, and occupational health and safety (OHS) policies exist in the Brazilian public sector, few works systematically and comparatively analyze how Federal Institutes disclose their occupational health and safety practices, especially in light of a consolidated international framework such as GRI 403. To date, there are no comparative assessments that allow

us to understand the level of maturity, convergence, and heterogeneity of these disclosure practices among different institutions within the Federal Network, which limits the ability to identify weaknesses, highlight best practices, and propose improvements in institutional communication and OHS governance.

Based on this overview, this article seeks to answer the following research question: how do the Federal Institutes of Education, Science and Technology disclose occupational health and safety information in their Management Reports, in light of the GRI 403 standard indicators, and what does this disclosure standard reveal about the formal or substantive nature of the transparency exercised by these institutions? The overall objective of the study is to evaluate the level of disclosure of occupational health and safety information in the Management Reports of ten Federal Institutes, based on the GRI 403 standard indicators, interpreting the findings in light of institutional theory. The specific objectives are: to identify the GRI 403 indicators present in the sample Management Reports; to classify the level of adherence of the disclosed content; and to compare the disclosure standards among the institutes, identifying convergences, gaps, and institutional asymmetries.

The article is structured in five sections, in addition to this introduction. Section 2 presents the theoretical framework, articulating accountability and Integrated Reporting in the public sector, the GRI 400 standards with a focus on GRI 403, the regulatory framework for occupational safety and health in the federal public service, and the concepts of institutional isomorphism and symbolic legitimacy. Section 3 describes the methodology employed, of a qualitative, descriptive, and applied nature, detailing the documentary corpus, the criteria for selecting indicators, and the

content analysis procedure. Section 4 presents the results and their discussion in light of the theoretical framework. Section 5 presents the final considerations, including contributions, limitations, and an agenda for future research.

2. THEORETICAL FRAMEWORK

2.1. Accountability, Transparency and Integrated Reporting in the Public Sector

The advancement of transparency and accountability practices in public administration reflects historical transformations in how public organizations relate to their stakeholders and justify the legitimacy of their actions (Martins et al., 2018; Barbosa, 2020). In the private sector, these transformations gave rise to sustainability reports and, subsequently, to Integrated Reporting, designed to consolidate financial and non-financial information into a single strategic communication tool (Garcia; Ciasca; Marçal, 2019). According to De Villiers, Rinaldi, and Unerman (2014), Integrated Reporting emerged as a response to the fragmentation of corporate reports and the difficulty stakeholders face in understanding value creation in a comprehensive and intertemporal way, arguing that organizational value results from the interaction between multiple capitals: financial, manufactured, intellectual, human, social, and natural (IIRC, 2013).

Within the public sector, these transformations take on particular meaning. While private companies adopt Integrated Reporting to communicate value creation to investors, public organizations are beginning to use it as a tool for accountability to society, articulating transparency, efficiency, and democratic legitimacy (Barbosa, 2020).

Accountability, in this context, represents the duty of the public manager to explain and justify decisions and results, allowing for social and institutional evaluation of their performance, and can be understood under three complementary dimensions: the procedural criterion, which ensures transparency in the decision-making and execution stages; the economic criterion, which relates the costs and benefits of implemented policies; and the institutional criterion, which defines responsible agents and control mechanisms.

In Brazil, the strengthening of accountability has been institutionalized by successive legal frameworks: the Fiscal Responsibility Law, Complementary Law No. 131/2009, known as the Transparency Law, and Law No. 12,527/2011, the Access to Information Law, which consolidated the right of access to public information as a duty of the State. Within the scope of specific accountability of federal bodies, the Federal Court of Accounts (TCU) plays a decisive role, articulating punitive, preventive, and educational mechanisms to induce good governance practices. This educational aspect became more evident from 2018 onwards, when the Court incorporated the principles of Integrated Reporting into its Management Reports, publishing in 2019 guidelines that structured the format of these reports according to the content elements proposed by the IIRC: organizational vision and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, perspectives, and basis of preparation.

The adoption of the Integrated Reporting format by public bodies does not, however, guarantee substantive communication. As Sonnerfeldt (2023) observes, in many public institutions the implementation of Integrated Reporting occurs in a superficial and

adaptive way, restricted to the incorporation of terminology and graphic elements of the model, without significant changes in the logic of accountability or in the mechanisms for generating and using information. This criticism dialogues with the distinction, recurrent in the international literature on accountability, between transparency of procedures, focused on compliance, and transparency of results, oriented towards effectiveness and the generation of social value (Adams, 2017; De Villiers; Maroun, 2017). It is precisely in this tension between form and substance that the research problem of this article is situated.

2.2. Social Responsibility and the GRI 400 Standards: Focus on GRI 403

The Global Reporting Initiative (GRI) has established itself, since the 1990s, as the leading international reference for disclosing sustainability information, allowing different types of entities to report their performance and practices related to sustainable development in a comparable way. The GRI standards structure is organized into Universal Standards, which establish fundamental reporting principles; Topical Standards of the 200, 300, and 400 series, which address the economic, environmental, and social dimensions respectively; and Sectoral Standards, focused on specific guidelines by sector of activity. The 400 series covers topics such as employment, labor relations, skills development, diversity, human rights, community impact, and occupational health and safety (GRI, 2021).

Among the pronouncements in this series, GRI 403, Occupational Health and Safety, guides the disclosure of information on OHS management systems, hazard identification, risk prevention,

incident investigation, and accident reporting. Updated in 2018, the standard reflects an approach based not only on legal compliance but also on proactive prevention and an organizational culture of care, requiring organizations to demonstrate the normative basis of their management systems, risk identification and mitigation processes, system coverage in relation to own and outsourced workers, the form of communication and employee participation, and quantitative data on accidents and injuries (GRI, 2018).

However, the transposition of these standards to the context of public administration is not straightforward. As argued by Carungu et al. (2022), the GRI was originally conceived for competitive business environments, in which voluntary disclosure is encouraged by market pressures and the pursuit of reputation; in public organizations, transparency is primarily a legal duty, and the motivations for adopting good informational practices are more related to institutional legitimacy than to competition. Studies such as those by Alves and Ramos (2021; 2022) reveal that the disclosure of socio-environmental and occupational health and safety information in Brazilian institutional reports is still incipient, characterized by asymmetries, low comparability, and a strong emphasis on bureaucratic compliance—conclusions that resonate with international research on European state organizations, in which the adoption of Integrated Reporting is frequently driven by factors of institutional legitimacy rather than by the effective integration of sustainability into organizational management (Manes-Rossi et al., 2020).

2.3. Regulatory Framework for Occupational Health and Safety in the Federal Public Service

The construction of a consistent regulatory framework for occupational health and safety (OHS) in the Brazilian federal public sector is the result of a historical process of normative advancements aimed at protecting the physical and mental integrity of civil servants. Law No. 8,112/1990, which established the single legal regime for civil servants of the Union, did not structure its own OHS management system, limiting itself to providing for medical leave and official medical examinations. This gap was partially overcome with the creation, in 2006, of the Integrated Occupational Health System for Federal Public Servants, later revoked due to structural weaknesses and replaced, in 2009, by the Integrated Subsystem for Employee Health Care, established by Decree No. 6,833/2009, in conjunction with the Policy on Employee Health and Safety.

The SIASS (Integrated System for Occupational Health and Safety) is organized into three complementary axes: health care, official health expertise, and promotion, prevention, and monitoring of employee health. It gives the occupational health and safety policy in the public service a systemic and interinstitutional character, providing for coordination between different federal agencies through Employee Health Reference Centers. The operationalization of SIASS is complemented by Normative Ordinance No. 03/2010, which approved the Operational Standard for Employee Health, defining operating parameters for the subsystem's units and guiding the adoption of the Regulatory Standards of the then Ministry of Labor as a technical reference applicable to the statutory regime.

Despite this relatively consolidated regulatory framework, the literature has documented persistent implementation difficulties. Torres and Silva (2022) identify that SIASS units tend to concentrate

their activities on the expert axis, to the detriment of preventive and health promotion actions, a result attributed to limitations in specialized human resources and insufficient integration between the information systems that support the policy. Imamura, Pereira and Pilatti (2024) add that this expert concentration compromises the consolidation of an organizational culture of prevention, reinforcing a reactive model of occupational health management that is reflected, as this article will demonstrate, in the very nature of the information made available in the Management Reports.

2.4. Institutional Isomorphism and Symbolic Legitimacy

The theoretical framework presented so far shows that the adoption of instruments such as Integrated Reporting, GRI standards, and occupational health policies expresses an institutional movement aimed at seeking legitimacy, transparency, and accountability in public administration. However, the mere existence of normative guidelines does not guarantee the effectiveness of management practices, as there is a gap between the formalization of structures and their substantive application (Anderson, 2025). Institutional theory offers the most appropriate interpretative framework for understanding this gap.

Meyer and Rowan (1977) argue that organizations operate in environments permeated by rules, myths, and expectations that define what is considered rational and appropriate. To ensure survival and recognition, they tend to formally adopt socially legitimized practices and structures, even if they do not always fully implement them. This adoption confers legitimacy and stability, even when it generates a dissociation between formal rules and daily routines, a phenomenon called institutional decoupling. The

authors emphasize that this decoupling should not be interpreted as organizational dysfunction, but as a rational response to environmental complexity, allowing the organization to meet external expectations without compromising its internal operation.

DiMaggio and Powell (1983) expand on this perspective with the concept of institutional isomorphism, according to which organizations become similar over time due to three types of pressure. Coercive pressures derive from laws, regulations, and requirements of control bodies, manifesting themselves, in the Brazilian case, in the determinations of the Federal Court of Accounts that induce the adoption of standardized governance structures and reports. Mimetic pressures emerge in contexts of uncertainty, when organizations seek to reduce risks by imitating models perceived as legitimate or successful, as occurs in the adoption of GRI standards and Integrated Reporting by institutions seeking alignment with internationally recognized benchmarks. Finally, normative pressures result from the professionalization and dissemination of technical and ethical standards shared by communities of auditors, public managers, and sustainability specialists.

Suchman (1995) adds to this discussion the notion of symbolic legitimacy, according to which organizations seek legitimacy not only through technical efficiency, but above all through conformity with widely accepted social expectations, distinguishing three dimensions of legitimacy: the pragmatic, arising from the perception that the organization meets the interests of its immediate stakeholders; the moral, which reflects the judgment that its actions are socially correct; and the cognitive, based on the naturalization of its practices as socially appropriate. From this

perspective, it is possible to understand that the adoption of models such as Integrated Reporting and GRI standards constitutes not only a technical process of improving institutional communication, but also an act of seeking legitimacy, in which institutions embedded in strongly regulated environments incorporate internationally recognized practices and discourses to reinforce their image of responsibility and efficiency.

Literature on public governance reinforces this distinction by arguing that substantive transparency requires more than simply fulfilling disclosure obligations; it demands coherence between discourse and practice, integration between planning, execution, and evaluation, and a commitment to the social utility of the information provided (Beuren; Portulhak, 2020). The notion of institutional maturity emerges, in this context, as an integrating concept, describing the degree of consolidation of values, structures, and practices that underpin an organization's ability to respond consistently and adaptively to the demands of its environment. Mature organizations balance normative compliance and practical effectiveness, transforming external demands into internalized and sustainable routines (Roeder; Junglos; Cestari, 2021). It is this distinction between formal compliance and substantive maturity that structures the empirical analysis presented in Section 4.

3. METHODOLOGY

This research is characterized as qualitative in its approach, descriptive in its objectives, and applied in its nature, since it aims to generate knowledge geared towards practical application by public managers, and not just theoretical advancement. The methodological design consisted of a documentary analysis of the

Management Reports of Federal Institutes of Education, Science and Technology, using the indicators of the international standard GRI 403 as an analytical framework.

The sample consisted of the 2022 Management Reports from ten Federal Institutes, selected based on criteria of public availability and geographic diversity, using convenience sampling: Farroupilha Federal Institute (IFFAR), Rio Grande do Sul Federal Institute (IFRS), Southern Rio Grande Federal Institute (IFSUL), Santa Catarina Federal Institute (IFSC), Catarinense Federal Institute (IFC), Paraná Federal Institute (IFPR), São Paulo Federal Institute (IFSP), Rio de Janeiro Federal Institute (IFRJ), Espírito Santo Federal Institute (IFES), and Mato Grosso do Sul Federal Institute (IFMS). The documents were collected from official institutional portals and the electronic accountability system of the Federal Court of Accounts, prioritizing the final versions filed in the annual accountability report, in order to ensure compliance with formal accountability criteria. The choice of the 2022 fiscal year is justified because, at the time of collection, it represented the last complete cycle of Management Reports available for all institutions in the sample.

Although the Federal Institutes analyzed do not formally adopt the GRI standard as a basis for preparing their Management Reports, GRI 403 (2018) was used as an analytical criterion because it represents the most widely recognized and internationally applied reference for the disclosure of information on occupational health and safety. Its systematized structure, focused on comparability and transparency, allows for an objective assessment of the quality and completeness of the information presented, albeit indirectly, functioning as an external parameter for measuring the alignment of institutional reports with global best practices in accountability.

The original structure of the GRI 403 class (2018) is composed of 28 indicators. For the purposes of this research, two indicators, 403-8b and 403-8c, were considered irrelevant as they represent developments of indicator 403-8a without adding substantively distinct information, dealing with methodological justifications generally absent in the analyzed reports. Additionally, eleven indicators, 403-9b to 403-9g and 403-10a to 403-10e, did not present any identifiable evidence in the analyzed documents and were therefore excluded from the analytical corpus. The effective set of analysis was, therefore, composed of fifteen indicators with identifiable evidence in at least one Management Report from the sample, presented in Table 1.

Table 1. GRI 403 indicators used as a benchmark for analysis.

GRI Indicator	Description
403-1a	Occupational health and safety management system, legal or regulatory basis
403-1b	Scope of the occupational health and safety management system
403-2a	Hazard identification, risk assessment and incident investigation, processes and procedures adopted.
403-2b	Procedures for hazard reporting and protection against reprisals
403-2c	Policies and processes that allow for the avoidance of risky situations.
403-2d	Incident investigation processes, risk assessment, and adoption of corrective measures.
403-3a	Occupational health services and their contribution to risk prevention.

403-4a	Communication of information on occupational safety and health and worker participation.
403-4b	Formal health and safety committees: composition, responsibilities, and representation.
403-5a	Training activities in occupational health and safety
403-6a	Programs promoting the health of workers, not related to work.
403-6b	Services and actions to promote health, access, frequency and structure.
403-7a	An approach to prevent or mitigate significant impacts on occupational health and safety.
403-8a	Coverage of the occupational health and safety management system, including own and third-party employees.
403-9a	Workplace accidents, fatalities, serious cases, mandatory reporting, types and man-hours worked.

Source: adapted from GRI (2018) and the results of the documentary research that underlies this article.

The analysis of the reports was conducted based on content analysis (Bardin, 2016), through systematic reading and categorization of the evidence foreseen in each indicator. The methodological operationalization occurred through the construction of a double-entry matrix in a spreadsheet, allowing the data to be organized in a structured way and identifying patterns. Each indicator was evaluated according to three adherence categories: adherent, when the content was clearly identified in the report in accordance with the scope of the GRI indicator; partially adherent, when the content was identified incompletely, generically, or indirectly; and non-adherent, when no evidence related to the indicator was found.

Table 2 illustrates, for three indicators selected for their analytical relevance, the operational classification criteria employed.

Table 2. Adherence criteria applied to selected indicators.

GRA Indicator	Member	Partially compliant	Non-adherent
403-1a	The report presents the legal or regulatory basis, technical standards, and descriptions of actions and structures, such as SIASS, expert assessments, and ergonomics.	Mere normative citations without concrete actions, or actions without explicit legal backing.	No mention of the occupational health and safety management system.
403-7a	The report describes actions to prevent or mitigate impacts on occupational health and safety, linked to institutional activities and supported by regulations.	Generic mentions of risk prevention or management, lacking clarity or a direct link to institutional activities.	No information on mitigating impacts on occupational safety and health.
403-9a	The report presents all the required elements: deaths, serious accidents, mandatory reporting, types of accidents, and man-hours worked, with disaggregated data.	Incomplete or generic information, lacking the distinctions required by the indicator.	Lack of any information regarding accidents, deaths, or hours worked.

Source: results of the documentary research that forms the basis of this article.

The coding was performed by the principal investigator and independently validated by the supervisor, with subsequent comparison and harmonization of results by consensus. This double coding and triangulation strategy aimed to increase the reliability of the categorization, following consolidated methodological recommendations for qualitative research in documentary studies (Yin, 2016). Specific classification discrepancies between the two coders were resolved through joint rereading of the controversial section of the original report and a new decision by consensus, without resorting to a third evaluator, given the limited number of discordant cases.

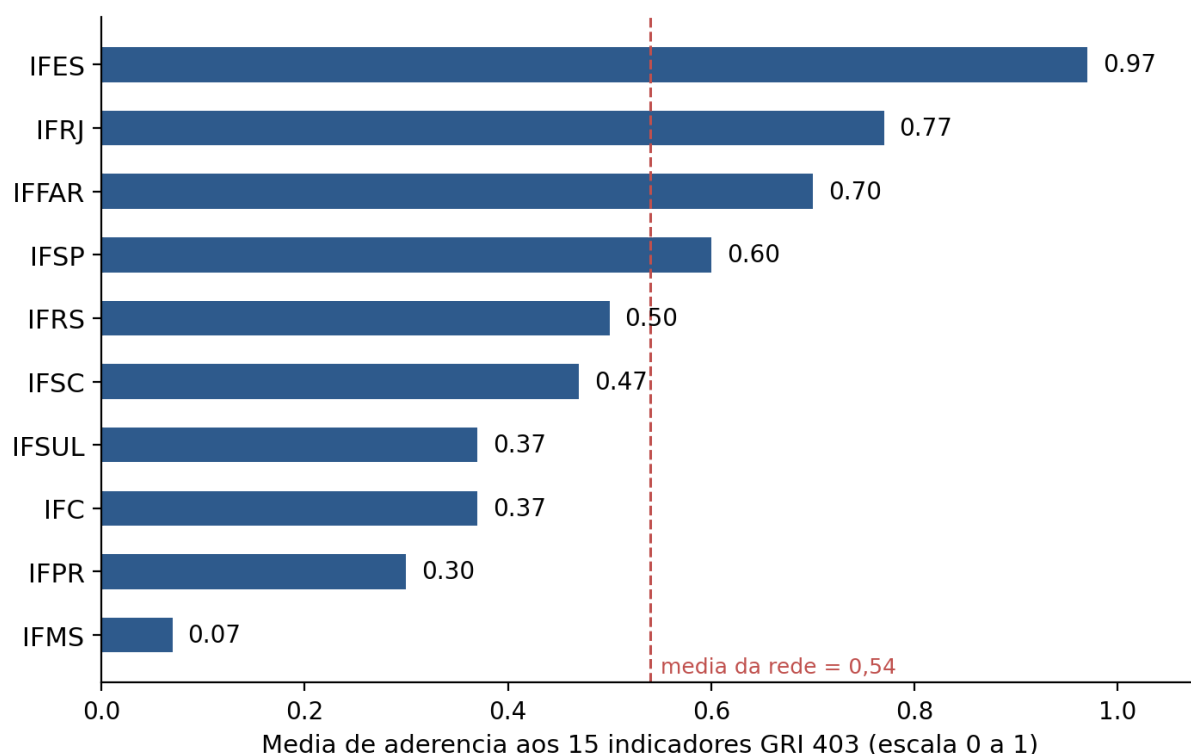
For data processing, descriptive techniques were employed, including mean, standard deviation, sum, and number of observations, calculated both by institution and by indicator. This allowed for the simultaneous characterization of the relative performance of each institution and the pattern of disclosure of each OSH (Occupational Safety and Health) theme within the network as a whole. Additionally, a biplot analysis was developed, cross-referencing the mean and standard deviation of disclosure for each indicator. This allowed for the classification of the fifteen indicators into analytical quadrants according to the average level of disclosure and the degree of homogeneity among the institutions, distinguishing between indicators that are widely and unevenly disclosed, indicators that are relatively uniformly and little disclosed, and indicators marked simultaneously by low disclosure and high heterogeneity.

4. RESULTS AND DISCUSSION

4.1. Overview of Evidence

The analysis of the fifteen GRI 403 indicators in the 2022 Management Reports of the ten Federal Institutes reveals significant variation in the level of adherence among institutions, summarized in Figure 1. The Federal Institute of Espírito Santo presented the best performance in the sample, with an average of 0.97, corresponding to 14.5 of the 15 indicators analyzed, demonstrating almost complete adherence. In upper intermediate positions, the Federal Institute of Rio de Janeiro stands out, with an average of 0.77, the Federal Institute of Farroupilha, with 0.70, and the Federal Institute of São Paulo, with 0.60. At the lower end of the distribution, the Federal Institute of Mato Grosso do Sul presented an average of only 0.07, preceded by the Federal Institute of Paraná, with 0.30, and by a lower intermediate group composed of the Federal Institute of Santa Catarina and the Federal Institute of Rio Grande do Sul, both with 0.37.

Figure 1. Average adherence to GRI 403 indicators, by Federal Institute (Management Reports, fiscal year 2022)

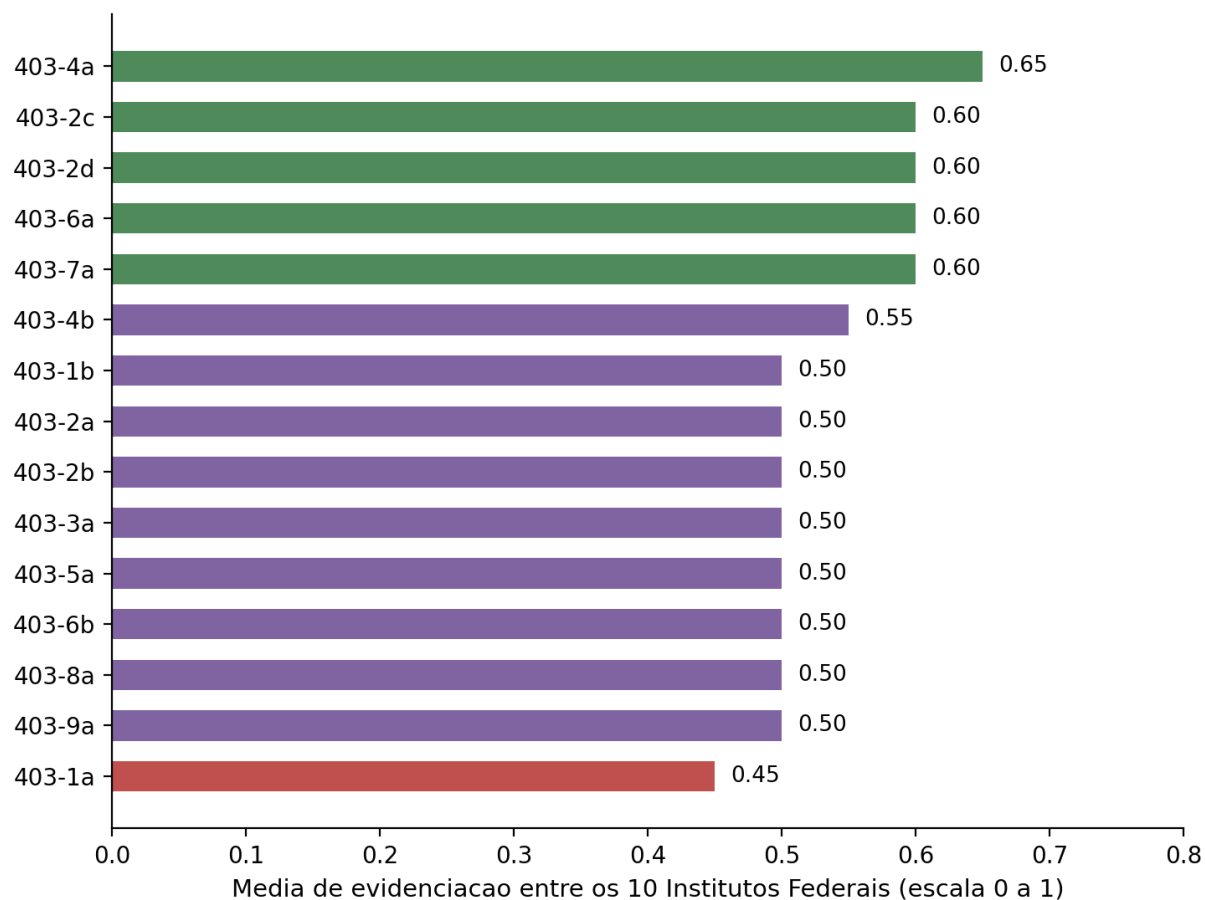


The range of this distribution, from 0.07 to 0.97 on a scale of zero to one, is revealing in itself. It indicates that adherence to international OSH indicators does not stem from a normative requirement uniformly internalized by the Federal Network, but from heterogeneous institutional capacities and priorities, a hypothesis that will be revisited in the theoretical discussion of this section. The overall sample average is 0.54, a value that, while suggesting moderate adherence when considered in isolation, masks the marked dispersion among institutions evidenced by Figure 1.

4.2. Indicator-Based Disclosure Standards: Between Declaration and Measurement

The indicator analysis, summarized in Figure 2, reveals a systematic pattern that constitutes the main finding of this article. The most prominent indicators among the ten institutes are GRI 403-4a, communication and worker participation, with an average of 0.65, followed by a group of four indicators with an average of 0.60: GRI 403-2c, policies for removing workers from hazardous situations; GRI 403-2d, incident investigation; GRI 403-6a, health promotion; and GRI 403-7a, prevention of impacts on occupational safety and health. In a second tier, with averages between 0.45 and 0.55, are the GRI 403-4b indicators, formal committees, GRI 403-1b, GRI 403-2a, GRI 403-2b, GRI 403-3a, GRI 403-5a, GRI 403-6b, GRI 403-8a and GRI 403-9a, the latter being especially critical, and GRI 403-1a.

Figure 2. Average disclosure by GRI 403 indicator, among the ten Federal Institutes analyzed.



A careful reading of the composition of these groups reveals the substantive pattern that this article argues is the central finding of the research. The most evident indicators are predominantly declarative and narrative in nature: GRI 403-7a, impact prevention, can be satisfied through textual descriptions of institutional policies and intentions; GRI 403-6a, health promotion, by mentioning programs and campaigns; GRI 403-4a, communication and participation, by citing formal communication channels. None of these three indicators requires, for their minimum satisfaction, the presentation of systematically collected, validated, and consolidated quantitative data. In contrast, the GRI 403-9a indicator, which demands the structured recording of deaths, serious accidents, mandatory reports, types of accidents, and man-hours worked, presented an average of only 0.50, with four points added up among the ten institutions, showing that the measurement of work-related injuries and accidents remains treated in a very limited way in the analyzed Management Reports. An even more critical situation

characterizes the GRI 403-1b indicator, scope of the OHS management system, which requires a clear description of which workers, activities, and locations are effectively covered by the system, as well as justification for any exclusions, an element practically absent in the analyzed reports.

The complementary analysis by quadrants, cross-referencing the mean and standard deviation of each indicator, allows for a further qualification of this pattern, summarized in Table 3.

Table 3. Classification of GRI 403 indicators according to average and homogeneity of reporting among the ten Federal Institutes.

Quadrant	Indicators	Analytical interpretation
High average, low homogeneity	403-7a; 403-2c; 403-6a; 403-2d; 403-4a; 403-4b	Topics most frequently reported online, but with significant asymmetry between institutions; some institutions report in detail, while others remain silent.
Low average, high homogeneity	403-1a; 403-8a; 403-6b	Low priority shared relatively uniformly, a pattern of collective omission, and not of convergence of best practices.
Low average, low homogeneity	403-9a; 403-2b; 403-5a; 403-1b; 403-3a; 403-2a	Lack of institutionalization combined with inequality between institutions; includes indicators most dependent on objective measurement.
High average, high homogeneity	No indicator	No single occupational safety and health (OSH) topic became simultaneously well-publicized and uniformly reported across the entire network analyzed.

Source: results of the documentary research that forms the basis of this article.

The most relevant finding in Table 3, for the interpretative purposes of this article, is the absence of any indicator in the high, medium, and high homogeneity quadrant. This means that, even among the OSH themes most frequently mentioned by the Federal Institutes, none has been consolidated as a uniform and widely shared practice throughout the network. Additionally, the low, medium, and high homogeneity quadrant, which includes GRI indicators 403-1a, 403-8a, and 403-6b, deserves careful reading, since the homogeneity observed there does not stem from convergence towards a shared good practice, but from a common pattern of informational omission, a finding consistent with the hypothesis that part of the apparent statistical regularity among the reports reflects coordinated institutional silence, and not consolidated maturity.

4.3. Interpretation in Light of Institutional Theory

The findings described in Sections 4.1 and 4.2 can be consistently interpreted in light of the concepts of institutional isomorphism, decoupling, and symbolic legitimacy presented in Section 2.4. The pattern of greater emphasis on declarative indicators compared to measurable indicators is consistent with Meyer and Rowan's (1977) interpretation of institutional decoupling. Federal Institutes almost universally adopt formal references to regulations such as Decree No. 6,833/2009 and SIASS, satisfying the normative and coercive expectation of citing the applicable legal framework. However, this citation is rarely accompanied by evidence of practical implementation, action plans, goals, or performance indicators linked to these formal structures. The formal structure thus appears

coupled to the institutional discourse but decoupled from management practice, producing what the literature calls formal transparency (De Villiers; Maroun, 2017; Barbosa, 2020).

The pronounced heterogeneity among institutes, evidenced in Figure 1, directly relates to the concept of institutional isomorphism by DiMaggio and Powell (1983), albeit partially and non-linearly. The coercive pressures exerted by the Federal Court of Accounts, in principle, affect all Federal Institutes equally, which would lead to greater convergence of practices if coercive isomorphism operated in a decisive and isolated manner. The persistence of such a wide variation, from 0.07 to 0.97, suggests that these coercive pressures are mediated by unequal technical-administrative capacities among the institutions, availability of specialized human resources, existence of specific occupational health coordination, and maturity of internal information systems—factors that the literature on SIASS had already identified as structurally heterogeneous in the Federal Network (Torres; Silva, 2022; Imamura; Pereira; Pilatti, 2024). Institutions with greater adherence, such as IFES and IFRJ, show evidence of more consolidated systems for coordinating occupational health and safety information, while institutions with minimal adherence, such as IFMS, show an almost complete absence of equivalent structures.

The finding in Table 3, according to which homogeneity in certain indicators stems from shared omission, and not from convergence of good practices, is particularly enlightening in light of Suchman's (1995) symbolic legitimacy. If the observed homogeneity reflected effectively internalized normative pressure, convergence around robust practices would be expected, not around informational silence. The convergence towards omission suggests, on the

contrary, that certain OSH issues, notably those requiring data collection and systematization infrastructure, such as the formal scope of the management system and the structure of health promotion services, remain on the margins of the symbolic legitimation priorities of most institutions, which concentrate their discursive efforts on issues with lower informational production costs.

This body of evidence allows us to qualify the answer to the research question proposed in the introduction of this article. The Federal Institutes of Education, Science and Technology present occupational health and safety information in their Management Reports in a predominantly declarative and normative manner, with a strong focus on legal references and institutional narratives, and limited communication of measurable results. This pattern, interpreted in light of institutional theory, expresses a combination of coercive pressures from control bodies, responded to through symbolic compliance, and a decoupling between formal OHS guidelines, notably the SIASS (Integrated System for Occupational Health and Safety), and their effective implementation and measurement. The transparency exercised by the analyzed Federal Institutes therefore predominantly approaches the formal, and not the substantive, pole of the continuum described in the literature on public accountability.

5. FINAL CONSIDERATIONS

This article aimed to evaluate the level of disclosure of occupational health and safety information in the Management Reports of ten Federal Institutes of Education, Science and Technology, based on the indicators of the GRI 403 standard, interpreting the findings in

light of institutional theory. The results demonstrate that this disclosure presents a predominantly formal pattern, with strong adherence to normative references and generic descriptions of structures and policies, but limited progress in the substantive communication of results. Indicators of a declarative nature, such as GRI 403-7a, impact prevention, GRI 403-6a, health promotion, and GRI 403-4a, worker communication and participation, showed the highest levels of disclosure, while indicators that demand objective and measurable data, such as GRI 403-9a, workplace accidents, and GRI 403-1b, scope of the management system, showed low or almost zero levels of disclosure. Furthermore, a marked inequality was observed between institutions, with average adherence scores ranging from 0.97 to 0.07, revealing profoundly different levels of institutional maturity within the same network subject to the same general regulatory requirements.

The main theoretical contribution of this article is to demonstrate, with systematized empirical evidence, how the concepts of institutional decoupling (Meyer; Rowan, 1977), institutional isomorphism (DiMaggio; Powell, 1983), and symbolic legitimacy (Suchman, 1995) operate together in explaining a concrete phenomenon of sectoral public transparency. The article shows that statistical homogeneity among organizations should not be interpreted, *per se*, as evidence of convergent institutional maturity, but may, on the contrary, reflect convergence towards shared patterns of informational omission, a methodologically relevant distinction for future studies on accountability in the public sector.

From a practical standpoint, this article originates a Technical-Technological Product, a practical guide aimed at managers and technical teams of Federal Institutes, which systematizes the

research findings into conceptual explanations, a synthesis of the methodological design, and objective recommendations for improving the disclosure of Occupational Health and Safety (OHS) in Management Reports. The guide translates the scientific diagnosis into applicable guidelines, including the proposition of a substantive transparency management cycle, structured in four stages: planning, defining GRI 403 indicators and those responsible for data collection; executing, adequately recording the actions performed; disclosing, communicating results publicly and strategically; and monitoring, transforming data into performance indicators over time. The product also systematizes promising experiences identified in the research sample itself, such as the incorporation of OHS indicators into institutional strategic planning and the creation of permanent health and well-being committees, offering them as a replicable reference for institutes with lower relative maturity.

This study presents limitations that should be considered in the interpretation of its findings and that define an agenda for future research. Firstly, the research was based exclusively on public documents, the Management Reports, which may not fully reflect the internal practices of the institutions. It is recommended that future studies triangulate document analysis with interviews with managers of occupational health and safety units and with direct observation of internal processes. Secondly, the analysis focused on the 2022 fiscal year, which makes it impossible to draw conclusions about temporal evolution or long-term trends. It is desirable that subsequent research adopt longitudinal designs capable of tracking the adherence trajectory of the same institutions over multiple fiscal years. Thirdly, the convenience sampling, while seeking geographical diversity, does not allow for statistical generalizations for the entire Federal Network. Therefore, future expansion of the

corpus to all Brazilian Federal Institutes is suggested, as well as the extension of the analytical model to other categories of federal public institutions subject to the same Integrated Reporting logic induced by the Federal Court of Accounts, such as federal universities and regulatory agencies.

Finally, it is concluded that the Federal Institutes in the sample are at an initial stage of maturity in disclosing occupational health and safety information, especially when analyzed under the international parameters of the GRI and under the principles of Integrated Reporting. Overcoming this stage depends, in light of the findings of this article, not only on strengthening the coercive pressures exerted by the control bodies, which are already relatively intense and uniformly applied, but above all on strengthening the internal technical and administrative capacities of the less mature institutions and on the effective integration between the information systems that produce OHS data and the processes for preparing Management Reports, conditions without which formal transparency will hardly evolve, by itself, into the substantive transparency that the public accountability literature advocates.

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