

## **Evaluation of Factors that Influence the Implementation of Risk Management and Integrity Programs in the Brazilian Navy**

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### **Abstract**

This study aimed to evaluate the factors that most influence the implementation of Risk Management Programs (RMP) and Integrity Management Programs (IMP) in order to identify the main obstacles and strategies to face resistance to change. To achieve this, a systematic literature review was conducted, followed by content analysis and categorization, which enabled the development and application of a questionnaire with 39 statements about the implementation of the Programs, resulting in 74 valid responses. Due to the differences found in the application of the Chi-square Test among the responses from the three respondent groups, the quantitative study, using the t-Test, was conducted with the 48 valid responses from members working in the operation of the RMP. Despite the small sample size, the analysis of the results suggests that the Brazilian Navy is in the initial phase of implementing the IMP and RMP. The results suggest that training is an obstacle to the implementation of the RMP, which may hinder the governance of the Program. The results also indicate the dependence of the IMP on the implementation of the RMP. Furthermore, the factors related to leadership actions to

support integrity, reduce failures in internal communication, and address barriers to transparency, as well as improve identification, analysis, and execution of risk responses, suggest that these factors are still not well consolidated, possibly due to the specific characteristics of the military environment where confidentiality and security are fundamental. The research also confirmed that strategies to reduce resistance to changes, such as having clear and constant communication, involving and engaging military and civilian personnel, practicing recognition and rewards, and primarily having leadership that sets an example, are essential for implementing changes based on the RMP and IMP.

**Keywords:** Risk Management; Integrity Management; Drivers and Hindrances; Resistance to Change; Brazilian Navy.

## 1. Introduction

Risk management has been widely discussed in the literature on management and public governance over the past ten years, with a considerable number of studies available in academic databases. In practice, since the publication of the public governance policy through Decree No. 9,203 (2017), integrity has been presented as one of the principles of public governance, incorporating a set of practices, processes, and policies aimed at ensuring that an organization operates ethically, transparently, and in alignment with principles of compliance and accountability.

The relationship between integrity management and risk management is intrinsic. While risk management identifies, analyzes, assesses, responds to, and monitors potential adverse events that may compromise an organization's objectives, integrity management focuses on ensuring that these objectives are achieved in an ethical and sustainable manner (Vieira & Barreto, 2019). Thus, integrity management complements risk management by addressing specific risks related to misconduct, fraud, corruption, and compliance violations, fostering a broader approach to corporate governance.

In contemporary society, crimes and other cyber risks reinforce the relevance of this topic in recent years, presenting dilemmas beyond the administrative perspective that affect everyday aspects, such as the use of security devices. These actions provide opportunities to broaden the culture of implementing anticipatory measures as a way to mitigate the effects of undesirable events, highlighting challenges for the average citizen, society, and governments (Renaud et al., 2018).

The criticism is that, although the vision of control has provided advances in public management in Brazil, the implementation of risk management in Brazilian public organizations has sparked debates about its effectiveness, articulating theoretical and practical aspects. It requires not only technical knowledge and the involvement of the entire organization for its implementation but also strategic direction; otherwise, it results in an increased administrative burden and a sense of limited return.

In this logic, risk management becomes relevant in complex contexts, as it focuses on managing what is unknown and not just what can be understood, anticipating situations, proposing systematic evaluation methods, and ways to address them, assisting public policy planners and decision-makers (Assi, 2021). It must consider "tangible and intangible sources of risk; causes and events; threats and opportunities; vulnerabilities and capacities; changes in internal and external contexts; indicators of emerging risks; limitations of knowledge and reliability of information; and biases, assumptions, and beliefs involved" (Assi, 2021, p.133).

To ensure organizational integrity, risk management must be complemented by mechanisms that ensure compliance with ethical and regulatory principles. Public integrity, essential for strengthening governance, consists of continuous adherence to ethical values and

standards, prioritizing the public interest (Controladoria-Geral da União [CGU], 2018a). An integrity program is a structured set of institutional measures aimed at preventing, detecting, and correcting fraud and corruption, reinforcing governance (Controladoria-Geral da União [CGU], 2018a). Thus, integrity management and risk management are interdependent, as identifying and mitigating risks is essential to avoid misconduct, ensuring transparency and regulatory compliance in public institutions (Controladoria-Geral da União [CGU], 2018a).

The article aims to identify the main facilitating factors and obstacles to the implementation of integrity management and risk management, considering the evidence that leads members of the Brazilian Navy to be convinced of the effectiveness of its implementation, in a strategic view, proposing new insights into the implementation process in public organizations.

## **2. Theoretical Foundation**

### **2.1 Risk and Risk Management**

Risk management presents two main elements: the understanding of the concept of risk and management as a means to systematize and operationalize actions aimed at reducing the undesired effects of specific events. In this sense, different approaches contribute to identifying potential sources of risk and offer different perceptions of the desired cause-and-effect relationships. Villarroel-Lamb (2020) points out that the idea of risk relates to the loss or deprivation of strategic resources in organizations, such as lives, property damage, and disruption of activities caused by an event. According to the author, the importance of identifying and categorizing each type and its elements contributes to the development of a plan and processes for risk assessment.

In the economic context, risk is an objective property, as "the risk-return relationship indicates that the higher the level of accepted risk, the greater the expected return on investments" (Assi, 2021, p. 18). According to the Brazilian Institute of Corporate Governance (IBGC), risk is the possibility of "something not going right" (Assi, 2021, p. 18), and from this perspective, risk management will be more effective the greater the identification of the effects of uncertainty on strategic objectives (Zhao et al., 2014, p. 814), with the intention of guiding the development of coping policies.

Risk management also highlights the influence of behavioral aspects, shaping the behavior of stakeholders, and may limit positive actions due to what Halachmi (2014) described as an excess of accountability. Renaud et al. (2018) argue that risk management, from the perspective of control, is grounded in accountability, with a punitive view of management. In this logic, citizen participation is directed toward controlling agents, concerning potential integrity risks in various areas in which they operate. If measures to mitigate the negative effects of identified events are neglected, the responsibility for the consequences falls on the agents and their managers. The counterpoint to this view showcases the more current perspective of risk management, which proposes to absorb risk by sharing responsibilities, in a shared management vision, highlighting new roles for citizens, governments, and the productive sector.

### **2.2 Risk and integrity management in public organizations**

Risk management has become an important concept for reforms in the public sector, necessary to enable public agencies to achieve their objectives. Government regulation is being defined in terms of risks; environmental regulation aims to mitigate environmental risks, and financial regulation addresses market risks. Based on risk analysis, regulatory frameworks are

promoted (Vieira & Barreto, 2019).

More recently, the value of public integrity has appeared as a way to consolidate governance, providing pathways for establishing sustainable relationships between different actors. This vision has incorporated elements into risk management, expanding its relevance as a tool for alignment between the adoption of common ethical values, principles, and norms, with a focus on the public interest. In this sense, public integrity has been consolidating itself as a strategic and sustainable response to corruption, shifting the focus "from ad hoc integrity policies to a context-dependent, behavioral, and risk-based approach" (Federal Comptroller General's Office [CGU], 2018a, p. 5).

Risk management for integrity is not a new process. What is currently being changed is the focus, which was previously directed towards operational and financial aspects, thus more procedural and intraorganizational, and now seeks to focus on collaboration, in an intersectoral view, based on the joint construction of public policies, acting as a driver for trust and networked actions. Vieira and Barreto (2019, p. 157) point out that promoting a culture of public integrity "is an essential requirement for increasing society's trust in the State and its institutions." According to the authors, in Brazil, integrity programs aim to "ensure compliance with ethical principles (ethics) and the observance of applicable laws and regulations (compliance)." Integrity is associated with ethics and its progress, virtuous behavior based on individual awareness, capable of discerning and acting correctly, guided by values and principles, and in aspects related to leadership.

### **2.3 Analysis of the regulations and guidelines of Brazilian public administration**

In the Brazilian context, integrity and risk management plans, as well as risk management for the preservation of integrity, are supported by laws, documents, ordinances, and other regulations, representing more than just a management tool, but a legal determination issued by oversight bodies and courts of accounts. Ordinance No. 750 of the Federal Comptroller General (Controladoria-Geral da União [CGU], 2016a), with risk management as one of its pillars, and Decree No. 9.203 (2017), which establishes the Brazilian public governance policy, formed the foundation for the establishment of four risk management axes, namely: (i) the commitment and involvement of senior management; (ii) the establishment of responsible units and integrity bodies; (iii) the management of risks focused on integrity; and (iv) strategies for continuous monitoring.

According to Kasai et al. (2022), the risk management methodology is relatively recent in the context of public administration studies. In 2012, the insertion of risk management for effective reform in public administration was highlighted – the result of joint advisory work carried out by the Organization for Economic Co-operation and Development (OECD) at the request of the CGU. From this study, the Joint Normative Instruction No. 01 CGU and the Public Ministry (Controladoria-Geral da União [CGU], 2016b) was established, formally introduced in the public sector (p.828). Although the regulations were not prescriptive, they served as guidelines for public administration bodies. In this logic, Ordinance No. 1.089/2018 of the Federal Comptroller General was issued to establish "guidelines for federal public administration bodies and entities, both direct and indirect, to adopt procedures for the structuring, execution, and monitoring of their integrity programs" (Controladoria-Geral da União [CGU], 2018b, p.5).

### **2.4 Facilitators and Barriers to Risk Management**

According to Assi (2021), to define the Facilitators and Barriers for the implementation of risk management, it is necessary to identify the risks to which organizations are exposed,

which can either hinder or impede the achievement of previously defined objectives, or facilitate or assist in reaching these goals. Once identified, the second challenge is the communication and engagement of all those involved at different levels of the organization, a task that encompasses not only awareness-raising actions but also training, personnel selection, risk identification and assessment, in addition to communication about the risk management plans. For this author, each activity presents facilitators and barriers, positioning risk management as a tool to mitigate the adverse effects of an undesirable event and improve the expected results.

Zhao et al. (2014) report research conducted with Chinese construction companies based in Singapore, applied to 35 experienced managers, in which 13 facilitators and 25 barriers to the implementation of risk management were identified, summarized in Table 1.

**Table 1**

*Facilitators and Barriers of Corporate Risk Management*

<b>Facilitators</b>	<b>Barriers</b>
<ul style="list-style-type: none"> <li>- Compliance with legal and regulatory requirements</li> <li>- Compliance with non-mandatory requirements</li> <li>- Support from senior management (controllers and executives)</li> <li>- Reduction of resource loss</li> <li>- Broad approach to risk management (control, accountability, and communication)</li> <li>- Improvement of the risk management process (consensus, decision-making, use of methods and techniques)</li> <li>- Profitability gains (creating shareholder satisfaction and competitive advantage)</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of data or poor data quality to assess Enterprise Risk Management (ERM)</li> <li>- Insufficient resources (lack of structural personnel for ERM)</li> <li>- Nonexistent or inadequate ERM process (lack of techniques and tools, lack of common risk language, lack of a clear ERM implementation plan, lack of clarity on ownership and responsibility for ERM implementation)</li> <li>- Lack of qualified personnel (low competence and training, inadequate training, lack of a case study)</li> <li>- Lack of support from the structure and information systems</li> <li>- Lack of risk culture and awareness.</li> <li>- Perception that ERM increases costs and administrative burdens (lack of confidence in practices, lack of perceived value or benefits of ERM, lack of a set of metrics to measure ERM performance)</li> <li>- Lack of commitment from the board and senior management (ERM not seen as a priority, lack of leadership from the board or senior management, managers have other priorities)</li> <li>- Recession and business downturns</li> </ul>

Note: Retrieved from Zhao et al. (2014, p. 823).

To complement, Table 2 summarizes other authors who identified Facilitators and Barriers in the literature.

**Table 2**

*Summary of Facilitators and Barriers – Systematic Literature Review*

<b>Research</b>	<b>Facilitators</b>	<b>Barriers</b>
Liu et al. (2018).	1. Integrated ability to control risks; 2. Benefits in ERM (Enterprise Risk Management) practices of leading construction companies; 3. Development of an internal risk management culture; and 4. Compliance with external requirements.	1. Inadequate time for implementation; 2. Lack of experienced personnel; and 3. Insufficient resources

Liu et al. (2011).	1. Establishment of risk management cells; 2. Definition of employee duties in risk management; 3. Formulation of risk management strategies; 4. Adaptation of ERM standards; and 5. Improvement in risk management through the adoption of ERM.	1. Need to establish risk management cells; 2. Need to formulate risk management strategies and routines; and 3. Need to cultivate a proactive risk culture.
Jean-Jules e Vicente (2021).	1. Commitment from top management and boards; 2. Risk identification, analysis, and response; 3. Clear definition of objectives; 4. Establishment of ERM policies and procedures; 5. Integration of technology into ERM; and 6. Development of a positive risk culture.	1. Rigid organizational structure; 2. Behavioral resistance to change; 3. Lack of support and commitment from top management; 4. Lack of technical and human resources; 5. Absence of clear policies and procedures for ERM; and 6. Perception that ERM increases bureaucracy.
Faisal et al. (2021).	1. ERM implementation; 2. Effective investment decisions; 3. Increase in company value; 4. Stakeholder engagement; and 5. Risk management maturity.	1. Initial level of ERM implementation; 2. Lack of integration of ERM with investment decisions; 3. Low level of risk management maturity; 4. Lack of studies on risk management maturity; and 5. Lack of continuous support from stakeholders.
Horvey e Odei-Mensah (2023).	1. Growing popularity of ERM; 2. Holistic approach to ERM; 3. Support from empirical evidence; 4. Adoption of ERM in large and medium-sized companies; 5. Integration of primary and secondary data; and 6. Positive impact of ERM on company performance.	1. Lack of a specific approach to measure ERM; 2. Use of secondary sources; 3. Difficulty in evaluating ERM; 4. Mixed results regarding ERM performance; 5. Need for studies in emerging economies; and 6. Non-linear relationship between ERM and performance.
Paape e Speklé (2012).	1. Regulatory environment; 2. Internal factors; 3. Ownership structure; 4. Company and industry characteristics; 5. Frequency of risk assessment and reporting; and 6. Use of quantitative risk assessment techniques.	1. Inconsistencies in the application of the COSO framework; 2. Challenges in the mechanistic view of risk management; 3. Internal organizational factors; 4. Challenges in communication and understanding; and 5. Limited resources.

In this context, Assi (2021) highlights the need to consider obstacles and facilitators as elements that impact the effective implementation of risk management. Although its purposes and benefits are clearly articulated, stakeholder engagement is a fundamental factor for its practical application, beyond what is written or communicated. As an example, the author points out that in 2002, the U.S. government enacted the Sarbanes-Oxley Act as a new direction for capital markets. Although it aimed to bring greater balance to the markets, its implementation faced significant resistance from stakeholders regarding its applicability. This was due to the assignment of responsibilities, the introduction of conduct standards for organizations and their leaders, and strict rules of engagement. In other words, resistance should not have existed, as the actions related to the implementation of the new legislation were intended to deliver the benefits of good governance, but resistance occurred, nonetheless.

## 2.5 Driving Forces of Change

Zhao et al. (2014) demonstrate that there are forces that drive change, prompting organizations to recognize that change is necessary and, at times, imperative. On the other hand, there are barriers that create sources of resistance within organizations. In such cases, it is crucial to identify and implement the best strategies to overcome these barriers and enable the implementation of these transformations, starting with the identification of the factors that generate resistance. The authors initially present some effective and situational approaches to understanding the Driving Forces of Change, which can arise from both the external and

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internal environments of the organization. These Driving Forces are listed in Table 3.

**Table 3**

*Driving Forces of Change*

<b>External Forces</b>	<b>Internal Forces</b>
<ul style="list-style-type: none"> <li>– Technological Advancements</li> <li>– Globalization</li> <li>– Competitive Pressures</li> <li>– Market Changes</li> <li>– Economic and Financial Factors</li> <li>– Social and Cultural Factors</li> <li>– Political and Legal Pressures</li> </ul>	<ul style="list-style-type: none"> <li>– Need for Reorganization</li> <li>– Need for Greater Profitability</li> <li>– Conflict Between Organizational Components</li> <li>– The Changing Nature and Composition</li> </ul>

Note: Retrieved from Zhao et al. (2014, p. 821).

Regarding External Forces, technological advancements compel organizations to change, incorporating new technologies into their products and services to remain competitive and ensuring their place in the market. This competitive pressure began with the globalization of the economy, when new markets were opened, and companies stopped competing locally and started operating globally. As a result, competition intensified, as rivals could emerge from any country. Today, changes in market dynamics allow some organizations to achieve greater competitive advantages, forcing others to reinvent themselves to accelerate changes, avoid losing market share, or even ensure their survival.

It is important to note that outside the organization, there are various economic forces exerting pressure, such as inflation and interest rate fluctuations. These factors can compromise the continuity of operations due to excessive debt or changes in currency exchange rates caused by fluctuations exceeding projections, leading to increased project costs. This scenario can create uncertainties, bringing instability to the economy, among other variables, potentially harming organizational performance due to the risks involved. There are also financial forces, such as increased taxes resulting in higher costs and difficulties accessing credit, which can strain finances, hinder customer acquisition, and limit the development of new projects.

In addition, social factors such as conflicts, revolutions, or even public safety issues, as well as cultural factors like the mindset of people in a particular country or region, educational levels, or religious aspects, can strongly affect organizations, increasing the risks they face.

Lastly, organizations are also exposed to external forces stemming from political instability and fragmentation, which may lead to changes in priorities by newly elected governments. This can reduce opportunities to start new projects or lower the profitability of ongoing ones. Political changes may also impact the entire legal framework through legislative adjustments, excessive bureaucracy, and the complexity of the legal system.

Zhao et al. (2014) further identified that, although external forces can serve as strong drivers of organizational change, such change can also be triggered by **internal forces**, such as the need for reorganization. This may occur through restructuring driven by a merger, growth opportunities, the launch of new products, or downsizing due to a recession.

**2.6 Resistance to Change**

Zhao et al. (2014) also highlight that resistance to change is a natural response of an organization’s members to significant changes imposed on the organizational environment.

This is based on the premise that people tend to develop habits and behaviors that have proven successful in the past. Resistance to change can be understood in two ways: negatively or positively. The negative perspective views resistance to change as a problem to be overcome, as it hinders or even prevents change. Conversely, the positive perspective sees resistance as a natural consequence of a successful change process.

In their study, these authors adopted the “negative perspective of resistance to change, linking it to organizational obstacles, as it pertains to barriers in implementing Enterprise Risk Management (ERM)” (p. 821). They identified 21 sources of resistance to organizational change, based on prior studies that used an oppositional approach, as shown in Table 4.

**Table 4**

*Sources of Resistance to Organizational Change*

C01 - Habits	C12 - Inconsistency
C02 - Fear of the unknown	C13 - Low level of employee-manager relation
C03 - Parochial self-interest	C14 - Ineffective management styles
C04 - Social factors	C15 - Selective information processing
C05 - Lack of individual capability to change	C16 - Threats to power or influence
C06 - Misunderstanding	C17 - Threats to resource allocations
C07 - Insufficient resources	C18 - Limited focus of change
C08 - Inadequate rewards and punishments	C19 - Organizational culture
C09 - Poor internal communication	C20 - Group inertia
C10 - Lack of commitment of the board and senior management	C21 - Structural inertia
C11 - Lack of trust in management	

Note: Retrieved from Zhao et al. (2014, p. 822)

**3. Methodology**

**3.1 Research Phases and Systematic Review Process**

The research was conducted using a **Mixed-Methods** approach, as outlined by Creswell (2014). This approach combines qualitative and quantitative methods, enabling a comprehensive understanding of the phenomenon under study. The research follows a sequential strategy that includes a systematic literature review, data categorization, questionnaire application, and normative analysis, a procedure similar to that used by Raschendorfer et al. (2023). Table 5 presents a summary of the research phases, and Table 6 outlines the steps of the systematic review process.

**Table 5**

*Summary of the Research Phases and Their Description*

Phase	Description
Phase 1: Systematic Literature Review	Conducted using the PRISMA 2020 methodology (Preferred Reporting Items for Systematic Reviews and Meta-Analyses, as per the 2020 version), which ensures transparency and rigor in the execution of systematic reviews. It includes defining the research question, searching for studies, selecting the studies, extracting and synthesizing data, and presenting the results (Page et al., 2021).
Phase 2: Data Categorization	Process of organizing and interpreting the collected data, involving the identification of key themes and the execution of content and thematic analyses to explore the relationships between these themes. This process resulted in the creation of analysis categories.



Phase 3: Normative Analysis	Analysis of regulations and guidelines applicable to risk management and integrity in public administration and the Brazilian Navy, assessing the compliance of current practices with established standards and identifying areas for improvements or adjustments.
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The research was developed in three phases, as follows: (i) Phase 1: Systematic Literature Review (SLR), conducted using the PRISMA methodology (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), as per the 2020 version (Page et al., 2021). The objective was to identify relevant studies on the topic, select them, extract the data of interest, and synthesize the findings. (ii) Phase 2: Data Categorization, a process of organizing and interpreting the collected data. This involved identifying key themes and performing content and thematic analyses to explore the relationships between these themes. (iii) Phase 3: Normative Analysis, which involved examining Brazilian governance, risk management, and integrity regulations to identify elements not highlighted in the literature review, focusing specifically on the Brazilian context. The categorization process aimed to identify drivers and hindrances related to risk management, as well as Driving Forces and Resistance to Change, with the goal of updating the current perspective and providing new insights into the implementation process within public organizations.

**Table 6**

*Steps of the Systematic Review Process*

Step	Process	Objective	Approach
1	Literature review	Exploratory	Qualitative
2	Identification of analysis categories	Exploratory	Qualitative
3	Selection of regulations on governance and risk management	Exploratory	Qualitative
4	Comparative analysis and review of analysis categories	Exploratory	Qualitative

The systematic literature review followed these steps (Page et al., 2021): (i) Definition of the research question; (ii) Search for studies; (iii) Selection of identified studies; (iv) Content analysis; (v) Categorization. The search was conducted in the Scopus database using specific keywords such as "risk management", "hindrances", and "critical drivers". A temporal framework of 2018–2024 was established, considering the publication of the Brazilian public governance policy in 2017 and the associated documentation on risk management. The search returned a total of 592 articles.

The selection of studies involved reviewing the abstracts of the articles identified during the search phase. Articles were selected if their objectives aligned with identifying Facilitators and Obstacles in Risk Management across various application areas, as well as identifying Driving Forces and Resistance to Change. To ensure the relevance of the selected studies, inclusion and exclusion criteria were applied, as detailed in Table 7.

**Table 7**

*Inclusion and Exclusion Criteria – Systematic Literature Review*

Inclusion Criteria	Exclusion Criteria
Thematic Relevance: Articles needed to directly address topics related to risk management, focusing on facilitators and obstacles in risk management across various application areas, as well as Driving Forces and Resistance to Change, or aspects of transparency and integrity.	Insufficient Thematic Relevance: Studies that did not directly address the core topics of the research, or that covered tangential aspects without a clear connection to risk management and integrity, were excluded.

<p>Applicability to the Organizational Context: Studies conducted in organizational contexts, even if diverse, were included, as the challenges of risk management and integrity in these environments present significant parallels to those faced by the Brazilian Navy.</p>	<p>Lack of Empirical Data: Articles that did not present empirical data and were based exclusively on theoretical discussions without practical validation were excluded.</p>
<p>Depth of Analysis: Priority was given to articles that provided a detailed and critical analysis of the addressed topics, ensuring that their contributions were substantial to the research objectives.</p>	<p>Contexts Distant from the Research Focus: Studies set in contexts that did not offer significant parallels to the challenges of risk management and integrity in the Brazilian Navy, such as highly specific and non-comparable sectors, were excluded.</p>

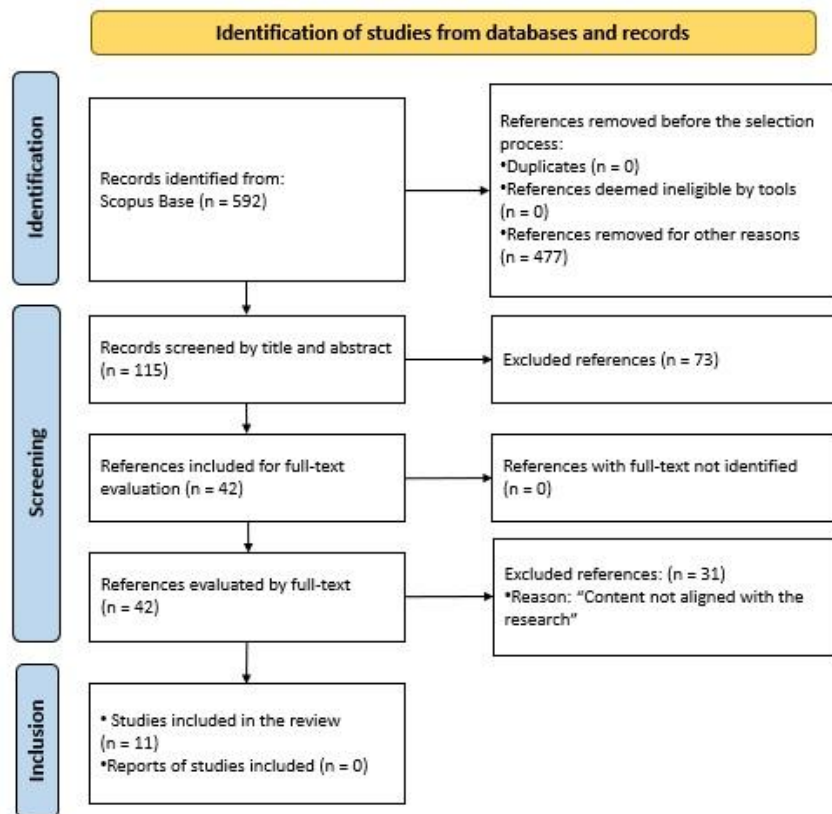
After identifying the main themes in the Systematic Literature Review (SLR), a content analysis was conducted to explore the relationships between these themes and better understand the context in which they arise in the reviewed articles. The content analysis focused on quantifying the themes identified in the articles. This process was employed to investigate the connections and interrelations between different themes. For instance, it was observed that "resistance to change" was frequently associated with "organizational culture", indicating that cultural barriers within an organization can hinder the implementation of changes. Similarly, "risk management" has been identified as a key part in mitigating challenges across various areas, such as cybersecurity and sustainability.

During the data categorization phase, a comparison was made with the study by Zhao et al. (2014), which identifies 13 drivers and 25 critical obstacles to the implementation of Enterprise Risk Management (ERM). This research served as a control framework, assisting in the organization of categories, as previously described in Table 1.

The use of thematic and content analysis was based on the approach applied by Farias et al. (2021), who utilized thematic indicators to categorize and interpret data in their research. Additionally, the methodology described by Rosa and Mackedanz (2021) regarding thematic analysis was considered, emphasizing the importance of mapping the frequency and relationships between themes to gain a deeper understanding of the interactions between different concepts in various contexts. This analytical process was essential to identify emerging patterns in the data and to provide a deeper understanding of the challenges and opportunities in implementing risk management and integrity practices, particularly in the context of the Brazilian Navy (Bowen, 2009). The results of the SLR were presented using the PRISMA 2020 flowchart (Figure 1).

**Figure 1**

*PRISMA 2020 Flowchart of the Research*



Source: Adapted from Page et al. (2021)

A total of 115 articles were identified in the Scopus database, which were evaluated based on their titles and abstracts and then fully read. At the end of this process, 11 articles were deemed the most aligned with the objectives of this research and were included in the categorization process.

The final phase, normative analysis, involved examining the standards and guidelines applicable to risk management and integrity in public administration. This phase aimed to assess the compliance of current practices with established standards and to identify areas requiring improvement or adjustment. The normative analysis was essential for understanding the legal and regulatory framework guiding risk management and integrity practices within the institution, ensuring that the proposed practices align with national and international guidelines. Among the documents analyzed, those listed in Table 8 stand out.

**Table 8**

Analyzed Regulations

Document	Description
Decree No. 11,529 (2023)	Establishes the Integrity, Transparency, and Access to Information System of the Federal Public Administration, setting governance and transparency standards for public organizations in Brazil.
Ordinance No. 57 (Brazil, 2019).	Provides guidelines for federal public administration agencies and entities to adopt procedures for structuring, implementing, and monitoring integrity programs.
Public Integrity Program Implementation Guide (Controladoria-Geral da União [CGU], 2018a)	Offers a step-by-step guide for implementing integrity programs in the federal public administration, focusing on structuring, executing, and monitoring, aligned with national best practices.

Operational Manual for Risk Management (Controladoria-Geral da União [CGU], 2018c)	Provides guidelines and recommendations for implementing and operationalizing risk management in public organizations, aligned with the best governance practices.
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For data analysis, the "data analysis spiral" strategy described by Creswell (2014) was employed. This approach combined aspects derived from the literature and compared them with elements found in Brazilian regulations on governance, risk management, and integrity. The normative analysis reviewed documents and guidelines, such as the CGU's Public Integrity Program Implementation Guide, to evaluate how these regulations affect the implementation of risk management policies in the Navy. This analysis aims to ensure that current practices align with established standards and to identify opportunities for improvement.

### 3.2 Development of the Research Instrument

The questionnaire structure focused on issues about the level of importance of certain factors in facilitating the implementation of ERM (Enterprise Risk Management) in the Brazilian Navy. The selection of statements was based on a joint analysis of bibliographic and regulatory sources, which resulted in the creation of five categories of analysis: Familiarity with the Integrity Program, Evaluation of the Risk Management Program, Drivers Factors for Change, Obstacles to Change, and Strategies to Reduce Resistance to Change. The instrument was formatted as a list of 39 factors, utilizing a 5-point Likert scale. The questionnaire was divided into two distinct parts: the first aimed at identifying the profile of the respondents, and the second presenting the 39 factors for respondents to analyze, which are shown in Table 9.

**Table 9**

*Categories and Factors for the Implementation of the Integrity and Risk Management Program in the Brazilian Navy*

Factors for Implementation and Their Categories	Key References
<b>1. Integrity Program</b>	
A1 - I am familiar with the Integrity Program of the Brazilian Navy	(1), (2), (8), (9), (10)
A2 - I believe Risk Management is important for the Integrity Program	(5), (8)
A3 - I perceive that internal communication is effective in disseminating information about the Integrity Program of the Brazilian Navy	(1), (5), (7), (8), (9), (10)
A4 - I perceive that there is already an Integrity Culture within the Brazilian Navy	(1), (2), (3), (4), (8), (9), (10)
A5 - The implementation of new Integrity Policies is greatly affected by resistance to change	(4), (8), (9), (10)
<b>2. Risk Management Program</b>	
B1 - I frequently participate in training related to Risk Management	(6), (11)
B2 - The leadership in the Brazilian Navy adequately penalizes those who violate integrity	(5), (8), (9), (10), (11)
B3 - The Integrity Program is suitable for addressing emerging risks in the Brazilian Navy	(5), (6), (11)
B4 - Procedures related to Risk Management in the Brazilian Navy are clear	(1), (11)
B5 - Leadership supports the implementation of Risk Management in the Brazilian Navy	(1), (11)
B6 - Internal communication is effective in disseminating information about Risk Management in the Brazilian Navy	(1), (7), (11)
B7 - There is transparency in operations related to Risk Management in the Brazilian Navy	(8), (9), (10), (11)
B8 - The implementation of new risk management policies is greatly affected by resistance to change	(4), (11)
B9 - I perceive that there is already a Risk Management Culture within the Brazilian Navy.	(1), (2), (3), (4), (11)

B10 - Members of the Brazilian Navy identify internal risks	(2), (4), (11)
B11 - Members of the Brazilian Navy analyze internal risks	(2), (4), (11)
B12 - Members of the Brazilian Navy implement responses to internal risks	(2), (4), (11)
B13 - Risk Management positively contributes to the overall integrity of the Brazilian Navy	(5), (8), (9), (10), (11)
B14 - I believe Risk Management will be effective for the future of the Brazilian Navy	(5), (11)
<b>3. Drivers Factors to Change</b>	
C1 - Support from senior management	(1), (4)
C2 - Continuous training and capacity building.	(6)
C3 - Transparency	(8), (9), (10)
C4 - Clear communication	(1), (7)
C5 - A positive organizational culture	(1), (2), (3), (4)
C6 - The use of incentives and recognition	(1), (4)
C7 - Technological support	(4), (7)
C8 - The use of adequate tools	(4), (6), (7)
<b>4. Hindrances Factors to Change</b>	
D1 - Resistance to change	(4)
D2 - Lack of financial resources	(1), (2), (7)
D3 - Lack of communication	(1), (7)
D4 - Lack of transparency	(8), (9), (10)
D5 - A resistant organizational culture	(1), (2), (3), (4)
D6 - Lack of adequate training	(6)
D7 - Lack of leadership	(1), (4)
<b>5. Strategies to Reduce Resistance to Change</b>	
E1 - Adopting clear and constant communication as a practice	(1), (3), (4), (7)
E2 - Involving and engaging military personnel/civilian staff	(2), (3), (4)
E3 - Conducting training and workshops	(3), (4), (6)
E4 - Having leadership that leads by example	(3), (4), (7)
E5 - Practicing recognition and rewards	(3), (4)

**Note:** Key References: 1) Zhao et al. (2014); 2) Liu et al. (2018); 3) Liu et al. (2011); 4) Jean-Jules e Vicente (2021); 5) Faisal et al. (2021); 6) Horvey e Odei-Mensah (2023); 7) Paape e Speklé (2012); 8) Brasil (2023); 9) Brasil (2019); 10) CGU (2018a); 11) CGU (2018c).

### 3.3 Strategy for data collection

The research employed a non-probabilistic convenience sampling method (Farrokhi & Mahmoudi-Hamidabad, 2012), considering the availability of time for both researchers and respondents, as well as geographical proximity and ease of access to data. The questionnaire focused on respondents' personal perceptions regarding their level of agreement with the Integrity Program, the Risk Management Program, Drivers Factors, and Hindrances Factors to the implementation of these programs, as well as Strategies for Reducing Resistance to Change within these programs. A database was created, listing 50 members of the Internal Control of the Brazilian Navy, 51 individuals operationally involved in the Risk Management Program of the Brazilian Navy, and 34 managers from Naval Aviation (operational area) of the Brazilian Navy, serving as the sampling base. The questionnaires were sent to these individuals via email or delivered in person to assess the level of evidence in the responses.

Responses were collected over three weeks. In total, 74 questionnaires were received, all of which were deemed valid, representing a response rate of 54.8%. Participants answered 39 questions using a five-point Likert scale, with response options ranging from "Strongly Disagree" to "Strongly Agree," as well as "I don't understand/I don't know." The research objectives were explained to participants, who signed the Free and Informed Consent Form, ensuring privacy, confidentiality, and voluntary participation.

### 3.4 Strategy for Data Testing

In this study, as responses were obtained from participants belonging to three different groups, members of Internal Control, Quartermasters from administrative units, and managers from Naval Aviation (operational area), all from the Brazilian Navy, it was necessary to apply the Chi-square Test to determine whether there were significant differences in the responses across these three samples (Valentin et al., 2010). The results are presented in Table 10.

**Table 10**

*Chi-square Test Results for All Questions*

Observed Results							
	SD	D	N	A	SA	DK	TOTAL
General	94	131	259	833	458	16	1791
Internal Control	3	47	74	209	130	0	463
Naval Aviation	12	72	140	202	98	2	526
Sum of values	109	250	473	1244	686	18	2780

Expected Results							
	DC	D	N	C	CC	DK	TOTAL
General	70,2	161,1	304,7	801,4	442,0	11,6	1791
Internal Control	18,2	41,6	78,8	207,2	114,3	3,0	463
Naval Aviation	20,6	47,3	89,5	235,4	129,8	3,4	526
Sum of values	109	250	473	1244	686	18	2780

The calculated Chi-square value was 100.94. The critical (tabulated) Chi-square value for 95% confidence and 10 degrees of freedom is 18.31. Since the calculated value is greater than the critical value, there are significant differences between the responses of the three groups, demonstrating that the perceptions of participants from the different groups are not homogeneous. This prevents the responses from being grouped together for the analysis of the results.

We can be even more specific by examining the calculated Chi-square value to assess whether it is possible to conduct the analysis in specific groups of questions, which are presented in Table 11.

**Table 11**

*Chi-square Test Results for Each Group of Questions*

Groups of Questions	Calculated Chi-square
Integrity Program of the Brazilian Navy	20,86
Risk Management Program of the Brazilian Navy	88,22
Drivers Factors	43,28
Hindrances Factors	26,85
Strategies to Reduce Resistance to Change	6,45

**Note:** Critical Chi-square value (tabulated): 18.31.

As the Chi-square Test indicated that the three groups have distinct perceptions, the sample of 48 individuals working operationally in the Risk Management Program (RMP) was chosen to identify the factors where respondents are convinced or possess evidence regarding agreement or disagreement with the aspects presented in the questionnaire. Although the sample size is not very large, statistical analysis can still be performed because the Central Limit Theorem holds for sample sizes greater than 30 (Zhao et al., 2014). The criticality of the determining factors (assertions) for their activities was calculated based on their mean scores

and the results of the one-sample t-Test, using two test reference values: 3.0 and 4.0, with a confidence level of 95%.

The following research hypotheses were defined:

- H1: Individuals working in the Risk Management Program (RMP) operation are convinced or possess evidence that they understand the most important aspects of the Integrity Program.
- H2: Individuals working in the RMP operation are convinced or possess evidence that they understand the most important aspects of the RMP.
- H3: Individuals working in the RMP operation are convinced or possess evidence that they can identify the main Drivers Factors for Changes.
- H4: Individuals working in the RMP operation are convinced or possess evidence that they can identify the main Hindrances Factors to Changes.
- H5: Individuals working in the RMP operation are convinced of the main Strategies to reduce Resistance to Changes.

## 4. Results and Discussion

### 4.1 Identification of Unsatisfactory Results: No Guarantee (95%) that the mean is greater than 3.00

Table 12 presents the worst results from the t-test, identifying where there is no guarantee that a given factor has a mean greater than 3.0 with a 95% confidence level. This characterizes evidence that the factor could be considered an obstacle to the implementation of the Integrity and Risk Management Programs in the Brazilian Navy.

Regarding the hypothesis "H1: Individuals working in the Risk Management Program (RMP) operation are convinced or possess evidence that they understand the most important aspects of the Integrity Program ", it is worth noting that the factor "A4 - I perceive that there is already an integrity culture within the Brazilian Navy" had an average value of 3.31. Although this is greater than the reference value of 3.0, the p-value was 0.054, which is higher than the reference threshold of 0.05, indicating no statistical guarantee that the value is indeed greater than 3.0. This shows that "A4" is the only factor related to the Integrity Program that cannot be confirmed, suggesting that it is not yet possible to affirm the existence of a consolidated Integrity Culture within the program. This finding aligns with Liu et al. (2018), who identified the absence of an organizational culture supporting the implementation of the Integrity Program as an obstacle to change. This result also suggests that adopting strategies, such as those outlined in the Public Integrity Program Implementation Guide (CGU, 2018a), could be adapted to meet the specific needs of the Brazilian Navy's Integrity Program. Establishing a step-by-step implementation process could help consolidate an integrity culture.

**Table 12**

*T-test Results, Reference Value: 3.0, Confidence Level: 95%*

Questions	Mean	t	Sig
A4 - I perceive that there is already an integrity culture within the Brazilian Navy.	3,3125	1,978	0,054
B1 - I frequently participate in training sessions related to risk management.	2,7826	-1,151	0,256
B2 - Leadership in the Brazilian Navy adequately punishes those who violate integrity.	3,1277	0,735	0,466
B6 - Internal communication is effective in disseminating information on Risk Management in the Brazilian Navy.	3,1667	0,984	0,330
B7 - There is transparency in operations related to Risk Management in the Brazilian	3,2391	1,633	0,109

Navy.			
B10 - Members of the Brazilian Navy identify internal risks.	3,2708	1,697	0,096
B11 - Members of the Brazilian Navy analyze internal risks.	3,2083	1,300	0,200
B12 - Members of the Brazilian Navy execute responses to internal risks.	3,2500	1,520	0,135

Regarding Hypothesis "H2", which pertains to the knowledge of the most important aspects of the RMP among those working operationally, we identified a significant gap to be addressed in the program. This gap relates to the factor "B1 - I frequently participate in training sessions related to risk management", which had the lowest average score of 2.78, below the reference value of 3.0. This result may suggest a lack of knowledge, skills, and expertise, as described by Zhao et al. (2014), highlighting the need to invest in RMP personnel to strengthen the program's governance and its integration with the Navy's units. Additionally, factors related to leadership's role in controlling non-compliance with normative aspects that violate integrity were noted in responses to Factor "B2", which achieved an average score of 3.13 with a p-value of 0.466 (greater than the reference value of 0.05). This may suggest a lower level of risk management maturity, as previously described in the study by Faisal et al. (2021).

Another issue identified was the need for leadership to address failures in internal communication (Factor "B6"), which scored an average of 3.17 with a p-value of 0.330. Improving the dissemination of information about risk management is crucial. This finding aligns with Paape and Speklé's (2012) study, which identified overcoming communication challenges as a key hindrance to improving understanding. These challenges should be addressed through internal organizational factors of the Integrity Program and the use of appropriate resources. Similarly, leadership must tackle the lack of transparency in operations related to risk management, as highlighted by Factor "B7" (average score 3.24 and p-value 0.109, greater than 0.05). This issue can also be mitigated by reducing communication failures.

It is important to emphasize, however, that many of these challenges in consolidating the Risk Management Program (RMP) may stem from the unique characteristics of the military environment, where decision-making always prioritizes confidentiality and security. In this context, it may be beneficial for the Brazilian Navy to adopt the practices outlined in the Risk Management Operational Manual (Controladoria-Geral da União [CGU], 2018c). This manual provides guidelines and recommendations for implementing and operationalizing risk management in public organizations, aligned with the best governance practices. The manual could be tailored to the needs and specificities of the Brazilian Navy, enabling the institution to also apply governance and transparency standards for public organizations as set forth in Decree No. 11,529 (Brazil, 2023), which established the Integrity, Transparency, and Access to Information System for the Federal Public Administration.

Finally, the results also indicate that risk management still needs to be better understood by personnel working operationally in the Risk Management Program. The results for internal risk identification (Factor "B10"), internal risk analysis (Factor "B11"), and execution of responses to internal risks (Factor "B12") had average scores of 3.27, 3.21, and 3.25, respectively, with p-values greater than 0.05. These findings suggest the need to improve risk management practices emphasized in the Integrity Program. In fact, the study by Jean-Jules and Vicente (2021) already identified that the lack of technical and human resources, as well as the absence of clear policies and procedures for Corporate Risk Management, are significant obstacles to effectively identifying, analyzing, and responding to risks. Therefore, applying this strategy within the Risk Management Program could help achieve better results in these areas.

On the other hand, the hypotheses "H3" (related to identifying the main Facilitating Factors for Change), "H4" (related to identifying the main Obstacle Factors to Change), and "H5" (related to knowledge of the main Strategies to Reduce Resistance to Change) yielded satisfactory results. Statistical guarantees confirm that the averages for all factors within these hypotheses are greater



than 3.0, with p-values less than 0.05. This indicates that these factors cannot be considered obstacles to the implementation of Integrity and Risk Management Programs in the Brazilian Navy.

#### 4.2 Identification of Satisfactory Results: 95% Guarantee that the mean is greater than 4.00

Table 13 highlights the best results from the t-test, identifying cases where there is statistical evidence (95% confidence level) that the analyzed factor's mean is greater than 4.0. This characterizes evidence that certain factors are already well-established within the Integrity and Risk Management Programs in the Brazilian Navy.

Regarding Hypothesis H1—focused on the most important aspects of the Integrity Program—the Factor "A2 - I believe Risk Management is important for the Integrity Program" achieved a mean score of 4.26, exceeding the reference value of 4.0, with a p-value of 0.006 (lower than the reference threshold of 0.05). This suggests that personnel actively involved in operations recognize the implementation of the Risk Management Program (CGU, 2018b) as a key tool for supporting the Integrity Program (Brazil, 2023).

However, despite Risk Management being considered important for the Integrity Program, Hypothesis H2, related to the most important aspects of the Risk Management Program, did not present any factors with a mean score higher than 4.0 and a p-value lower than 0.05. This could indicate that the implementation process of the Risk Management Program is still in its early stages within the Navy.

Similarly, regarding Hypothesis H3, which focuses on identifying the main Drivers Factors for Change, the results suggest no evidence in the studied sample to classify any of the factors as Drivers. None achieved a mean score above 4.0 or a p-value below 0.05.

**Table 13**

*Result of the t-test, reference value 4.0, and confidence level 95%.*

Questions	Mean	t	Sig
A2 - I believe Risk Management is important for the Integrity Program.	4,2609	2,890	0,006
D1 - Resistance to change.	4,2708	2,369	0,022
E1 - Adopting clear and constant communication as a practice.	4,4583	5,457	0,000
E2 - Involving and engaging military personnel/civilian staff	4,3750	4,060	0,000
E4 - Having leadership that leads by example.	4,5417	6,897	0,000
E5 - Practicing recognition and rewards	4,2292	2,115	0,040

Regarding Hypothesis "H4" on identifying the main Obstacle Factors to Change, it was observed that, for individuals working at the operational level, the Obstacle Factor "D1 - Resistance to change" is the main difficulty to be addressed. This factor received an average response score of 4.27, with a p-value of 0.022. These results confirm the findings of Jean-Jules and Vicente (2021), which indicate that behavioral resistance to change is indeed an obstacle. As a result, the factors related to Hypothesis "H5" regarding the main Strategies to Reduce Resistance to Change gain importance. By agreeing with these strategies, respondents may be pointing toward the most appropriate approach to reduce resistance to Integrity and Risk Management Programs.

Thus, the responses suggest that the following factors are considered essential by operational personnel for implementing changes based on the Integrity and Risk Management Programs of the Brazilian Navy: "E1 - Adopting clear and constant communication as a practice", previously mentioned by Zhao et al. (2014) and Paape and Speklé (2012) in their research; "E2 - Involving and engaging military personnel/civilian staff ", identified by Liu et

al. (2018) as highlighting the need to work with experienced personnel; "E5 - Practicing recognition and rewards", cited by Paape and Speklé (2012), emphasizing the use of evaluations and results presented in risk reports, while considering internal organizational capacities; "E4 - Having leadership that leads by example", which achieved the highest average score of 4.54 and a p-value of 0.000. This factor was previously described by Liu et al. (2011), emphasizing the duties of employees in risk management. These findings underscore the importance of these factors for facilitating the implementation of changes, particularly within the context of the Brazilian Navy's Integrity and Risk Management Programs.

## **5. Final Considerations**

The main objective of this article was to identify the factors that most influence the implementation of Risk Management Programs (RMP) and Integrity Programs (IP) to examine the main obstacles and strategies for overcoming resistance to change. The study aimed to provide evidence that could convince members of the Brazilian Navy of the effectiveness of these programs from a strategic perspective, offering new insights into the implementation process in public organizations.

In the initial phase, a systematic literature review was conducted, beginning with the understanding, systematization, and operationalization of risk management, which has become a key strategy for public sector reforms. This approach has provided pathways for establishing sustainable relationships among different stakeholders, helping public organizations achieve their objectives.

From this foundation, the value of public integrity was discussed as a means to strengthen governance with a focus on the public interest. In this context, various laws, documents, ordinances, and other normative acts have been created by oversight bodies and audit courts to support the implementation of integrity and risk management programs. Additionally, risk management has been used as a tool to preserve integrity, with corporate risks showing a strong connection to governance.

The literature analysis highlighted the role of leadership as a key element in addressing administrative and operational gaps within organizations, with significant impacts on risk management. However, what emerged was that leadership, from a more contemporary perspective, promotes actions aimed at bringing stakeholders closer together, creating an environment conducive to networked collaboration. This finding suggests the need to move beyond structural aspects, such as senior management support and the organization of administrative controls, offering advancements over previous studies and contributing both academically and practically. These contributions point to a new approach to risk management that transcends a perspective solely focused on accountability. The emphasis shifts to the importance of strategic communication and fostering a positive organizational culture as essential factors for the success of such initiatives.

The study also made it clear that resistance to change can exist within organizations. This resistance is a natural response from members to significant changes imposed on the organizational environment, as individuals tend to stick to behaviors that have proven effective in the past.

Another part of the research was conducted based on a questionnaire, with its questions grounded in the key authors identified during the literature review. The questionnaire, consisting of 39 questions, was answered by 74 members of the Brazilian Navy's Risk Management System. Participants answered questions regarding the main factors related to the Integrity Program, the Risk Management Program, the Facilitators and Obstacles to implementing these programs, and strategies to reduce Resistance to Change.

Due to differences identified through the Chi-square Test in the responses from the three

groups of respondents (members involved in PGR operations, Naval Aviation managers, and Internal Control personnel), the quantitative study, using the t-Test, was conducted with the 48 valid responses from members working in PGR operations.

The analysis of these results revealed that the Brazilian Navy is still in the early stages of implementing its Risk Management Program. This is evidenced by the fact that half of the results for the factors related to Hypothesis "H2: Members working in PGR operations are convinced or have evidence that they understand the most important aspects of the Risk Management Program" produced average scores without statistical significance above 3.0. Among these, the training of PGR members yielded the worst result. This research offers some intriguing insights. First, it highlights that PGR training is a facilitator for the program's implementation; however, in some cases, it can also act as an obstacle when not properly executed.

This reminds us that, in the public sector, training may not always be sufficient due to limited resources for proper execution or because of competing administrative priorities that also impact risk management. For this reason, we suggest that, given its relevance and connection, training efforts could focus on governance. By using existing normative instruments, it is possible to integrate risk management and its coordination across units, thereby enhancing the consolidation of risk management practices within public organizations in Brazil.

It is also important to highlight that the results for factor "A2," about the dependence of the Integrity Program on the implementation of the Risk Management Program, were confirmed by respondents. From this, we can infer that the level of implementation of the Risk Management Program is likely influencing the state of the Integrity Program, suggesting that both programs may currently share a similar level of implementation.

Another important point is that Factor "D1 – Resistance to Change," related to Hypothesis "H4" on identifying the main Obstacle Factors to Change, was the only one of the five factors recognized as a true obstacle to be addressed by the Brazilian Navy. This confirmation led to the realization that Factors E1, E2, E4, and E5, related to Hypothesis "H5" on the main Strategies to Reduce Resistance to Change, are the key strategies that the Brazilian Navy should implement to support the adoption of Integrity and Risk Management Programs.

It is also worth highlighting that the research emphasized the growing prominence of leadership-related aspects over traditional concepts and techniques, positioning leadership as a driver for adopting the practices proposed by the Brazilian Navy. Traditionally, leadership is exercised through the engagement and actions of senior management to support risk management initiatives within organizations. However, in this study, even with a small sample, the role of leadership appeared as critically important in a nascent environment, such as the implementation of a Risk Management Program or an Integrity Management Program.

In such environments, issues related to regulation or organizational challenges may arise, such as the absence of a unifying "flag" that encapsulates the necessary efforts or practices not yet adapted to the organization's size, complexity, or unique characteristics. This is the case for the Brazilian Navy, where limitations in applying traditional techniques—such as those employed in these programs—become apparent. Leadership, therefore, plays a pivotal role in navigating these challenges and ensuring the alignment of efforts with the organization's specific needs.

Leadership, in these cases, is more frequently engaged, which may indicate the need to address the lower level of autonomy in such organizations. Leadership must, therefore, coordinate all stakeholders to "keep the wheel turning," as the program has not yet been consolidated, and the "engine of autonomy" is not yet operational. This effort is necessary until the program becomes fully established, institutionalized, regulated, and operational, at which point a solidified know-how will exist. Importantly, this process is not tied to the

leader's personality. For such applications, entrepreneurial leadership can be recommended—one that identifies problems and seeks solutions collaboratively and within the organization's framework.

These findings have broader implications for the research, such as revisiting and updating the Brazilian Navy's Risk Management and Integrity Management policies. The adoption of a more robust risk governance structure, with clearly defined competencies and responsibilities, is recommended. Additionally, methodologies based on the Operational Manual of Risk Management developed by the Office of the Comptroller General of CGU could be adopted. This manual provides guidelines and instructions for implementing and operationalizing risk management in public organizations, aiding in the application of best governance practices within the Navy.

Similarly, it is suggested that the Integrity Program adhere to the recommendations of Ordinance No. 57/2019 issued by the CGU, following its guidance for structuring, executing, and monitoring Integrity Programs. Moreover, implementing the Integrity Program according to the CGU's Public Integrity Program Implementation Guide is advisable, ensuring alignment with national best practices on this topic.

In addition to the contributions mentioned, it is necessary to acknowledge some limitations of this study. The sample size may restrict the generalizability of the results, and the reliance on respondents' perceptions could introduce biases. Furthermore, the quantitative approach limits the exploration of deeper cultural and organizational factors. Lastly, the temporal scope does not allow for evaluating the evolution of program implementation over time. Future studies could expand the sample, incorporate qualitative methodologies, and analyze the trajectory of these programs for a more comprehensive understanding.

Thus, this article contributes theoretically by bringing insights from the Brazilian context to the discussion on the implementation of Risk Management and Integrity Programs in Public Administration. As a practical contribution, it emphasizes the need to use the tools already available in the regulatory framework on this subject. Additionally, it highlights the fragility of the topic in the public sector, underscoring the demand for more assertive public policies.

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