

UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
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**Enabling vs. Coercive Bureaucracy: How Descriptive Norms
Influence Individual Perceptions and Willingness to Implement a
Performance Management System**

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PEDRO OLIVEIRA ESPINDOLA CRUZ

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Performance Management System**

Master's dissertation presented to the COPPEAD Graduate School of Business, Universidade Federal do Rio de Janeiro, as part of the mandatory requirements in order to obtain the title of Master in Business Administration (M.Sc.).

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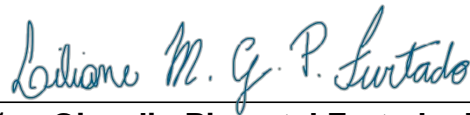
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To my beloved son Vicente, whose happiness has become my greatest motivation to strive to be a better person since the day you were born. With you, I have learned so much—from that very first day—about parenting, about myself, and about life.

To my dear wife Pamela, my love and life partner of over 20 years, whose companionship and support have been essential not only in this endeavor but in many others throughout our lives.

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"The most critical objective for future research, however, is to get beyond the pejorative connotations that have swamped the term bureaucracy. Forty years ago, Gouldner (1955) denounced the 'metaphysical pathos' that had surrounded the concept and stifled research on the possibility of forging forms of bureaucracy that could deliver efficiency without enslavement. It is time we took up his challenge."
Paul Adler and Bryan Borys

RESUMO

CRUZ, Pedro Oliveira Espindola. **Burocracia Facilitadora vs. Coercitiva:** Como as Normas Descritivas Influenciam as Percepções Individuais e a Disposição para Implementar um Sistema de Gestão de Desempenho. Rio de Janeiro, 2025. 75 pp. Dissertação (Mestrado em Administração) - Instituto COPPEAD, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2025.

Esta pesquisa examina o papel das percepções facilitadoras (*enabling*) na disposição dos colaboradores em implementar sistemas de gestão de desempenho (sigla em inglês, *PMS*) e investiga como as percepções do grupo podem influenciar as percepções individuais. A pesquisa envolveu dois estudos separados—um com desenho *quasi-experimental* e outro com desenho experimental—coletando dados de militares e servidores civis da Marinha do Brasil em um programa de treinamento sobre o *PMS* da Força. Os principais objetivos foram determinar se as percepções facilitadoras impactam positivamente os esforços de implementação e se as percepções do grupo afetam significativamente as percepções individuais sobre o sistema. Os resultados confirmaram que as percepções facilitadoras desempenham um papel crucial no aumento da disposição para implementar. Por outro lado, a influência das percepções do grupo sobre as percepções individuais não foi significativa no contexto estudado. Esses achados reforçam modelos teóricos de burocracia facilitadora e destacam a importância de projetar *PMS* com características que promovam transparência, flexibilidade e autonomia do usuário. A pesquisa também enfatiza a relevância dos fatores contextuais para o sucesso de ferramentas de controle organizacional, como os *PMS*, e sugere a exploração futura dos impactos de longo prazo por meio de estudos longitudinais.

Palavras-chave: Burocracia facilitadora, sistemas de gestão de desempenho, disposição para implementação, normas sociais, normas descritivas, normas injuntivas, comportamento organizacional.

ABSTRACT

CRUZ, Pedro Oliveira Espindola. Enabling vs. Coercive Bureaucracy: How Descriptive Norms Influence Individual Perceptions and Willingness to Implement a Performance Management System. Rio de Janeiro, 2025. 75 pp. Dissertation (Master's Degree in Business Administration) - COPPEAD Graduate School of Business, Federal University of Rio de Janeiro, Rio de Janeiro, 2025.

This research investigates the role of enabling perceptions in shaping employees' willingness to implement performance management systems (PMS) and examines how group perceptions may influence individual perceptions. The research involved two separate studies—one using a quasi-experimental design and the other a true experimental design—collecting data from military and civilian personnel in a PMS training program within the Brazilian Navy. The main objectives were to determine whether enabling perceptions positively impact implementation intentions and whether group perceptions significantly affect individual perceptions of the system. The results confirmed that enabling perceptions play a crucial role in enhancing the willingness to implement PMS. Conversely, the influence of group perceptions on individual perceptions was not significant in the studied context. These findings reinforce theoretical models of enabling bureaucracy and emphasize the importance of designing PMS with features that foster transparency, flexibility, and user autonomy. The research also highlights the relevance of contextual factors for the success of organizational control tools, such as PMS, and suggests further exploration of long-term impacts through longitudinal studies.

Keywords: Enabling bureaucracy, performance management systems, willingness to implement, social norms, descriptive norms, injunctive norms, organizational behavior.

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LIST OF ABBREVIATIONS

C-Exp-EGE-OF/PR	Curso Expedito de Excelência em Gestão para Oficiais e Praças (Intensive Course on Management Excellence for Officers and Enlisted Personnel)
CIANB	Centro de Instrução e Adestramento Almirante Newton Braga (Admiral Newton Braga Training and Instruction Center)
ComImSup	Comando Imediatamente Superior (Immediate Superior Command)
EMA	Estado-Maior da Armada (Navy General Staff)
GDP	Gross Domestic Product
GesPública	Programa Nacional de Gestão Pública e Desburocratização (National Program for Public Management and Debureaucratization)
IAM	Inspeção Administrativa Militar (Administrative Military Inspection)
LAC	Latin American and Caribbean
MaPNetuno	Manual de Procedimentos do Programa Netuno (Netuno Program Procedures Manual)
MO	Military Organization
NPM	New Public Management
OECD	Organisation for Economic Co-operation and Development
PMS	Performance Management System
PoC	Point of Contact
SAG-PN	Sistema de Avaliação da Gestão do Programa Netuno (Management Evaluation System of the Netuno Program)
TPA	Traditional Public Administration

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1. INTRODUCTION

The public sector plays a crucial role in the global economy, employing millions of people in various essential functions for society. According to the Organisation for Economic Co-operation and Development (OECD), public sector employment accounts for between 10% and 30% of total employment in member countries, with an average of 21% (OECD, 2024). In Brazil, public servants represent approximately 12% of total employment, a percentage lower than the OECD average but aligned with the Latin American and Caribbean (LAC) average of 12% (OECD, 2024). In financial terms, government revenue in Brazil corresponded to 43.3% of the Gross Domestic Product (GDP) in 2022, while the average was 31.5% in LAC countries and 39.7% in OECD countries (OECD, 2024).

Specifically, the defense sector, in addition to having a significant workforce, is one of the most structured and regulated. In 2024, the Ministry of Defense's budget amounted to approximately R\$ 125 billion (Portal da Transparência do Governo Federal, 2024). On the international stage, military expenditure increased in all regions, especially after the war in Ukraine. In 2023, the United States led military spending, with a budget of \$916 billion, while Russia allocated about \$109 billion (5.9% of its GDP) to defense (SIPRI, 2024).

As public institutions worldwide have grown in size and complexity over the years, governments have faced increasing pressure to improve efficiency, accountability, and service delivery. These demands have led to the search for management approaches aimed at enhancing organizational performance. One such approach is New Public Management (NPM), which has been widely implemented to increase efficiency and transparency in various public institutions, including the Armed Forces.

Since the emergence of NPM, practices and tools originating from the private sector and focused on reducing costs and increasing productivity have been incorporated into public organizations. The aim was to make Public Administration more efficient (Hood, 1991). Consequently, the workforce of public organizations was tasked with adopting and adapting to these new managerial rules and practices, especially performance management systems (PMS), to meet the public interest and the continuous demand for efficiency. This set of rules and practices is commonly referred to as "management controls" (van Helden and Reichard, 2019).

However, recent research has highlighted the importance of considering the workforce's perception of these controls (Tummers et al., 2012; Petersen et al., 2019; and Cuganesan and Free, 2020). The success of implementing management controls is directly linked to the adherence or acceptance that the workforce develops towards them. Cuganesan and Free (2020)

state that studies on the workforce's attitudes and behaviors in response to NPM-inspired initiatives have found varied results. While some suggest that such initiatives have promoted clarity of objectives, empowerment, and job satisfaction, others indicate increased job tension, decreased well-being, creativity, and employee commitment.

Results like these, which point in opposite directions, contribute to the intensification of both positive and negative evaluations regarding NPM, its reforms, and initiatives inspired by the movement. This polarization of evaluations is quite similar to what occurs concerning bureaucracy itself. While some studies point to the beneficial consequences of bureaucracy, strengthening the positive evaluation of its supporters, other studies corroborate the statements of its critics by indicating its dysfunctions (Adler and Borys, 1996). In this debate, both sides rarely acknowledge the validity of the arguments of the opposing side.

Adler and Borys' (1996) Theory of Two Types of Bureaucracy offers a distinct perspective on bureaucracy, seeking to move beyond the debate of bureaucracy being a "necessary evil" for organizations and their employees. Bureaucracy, in this context, is understood as a system of formalized organizational processes for resource allocation and coordination, often characterized by hierarchical structures and explicit rules and procedures (Ellig, 2001). Rather than debating whether organizations should have higher or lower levels of formalization, Adler and Borys aimed to reconcile the positive and negative assessments. They argue that the type of formalization—defined by its characteristics, design, and implementation—is what truly determines employees' attitudes and behaviors towards it.

In their research, the authors realized that the degree of formalization alone and the proportion of repetitive tasks did not satisfactorily explain employees' attitudes, behaviors, and performance. Adler and Borys decided to understand why some rules are naturally accepted - which they called good rules - by employees, while other rules are simply ignored or met with resistance by employees - referred to by the authors as bad rules. If rules are rules and must be followed, especially in the context of public service, why are some of them more accepted than the others? Thus, the authors sought to develop a theory capable of explaining the criteria used by subordinates to judge the rules as "good" or "bad."

The Theory of Two Types of Bureaucracy, created by the authors, proposes an explanation by stating that formalization, seen as an organizational technology, can be categorized into two main types: enabling and coercive. Adler and Borys define formalization as the extent of written rules, procedures, and instructions within an organization. Their proposal is that the (positive or negative) impact of formalization on employees' behavioral

responses varies according to how much this formalization allows the individual to better master their task or serves as a means to coerce the employee's effort and compliance.

Subsequent studies have utilized Adler and Borys' (1996) theory, confirming their arguments with empirical evidence by applying this theoretical lens to management controls (and other forms of formalization), their antecedents, and their consequences for organizations and their employees (Aase, 1998; Hoy and Sweetland, 2001; Ahrens and Chapman, 2004; Wouters, 2009; Jordan and Messner, 2012; Barroso et al., 2016; Arend et al., 2017; Cuganesan and Free, 2020; Van der Hauwaert et al., 2022; and Johansen-Berg and Wennblom, 2023). The theoretical framework itself was revisited by Adler (2012) in another theoretical study, in which the author states that bureaucracy has an intrinsic characteristic of ambivalence, meaning it is perceived as both enabling and coercive at the same time.

Despite the importance of the workforce's willingness to implement (Tummers et al., 2012) being a crucial factor for the success of any formalization, and this willingness being directly linked to the initial question of Adler and Borys' theory (how employees judge a rule as good or bad), few studies have examined how the enabling perception of a given formalization can influence employees' willingness to implement that formalization. As willingness to implement is a scale developed in public administration field, and most studies were found to be related to discretion, trust, leadership (Tummers et al., 2012, Tummers and Bekkers, 2014; Van der Voet, 2014 Thomann et al., 2018, Hassan et al., 2021, Ahmad et al., 2021, and Vento, 2024), an approach that combines this concept with Two Types of Bureaucracy theory can bring new perspectives to present and future research.

The most commonly found studies correlate enabling management controls with their possible antecedents and positive performance and behavioral outcomes (such as commitment, motivation, satisfaction, and performance), both in private and public organizations (Ahrens and Chapman, 2004; Wouters, 2009; Jordan and Messner, 2012; Barroso et al., 2016; Cuganesan and Free, 2020; Van der Hauwaert et al., 2022; and Johansen-Berg, 2023). Thus, this study aimed to use the Theory of Two Types of Bureaucracy to understand how employees' perceptions influence their willingness to implement a formalization, often materialized by management controls.

For this purpose, a commonly used management control in empirical studies based on this theory, performance management systems (PMS), was chosen as the object of analysis. Specifically, the PMS chosen was the management evaluation system of the Brazilian Navy's Netuno Program. This choice also contributes to the diversification of contexts in which Adler

and Borys' theory has been empirically applied, as studies using this theory in the context of military institutions or security forces (except for Cuganesan and Free, 2020) are also scarce.

In addition to the enabling characteristics of a formalization, other factors can also influence employees' willingness to implement it. Tummers et al. (2012) proposed a framework that includes contextual factors influencing public employees' willingness to implement a new policy. These factors are correlated with the perceptions of managers and peers regarding the new policy. Applying this perspective to the analysis of perceptions of bureaucracies as enabling, it seems reasonable to presume that the perception of the group in which the individual is embedded influences their perception and behavior.

Understanding these factors that influence an individual's perception can be used as a tool to stimulate positive or desired behaviors, as shown by the research of professors Tankard and Paluck (2016). According to the researchers, one of the sources of information people use to form their perceptions is precisely the information about the group's perception. Therefore, an employee's enabling perception of a PMS could be influenced by the information they have about the perception of other group members regarding the same system.

Given the importance of enabling perception in ensuring an individual's willingness to implement a PMS and the influence of information about the group's perception on the individual's perception within the same group, the questions arise: How can enabling perceptions about a PMS influence an individual's willingness to implement it? And what is the effect of information about the group's perception on the individual perception of a PMS as enabling?

In the specific case of the Brazilian Navy, understanding this phenomenon can contribute to the development of interventions capable of influencing the enabling perceptions of its military personnel and employees regarding the evaluation system of the Netuno Program. Thus, in addition to benefiting from the positive results demonstrated by previous research related to enabling management controls, military organizations will be able to understand how to increase their crews' willingness to implement the system.

2. LITERATURE REVIEW

2.1 PUBLIC MANAGEMENT MODELS: THE EVOLUTION OF PARADIGMS

Considering the typology cited by Raschendorfer et al. (2022) on the evolution of administrative reforms over the years, three paradigms have succeeded each other as dominant: the Bureaucratic Paradigm (Traditional Public Administration [TPA]), New Public Management (NPM), and New Public Governance. Each of these paradigms emerged with the aim of changing the guidelines and practices of Public Administration established by the previous paradigm. This change aimed to adapt the public sector to the political demands of the society of each period.

According to Raschendorfer et al. (2022), while TPA sought to eliminate patrimonialism and position the State as a provider to fully meet social demands, NPM brought the market logic to the public sector, prioritizing efficiency and results and positioning society as a client of the State. New Public Governance, in turn, emerged as a response to some dysfunctions of NPM, such as competitiveness between organizations that should collaborate and the detachment from human and social development (Raschendorfer et al., 2022). However, concepts and practices inspired by NPM continue to be applied and studied to this day.

Since its emergence in the late 1970s, New Public Management (NPM) has introduced initiatives aimed at aligning public administration with modern administrative trends (Hood, 1991). Hood (1991) states that NPM represented the condensation of a set of similar administrative ideas and doctrines that, at the time, aimed at bureaucratic reform in OECD countries. Some of the doctrinal components highlighted by the author, such as "explicit performance standards and measures," "output control," and "emphasis on private-sector management styles," indicate the main objective of these trends: to make public administration more results-oriented and efficient.

Despite its popularity, NPM is also subject to severe criticism. In a more recent literature review, Reiter and Klenk (2018) showed that the term "post-New Public Management" has been used to signal a crisis in the NPM organizational model and as a basis for future reforms. However, it is still considered important for public organizations and researchers who utilize and study the NPM model and initiatives inspired by it (for example: Taniguchi, 2021; Moberg and Malmrose, 2024; and Goldfinch and Halligan, 2024). In the Brazilian context, a transition of paradigms is currently observed, from NPM to Public Governance, in which the focus of public administration shifts to the creation of public value (Raschendorfer et al., 2022).

However, the principles, ideas, and practices initially introduced by NPM remain valid and useful for the improvement of public management. In this sense, positive and negative

assessments of the employees regarding these practices have proven important in determining their success (Tummers et al., 2012; and Petersen et al., 2018). To better explore these positive or negative assessments of individuals regarding bureaucracy itself, it is also important to understand individuals' assessments of PMS and other management controls, bringing to light the debate about the need for more or less bureaucracy in public organizations and how this impacts employees' attitudes and performance.

2.2 TWO TYPES OF BUREAUCRACY

Adler and Borys' (1996) theory of two types of bureaucracy presents an analysis of the formalization of organizational processes, aiming to reconcile positive assessments (focused on advantages such as technical standards and quality assurance) and negative assessments (focused on disadvantages such as slowness/inefficiency and employee alienation) of bureaucracy. The authors argue that employees' reactions and attitudes towards formalization depend on the characteristics of the formalization to which they are subjected. These characteristics go beyond the repetitiveness of tasks or the degree of formalization of an organization's rules.

In their research, Adler and Borys found that these issues were not sufficient to satisfactorily explain the impact of formalizations on employees' attitudes and performance. With the premise that people tend to resent what they consider "bad rules," while "good rules" are accepted without question and rarely noticed (Perrow, 1986), they sought to create a theory capable of explaining how employees distinguish "good" rules from "bad" ones.

The authors propose that formalization, seen as an organizational technology, can be categorized into two main types: enabling and coercive. Adler and Borys define formalization as the extent of written rules, procedures, and instructions within an organization. According to this theory, besides the degree of formalization, employees' attitudes and performance vary positively or negatively depending on how much this formalization allows the individual to better master their task (enabling formalization) or serves as a means to coerce the employee's effort and compliance (coercive formalization).

Adler and Borys (1996) argue that if "technology is a know-how that has been objectified to become relatively independent of the skills of an actor", then the know-how can be objectified not only in equipment and software but also in procedures and structures (formalizations). With this perspective, they consider formalizations as organizational technologies, drawing a parallel between organizational formalization and equipment technology to develop the concepts of enabling bureaucracy and coercive bureaucracy.

In the context of equipment technology and automation, equipment designed under a usability approach are those that enhance users' abilities, allowing them to perform more complex and valuable tasks. The rationale behind this type of equipment relies on the user's capability, so the rules and procedures are designed to support the development of their skills, provide useful resources, and promote their autonomy.

On the other hand, deskilling equipment refers to a design approach that aims to reduce dependence on a more skilled user and, in the case of a worker, a more expensive one. The authors state that in this deskilling approach, the user is considered a "source of problems to be eliminated", whereas in the usability approach, the user is a "source of intelligence and skills to be supported". Instead of relying on users' abilities, deskilling equipment seeks to create a "fool-proof" system that minimizes the possibility of error by restricting decision-making.

Starting from the premise that formalization codifies good practices to stabilize and disseminate new organizational capabilities, the authors use these concepts to illustrate how these two formalization approaches (enabling and coercive) can impact employee motivation and performance. While enabling formalization promotes a work environment where employees feel valued and empowered, coercive formalization can lead to demotivation and alienation, underutilizing workers' skills and restricting their potential to contribute to the organization.

2.2.1 FEATURES OF ENABLING FORMALIZATIONS

Based on equipment design, Adler and Borys (1996) continue to draw the parallel by using the four characteristics that distinguish upskilling and deskilling approaches (repair, internal transparency, global transparency, and flexibility) to analyze and compare with formalization approaches. The first feature is repair, which refers to allowing employees to resolve problems on their own when unexpected obstacles or failures arise in the processes. In an enabling approach, rules and procedures are structured to provide clear guidelines for problem identification and resolution.

The repair feature in enabling formalization, which promotes employees' ability to solve problems autonomously, finds its counterpart in coercive formalization. Here, employees are often discouraged from taking the initiative to solve problems, being encouraged to follow strictly defined procedures without room for independent decision-making. This can result in inefficiencies and delays, as workers need to seek approval for any deviation from the established rules.

The second feature is internal transparency, which means that internal processes and decisions are understandable to all members of the organization. An enabling formalization

ensures that employees have access to information (visibility) about how and why certain rules and procedures are established. Additionally, employees receive feedback on their performance and previous benchmarks, allowing them to compare themselves with historical and desirable standards.

In contrast, in coercive formalization, rules are established hierarchically and less transparent, leaving employees without clear information about the reasons behind the rules and procedures. This lack of visibility also extends to feedback on employees' work, leaving individuals without information or benchmarks to evaluate the quality or performance of their outputs. The lack of internal transparency can lead to an environment of distrust and resentment, where workers feel undervalued and excluded from decision-making processes.

Global transparency, the third feature, relates to the clarity about how individual tasks connect to the organization's overall objectives. In an enabling formalization, employees receive a variety of contextual information that helps them interact creatively with other parts of the organization and the environment. This way, the individual understands how their task contributes to the whole.

Conversely, in the coercive approach, transparency with subordinates is a risk to be minimized. Employees do not have a clear view of how their work contributes to the organization's overall success. Contextual information is distributed asymmetrically across hierarchical levels. This disconnect can lead to decreased engagement and job satisfaction.

Finally, flexibility is the fourth feature used to differentiate the two approaches. This characteristic refers to the ability of systems and rules to adapt to the specific needs and circumstances of employees. Instead of imposing rigid procedures, enabling formalization allows for adjustments and adaptations as needed. A coercive manual rigidly details the sequence of steps to be followed and requires employees to seek approval to skip steps, assuming that the manual prescribes, and the employee merely implements. On the other hand, an enabling manual views deviations as learning opportunities.

2.2.2 EMPIRICAL CONFIRMATIONS AND AMBIVALENCE

In addition to the theoretical and empirical evidence already presented by Adler and Borys (1996) in their research, subsequent and recent studies have explored this categorization suggested by the authors and empirically confirmed the positive impacts of adopting enabling formalizations. For example, Ahrens and Chapman (2004) investigated management control systems used in an enabling manner in organizations and concluded that this approach allowed managers to pursue efficiency and flexibility simultaneously. Wouters (2009) and Barroso et al. (2016) conducted studies demonstrating that the implementation of a performance system

under the enabling logic not only improved organizational performance but also increased employee commitment and favored organizational learning.

In a more recent example, the findings of Johansen-Berg and Wennblom (2023) indicate that the perception of the enabling qualities of the budgeting system (flexibility, repairability, and transparency) is associated with the psychological safety climate of managers, characterized by trust and perception of fairness in upper management, which, in turn, increases the sense of psychological empowerment and reduces negative attitudes towards bureaucracy in the organization.

However, some research has found that it is common for bureaucracies/formalizations to be perceived simultaneously as enabling and coercive. In the original article, Adler and Borys had already noted that even a rule with enabling characteristics can be perceived as coercive if it is designed or implemented coercively. One of the authors of the theory conducted a study on this topic (Adler, 2012), in which he investigated the experience of ambivalence towards bureaucracy experienced by employees. Taking the example of the Toyota production system used in the seminal study (Adler and Borys, 1996), Adler observes that workers appreciate the enabling aspect of standardized rules, which facilitate problem-solving and improve efficiency. However, these same workers also feel that these rules intensify work and limit their autonomy, perceiving them as coercive.

Adler (2012) concludes that this ambivalence is an intrinsic characteristic of modern bureaucracy, where the same organizational policies and structures can have simultaneously positive and negative effects on employees. The author refers to bureaucracies perceived by the employees as enabling as those whose enabling function is more salient. Thus, even a rule perceived as enabling by employees would not be considered entirely enabling. Instead, this type of formalization would have its enabling function more salient than its coercive function. In this study, the terms "predominantly enabling" and "predominantly coercive" are adopted.

Ambivalence in organizations was also studied by Ashforth et al. (2014) and Wu et al. (2023), but in a more comprehensive manner. According to the authors, the experience of having both positive and negative orientations towards an object (such as a person, task, or rule) is common in organizations. Ashforth and colleagues further assert that, because ambivalence is an uncomfortable feeling, individuals and organizations develop conscious and unconscious responses to reduce the intensity of the ambivalence experienced. These responses can involve cognition, affect, and/or behavior. Therefore, we can assume that formalizations and PMS will also be objects of ambivalence, being perceived as both enabling and coercive simultaneously by individuals, generating cognitive, affective, and/or behavioral responses in them. One

common response to ambivalence, according to Ashforth et al. (2014), is domination. This response basically involves the individual focusing only on one of the orientations (positive or negative) and ignoring the other. For this reason, in this study, we will consider that a predominantly enabling perception is sufficient to indicate that the individual has an enabling perception of the PMS.

2.3 WILLINGNESS TO IMPLEMENT

Tummers et al. (2012) developed a theoretical model to explain public professionals' willingness to implement new policies by integrating insights from public administration, applied psychology, and change management. The proposed model identifies three main factors influencing this willingness: (1) policy content, including its perceived meaningfulness and the level of discretion granted to implementers; (2) organizational context, encompassing the degree of influence professionals have in the implementation process and their perception of subjective norms from managers and colleagues; and (3) individual characteristics of implementers, such as their tendency toward rebelliousness and compliance with rules. These factors interact to determine whether a professional perceives a policy as aligned with their values and feels motivated to implement it effectively.

Empirical research conducted by the authors revealed that policy content, particularly its perceived meaningfulness for society, clients, and the professional themselves, has the most substantial impact on willingness to implement. However, the organizational context and individual characteristics also play a significant role. The study highlights that when professionals perceive a policy as lacking meaning or excessively restricting their autonomy, their willingness to implement it decreases. Additionally, social norms within the organization, such as perceived support from colleagues and managers, can shape this willingness. Thus, the model proposed by Tummers et al. (2012) provides a robust framework for understanding the factors that drive or hinder policy implementation, contributing to the literature on organizational behavior and policy management.

A closer look at Factor 1 (policy content) reveals a connection to Adler and Borys' (1996) Theory of Two Types of Bureaucracy. Their theory distinguishes between enabling and coercive formalizations, arguing that employees respond positively to rules and structures that support problem-solving, learning, and autonomy, but react negatively when these same structures are perceived as control mechanisms that limit discretion. In Tummers et al.'s model, meaningfulness and discretion—core components of policy content—are central to this distinction. Policies that are perceived as meaningful and allow a degree of discretion align closely with enabling formalizations, which has reparability (autonomy), transparency, and

flexibility as features. Conversely, policies seen as meaningless or rigidly imposed with minimal discretion resemble coercive formalizations, which can lead to resistance and low willingness to implement.

Despite the recognized importance of willingness to implement (Tummers et al., 2012) as a crucial factor in policy success, research has yet to fully explore how enabling perceptions influence this willingness. Most studies on willingness to implement have focused on factors such as discretion, trust, and leadership (Tummers et al., 2012; Tummers & Bekkers, 2014; Van der Voet, 2014; Thomann et al., 2018; Hassan et al., 2021; Ahmad et al., 2021; Vento, 2024), but they have not explicitly examined how employees' perception of formalization—whether enabling or coercive—affects their willingness to implement policies. This gap suggests that integrating the Theory of Two Types of Bureaucracy into studies on willingness to implement could provide new insights into how bureaucratic structures shape employees' behavioral responses.

Similar to previous research that used PMS to study perceptions of bureaucracy (Wouters & Wilderom, 2008; Wouters, 2009; Van der Hauwaert et al., 2022), this study examines the impact of enabling perceptions on willingness to implement within the context of performance management systems (PMS). In addition to being a form of formalization and bureaucracy (Wouters & Wilderom, 2008), PMS are widely adopted in public organizations, particularly those influenced by New Public Management (NPM) principles. Their structured nature makes them an ideal setting to explore how perceptions of enabling formalization influence employees' willingness to implement policies. This leads to the first hypothesis:

H1: The greater an individual's enabling perception of a performance management system (PMS), the greater their willingness to implement it.

2.4 PERCEPTION OF SOCIAL NORMS

However, it is important to consider the influence of other group members on an individual's behavior. Even if an individual is in favor of a certain policy or rule, they may decide not to support or adopt it if their perception is that their managers or peers do not approve of such a policy, as demonstrated in the study by Tummers et al. (2012).

In this sense, the work of professors Tankard and Paluck (2016) clarifies the subjective and dynamic nature of individuals' perceptions of social norms. It is important to highlight that, in this study, the term "norm" does not refer to a set of rules or procedures (these will continue to be called formalizations). In the definitions provided by the authors, "real norm," or "descriptive norm" (Cialdini, 2003), refers to the behavior patterns of a given group, commonly

used as a reference by policymakers, researchers, and statisticians. The term "norm" or "subjective norm," used in the field of psychology, refers to the subjective perceptions of a group member about these "real norms." Professor Cialdini (2003), in turn, calls this latter concept "injunctive norm" and refers to it as the "perception of which behaviors are typically approved or disapproved."

Tankard and Paluck (2016) explore the difference between real norms and subjective norms and justify psychologists' focus on subjective perceptions based on two reasons. First, the fact that an average person does not know the actual behavioral standards or exact opinions of their entire group. Their perceptions are based on personal, local, and selective experiences. Second, these subjective perceptions of real norms can guide individuals' opinions and behaviors. Therefore, when psychologists try to change behavior and attitude patterns in a group, they design interventions aimed at influencing members' perceptions of these real norms.

According to the authors, individuals' perceptions of norms play a fundamental role in guiding individual behavior. For this reason, Tankard and Paluck (2016) explore how influencing perceptions of norms can serve as a vehicle for social change. The professors highlight the sources of information that shape these perceptions and how interventions can change these perceptions and, consequently, guide individuals' behaviors.

Tankard and Paluck (2016) identify three main sources of information that influence individuals' perceptions of norms, called normative information sources: the behavior of other individuals, especially those who are influential in the group; summarized information about the group's behavior patterns, that is, presenting the real norm to individuals; and, finally, institutional signals, such as laws, policies, and organizational guidelines that indicate which behaviors are desirable in a group.

To influence individuals' perceptions and, consequently, their behavior, interventions can focus on one or more of these sources of normative information. Tankard and Paluck (2016) discuss that the effectiveness of these interventions lies in individuals' relationships with the information source. For example, members of a group are more likely to adopt behaviors if they perceive that these behaviors are common among their peers or encouraged by respected institutions.

Empirical findings of the impact of group perception on individual perception, also involving manipulations of these perceptions, had already been observed earlier, such as in the study by Goode et al. (2014). In their research, Goode and colleagues sought to influence university students to reduce alcohol consumption. The authors used one of the sources of

normative information, summarized information about the group's behavior pattern, to create an intervention capable of changing the behavior of the young female students.

The intervention consisted of presenting real data (real norm) about the group's perception of acceptable alcohol consumption levels to the students, which were lower than what the young women believed based on their subjective perceptions (injunctive norm). Upon realizing that their subjective perception was different from reality, the students felt more comfortable reducing their intention to consume alcohol at upcoming university social events.

Similarly, it seems reasonable to assume that if an individual believes that other group members perceive a PMS as enabling, this will increase their own enabling perception of the same PMS. Based on the studies by Tankard and Paluck (2016) and Tummers et al. (2012), considering the impact of group perception on individuals' perceptions, a second hypothesis was developed for this study.

H2: The more individuals believe that the group perceives the PMS as an enabling formalization (injunctive norm), the greater their own enabling (subjective) perception.

3. NETUNO PROGRAM AND THE PMS STUDIED

An example of a performance management system (PMS) can be found in the Brazilian Navy's Netuno Program. The program, which is explicitly inspired by Brazilian Public Administration guidelines and NPM, uses a system to evaluate the management of the Navy's units. Considering this system as a PMS, it is possible to analyze it as a formalization under the theoretical lens of Adler and Borys (1996), as well as the perception of individuals subjected to this system to verify its impact on their willingness to implement it. However, it is necessary to present the Netuno Program to better contextualize the study.

The Netuno Program is an institutional initiative of the Brazilian Navy aimed at improving management in Military Organizations (MO). Launched in 2006, the program's main objectives are to equip MOs with process analysis and improvement tools, promoting efficiency through optimized use of available resources. Additionally, the program seeks to monitor and evaluate quality improvement actions of the services offered by MOs, rewarding those that stand out. Encouraging continuous training and personnel participation through training and recognition of outstanding initiatives is also a central focus of the program. Finally, the Netuno Program aims to raise awareness at all levels of the naval structure about the importance of achieving management excellence, valuing this principle as fundamental to the daily operations and future of the Brazilian Navy.

According to EMA-134 (Chapter 4) - Naval Administrative Management Manual -, the program is described as “an administrative process aimed at improving the management of Military Organizations (MOs) and, consequently, providing the Brazilian Navy with the best conditions to be ready and adequate to the political-strategic stature required by the country.” Since its creation, the Netuno Program has been continuously updated and improved to ensure alignment with best management practices and federal government requirements.

3.1 HISTORY AND EVOLUTION

The context of the emergence of the Netuno Program can be understood considering administrative reforms and technological evolution that have marked public administration in recent decades. As described by Conceição (2012) and Raschendorfer et al. (2022), the need for states to adapt to increasing demands for quality in public administration services and products drove the adoption of management models inspired by the private sector, a movement known as New Public Management (NPM). In the case of the Brazilian Navy, this set of reforms in Brazilian Public Administration, such as the Federal Government's GesPública program, resulted in the creation of programs like Netuno.

Conceição (2012) highlights that with the implementation of the Netuno Program, there was a significant shift in how management was perceived and conducted in MOs. The program was incorporated into the Navy's internal norms and became mandatory for all MOs, ensuring its uniform and systematic application. The introduction of evaluation and continuous improvement cycles, as described in Circular No. 38/2023 (internal directive) of the Navy General Secretariat, reinforced the Navy's commitment to management excellence since the program's first steps.

3.2 STRUCTURE AND OPERATION

The Netuno Program comprises various tools and methodologies that cover different aspects of organizational management. Among these tools are management self-assessment, process management, organizational strategic planning, risk management, and organizational climate surveys. Each of these tools is designed to provide a holistic and integrated view of management in MOs, promoting continuous improvement and innovation.

Management self-assessment, for example, is a critical process that allows MOs to identify strengths and improvement opportunities in their management practices. According to the Netuno Program Procedures Manual (MaPNetuno), self-assessment should involve representatives from all MOs sectors and aims to promote organizational learning and management maturity.

3.3 MANAGEMENT EVALUATION SYSTEM OF THE NETUNO PROGRAM

Among the tools recommended by the Netuno Program, management evaluation is the one that integrates all tools, as its purpose is to assess the implementation of the other tools to direct an MO's efforts and ensure continuous management improvement. Thus, this research limited the scope of its analysis to the management evaluation system of the program, considering the system as a PMS.

The Management Evaluation System of the Netuno Program (in Portuguese, *Sistema de Avaliação da Gestão do Programa Netuno* [SAG-PN]) is a central component for the continuous improvement of the Brazilian Navy's MOs. This evaluation is essential to ensure that management practices are aligned with the Navy's strategic objectives and best international practices. According to the MaPNetuno, management evaluation is structured around an excellence model that encompasses various criteria and areas of focus, ensuring a comprehensive and integrated approach.

3.4 EVALUATION STRUCTURE

Management evaluation in the Netuno Program was conducted using the P-10 Checklist, as specified in EMA-130 – Navy Visits, Inspections, and Functional Meetings Manual. The checklist was recently discontinued by Circular No. 38/2023 of the Navy General Secretariat, no longer part of Administrative Military Inspections (IAM) and now an independent and more flexible event than IAM, as the latter depends on the presence of a member of the Admiralty and a commission designated by order. The current checklist, called the Management Evaluation Checklist, is divided into seven main principles, each with specific criteria to be evaluated:

- **Systemic Thinking:** This principle evaluates how the MO defines its strategic indicators and aligns them with the organization's mission and vision. It also includes analyzing decision-making within the MO.
- **Governance and Integrity:** Evaluates organizational values and principles, risk management, and the transparency of MO actions. This principle is crucial to ensuring that the MO operates according to ethical and social responsibility standards.
- **Strategies and Plans:** Analyzes how the MO conducts external and internal environment analysis, translates its strategies into goals, and monitors action plan execution.
- **Stakeholder Commitment:** Focuses on identifying and prioritizing stakeholder requirements and managing relationships and handling requests and complaints.
- **Organizational Learning and Innovation:** Examines how the MO conducts organizational diagnosis, develops essential competencies, manages knowledge, and encourages innovative practices.
- **Sustainable Development:** Evaluates MO practices in economic, environmental, and social terms, ensuring that its operations are sustainable and responsible.
- **Process Orientation:** This principle evaluates how the MO identifies, maps, analyzes, and implements process improvements, ensuring operational efficiency and effectiveness.

3.5 SELF-ASSESSMENT PROCESS

Self-assessment is a critical step in the management evaluation system. According to MaPNetuno, this process should involve all MO sectors to ensure a comprehensive and accurate view of management practices. Self-assessment comprises two main documents: a descriptive

questionnaire, where the MO's adopted practices are described, and a quantitative table that scores these practices. The evaluation is conducted periodically, and the results are used to identify improvement areas and implement corrective actions.

3.6 VALIDATION AND CONTINUOUS IMPROVEMENT

The validation of self-assessments, previously conducted during Administrative Military Inspection (IAM), can now be performed at any time by the MO's Immediate Superior Command (COMIMSUP), soon after the organization communicates that it has conducted its self-assessment. According to Circular No. 38/2023 of the Navy General Secretariat, this validation process is crucial to ensuring the impartiality and accuracy of evaluations. Validators, who must be qualified and trained in the Netuno Program, verify the presented evidence and can adjust the scores assigned during the self-assessment.

Additionally, the checklist is regularly updated to incorporate new best practices and adapt to changes in the organizational and technological environment. This continuous evaluation and updating process ensures that the Netuno Program remains relevant and effective in promoting management excellence.

3.7 IMPACT OF MANAGEMENT EVALUATION

The management evaluation system has shown positive results in professionalizing management in MOs. As noted by Conceição (2012), implementing evaluation and continuous improvement cycles strengthens MOs' ability to adapt to new demands and challenges, promoting a culture of excellence and innovation. The biannual awarding of MOs that stand out in their management practices serves as an additional incentive for continuous improvement, publicly recognizing the efforts and results achieved.

3.8 COMPATIBILITY AND IMPACT

Conceição (2012) analyzed the compatibility of the Netuno Program with the naval-military environment and concluded that, despite the cultural and structural particularities of military institutions, the program can significantly contribute to fulfilling the Brazilian Navy's activities. Empirical studies on the implementation of the Netuno Program indicate that its tools have been effective in professionalizing management and promoting a culture of excellence and innovation in MOs.

3.9 SAG-PN AS AN ENABLING/COERCIVE FORMALIZATION

As an established program in a military institution (Brazilian Navy) and inspired by Public Administration (GesPública), it is natural for the Netuno Program, and its PMS, to have characteristics perceived by its users as coercive bureaucracy. It is also natural for organizational rules and processes in bureaucratic institutions like the Brazilian Navy to exhibit both coercive and enabling characteristics, causing users to experience ambivalence. However, if coercive characteristics are more salient in these institutions, this may result in lower adherence by the workforce.

Despite significant results demonstrated in MO management progress reports and the legitimacy of top management, since its institutionalization, the uniform implementation and the inherent characteristics of the military profession may have made the Netuno Program's management evaluation system something people feel they must do (coercive), rather than something they have internalized through values and purpose (enabling). Due to uniform implementation and military cultural aspects, this study assumes that coercive characteristics are more noticeable to most of users than enabling ones. This user perception could significantly reduce engagement and motivation to implement Netuno Program's tools (like SAG-PN), potentially leading to less efficient organizations.

4. RESEARCH OVERVIEW

Aiming to test the hypotheses, two studies were conducted. The first applied a mixed quasi-experimental design (within-groups and between-groups), while the second used a true experiment design. Both studies involved military personnel and civilian employees of the Brazilian Navy who were either currently working or would soon be working with the Netuno Program in their organizations. The participants, totaling 256 military and civilian members, were part of a Netuno Program training course called "*Curso Expedito de Excelência em Gestão para Oficiais e Praças*" (C-Exp-EGE-OF/PR) held at the *Centro de Instrução e Adestramento Almirante Newton Braga* (CIANB). In both experiments, manipulations were performed, whereby a treatment group was exposed to a stimulus to verify its impact in comparison to a control group. The data collected from these experiments was analyzed through quantitative analysis to examine the effects of the independent variables and the manipulation. The details of each study will be described in the following sections.

5. STUDY 1

Using a mixed quasi-experimental design, the first study was a field study aimed at investigating the effect of summarized information regarding a group's perception of the SAG-PN on individual perceptions of the same program. To achieve this, two distinct groups were targeted in the research. One of them, the treatment group, received a presentation with information about how their peers evaluated the Netuno Program, while the other, the control group, was not subjected to any manipulation.

5.1 PARTICIPANTS

The selection of participants to this research was not random, since they were part of two separate classes that attended in-person training courses regarding the Netuno Program. These classes were pre-scheduled by the Navy and took place in May and June 2024. The first class, held in May, served as the control group, while the second class, held in June, was the treatment group, which was exposed to the manipulation mentioned above and will be detailed below.

The composition of each class, however, was determined randomly based on a list provided by the CIANB, which contained 75 individuals interested in attending the Netuno Program course. Efforts were made during the class assignment to ensure that the groups had similar proportions of participants regarding demographic factors that could influence their experience with the PMS under study, namely: gender, hierarchical level, employment status with the Navy, and the type of Military Organization (MO) in which they were serving at the time of training (operational or non-operational MO).

Initially, the first class (Class 1) consisted of 38 students, while the second class (Class 2) had a total of 37 students. The lists of both classes were sent to the CIANB so that the center could inform the interested individuals of the course dates and facilitate their enrollment. However, due to scheduling conflicts for some participants or their MOs, the center had to authorize certain requests for class transfers to ensure that the MOs involved did not miss the opportunity to participate in the training.

After some transfers, Class 1 was composed of 40 participants, of whom 29 (72.5%) were men and 11 (27.5%) were women. Among these students, 16 (40%) were military officers, 21 (52.5%) were enlisted personnel, and 3 (7.5%) were civilian employees. Regarding their employment status with the Navy, 8 (20%) were retired military personnel, 5 (12.5%) were temporary military personnel, 24 (60%) were active-duty military personnel, and 3 (7.5%) were statutory civilian employees.

Class 2, in turn, was composed of 32 participants, of whom 21 (65.5%) were men and 11 (34.5%) were women. Among these students, 13 (40.6%) were military officers, 18 (56.3%) were enlisted personnel, and 1 (3.1%) was a civilian employee. Regarding their employment status with the Navy, 4 (12.5%) were retired military personnel, 4 (12.5%) were temporary military personnel, 23 (71.9%) were active-duty military personnel, and 1 (3.1%) was a statutory civilian employee.

5.2 DATA COLLECTION PROCEDURES

In both classes, two questionnaires were administered: one on the first day of the course, before the classes began, and another four days later, on the last day of class. The questionnaires were designed and made available through the Qualtrics platform, with the links for each questionnaire sent via email to all participants. Additionally, as an alternative means of access, a QR code was projected on the classroom board and scanned with personal mobile phones by some students who were unable to access their emails on the training room computers.

It was verbally and explicitly communicated in writing, at the beginning of the questionnaire, that participation in the research was anonymous and voluntary. The questionnaires were carefully designed to ensure that participants could not be identified through their responses. To this end, information such as name, rank, or the MO where the participant was serving was not requested.

However, a procedure was implemented to allow for the comparison of responses from the same participant at the beginning and end of the course. On the first day of class for each group, before responding to the first questionnaire and before attending any lectures, each participant randomly drew an envelope from a box containing a paper with a number from 1 to 40 printed on it, without the researchers seeing which number the participant had selected. It was verbally explained that this would serve as the 'participant code' for those who chose to participate in the research, and its purpose was clarified. Participants were instructed to keep this number for use in future questionnaires. The 'participant code' was the first piece of information to be entered in all questionnaires. Each questionnaire included 1 to 2 attention check questions, and responses from participants who failed at least one of these checks were discarded.

As previously mentioned, the objective of this study was to assess the participants' perception of the SAG-PN rather than the entire Netuno Program. This limitation in the research scope aimed to focus the participants' attention and ensure that, when collecting their perceptions, all were evaluating the same object of analysis. This approach sought to prevent

situations where some participants considered a specific tool, such as the 'management council,' while others evaluated a different tool, such as 'organizational strategic planning,' thereby ensuring greater consistency and accuracy in the data collected.

5.3 MEASURES

To test Hypothesis 1, the enabling perception and individuals' willingness to implement perspectives on the SAG-PN. These measurements were conducted in both classes before the course began and on the last day of the course, allowing for a comparison of individuals' perceptions and intentions before and after participating in the course. This condition was considered important due to the possibility that participants might have had little or no prior contact with the system, either because of a short career duration or specific professional circumstances.

5.3.1 ENABLING PERCEPTION SCALE

To measure the perception of military and civilian personnel regarding the system, the scale developed by Van der Hauwaert et al. (2022) was utilized. This scale, based on Adler and Borys' (1996) Theory of Two Types of Bureaucracy, evaluates managers' perceptions of organizational performance evaluation systems. The study by Van der Hauwaert et al. (2022) made a significant contribution by creating a scale that measures the enabling perception of performance measurement systems (PMS). The study demonstrated how PMS perceived as enabling formalizations can enhance autonomous motivation and managerial performance by satisfying three basic psychological needs: autonomy, competence, and relatedness. Using data from 186 Belgian managers, the authors confirmed that autonomous motivation mediates the relationship between enabling PMS and managerial performance, highlighting that the fulfillment of basic psychological needs is a crucial mechanism in this process.

Van der Hauwaert et al. (2022) emphasize that the perception of performance measurement systems as enabling is associated with creating a work environment that supports managers' needs for autonomy, competence, and relatedness. The study suggests that control systems designed in an enabling manner not only improve performance but also increase intrinsic motivation and job satisfaction among managers. The scale developed by Van der Hauwaert et al. (2022) was used in this research to measure users' perceptions of the SAG-PN, enabling an empirical analysis of the relationship between enabling perceptions and the willingness to implement the system.

The scale consists of 12 items distributed across four dimensions representing the characteristics of an enabling formalization (repair, internal transparency, external transparency, and flexibility). Although the scale includes these four dimensions, the authors conceptualize "enabling PMS as a global construct rather than a second-order construct or four first-order dimensions," that is, as a unidimensional construct. Each item is rated by respondents on a 7-point Likert scale, ranging from 'Strongly Disagree' to 'Strongly Agree.' The scale items were translated using the back-translation method and subsequently adapted to ensure that participants understood that the statements referred to the SAG-PN, as shown in the table below. The final score corresponds to the average of the 12 items, with higher scores indicating a greater prevalence of enabling characteristics.

Table 1: Enabling Perception Scale Items

Dimension/ Item	Statement
Repair 1	The items in the Netuno Program Management Evaluation Checklist help me initiate improvement actions on my own.
Repair 2	The Netuno Program Management Evaluation System makes it possible to react in time and consequently avoid problems.
Repair 3	The Netuno Program Management Evaluation System makes it possible to present measurements that can serve as warning signals.
IntTrans 1	I understand the performance measurements related to my MO/sector where I work.
IntTrans 2	I understand why certain performance measurements are included in my MO/sector where I work.
IntTrans 3	Information about the current condition of performance measurements in my MO/sector is available.
IntTrans 4	The Netuno Program Management Evaluation System gives me an indication of how I perform my work.
GloTrans 1	The link between my own tasks and the organization's goals is clear.
GloTrans 2	The Netuno Program Management Evaluation System facilitates communication with the organization's stakeholders.
Flex 1	I can make decisions based on the performance information provided by the Netuno Program Management Evaluation System.

Flex 2	Performance measures can be added to the Netuno Program Management Evaluation System to meet specific work needs.
Flex 3	Suggestions on which I can make decisions arise from the Netuno Program Management Evaluation System.

5.3.2 WILLINGNESS TO IMPLEMENT

Tummers et al. (2012) developed a three-factor model to explain the willingness of public sector professionals to implement policies. The model includes policy content, organizational context, and the personal characteristics of implementers. This model was quantitatively tested in a study with 1,317 public sector professionals in the Netherlands. The willingness to implement scale created by the authors was used as a metric to measure the readiness and intention of public sector professionals to adopt new policies and programs. The scale, designed by the authors, is unidimensional and consists of five items evaluated on a 5-point Likert scale, ranging from 'Strongly Disagree' to 'Strongly Agree.'

In the context of this research, the scale was translated using the back-translation method and adapted to measure the participants' intention to adopt the practices and standards established for the system under study. This adaptation considered the organizational specificities of the Brazilian Navy, ensuring that the items were relevant and understandable for both military personnel and civilian employees. Additionally, a 7-point Likert scale was used instead of a 5-point scale to provide greater sensitivity in responses.

Table 2: Willingness to Implement Scale Items

Statements
I intend to try to convince peers and subordinates of the benefits that the Netuno Program Management Evaluation System will bring.
I intend to strive to achieve the goals of the Netuno Program Management Evaluation System.
I intend to reduce the resistance of peers and subordinates towards the Netuno Program Management Evaluation System.
I intend to allocate time to implement the Netuno Program Management Evaluation System.
I intend to strive to successfully implement the Netuno Program Management Evaluation System in my MO.

5.4 MANIPULATION OVERVIEW

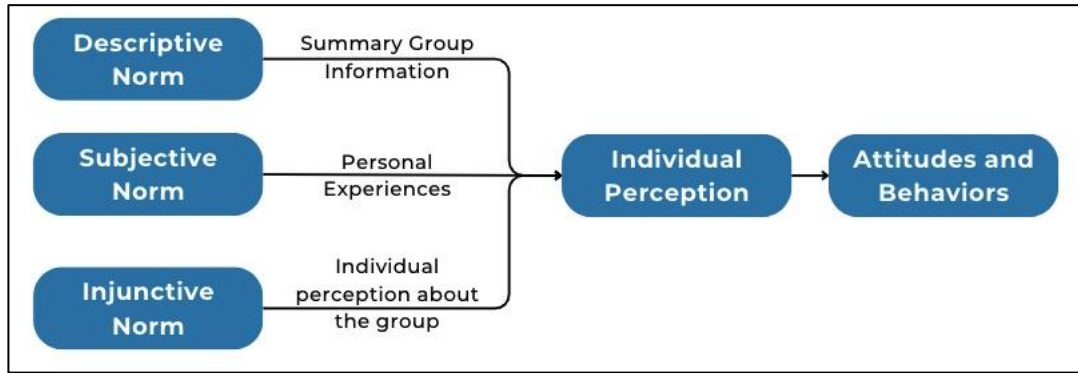
To test the second hypothesis, manipulations were carried out in each study with the aim of altering participants' perceptions, as suggested by the studies on social norms cited earlier (Cialdini, 2003; Tankard & Paluck, 2016). However, due to the fact that Study 1 was conducted in a face-to-face course format and Study 2 was conducted online, the interventions were implemented in different ways, as will be detailed below.

The literature suggests that strategies to positively influence users' perceptions of rules and practices include trust-building activities and clear communication of the intentions behind implemented actions (Cuganesan & Free, 2020; Van der Hauwaert et al., 2022; Johansen-Berg, 2023). These interventions help create an environment where employees feel valued and supported, promoting an enabling perception of formalization.

For this research, however, a specific type of manipulation inspired by the study of Goode et al. (2014) was chosen. This decision was motivated by the limited time available to conduct the experiment and the effectiveness of this intervention in producing short-term results. Unlike other interventions based on trust-building and communication strategies, which require longer-term studies, the chosen intervention method—presenting positive normative data on colleagues' perceptions—allows for a quick assessment of its impact on participants' perceptions.

Figure 1 was developed based on the studies of Professors Tankard and Paluck (2016) and illustrates the influence of the group's descriptive and subjective norms on individual perceptions (subjective and injunctive). The interventions were designed to confirm the injunctive norm and present a recent and real descriptive norm to influence individual perception.

Figure 1: Social Norms Influence on Individual Perception



Source: Created by the author.

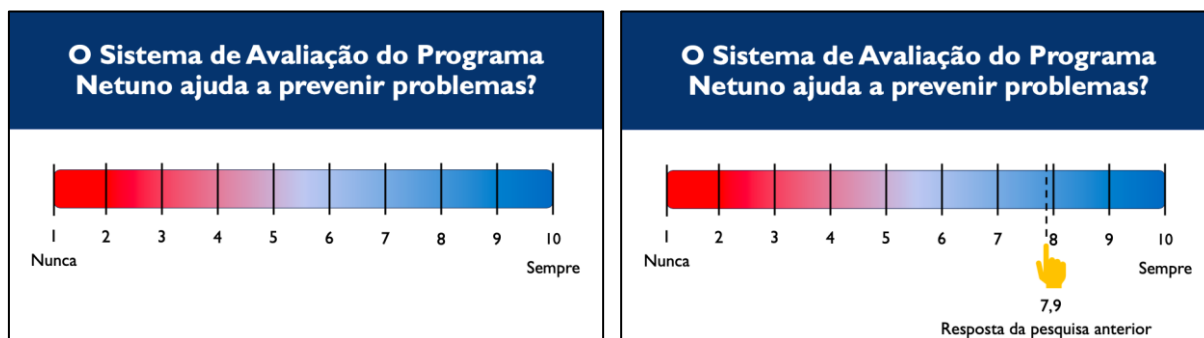
5.4.1 MANIPULATION IN STUDY 1

In Study 1, due to the number of participants in each class, it was necessary to assess the perceptions of participants from Class 1 to use these observations as our control group and to develop a method to influence the perceptions of participants in the treatment group, as suggested by the studies on social norms cited earlier (Cialdini, 2003; Goode et al., 2014; Tankard & Paluck, 2016). This enabled a comparison of results between the two groups regarding perceptions and willingness to implement, aiming to determine whether the manipulation had any effect.

The intervention took place in the treatment group immediately before the administration of the second questionnaire (on the last day of the course) and consisted of a presentation to the participants. The presentation contained summarized information on the control group's perceptions, highlighting their predominantly enabling perception of the program's evaluation system. Therefore, the enabling perceptions collected from the first group, in addition to being used to test Hypothesis 1, served as a descriptive (or real) norm for the intervention. The figures 2 illustrate two example slides used in the intervention, related to a question presented to the participants (one of three questions shown). In these slides, following the approach of Goode et al. (2014), a question was initially presented to prompt participants to reflect on the PMS under study (SAG-PN).

This question was one of the items from the enabling scale used in the questionnaire but was paraphrased and presented on a 1-to-10 scale to prevent recognition by respondents. Next, participants were encouraged to answer (most responses were closer to 5 than to 10 on the scale shown). Immediately afterward, the second slide was presented to create a break in expectations by revealing a real (descriptive) norm that was more positive than the participants had anticipated (injunctive norm).

Figure 2: Examples of slides used in the intervention



Note: First slide used to ask participants what they think most people responded (Injunctive Norm). Second slide shows what people indeed responded (Descriptive Norm).

Additionally, excerpts from testimonials with positive perceptions of the system, previously collected from individuals who did not participate in the experiment, were presented. By demonstrating that other military personnel perceive the system as predominantly enabling, the intervention aimed to create a contrast between the injunctive norm (subjective perception of typical group behavior) and the descriptive norm (actual typical behavior of the group). This manipulation represents a direct intervention in one of the three main sources of information influencing individual norm perceptions (Tankard & Paluck, 2016), namely, "summarized information about group", which indicates its behavior patterns or opinions.

Following the intervention, participants were administered the second questionnaire, which again measured their enabling perceptions of the PMS under study and their willingness to implement it. To ensure the effectiveness of this intervention, a manipulation check question was included at the beginning of the questionnaire. After a brief description of enabling and coercive rules, participants answered the following question: "How do military personnel and civilian employees generally perceive the Netuno Program's evaluation system?" The response was provided on a 5-point Likert scale, ranging from "Completely Coercive" to "Completely Enabling." This question was present in both questionnaires administered to Classes 1 and 2, yielding positive results for the manipulation check.

5.5 RESULTS

The data collected in Study 1 were analyzed using statistical methods in the STATA software, which allowed for hypothesis testing and the evaluation of the intervention's effectiveness by comparing the control and treatment groups regarding their perceptions and intentions. To test Hypothesis H1, a linear regression analysis was conducted, where willingness to implement was used as the dependent variable and enabling perception as the independent variable. Both variables were measured on the last day of training, after the intervention, for both groups (control and treatment).

It is important to highlight that, for this analysis, the data from both groups were combined, as the objective was to investigate the relationship between enabling perception and the intention to implement, regardless of whether the perception was influenced by manipulation. This approach made it possible to examine the relationship between the two variables to understand the magnitude, direction, and statistical significance of the impact of enabling perception on the willingness to implement.

The results revealed that enabling perception has a positive and statistically significant influence on the willingness to implement ($\beta = 0.621$, $p < 0.001$). The coefficient of determination ($R^2 = 0.359$) indicated that 35.9% of the variance in the willingness to implement is explained by enabling perception, suggesting a moderate impact. The overall model was significant ($F(1, 56) = 31.30$, $p < 0.001$), and the 95% confidence interval (0.399 to 0.844) reinforces the robustness of the estimate. These findings confirm that enabling perception is a relevant and consistent predictor of the willingness to implement.

Table 3: Regression without Control Variables (Study 1)

Variables	Coefficient	Std. err.	t	95% conf. interval	
Dependent Variable: Willingness to Implement					
Independent Variable:					
Enabling Perception Score	0.621**	0.111	5.59	[0.399	0.844]
Constant	2.623**	0.588	4.47	[1.446	3.800]

Note: $n = 58$. * $p < 0.05$; ** $p < 0.01$

By including control variables in the model, an increase in the coefficient of determination (R^2) from 0.359 to 0.453 was observed, indicating that the model with control variables explained a larger proportion of the variance in the willingness to implement (45.3% compared to 35.9% in the model without controls). Despite this increase in explanatory power, the impact of enabling perception ($\beta = 0.650$, $p < 0.001$) remained consistent and significant compared to the model without controls ($\beta = 0.621$, $p < 0.001$). Additionally, the control variable "Operational MO" showed a significant negative impact ($\beta = -0.798$, $p = 0.029$), suggesting that the type of military organization influences the willingness to implement. These results reinforce that enabling perception remains the primary predictor of the willingness to implement, regardless of the inclusion of control variables, while organizational characteristics may add additional nuances to the explanation of the observed behavior.

Table 4: Regression with Control Variables (Study 1)

Variables	Coefficient	Std. err.	t	95% conf. interval	
Dependent Variable: Willingness to Implement					
Independent Variable:					
Enabling Perception Score	0.650**	0.117	5.57	[0,416	0.885]
Gender	-0.151	0.242	-0.62	[-0.636	0.334]
Employment status	-0.006	0.128	-0.05	[-0.264	0.251]
Length of service	0.003	0.059	0.04	[-0,116	0.122]
Currently in an Operational MO	-0.799*	0.356	-2.24	[-1.513	-0.084]
Netuno Point of contact (PoC)	-0.439	0.239	-1.84	[-0.920	0.041]
SAG-PN as Collateral duty	0.169	0.253	0.67	[-0.338	0.676]
Constant	3.450**	0.726	4.75	[1.991	4.908]

Note: n = 58. *p < 0.05; **p < 0.01. Only control variable related to Operational MO showed a significant impact.

To test Hypothesis H2, a one-way ANOVA was conducted, comparing the means of the enabling perception variable between the control and treatment groups. In Study 1 (Classes 1 and 2, respectively), the test indicated that the intervention had no statistically significant impact, as shown by $F(1,56) = 0.89$, $p = 0.3496$ (greater than 0.05). The coefficient of determination ($R^2 = 0.0156$) shows that only 1.56% of the variance in enabling perception was explained by class (control vs. treatment), suggesting a very limited impact. The adjusted R^2 (-0.0019) further reinforces that the intervention did not contribute to predicting differences in participants' perceptions.

Table 5: Enabling Perception by Class comparison - ANOVA (Study 1)

Source of Variation	Partial SS	df	MS	F	Prob>F (p)
Model	0.777	1	0.777	0.89	0.3496
Participant's Group	0.777	1	0.777	0.89	0.3496
Residual	48.93	56	0.874		
Total	49.70	57	0.872		

Note: n = 58. The variable "Participant's Group" indicates whether participant was subject to intervention.

The ANOVA results were confirmed by the observed means in the groups showed slight variation: $M = 5.32$ ($SD = 1.03$) for Class 1 and $M = 5.08$ ($SD = 0.83$) for Class 2. While the difference is minor, it does not suggest a substantial divergence between the groups. Therefore, Hypothesis H2 was not confirmed in the first study.

Table 6: Group perception Means Comparison (Study 1)

Group	Mean	SD
Control	5.32	1.03
Treatment	5.08	0.83

Note: n = 58.

5.6 DISCUSSION

As mentioned earlier, the results of the first study confirmed Hypothesis H1. These findings are consistent with previous studies that found correlations between PMS with enabling characteristics and workforce satisfaction and motivation (Van der Hauwaert et al., 2022). This demonstrates that, in addition to benefiting the organization (in terms of production efficiency) and improving employee well-being, PMS perceived as enabling can enhance employees' willingness to implement them effectively.

Effective implementation is crucial to prevent the PMS from becoming a management tool adopted merely out of obligation, which would fail to deliver the expected results for the organization that designed it. If this occurs, the PMS could become an unreliable source of information for organizational decision-making, thereby impacting the achievement of its objectives.

Regarding the influence of group perception on individual perception (Hypothesis H2), the results of this study contradict previous findings (Goode et al., 2014), indicating that summary group information about how the PMS is perceived by the group does not significantly influence individuals' perception. Apparently, for behaviors related to the adoption of management tools, this influence is weaker than for other types of behavior, such as those studied by Goode et al. (2014).

This phenomenon might be explained by the work of Tummers et al. (2012), who suggest that the willingness to implement policies is influenced not only by the perceptions of managers and colleagues but also by the policy content, the degree of discretion, and the personal characteristics of the implementers.

After analyzing the results of Study 1, we decided to conduct a second study with a more robust design to verify the consistency of the findings. In consultation with CIANB, we identified that a new cohort for the same course would take place in September, this time with over 200 participants due to the possibility of online attendance. This new opportunity enabled the execution of a true experiment and expanded the validity of the results, providing a stronger foundation for the study's analyses and conclusions.

6. STUDY 2

To replicate the results of Study 1 with a more robust research design, a second study was conducted online using a between-subjects experimental design. Additionally, this study collected data at the beginning of the first day of the course to capture participants' initial perceptions of the SAG-PN. This approach ensured that their responses reflected spontaneous perceptions, uninfluenced by course content or interactions with instructors and peers. We also considered the possibility that the online format would enhance the spontaneity of responses, as some participants were not physically present in a military organization none of them were in the presence of military instructors—factors that could inhibit more honest responses, despite guarantees of anonymity and voluntary participation.

As in Study 1, the participants were members of another cohort of the instruction courses on the Netuno Program, held in September 2024. Although the cohort operated in a hybrid format (in-person and online), only students who participated remotely were included in this second study. The opportunity to work with a cohort containing remote participants allowed for the execution of a true experiment due to the large number of participants. However, as we will see later, this new format also required adaptations to the manipulation originally used in Study 1.

In this study, upon clicking the link to access the survey, created on the Qualtrics platform, participants were randomly assigned to either the control or treatment group. Similar to Study 1, the treatment group received the manipulation and then responded to the questionnaire items. The control group, on the other hand, did not undergo any manipulation and was directed straight to the questions.

6.1 PARTICIPANTS

Regarding the demographic data of this study, the group consisted of 276 students, of whom 216 (78.3%) were men and 60 (21.7%) were women. Among them, 105 (38%) were officers, 162 (58.7%) were enlisted personnel, and 9 (3.3%) were civilian employees. In terms of employment status with the Navy, 201 (72.8%) were active-duty career military personnel, 43 (15.6%) were temporary military personnel, 23 (8.3%) were retired military personnel, and 9 (3.3%) were statutory civilian employees.

Of these 276 students, 241 voluntarily responded to the questionnaire. As in the previous study, all students were informed about the voluntary and anonymous nature of the questionnaire, which was also emphasized through the Free and Informed Consent Form at the beginning of the questionnaire. After excluding responses from participants who did not

complete the questionnaire or who failed one of the two attention checks, 184 participants remained, which constituted the final sample for the study.

6.2 DATA COLLECTION PROCEDURES

As mentioned earlier, unlike Study 1, which employed a combination of between-subjects and within-subjects designs—where participants completed the questionnaire at two different points in time (on the first and last day of the course)—Study 2 followed a between-subjects design. Therefore, participants completed the questionnaire only once, on the first day of the course, before the first lecture began.

Upon clicking the study access link, participants were randomly assigned to either the control or treatment group. The first part of the questionnaire was used for manipulation and differed between the control and treatment groups. While the control group received a real news article about governance in the Brazilian Navy that was not directly related to the central theme of the study, the treatment group was presented with a fictional story and characters who explicitly expressed a predominantly coercive perception of the Netuno Program management evaluation system (SAG-PN). These vignettes are provided in the appendices.

Next, the manipulation was conducted by presenting summarized information from Study 1 on the perceptions of military personnel regarding the SAG-PN, showing that the majority held a predominantly enabling view of the PMS, contrary to the perception of the characters. Further details about these questions are explained in the intervention section.

Following this initial stage, the same scales used in Study 1 were administered to measure variables related to enabling perception and willingness to implement. The questions used are provided in appendices. The hyperlinks to access the questionnaire were shared via the chat function on the Webex platform, which was used for course content delivery.

6.3 MEASURES

The same measures of the enabling perception scale (Van der Hauwaert et al., 2022) and the willingness to implement scale (Tummers et al., 2012) used in Study 1 were applied.

6.4 MANIPULATION IN STUDY 2

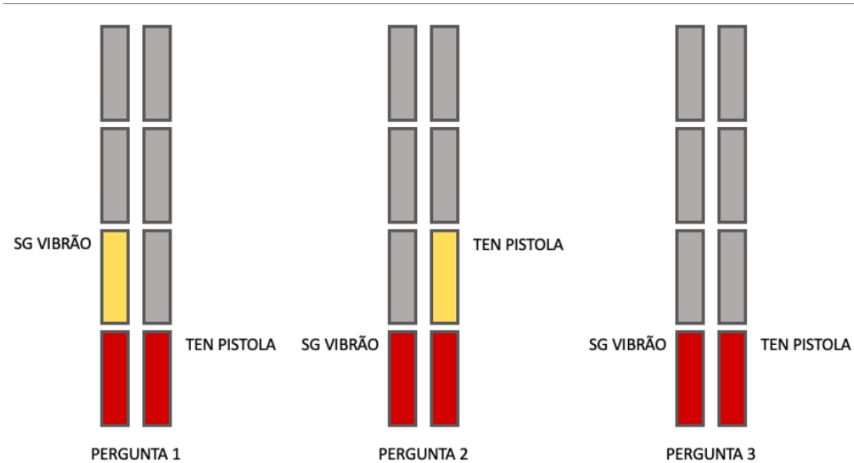
In the second study, it was necessary to adapt the presentation of the summarized information on the control group's perception from Study 1 (descriptive norm) since the participants were attending the course remotely. The theoretical basis remained the same: to present a descriptive norm that contradicted the individual's initial perception of the group (injunctive norm) to influence their individual perception. As mentioned earlier, the intervention was integrated into the first part of the questionnaire, which was distinct for the control and treatment groups. For the control group, this section contained a real news article about governance in the Brazilian Navy, unrelated to the central theme of the study. The treatment group, on the other hand, was presented with a fictional story featuring equally fictional characters who explicitly demonstrated a predominantly coercive perception of the SAG-PN.

In this fictional story, two military characters (an officer and an enlisted member), who had limited contact with the SAG-PN and were accustomed to hearing negative opinions about the PMS, were assigned by their respective MOs to attend the Management Excellence Training Course (the same course attended by the participants). Over the course of the story, the characters received a brief explanation of the concepts of enabling and coercive rules and were invited to participate in a survey to share their perceptions of the system. The survey answered by the characters contained the same three questions used in the slides from Study 1, namely:

- "Do you consider the Netuno Program Management Evaluation System to be predominantly Coercive or Enabling?"
- "Does the Netuno Program Management Evaluation System assist in decision-making?"
- "Does the Netuno Program Management Evaluation System help prevent problems?"

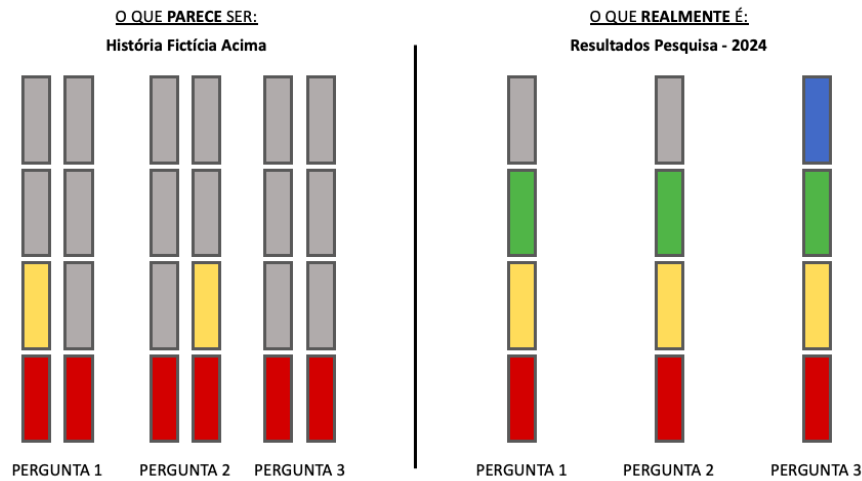
According to the story, the responses provided by the characters clearly demonstrated their predominantly coercive perception of the evaluation system. Influenced by their personal experiences and the opinions they had heard throughout their careers, both characters consistently responded with one or two points on a four-point scale to the survey questions, as shown in the accompanying image displayed in the story (see figure 3). These character responses were presented in this manner to make it more difficult for participants to associate the survey within the fictional story with the questions they would later answer in the questionnaire.

Figure 3: Characters answers presented in the story to treatment group participants



After reading the story, participants in the treatment group were asked whether they believed that most Brazilian Navy personnel shared the same view as the characters. Next, they were presented with the real data collected in Study 1, indicating that the majority of military personnel held an opposing perception to that of the characters—namely, a predominantly enabling view of the system under study. Our results indicate that more than 80% of participants (77 participants) had their expectations broken, as they responded that most Navy personnel held the same opinion as the characters but were then confronted with a different reality (descriptive norm). This contradiction aimed, as in Study 1, to demonstrate to the treatment group participants that there was a divergence between the group's actual perception (descriptive norm) and the individual's inferred perception of the group (injunctive norm). This information was reinforced by displaying the image in figure 4, which compared the characters' responses from the story with the actual responses of Study 1 participants, adapted to a four-point scale.

Figure 4: Comparison between characters and real-life answers presented to treatment group participants.



Following this intervention section, participants answered a manipulation check question identical to the one used in Study 1. The manipulation check question was presented to both the control and treatment groups and yielded positive results for the verification of the manipulation. Subsequently, participants responded to the questions related to enabling perception and willingness to implement, according to the scales mentioned in the measures section. The results obtained will be detailed and discussed in the following sections.

6.5 RESULTS

As in Study 1, to test Hypothesis H1, a linear regression analysis was conducted, using enabling perception as the independent variable and willingness to implement as the dependent variable. Similar results to those observed in the first study were found. The analysis revealed that enabling perception also positively influences the willingness to implement ($\beta = 0.578$, $p < 0.001$). The model presented an R^2 of 0.346, indicating that 34.6% of the variance in the willingness to implement is explained by enabling perception, reflecting a moderate impact. The F-test ($F(1,182) = 96.30$, $p < 0.001$) and the confidence interval (0.462 to 0.695) confirm the model's relevance and the consistency of the impact. Comparing the two studies, it is observed that the effect of enabling perception was significant in both contexts, supporting the first hypothesis.

Table 7: Regression without Control Variables (Study 2)

Variables	Coefficient	Std. err.	t	95% conf. interval
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Dependent Variable: Willingness to Implement

Independent Variable:

Score Enabling	0.578**	0.059	9.81	[0.462	0.695]
Cons	2.985**	0.307	9.74	[2.380	3.590]

Note: n = 58. *p < 0.05; **p < 0.01

The inclusion of demographic and contextual variables in the model for Study 2 increased its explanatory power, raising the R^2 from 0.346 to 0.397. This demonstrates that factors such as gender, years of service, and employment status contributed modestly to capturing a greater proportion of the variance in the willingness to implement. Despite this, enabling perception remained the most significant element in the model ($\beta = 0.571$, $p < 0.001$), reinforcing its positive influence on the willingness to implement. Gender also showed a significant impact ($\beta = 0.349$, $p = 0.021$), indicating that men reported a higher willingness to implement compared to women. As in Study 1, other control variables, such as years of service and role in the Netuno Program, did not show significant effects. These results confirm that in both studies, enabling perception played a prominent and consistent role in explaining the willingness to implement, even when controlling for individual and organizational characteristics.

Table 8: Regression with Control Variables (Study 2)

Variables	Coefficient	Std. err.	t	95% conf. interval	
Dependent Variable: Willingness to Implement					
Independent Variable:					
Enabling Perception Score	0.572**	0.058	9.79	[0,456	0.687]
Gender	0.349*	0.150	2.32	[0.523	0.646]
Employment status	0.114	0.074	1.55	[-0.031	0.259]
Length of service	-0.005	0.034	-0.14	[-0,072	0.063]
Currently in an Operational MO	-0.142	0.132	-1.07	[-0.402	0.118]
Netuno Point of contact (PoC)	0.163	0.143	1.14	[-0.119	0.446]
SAG-PN as Collateral duty	0.137	0.146	0.94	[-0.152	0.423]
Constant	2.56**	0.348	7.36	[1.873	3.245]

Note: n = 184. *p < 0.05; **p < 0.01. "Gender" was the only control that showed a significant impact.

Similar to Study 1, a one-way ANOVA was used to test Hypothesis H2, comparing the means of enabling perception between the control and treatment groups. In Study 2, the results again indicated that the intervention did not have a statistically significant impact ($F(1,182) = 2.62$, $p = 0.1074$). The coefficient of determination ($R^2 = 0.0142$) shows that only 1.42% of the

variance in enabling perception was explained by the intervention, suggesting a very limited effect. The adjusted R^2 (0.0088) further reinforces that the model did not substantially exceed the fit of the null model.

Table 9: Enabling Perception by Class comparison - ANOVA (Study 2)

Source of Variation	Partial SS	df	MS	F	Prob>F (p)
Model	2.702	1	2.702	2.62	0.107
Participant's Group	2.702	1	2.702	2.62	0.107
Residual	187.89	182	1.032		
Total	190.59	183	1.041		

Note: n = 184. The variable "Participant's Group" indicates whether participant was subject to intervention.

The means in each group also support this finding: the mean for the control group was 4.98 (SD = 0.99), while the mean for the treatment group was 5.22 (SD = 1.05)—a difference that was not statistically significant. Therefore, Hypothesis H2 was not confirmed in the second study.

Table 10: Group perception Means Comparison (Study 2)

Group	Mean	SD
Control	4.98	0.99
Treatment	5.22	1.05

Note: n = 184.

6.6 DISCUSSION

The results of the second study corroborate the initial findings of Study 1, confirming Hypothesis H1 within a more robust experimental context. The use of an experimental design with a larger sample and greater geographic diversity, made possible by the online format, allowed for more effective control of variables that could influence the results, thereby strengthening both the external and internal validity of the study.

When analyzing the impact of workers' perceptions of a PMS on their willingness to implement it, it was again confirmed that the perception of enabling characteristics positively influences the intensity with which workers engage with the management tool. This result reinforces the notion that when a PMS is seen as a tool that can effectively improve daily work, rather than as a mere obligation, it tends to be used more consistently.

Regarding Hypothesis H2, the results of the second study replicated the pattern observed in the first, indicating that the way an individual believes the group perceives the PMS does not exert a significant influence on their individual perception. Although this result contrasts with

findings from previous research (Goode et al., 2014), it aligns with the perspective of Tummers et al. (2012), which suggests that the adoption of policies or management tools is influenced by multiple factors beyond social influence.

The consolidation of these results in a large-scale experiment with greater methodological rigor provides increased confidence in the inferences drawn from the data. Additionally, the online format of the experiment enabled tighter control of contextual factors by minimizing the influence that classmates might exert in a face-to-face setting, whether through comments or non-verbal communication.

7. ADICCIONAL ANALYSIS

Although the primary focus of this research was not to directly evaluate the impact of the C-EXP-EGE course on participants' perceptions of the Netuno Program Management Evaluation System (SAG-PN), the data collected in Study 1 allowed for an exploratory analysis that may provide relevant insights for organizations, particularly for the Brazilian Navy. It is important to highlight that these results were obtained independently of the manipulation conducted in the study, as all students were considered, including both the control and treatment groups.

A paired t-test was conducted to compare participants' enabling perception before and after the course. This statistical test assesses whether there is a significant difference between two related measurements, where each participant serves as their own control.

The results reveal that the mean enabling perception before the course was 4.98, with a standard deviation of 0.88, while after the course, the mean increased to 5.21, with a standard deviation of 0.94. The difference between the means was 0.23, and the 95% confidence interval suggests that this difference could range between 0.02 and 0.44 points. The t-test produced a value of 2.1793 with a p-value of 0.0335, indicating that this variation is statistically significant. Therefore, it can be inferred that participation in the course may have contributed to a positive change in participants' enabling perception of the SAG-PN.

Table 11: Enabling Perception before and after training – Paired T-test (Study 1)

Variables	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Enabling Perception (After)	5.21	0.12	0.941	[4.96	5.45]
Enabling Perception (Before)	4.98	0.12	0.883	[4.75	5.21]
Difference between means	0.23	0.11	0.797	[0.02	0.44]

Note: n = 58. p = 0.0355

The analysis of these results allows for several relevant considerations. Firstly, the statistics indicate that the course may have played an important role in shaping how participants perceive the SAG-PN. The increase in enabling perception suggests that, over the course of the training, students gained a better understanding of the system and its objectives, which may have reduced negative impressions or doubts about its functionality. This effect aligns with previous studies demonstrating that greater familiarity with an evaluation system can reduce resistance and improve its acceptance.

8. GENERAL DISCUSSION

8.1 THEORETICAL CONTRIBUTION

The findings from both studies corroborate the relevance of the Theory of Two Types of Bureaucracy (Adler & Borys, 1996) in understanding how enabling perceptions influence individuals' willingness to implement a PMS. Specifically, the confirmation of Hypothesis H1 in both studies highlights the positive and significant relationship between enabling perception and the intention to implement. This result reinforces previous research (Van der Hauwaert et al., 2022) and advances the field by demonstrating this dynamic within a military context, an environment often characterized by coercive features. Furthermore, while previous studies have shown that enabling PMS improves employee performance and well-being, this research broadens that perspective by demonstrating that such characteristics also enhance the willingness to implement, ensuring the system's continuity and effectiveness.

Another contribution of this study is the confirmation of a suggestion from Adler and Borys' (1996) theory and Adler's later work on the ambivalence of bureaucracy (2012), which posits that even in organizations typically seen as coercive, it is possible to implement enabling rules or systems such as PMS. A prominent example of this dynamic, as cited by the authors, is the case of the New United Motor Manufacturing, Inc. (NUMMI), where Toyota overcame historical challenges to implement enabling practices within a rigid, unionized, and coercive factory environment. Similarly, the SAG-PN exemplifies how enabling systems can be incorporated into a highly structured military context, such as that of the Brazilian Navy, to improve both organizational performance and engagement. These cases underscore the possibility of successful enabling systems, even under conditions demanding strict hierarchy and control.

On the other hand, the results did not confirm Hypothesis H2, suggesting that the group's perception of the PMS has a limited impact on individual perception. This finding contradicts previous research, such as Goode et al. (2014), which demonstrated the influence of descriptive norms on other types of behavior. While this conclusion diverges from earlier studies, it aligns with the perspective of Tummers et al. (2012), which suggests that the adoption of policies or management tools is influenced by multiple factors beyond social influence. This finding underscores the importance of considering the specific content of the intervention and the characteristics of the organizational context when investigating the impact of social norms.

The consistency of results across both studies suggests that the applied intervention had a limited impact on participants' enabling perception. These findings indicate the need to revise the intervention or explore other factors that might influence enabling perception in similar

contexts. One possible factor worth considering is the military environment in which the research was conducted, characterized by rigid hierarchies and an organizational culture that may limit receptiveness to interventions. The formal and structural nature of the military context may have reduced the impact of the manipulation, making it more difficult to alter how participants evaluate the enabling characteristics of the PMS.

8.2 PRACTICAL IMPLICATIONS

The results confirm that management systems with enabling characteristics can promote benefits for both organizations and the workforce. In addition to the benefits highlighted in previous studies, such as increased performance and employee satisfaction, predominantly enabling perceptions are associated with a greater willingness among participants to implement the system. This underscores the importance of designing management tools that prioritize flexibility, transparency, and support for autonomy.

For organizations seeking to implement enabling management systems, it is essential to emphasize the need for a careful and context-specific implementation process, as suggested by Adler and Borys (1996). Moreover, adopting practices that enhance enabling perceptions can create a virtuous cycle of organizational engagement. For instance, the more employees understand how the system can positively impact their routine while also improving organizational efficiency and effectiveness, the more likely they are to adhere spontaneously to new guidelines and processes. This engagement translates into performance improvements, reduced resistance, and increased satisfaction.

The additional within-subjects analysis conducted in this study suggests that training contributed to a positive shift in enabling perception among personnel. This may be attributed to participants gaining a clearer understanding of the PMS tools, their practical applications, and how these tools integrate into the broader organizational framework, enhancing their sense of global transparency. Recognizing this predominance of enabling characteristics can initiate a virtuous cycle of organizational development, as increased PMS implementation not only enhances operational efficiency but also helps solidify an organizational culture aligned with strategic objectives.

In the specific context of the Netuno Program Management Evaluation System (SAG-PN), the confirmation of Hypothesis H1 indicates that the Brazilian Navy should maintain and strengthen the enabling characteristics of its PMS.

Although attempts to influence individual perception through group norms were not effective, it is advisable to explore other forms of intervention, such as more detailed success

stories or communication strategies that foster greater user identification with the system. Adjustments in this regard could optimize outcomes in future initiatives.

In parallel, continuous monitoring and systematic adjustments to the evaluation process are necessary to ensure that it continues to meet both organizational and professional demands. It is also important to emphasize clear communication regarding the objectives and advantages of the SAG-PN. If a short-term course was able to significantly increase enabling perception, ongoing interventions and training reinforcement could further amplify the positive impact.

Throughout the three cohorts observed in this study, the dissemination of best practices and the exchange of experiences between instructors and students from different Navy units were evident. Findings from the additional within-subjects analysis suggest that these interactions contribute to a more positive perception of the system by highlighting the enabling features of the PMS and Netuno Program as a whole. Although this analysis was neither the primary focus of the research nor part of the tested hypotheses, its insights may guide future organizational decisions. With an understanding of the Theory of Two Types of Bureaucracy, the Brazilian Navy could strategically use the course to enhance personnel's perceptions of the PMS studied by incorporating content that highlights the enabling characteristics of the SAG-PN.

8.3 LIMITATIONS AND FUTURE RESEARCH

This research presents relevant limitations that should be considered when analyzing the results, while also opening opportunities for further in-depth investigations. Firstly, the studies were conducted within the context of the Netuno Program of the Brazilian Navy, which adds cultural and structural specificity to the investigated scenario. Future research could expand the scope by replicating the study in different contexts, such as other armed forces, government organizations, and private corporations, to assess the applicability of the conclusions across diverse settings.

Additionally, the analysis of the training's impact focused on a limited timeframe corresponding to the course duration. No longitudinal analyses were conducted to evaluate whether the observed perceptual changes are sustainable or temporary. Future investigations could adopt a longitudinal design to examine the persistence of training effects over time, as well as the factors that promote the durability of these perceptions. This approach would also allow for the exploration of correlations between enabling perception and effective adherence to the practices proposed by the system.

Although interventions based on social norms have demonstrated positive outcomes in other contexts (Goode et al., 2014), further research could investigate why this approach did not yield the expected results in this study. This highlights the need to explore alternative intervention strategies. For example, future approaches could consider factors identified by Tummers et al. (2012), such as the content of the implemented policy and the individual characteristics of participants, which may significantly influence their willingness to implement the system.

Regarding the intervention, this research opted to implement only the unidirectional manipulation aimed at increasing enabling perception. This decision was made because the potential consequences of a bidirectional manipulation, particularly in the direction of decreasing enabling perception, were unclear and could be detrimental to Brazilian Navy organizations. Therefore, we prioritized an intervention that could be beneficial to these organizations. Future studies could explore contexts in which bidirectional manipulation (both increasing and decreasing enabling perception) is applied to gain a deeper understanding of this phenomenon.

Institutional factors, such as organizational culture and hierarchical structure, may also play a crucial role in shaping the effectiveness of these interventions. In this study, one potential influence on the outcome was the fact that the course was conducted by an officer senior to most of the students. This dynamic may have influenced participants' initial responses due to fear of reprisal—a concern amplified by the discipline and rigid hierarchy inherent in military environments. If initial responses were influenced by such fears, they may have been more positive than the participants' actual perceptions, making it more difficult to observe significant changes over time. Future studies could aim to design interventions that minimize this type of influence.

During this research ambivalence toward bureaucracy, as discussed by Adler (2012), also could be observed. Some participants expressed positive perceptions (above 4) on certain items of the enabling perception scale, even when their overall perception (average) remained less favorable (below 4), and vice versa, suggesting the simultaneous presence of both enabling and coercive characteristics. Future studies could qualitatively explore the predominance of enabling and coercive perceptions, aligning with the view that the salience of these characteristics shapes individuals' behavioral responses.

Still on the topic of ambivalence, future research could utilize ambivalence frameworks, such as the one developed by Ashforth et al. (2014), to investigate how individuals perceive ambivalence concerning enabling PMS and the strategies they employ to manage the associated

uncertainty and discomfort. The framework proposed by the authors not only outlines the responses that individuals and organizations adopt in the face of ambivalence but also examines the positive and negative outcomes of each response, along with the conditions under which they are most effective. This approach could provide valuable insights into the mechanisms underlying ambivalence and inform strategies to optimize the implementation and acceptance of PMS in various organizational contexts.

Furthermore, the analysis relied primarily on quantitative methods, which, although robust in identifying statistically significant patterns and relationships, have limitations in understanding the underlying mechanisms of the observed phenomena. Qualitative approaches, such as in-depth interviews and focus groups, could complement the findings by providing detailed insights into the psychosocial processes that shape participants' perceptions and willingness to implement the system.

Thus, while this research has advanced the understanding of the influence of enabling perceptions on the willingness to implement a PMS, it also exposes the intrinsic complexity of the topic, offering directions for future studies that can expand and refine the generated knowledge. By addressing the limitations identified, such as the specific cultural and organizational context of the Brazilian Navy, future research can provide a more comprehensive understanding of the factors that influence the effectiveness of enabling management systems.

This research explored how enabling perceptions of performance management systems (PMS) shape the willingness of employees to implement these systems, and also the role of group perceptions in influencing individual attitudes. By investigating these dynamics, the study provides insights into how organizational formalizations can either foster or hinder employee engagement to management controls, like PMS.

The findings confirmed that enabling perception has a strong and statistically significant effect on employees' willingness to implement a PMS. This suggests that systems designed with characteristics such as flexibility, transparency, and support for autonomy can foster greater engagement among employees. In contrast, the anticipated influence of group perception on individual perception was not supported by the data, indicating that, in the context of PMS adoption, individual attitudes are less susceptible to social norms influences than previously theorized.

This study reinforces Adler and Borys' (1996) Theory of Two Types of Bureaucracy by demonstrating that enabling features can successfully operate even within hierarchical organizations. This finding underscores the need to further explore how personal, contextual, and structural factors influence the acceptance and implementation of performance systems.

Further research is recommended to investigate how enabling perceptions operate across varying organizational structures and to explore their sustained impact on employee willingness to implement over time.

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APPENDICIES

APPENDIX A

Informed Consent Form (used before training start)

"O (a) Senhor (a) está sendo convidado (a) para ser participante de um projeto de pesquisa científica de responsabilidade do pesquisador Pedro Oliveira Espindola Cruz.

Leia cuidadosamente o que se segue e pergunte sobre qualquer dúvida que você tiver. Caso se sinta esclarecido (a) sobre as informações que estão neste Termo e aceite fazer parte do estudo, peço que clique no botão "Continuar" ao final desta página. Saiba que você tem total direito de não querer participar.

1. A participação na pesquisa é de caráter voluntário e anônimo. As perguntas do questionário foram elaboradas de forma que não seja possível identificar o participante, de forma que este possa sentir-se a vontade para responder sinceramente a todas as questões.
2. O trabalho tem por finalidade entender as percepções dos participantes sobre Sistemas de Avaliação da Gestão;
3. A participação nesta pesquisa consistirá no preenchimento de questionário com duração estimada de XX minutos.
4. Os benefícios com a participação nesta pesquisa serão a possibilidade de a Marinha do Brasil compreender melhor a percepção dos militares em relação a Sistemaa de Avaliação da Gestão e possíveis intervenções para melhorar a percepção ou o sistema em si;
5. Os participantes não terão nenhuma despesa ao participar da pesquisa e poderão retirar sua concordância na continuidade da pesquisa a qualquer momento.
6. Não há nenhum valor econômico a receber ou a pagar aos voluntários pela participação, no entanto, caso haja qualquer despesa decorrente desta participação haverá o seu ressarcimento pelos pesquisadores.
7. Caso ocorra algum dano comprovadamente decorrente da participação no estudo, os voluntários poderão pleitear indenização, segundo as determinações do Código Civil (Lei nº 10.406 de 2002) e das Resoluções 466/12 e 510/16 do Conselho Nacional de Saúde.
8. Os dados coletados serão utilizados única e exclusivamente para fins desta pesquisa, e os resultados poderão ser publicados. Qualquer dúvida, pedimos a gentileza de entrar em contato com Pedro Oliveira Espindola Cruz, pesquisador responsável pela pesquisa, telefone: (XX) XXXX-4374, e-mail: xxxx@xxxxxx.xxx.br.

Informed Consent Form (used in last day of training)

"O (A) Senhor (a) está sendo convidado (a) a continuar participando do projeto de uma pesquisa científica de responsabilidade do pesquisador Pedro Oliveira Espindola Cruz.

Este questionário é uma continuação do que foi respondido pelos participantes no primeiro dia de aula. Por isso, lembre-se de usar o mesmo código de participante usado no primeiro dia. Lembramos que a participação na pesquisa é de caráter voluntário e anônimo. As perguntas do questionário foram elaboradas de forma que não seja possível identificar o participante, de forma que este possa sentir-se a vontade para responder sinceramente a todas as questões."

APPENDIX B

Questions on Demographic Data

"Qual é o seu vínculo atual com a Marinha do Brasil?"

- Militar de Carreira da Ativa
- Militar Temporário
- Militar da Reserva (TTC)
- Servidor Civil

Quanto tempo de serviço você possui?

- 0 a 5 anos
- 6 a 10 anos
- 11 a 15 anos
- 16 a 20 anos
- 21 a 25 anos
- 26 a 30 anos
- Mais de 30 anos

Qual é o seu gênero?

- Feminino
- Masculino

Você serve em uma OM operativa (Ex: Navio, Batalhão ou Esquadrão)?

- Sim
- Não

Você já trabalhou como elemento de contato para o Programa Netuno?

- Sim (Informar por quanto tempo, aproximadamente, em meses): ____
- Não

Você já exerceu alguma função colateral diretamente ligada ao Programa Netuno, como por exemplo membro do Comissão Executiva do Conselho de Gestão?

- Sim (Informar por quanto tempo, aproximadamente, em meses): ____
- Não"

Note: TTC is the abbreviation for "Tarefa por Tempo Certo" in Portuguese. It is used to refer to reserve military personnel contracted for specific tasks and for a fixed period.

APPENDIX C

Question and Measurement Scale Items for Enabling Perception

"No contexto do Sistema de Avaliação da Gestão do Programa Netuno, classifique as questões de acordo com uma escala de 1 a 7, onde 1 significa "Discordo totalmente" e 7 significa "Concordo totalmente".

Esse sistema, anteriormente parte da Inspeção Administrativo-Militar (IAM), utiliza a Lista de Avaliação da Gestão do Programa Netuno e possui um ciclo dividido em etapas: Autoavaliação da Gestão, Validação por um validador certificado, elaboração do Plano de Melhoria da Gestão (PMGes), implementação e acompanhamento das melhorias e reinício do ciclo de avaliação.

- Os itens da Lista de Avaliação da Gestão do Programa Netuno me ajudam a iniciar ações de melhoria por conta própria.
- O Sistema de Avaliação da Gestão do Programa Netuno torna possível reagir a tempo e, conseqüentemente, evitar problemas.
- O Sistema de Avaliação da Gestão do Programa Netuno torna possível apresentar medições que podem servir como sinais de alarme.
- Entendo as medições de desempenho relativas à minha OM/ao setor onde trabalho.
- Entendo por que determinadas medições de desempenho estão incluídas em minha OM/no setor onde trabalho.
- Há informações disponíveis sobre a condição atual das medições de desempenho da minha OM/do meu setor.
- O Sistema de Avaliação da Gestão do Programa Netuno me dá uma indicação de como executo meu trabalho.
- A ligação entre minhas próprias tarefas e as metas da organização é clara.
- O Sistema de Avaliação da Gestão do Programa Netuno possibilita a comunicação com as partes interessadas da organização.
- Posso tomar decisões com base nas informações de desempenho fornecidas pelo Sistema de Avaliação da Gestão do Programa Netuno.
- Medidas de desempenho podem ser adicionadas ao Sistema de Avaliação da Gestão do Programa Netuno para atender a necessidades específicas de trabalho.
- Sugestões sobre as quais posso tomar decisões surgem do Sistema de Avaliação da Gestão do Programa Netuno."

APPENDIX D

Question and Measurement Scale Items for Willingness to Implement

"Quanto ao Sistema de Avaliação da Gestão, avalie as afirmações a seguir em uma escala de 1 a 7, sendo 1 equivalente a "Discordo totalmente" e 7 equivalente a "Concordo totalmente".

- Pretendo tentar convencer pares e subordinados dos benefícios que o Sistema de Avaliação da Gestão do Programa Netuno irá trazer.
- Pretendo me esforçar para atingir as metas do Sistema de Avaliação da Gestão do Programa Netuno.
- Pretendo reduzir a resistência de pares e subordinados em relação ao Sistema de Avaliação da Gestão do Programa Netuno.
- Pretendo reservar tempo para implementar o Sistema de Avaliação da Gestão do Programa Netuno.
- Pretendo me esforçar para implementar o Sistema de Avaliação da Gestão do Programa Netuno com sucesso na minha OM."

APPENDIX E

Manipulation Check Question

"Algumas perguntas desta pesquisa envolvem o Sistema de Avaliação do Programa Netuno. Esse sistema, anteriormente parte da Inspeção Administrativo-Militar (IAM), utiliza a Lista de Avaliação da Gestão do Programa Netuno e possui um ciclo dividido em etapas: Autoavaliação da Gestão, Validação por um validador certificado, elaboração do Plano de Melhoria da Gestão (PMGes), implementação e acompanhamento das melhorias e reinício do ciclo de avaliação.

Antes de responder a próxima pergunta, gostaríamos de fornecer uma breve explicação:

As regras coercivas são caracterizadas por uma estrutura rígida, hierárquica e centralizada, onde as decisões são tomadas de forma autoritária e as regras são impostas de maneira inflexível, priorizando a obediência às regras sobre a criatividade e inovação.

Por outro lado, as regras facilitadoras têm uma estrutura mais flexível e descentralizada, promovendo uma cultura de colaboração e comunicação aberta, incentivando a inovação e a criatividade entre os funcionários.

Tendo em mente essa explicação, responda a pergunta a seguir com relação ao Sistema de Avaliação do Programa Netuno.

- Como os militares e servidores em geral percebem o sistema de avaliação do Programa Netuno?"

Note: The response to this question was provided on a 5-point Likert scale, as shown below:

1. "Totalmente Coerciva"
2. "Predominantemente Coerciva"
3. "Equilibrada"
4. "Predominantemente Facilitadora"
5. "Totalmente Facilitadora"

APPENDIX F

Vignette for Control Group (Study 2)

"Antes de começar a pesquisa, pedimos que leia a informação abaixo. Ao final, responda à pergunta que é apresentada sobre o texto."

Em julho de 2024, a Marinha do Brasil introduziu uma mudança significativa em sua estrutura com a criação do Núcleo de Assessoria de Governança da Marinha do Brasil (NAGMB). Essa nova unidade foi estabelecida com o objetivo de integrar e coordenar as práticas de governança dentro da instituição, assegurando que os processos internos sigam os princípios de transparência, eficiência e economicidade, conforme exigido pelos órgãos de controle federais. A função do NAGMB é assessorar o Chefe do Estado-Maior da Armada, proporcionando suporte na implementação de diretrizes estratégicas e facilitando a tomada de decisões informadas, alinhadas às melhores práticas de governança pública.

O NAGMB também é responsável por monitorar e avaliar o desempenho dos diversos setores da Marinha, garantindo que os recursos públicos sejam aplicados de maneira responsável e que as metas institucionais sejam alcançadas com eficácia. A criação desse núcleo faz parte de um esforço mais amplo da Marinha para modernizar sua gestão e otimizar a sua operação administrativa. Um dos principais desafios enfrentados pelo núcleo será a harmonização das atividades entre diferentes áreas, assegurando que as políticas institucionais estejam em conformidade com as expectativas da sociedade e as exigências legais.

A governança e a gestão, embora inter-relacionadas, têm papéis distintos dentro da Marinha. Enquanto a governança se concentra em definir o rumo e monitorar a instituição, a gestão se ocupa da execução das atividades, seguindo as orientações estabelecidas pela governança. Essa distinção é essencial para o bom funcionamento da organização, garantindo que a Marinha continue a atuar de maneira eficiente e responsável, ao mesmo tempo em que busca a excelência no uso de seus recursos.

Com a criação do NAGMB, espera-se que a Marinha consiga aprimorar sua capacidade de resposta às demandas da sociedade, além de se alinhar ainda mais aos padrões de governança pública adotados por outras instituições federais. A implementação de práticas de governança é vista como um avanço na estrutura administrativa da Marinha, refletindo o compromisso da instituição com a transparência, a integridade e a prestação de contas. A criação desse núcleo

marca um passo importante no processo de modernização da Marinha, permitindo que a instituição continue a cumprir sua missão de defesa dos interesses nacionais de forma cada vez mais eficaz e alinhada com as expectativas da sociedade brasileira.

Você já sabia dessa mudança na estrutura de governança da Marinha?

- Sim
- Não"

APPENDIX G

Vignette for Treatment Group (Study 2)

"Antes de começar a pesquisa, pedimos que leia a situação abaixo. Ao final, responda a pergunta que é apresentada sobre o texto."

Sargento VIBRÃO e Tenente PISTOLA entraram na Marinha com grande expectativa de servir e aprender. Desde os primeiros anos, em meio à rotina agitada de suas Organizações Militares (OMs), ouviram menções sobre o Sistema de Avaliação do Programa Netuno. No entanto, entre tantas outras atividades e responsabilidades, nunca tiveram a oportunidade de entender exatamente como o sistema funcionava. O Programa Netuno e suas ferramentas sempre pareceram distantes, um programa burocrático e complicado, que ninguém parecia gostar.

A cada vez que alguém mencionava o Netuno ou o Sistema de Avaliação nas conversas informais do dia a dia, os comentários não eram animadores. Ouvia-se constantemente coisas como:

"Esse sistema é só papelada desnecessária."

"O Netuno só atrasa o nosso trabalho, não dá pra acompanhar tudo."

"Ninguém tem tempo pra preencher isso, só atrapalha."

"É mais uma burocracia sem aplicação prática."

As palavras eram repetidas tantas vezes que criaram uma imagem negativa do programa na cabeça dos dois. Além disso, a função de lidar diretamente com o Netuno na OM era temida, quase como uma punição. Sempre que algum militar era designado para o programa ou para fazer os cursos relacionados a ele, o medo e a frustração eram visíveis.

Agora, ambos se encontravam em uma situação inesperada: Sargento VIBRÃO e Tenente PISTOLA foram designados por suas respectivas OMs para realizar o Curso Expedito de Excelência em Gestão, a principal capacitação ligada ao Programa Netuno. Ambos estavam apreensivos, sem saber o que esperar. Lembravam do que tinham ouvido até então, e a ideia de enfrentar esse novo desafio parecia pesada.

Durante o Curso Expedito de Excelência em Gestão, Sargento VIBRÃO e Tenente PISTOLA foram convidados a participar de uma pesquisa sobre o Sistema de Avaliação do Programa Netuno. O objetivo da pesquisa era verificar se os participantes consideravam o sistema como uma regra coerciva ou facilitadora.

Antes de responder às perguntas, receberam uma breve explicação:

- **Regra Coerciva:** É uma regra que impõe obrigações e restrições de forma rígida, tornando as tarefas mais difíceis e limitando a autonomia dos militares em suas atividades diárias.

- **Regra Facilitadora:** É uma regra que apoia e auxilia os militares, tornando o trabalho mais eficiente e proporcionando maior autonomia e flexibilidade nas operações.

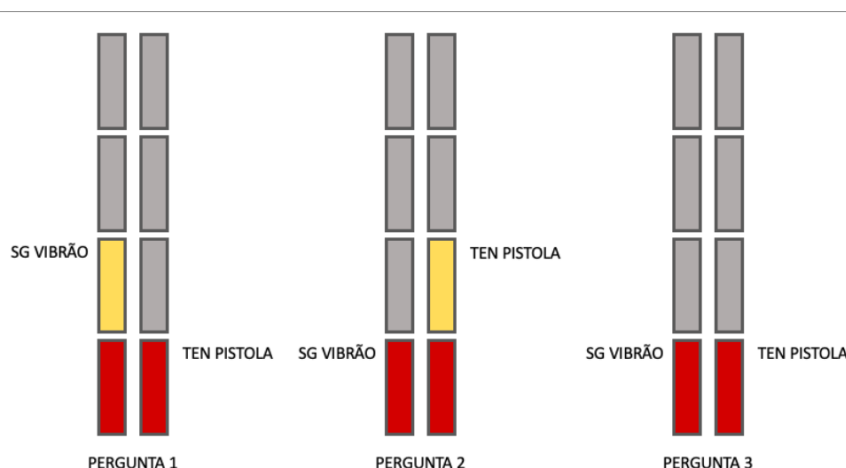
A pesquisa incluía perguntas como as três perguntas a seguir:

- *"Você considera o Sistema de Avaliação do Programa Netuno predominantemente Coercivo ou Facilitador?"*

- *"O Sistema de Avaliação do Programa Netuno ajuda na tomada de decisões?"*

- *"O Sistema de Avaliação do Programa Netuno ajuda a prevenir problemas?"*

Para cada pergunta, deveriam responder em uma escala de 4 pontos, variando de "Discordo Totalmente" a "Concordo Totalmente". Influenciados por suas percepções negativas e pelas opiniões que ouviram ao longo dos anos, Sargento VIBRÃO e Tenente PISTOLA marcaram sempre os dois pontos mais baixos da escala, indicando que discordavam das afirmações positivas sobre o sistema, conforme demonstrado na figura abaixo.



Agora, nós perguntamos a você: Você acredita que a maioria dos militares e servidores da Marinha do Brasil pensa como os personagens VIBRÃO e PISTOLA?

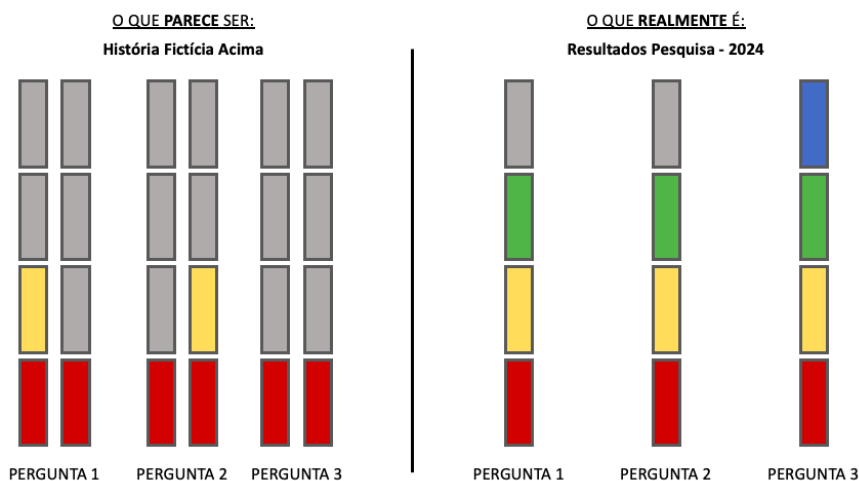
- Sim
- Não"

If respondents answered "Sim" to the question at the end of the fictional story, they were presented with the text below:

"Na verdade...

Sua impressão está errada. Embora os personagens VIBRÃO e PISTOLA, você e outras pessoas acreditem que a maioria dos militares e servidores da Marinha vê o Sistema de Avaliação como predominantemente COERCIVO, os dados mostram uma realidade diferente.

A história que você acabou de ler é fictícia, apesar de possivelmente estar alinhada com a sua experiência pessoal e de muitos outros militares. Entretanto, em uma pesquisa realizada este ano (2024) com militares e servidores da Marinha, a maioria considerou o sistema predominantemente FACILITADOR.



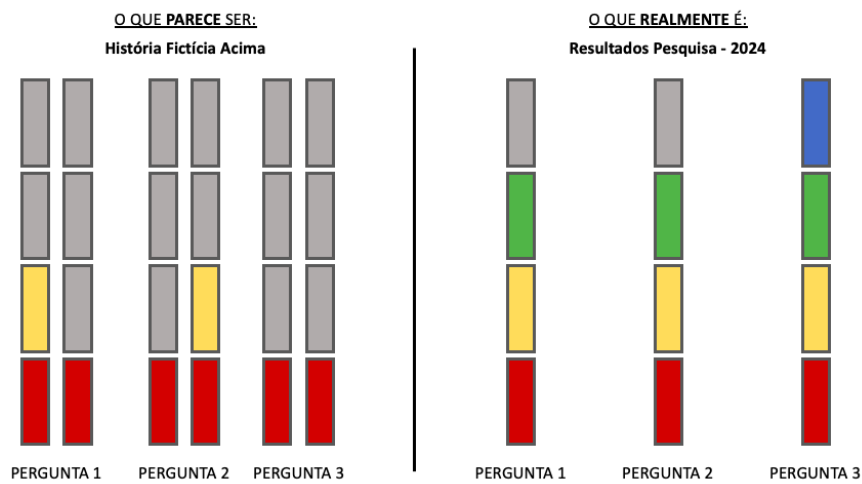
Diferentemente do que muitos de nós podemos estar acostumados a ouvir, quando consultados individualmente, a média das respostas coletadas no estudo colocou o sistema no nível mais positivo da escala (quarto nível), sugerindo que o Sistema de Avaliação do Programa Netuno facilita as atividades mais do que atrapalha."

If respondents answered "Não" to the question at the end of the fictional story, they were presented with the text below:

"Na verdade...

Sua impressão está correta. Realmente, a maioria dos militares não compartilha a visão dos personagens VIBRÃO e PISTOLA.

Em uma pesquisa realizada esse ano (2024), a maioria dos militares e servidores da Marinha do Brasil considerou o Sistema de Avaliação do Programa Netuno como predominantemente FACILITADOR.



A média de respostas colocaria o sistema no quarto (melhor) nível da escala, sugerindo que o Sistema de Avaliação do Programa Netuno facilita as atividades mais do que atrapalha"