



MESTRADO EM GESTÃO DO POTENCIAL HUMANO

**From organizational culture to efficiency in people management:  
Development and validation of the People Management  
Efficiency Scale (PMES)**

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Lisboa

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## Resumo

Este estudo analisa a eficiência na gestão de pessoas enquanto uma capacidade organizacional multidimensional, que resulta da interação entre a cultura organizacional, os processos internos de trabalho e os enquadramentos institucionais. Foi adotado um desenho metodológico misto, de natureza sequencial exploratória, composto por três estudos. O Estudo 1 recorreu a entrevistas semiestruturadas com 15 auditores para identificar as dimensões-chave da gestão de pessoas. O Estudo 2 envolveu entrevistas cognitivas com 28 profissionais para refinar os itens. O Estudo 3 consistiu na aplicação de um questionário a 286 trabalhadores, com o objetivo de validar a Escala de Eficiência na Gestão de Pessoas (EEGP) e testar um modelo de mediação paralela. As análises fatoriais exploratória e confirmatória revelaram uma estrutura de cinco dimensões. Os resultados evidenciaram efeitos diretos e indiretos da cultura organizacional na eficiência, mediados pela organização do trabalho e pela melhoria contínua. Não se observaram diferenças significativas entre organizações certificadas e não certificadas. Foi, ainda, possível apurar que a eficiência na gestão de pessoas depende menos da certificação formal e mais da internalização efetiva dos valores culturais nas práticas organizacionais.

**Palavras-chave:** eficiência na gestão de pessoas; cultura organizacional; desenvolvimento e validação de escala; organização do trabalho; melhoria contínua; certificação organizacional.

## Abstract

This study examines people management efficiency as a multidimensional organizational capability arising from the interaction between organizational culture, internal work processes, and institutional frameworks. A mixed-methods sequential exploratory design was adopted, comprising three studies. Study 1 involved semi-structured interviews with 15 auditors to identify key dimensions of people management. Study 2 employed cognitive interviews with 28 professionals to refine the measurement items. Study 3 consisted of a survey administered to 286 employees, aiming to validate the People Management Efficiency Scale (PMES) and to test a parallel mediation model. Exploratory and confirmatory factor analyses supported a five-dimensional structure. The results revealed both direct and indirect effects of organizational culture on people management efficiency, mediated by work organization and continuous improvement. No significant differences were observed between certified and non-certified organizations. Overall, the findings indicate that people management efficiency depends less on formal certification and more on the effective internalization of cultural values into organizational practices.

**Keywords:** people management efficiency; organizational culture; scale development and validation; work organization; continuous improvement; organizational certification.

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## List of acronyms and abbreviations

AMO	-	Ability–Motivation–Opportunity
AVE	-	Average Variance Extracted
$\beta$	-	Unstandardized coefficient
CFA	-	Confirmatory Factor Analysis
CFI	-	Comparative Fit Index
CR	-	Composite Reliability
CVI	-	Content Validity Index
d	-	Cohen effect size
EFA	-	Exploratory Factor Analysis
HR	-	Human resource
HRM	-	Human resource management
KMO	-	Kaiser–Meyer–Olkin indicator
LLCI	-	Lower limits of the 95% confidence interval
M	-	Mean
MSV	-	Maximum shared variance
p	-	p-value
PCA	-	Principal Component Analysis
PMES	-	People Management Efficiency Scale
RMSEA	-	Root Mean Square Error of Approximation
SD	-	Standard-deviation
SE	-	Standard error
SRMR	-	Standardized Root Mean Square Residual
t	-	t-test
TLI	-	Tucker–Lewis Index
ULCI	-	Upper limits of the 95% confidence interval
$\chi^2$	-	Chi-square

## **Introduction**

The increasing complexity of contemporary organizational contexts, marked by simultaneous demands for performance, continuous adaptation, and attention to employee well-being, has reinforced the centrality of people management as a strategic organizational function (Stahl et al., 2020). Within this framework, efficiency in people management is no longer understood exclusively through an economic–financial lens but increasingly incorporates social, relational, and sustainability-related concerns associated with value creation for all stakeholders (Crossan et al., 2019). In parallel, there has been a widespread diffusion of management systems and normative frameworks across domains such as quality, environmental management, occupational health and safety, work–life balance, and organizational well-being (Chen & Tsai, 2025). These frameworks seek to structure processes, responsibilities, and control mechanisms and are frequently assumed to function as instruments for enhancing organizational efficiency, including efficiency in people management (Gemar et al., 2019). However, empirical evidence suggests that the mere formal adoption of such systems does not ensure more effective people management practices and highlights the importance of the internal processes through which these frameworks are interpreted and implemented by organizations (Bozhinovska et al., 2023).

Efficiency in people management has progressively been conceptualized as a multidimensional and systemic construct, emerging from the articulation between cultural context, work organization, human resource management practices, and continuous learning processes (Harney & Collings, 2021). Within this perspective, organizational culture plays a structuring role by shaping how people management practices are designed, implemented, and interpreted within organizational settings (Hartnell et al., 2019). Nevertheless, despite this theoretical recognition, the internal mechanisms through which culture is effectively translated into efficiency in people management remain underexplored, particularly regarding the role of work organization and continuous improvement as mediating processes in this relationship.

At the same time, the empirical operationalization of efficiency in people management continues to reveal significant limitations. Although there is growing consensus regarding its integrated and relational nature, many studies still rely on fragmented indicators or partial proxies, which hampers a systemic understanding of the phenomenon and limits consistent comparison across empirical investigations (Austen & Piwowar-Sulej, 2025). Additionally, the impact of organizational certification on people management efficiency remains ambiguous, as certification is often assumed to signal good practices, despite empirical evidence suggesting

that normative formalization does not necessarily translate into the substantive internalization of organizational practices.

It is within this context that the present article positions itself within the debate in organizational social sciences, integrating contributions from human resource management (HRM), institutional theory, and organizational studies. The study offers three main contributions. First, it develops and validates the People Management Efficiency Scale (PMES), designed to capture, in an integrated manner, the cultural, structural, relational, and processual dimensions of efficiency in HRM. Second, it empirically tests an explanatory model that examines organizational culture as an antecedent of people management efficiency, considering the mediating role of work organization and continuous improvement as internal mechanisms through which cultural values are translated into practices and outcomes. Finally, it proposes a critical reading of organizational certification as an institutional framework, distinguishing normative formalization from the substantive effectiveness of people management practices.

## **1. Literature Review**

### **1.1. Organizational Culture and People Management**

Organizational culture can be understood as a system of shared values, beliefs, and norms that guides behavior and frames organizational practices, influencing processes ranging from decision-making to internal cohesion (Bogale & Debela, 2024). Vasumathi et al. (2025) emphasize that culture is not merely a reflection of individual attitudes but rather a structured set of assumptions that shapes how organizational processes are regulated and experienced by employees. Despite broad consensus regarding its relevance, there remains considerable heterogeneity in how its core elements are conceptualized and operationalized in empirical studies, reinforcing the need for context-sensitive analyses (Isufi et al., 2025). In a similar vein, Manekar (2024) argues that culture has a direct impact on the effectiveness of people management practices, as it guides how employees perceive their roles, organizational objectives, and performance expectations. Alignment between organizational culture, organizational strategy, and HRM practices tends to reinforce coherence between formally defined principles and practices effectively implemented within organizations (Georgescu et al., 2024).

Abawa and Obse (2024) contend that positive organizational cultures enhance the effectiveness of HRM practices, which is reflected in higher levels of performance and

increased employee satisfaction. The study conducted by Vasumathi et al. (2025) demonstrates that cultural dimensions such as teamwork, trust, and shared goals are positively associated with performance, resulting in higher productivity levels. However, this relationship is contingent upon organizational context and sectoral characteristics, highlighting the importance of examining the interaction between organizational culture and specific people management practices (Janićijević et al., 2018). When culture is aligned with HRM practices and organizational objectives, organizational performance and adaptive capacity in response to internal and external challenges tend to be strengthened (Georgescu et al., 2024).

### **1.2. People Management Efficiency as a Multidimensional Construct**

Efficiency in HRM has increasingly been conceptualized beyond a strictly economic–financial logic (Austen & Piwovar-Sulej, 2025). It is currently understood as a systemic and multidimensional construct, oriented toward multiple stakeholders and assessed according to its capacity to create value for organizations, employees, and society (Kurniawan et al., 2025).

Within this framework, Stahl et al. (2020) propose a sustainable HR performance model that explicitly integrates a multi-stakeholder perspective and the triple bottom line logic (people, planet, and prosperity). The HR function is conceived as an integrated system of practices influencing: (i) economic outcomes, such as productivity and innovation (Cooke, 2025); (ii) social outcomes, including employee well-being, fairness, and development (Christina et al., 2025); and (iii) environmental outcomes, whose effectiveness depends on the internal coherence of practices and their strategic alignment with long-term organizational objectives (Kurniawana et al., 2025).

In a similar direction, Bozhinovska et al. (2023) update classical strategic HRM models, namely the Harvard and Michigan models, proposing a conceptual framework grounded in a multi-stakeholder perspective. Within this framework, consistent people management outcomes emerge from the interaction between: (i) top management leadership characteristics (Diep & Horváthová, 2024); (ii) the adoption of a broad stakeholder perspective in policies and practices (Austen & Piwovar-Sulej, 2025); (iii) increased employee involvement and commitment (Wojtczuk-Turek, 2025); and (iv) sustained improvement in organizational performance over time (Lawter & Garnjost, 2025). This approach reinforces the idea that HRM efficiency results from systemic configurations rather than from the isolated adoption of specific practices (Heffernan et al., 2022).

This theoretical perspective supports the understanding of people management efficiency as a multidimensional construct, operationalized through interdependent dimensions (Bozhinovska et al., 2023). Based on this conceptualization, the following subsections explore four core components of people management efficiency – organizational culture, work organization, transparency in organizational contexts, and continuous improvement of processes and outcomes – which are critical for sustainable value creation in people management.

### **1.2.1. Organizational Culture**

Organizational culture constitutes a central mechanism through which people management practices are translated into sustained organizational outcomes (Manekar, 2024). Georgescu et al. (2024) demonstrate that strategic HRM practices – namely recruitment and selection, training, performance management, and the work environment – influence organizational resilience, with culture acting as a significant mediator in this relationship. According to the authors, cultures oriented toward collaboration, learning, and innovation amplify the impact of HR practices on responsiveness to crises and change. This effect is reflected in greater adaptive effectiveness and more efficient use of organizational resources. In line with this argument, Botelho (2020) suggests that cultures oriented toward flexibility, learning, and openness reinforce the impact of HRM practices on innovation, highlighting a complementary relationship between organizational culture and people management systems.

In this context, Georgousopoulou et al. (2025) argue that organizational culture influences how people management is perceived. Cultural context significantly affects several domains – quality, safety, and customer orientation – and it is within this framework that HRM practices may be interpreted either as bureaucratic control mechanisms or as opportunities for development and learning (Bowen & Ostroff, 2004; Taylor & Woodhams, 2022).

Organizational culture contributes to people management efficiency in two ways: (i) as a contextual condition that can intensify or neutralize the impact of HRM practices on individual and organizational outcomes (Srivastava & Rao, 2025); and (ii) as an outcome that consolidates over time when people management practices are applied consistently and coherently (Isufi et al., 2025). Accordingly, organizational culture assumes both a structural and a dynamic role in people management efficiency, as it influences the mechanisms through which HRM practices produce effects and the stability of these effects over time (Heffernan et al., 2022).

### **1.2.2. Work Organization**

Work organization also plays an important role in people management efficiency, as it structures how work is planned and performed. This dimension is associated with job design and encompasses aspects such as autonomy, participation, access to information, and opportunities for employee development (Cahyadi et al., 2024).

The concept of HRM system strength, proposed by Heffernan et al. (2022), is grounded in the clarity, consistency, and consensus of HR practices. When people management is coherent and supported by internal processes and open systems, employees report higher levels of well-being. Diep and Horváthová (2024) further emphasize that work organization functions as an organizational structure through which HRM practices influence individual and organizational outcomes. Cahyadi et al. (2024) show that HRM practices involving skill development, empowerment, information sharing, and recognition contribute to employee adaptation and resilience. Similarly, Alqudah et al. (2022) highlight that work organization facilitates employee responses to change and has direct implications for people management efficiency.

The reviewed studies indicate that work organization plays a central role in shaping how HRM practices foster individual and organizational performance (Jiang et al., 2012). This perspective aligns with the AMO (Ability–Motivation–Opportunity) framework, according to which the impact of people management practices depends on how they create conditions for capability development, enhance motivation, and promote opportunities for participation (Katou & Budhwar, 2015). In this sense, Heffernan et al. (2022) stress that work organization contributes directly to people management efficiency.

The way work is organized is also fundamental for effectively responding to the demands of management systems, including normative requirements, procedural reviews, audits, and performance monitoring through indicators. Consequently, work organization is essential for translating HRM practices into work experiences that sustain performance, adaptation, and employee engagement over time (Alqudah et al., 2022).

### **1.2.3. Transparency in Organizational Contexts**

Transparency has been identified as a key factor in strengthening trust, commitment, and cooperative behaviors, dimensions that Schnackenberg and Tomlinson (2016) consider central to an effective HRM system. Building on this idea, Jiang and Luo (2018) argue that transparency in internal communication has a direct and significant effect on employee trust

and engagement, translating into positive organizational outcomes. These findings are corroborated by Hadziahmetovic and Salihovic (2022), who demonstrate that transparency goes beyond a purely communicational function and plays a structuring role in reducing organizational ambiguity and enhancing HRM system efficiency.

This perspective is closely linked to HRM system strength, according to which clarity, consistency, visibility of practices, and credibility of information sources are essential conditions for employees to understand the underlying logic of the management system. When HRM practices are perceived as inconsistent or arbitrary, system effectiveness tends to be compromised, increasing the need for supervision and control (Heffernan et al., 2022). Transparency is particularly relevant in three core domains: (i) HRM processes (e.g., recruitment and selection criteria, career progression, performance appraisal, compensation; Pak et al., 2021); (ii) organizational decisions directly affecting work (e.g., restructuring, technological change, job redesign; Jiang & Luo, 2018); and (iii) communication of expectations and feedback regarding goal setting, performance metrics, and results communication (Kim & Beehr, 2018). These domains link transparency to organizational efficiency indicators such as reduced defensive behaviors and resistance to change, enhanced trust and commitment, and greater alignment between individual behaviors and organizational objectives (Fugat et al., 2012).

In certification contexts and in the adoption of formal management systems – where procedures, metrics, and audits reinforce institutional control infrastructures – this dimension assumes particular importance (Power, 2015). Clarifying expectations, making evaluation criteria visible, and explaining impacts on people management contribute to strengthening perceptions of organizational justice and enhancing process and outcome efficiency (Pariße, 2025). According to Schnackenberg and Tomlinson (2016), transparency plays a central role in people management, as it functions as a cognitive and relational alignment mechanism that sustains long-term trust relationships.

#### **1.2.4. Continuous Improvement of Processes and Outcomes**

As an integrative dimension of people management efficiency, continuous improvement of processes and outcomes refers to organizational capacity to review, adjust, and refine practices. This orientation promotes collective learning, internal capability development, and consistent performance optimization over time (Garavan et al., 2012; Sadeghi & Rad, 2018). Gemar et al. (2019) demonstrate that identifying organizational dysfunctions, defining

indicators, and systematically implementing corrective and preventive actions enable the detection of weaknesses in HRM processes and guide interventions with performance impacts.

Complementarily, Wickramasinghe and Chathurani (2021) confirm that continuous improvement initiatives positively affect employee engagement and teamwork. These findings suggest that, in HRM, such initiatives go beyond process efficiency and influence social and motivational dynamics associated with organizational performance. Dat and Hanh (2022) show that effectively managed continuous improvement processes contribute to the development of individual and collective capabilities, promoting behavioral change and more disciplined work practices. Rode et al. (2022) propose a conceptual model in which learning-oriented HRM practices, combined with problem-solving activities, foster continuous improvement. This effect is supported by social mechanisms such as trust climate, knowledge sharing, and perceived organizational support (Heffernan et al., 2022).

Continuous improvement constitutes a structuring dimension of people management efficiency because it enables HRM practices to be adjusted based on results, while simultaneously promoting employee development and optimizing organizational performance (Lepak et al., 2018). In articulation with organizational culture, work organization, and transparency, continuous improvement contributes to a coherent and dynamic functioning of the people management system, grounded in organizational learning and sustained value creation over time (Crossan et al., 2019).

When considered integratively, this multidimensional configuration allows people management efficiency to be understood as a continuous organizational process emerging from the interaction between practices, behaviors, and organizational context (Harney & Collings, 2021). Despite the relevance of these dimensions, it remains necessary to understand how organizational culture influences people management and its outcomes (Hartnell et al., 2019). The following section examines the internal organizational processes that link organizational culture to HRM practices and clarifies their contribution to the coherence, consistency, and effectiveness of the people management system.

### **1.3. From Culture to Practices: Internal Organizational Mechanisms**

People management efficiency does not depend solely on the normative frameworks adopted in domains such as quality, environmental management, occupational health and safety, people management, work–life balance, and organizational well-being (e.g., ISO 9001, ISO 45001, NP 4427). It depends primarily on how these frameworks are interpreted,

operationalized, and embedded within the organization (Lepak et al., 2018; Magalhães et al., 2024).

These processes link formal normative requirements to everyday practices, transforming formal demands into concrete modes of action (Heffernan et al., 2022). Diep and Horváthová (2024) argue that the effects of HRM practices on well-being and performance do not occur immediately or linearly but rather through mediating pathways associated with organizational culture and work organization. In this context, work organization, trust climate, and learning processes play a central role in how practices are internalized and influence organizational adaptive capacity over time (Heffernan et al., 2022). Georgescu et al. (2024) further emphasize that these factors operate interdependently, shaping work experiences and conditioning the overall effectiveness of people management.

Accordingly, the four dimensions previously identified play a central role in explaining people management efficiency and in structuring the processes through which normative frameworks are translated into consistent and sustained practices (Georgescu et al., 2024): organizational culture, work organization, transparency in organizational contexts, and continuous improvement of processes and outcomes.

Organizational culture establishes the framework that legitimizes or constrains how practices are formalized and how requirements associated with management systems are assimilated by organizations (Bogale & Debela, 2024). When culture is oriented toward learning, innovation, collaboration, and social responsibility, it amplifies the impact of normative frameworks on people management and facilitates employee acceptance (Stahl et al., 2020). This cultural framework is reflected in how work organization translates HRM values and policies into practices that affect employee ability, motivation, and contribution to organizational objectives (Heffernan et al., 2022). Through job design, the formal principles of management systems are converted into concrete experiences of autonomy, participation, and skill utilization, in line with the AMO perspective widely applied in HRM (Pak et al., 2019).

Transparency, in turn, ensures understanding of the objectives and criteria underlying people management practices and reinforces trust, perceptions of fairness, and employee engagement (Yang & Mostafa, 2024). These factors are particularly relevant in certification contexts and for the acceptance of organizational changes resulting from such systems (Heffernan et al., 2022).

Finally, continuous improvement of processes and outcomes results from the cumulative interaction of these dimensions. It depends on a learning-oriented culture, a work organization

that fosters participation and initiative, and transparency practices that value employee contributions and make them visible across the organization (Wickramasinghe & Chathurani, 2021).

Certified management systems establish a set of formal conditions that contribute to people management efficiency (Gemar et al., 2019). However, their effectiveness depends on how these four internal dimensions articulate and reinforce one another over time, influencing the conversion of adopted frameworks into coherent and results-oriented HRM practices (Georgescu et al., 2024).

#### **1.4. Organizational Certification as an Institutional Framework**

Management system certification defines formal requirements for structuring, implementing, monitoring, and continuously improving organizational processes (Gemar et al., 2019). Beyond its technical function, certification translates regulatory, professional, and societal expectations into internal principles that influence how HRM practices are designed and evaluated (Stahl et al., 2020).

ISO standards – namely ISO 9001 (quality), ISO 14001 (environment), and ISO 45001 (occupational health and safety) – are based on a common structure (High Level Structure), facilitating their integration into a single, coherent management system (ISO, 2015a; 2015b; 2018). This normative framework promotes process-based approaches, risk-based management, employee participation, internal communication, and continuous improvement (Gemar et al., 2019). These transversal principles contribute to more systematized and efficient people management (Heffernan et al., 2022).

In the Portuguese context, NP 4427, NP 4552, and NP 4590 – focused respectively on HRM, work–life balance, and organizational well-being – extend certification to the social and human dimensions of people management (IPQ, 2018; IPQ, 2021; IPQ, 2022). Combining ISO frameworks with NP standards allows the structuring of an integrated normative framework in which people management is conceived as an organizational system rather than merely an administrative function (Austen & Piwowar-Sulej, 2025).

Nevertheless, certification does not guarantee higher levels of people management efficiency (Bozhinovska et al., 2023). Studies on ISO 14001 indicate that implementations focused primarily on audit compliance and certification maintenance tend to produce limited impacts on people management and organizational performance (Sherly & Nawangsari, 2022; Wickramasinghe & Chathurani, 2021). These effects are particularly limited in the absence of

effective Green HRM practices and a sustainability-oriented organizational culture (Lawter & Garnjost, 2025). Similar patterns are observed in occupational health and safety, where the benefits associated with ISO 45001 depend largely on leadership, continuous training, open communication, and the internalization of a shared safety culture (Wickramasinghe & Chathurani, 2021). When used as instruments for critical reflection and strategic alignment, these frameworks may function as catalysts for organizational learning and HRM practice redesign; however, when adopted predominantly in a symbolic manner, their effects tend to be marginal (Bozhinovska et al., 2023).

Despite their structuring potential, certification systems present limitations associated with overly formalistic appropriation, including documentation overload, audit fatigue, and difficulties in capturing informal and relational dimensions of people management – such as trust, perceived justice, and supportive climate – which are widely recognized as determinants of work experience and performance (Diep & Horváthová, 2024).

In this study, organizational certification is treated as a dichotomous contextual variable (certified versus non-certified organizations), understood as a proxy for the degree of institutional formalization of people management practices grounded in normative management systems. This methodological choice does not assume that certification ensures more effective practices but recognizes that the adoption of certified systems creates differentiated formal conditions for structuring, monitoring, and continuously improving HRM (Austen & Piwowar-Sulej, 2025).

## **2. Methodology**

### **2.1. Research Design**

The study was operationalized through a mixed-methods approach, employing an exploratory sequential design and structured into three complementary and interdependent studies. The primary purpose of this design was to ensure rigor in instrument development and to establish its conceptual, semantic, and empirical validity.

In the first phase, an exploratory qualitative approach was adopted, based on semi-structured interviews, to identify the dimensions associated with people management within organizational contexts. Subsequently, cognitive interviewing using a think-aloud procedure was conducted to assess item adequacy in relation to the study objectives. Finally, a quantitative study was implemented to examine the psychometric validity of the instrument and to empirically test the proposed conceptual model.

## **2.2. Study 1 – Item Development (Semi-Structured Interviews)**

The first study aimed to explore the perceptions of auditors who work directly with certification bodies in certification processes of management systems with implications for people management in organizational contexts. This analysis enabled the identification of conceptually relevant dimensions, which served as the basis for the initial construction of the questionnaire items.

### **2.2.1. Participants**

Fifteen professionals participated in this study (nine women and six men), each with more than ten years of experience as certified auditors, reflecting the composition of the professional context under analysis. According to Rubery and Fagan (2019), women tend to be more represented in occupations associated with HRM and services. The number of interviews was determined according to the principle of theoretical saturation, allowing the collection of sufficient information to identify recurring patterns.

### **2.2.2. Procedure**

Semi-structured interviews were conducted using a previously defined interview guide. The interviews took place individually and had an average duration of approximately 45 minutes. After informed consent was obtained, the interviews were audio-recorded and subsequently transcribed for content analysis.

The credibility of the qualitative analysis was ensured through conducting interviews until theoretical saturation was achieved, as well as through the adoption of systematic data analysis procedures, including thematic coding and discussion of emergent categories, as described in the following section.

### **2.2.3. Interview Content Analysis**

The analysis process involved coding the narratives, identifying categories and subcategories, and systematizing the main emergent dimensions. Data were analyzed using an inductive approach, supported by MAXQDA software (version 26). The analysis identified five dimensions associated with HR-related certification in organizational contexts: organizational culture, work organization, continuous improvement, transparency, and people management efficiency.

These domains reflect the areas perceived as most relevant by participants within HR-related certification processes and constituted the conceptual basis for the initial formulation of the questionnaire items. Based on these findings, instrument development proceeded, followed by cognitive validation, as described in Study 2.

### **2.3. Study 2 – Think-Aloud Item Review (Cognitive Interviews)**

The second study aimed to assess item clarity, semantic adequacy, and comprehensibility, drawing on the conceptual domains defined in Study 1. To this end, cognitive interviewing was conducted using a think-aloud procedure. This method enabled examination of participants' interpretations of each statement and identification of potential ambiguities or formulation problems. Based on this analysis, adjustments were made to item wording in order to ensure instrument suitability for the target population.

#### **2.3.1. Participants**

This study included 28 professionals with experience in auditing, quality management systems, and HR-related domains. The number of participants followed Willis's (2005) recommendations for cognitive validation studies, which prioritize analytical depth over sample size.

#### **2.3.2. Procedure and Item Adequacy Analysis**

A pool of 100 items was developed and evenly distributed across the five dimensions identified in Study 1, with 20 items per dimension. Each participant reviewed all items and assigned a score on a scale from 1 (not adequate at all) to 10 (highly adequate), based on perceived relevance to the study objectives.

Item adequacy was assessed using the Content Validity Index (CVI), calculated as the proportion of experts assigning scores equal to or above 8, as recommended by Lynn (1986). The criteria proposed by Polit and Beck (2006) were also applied, and only items with a CVI equal to or higher than 0.70 were retained, resulting in a final version comprising 36 items.

### **2.4. Study 3 – Psychometric Properties of the Instrument**

The third study aimed to examine the psychometric properties of the instrument developed in the previous phases, using a quantitative approach. The questionnaire's factor

structure was assessed through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Reliability and validity were also evaluated.

Given the available sample size, the same dataset was used for both EFA and CFA, as splitting the sample into independent subsamples could compromise the stability of factorial solutions (Hair et al., 2022).

Because data were collected through self-report and at a single time point, procedural remedies were adopted to mitigate potential method biases, including participant anonymity, clarification that there were no right or wrong answers, and clear instructions for questionnaire completion. In addition, Harman's single-factor test was conducted, yielding a solution explaining 34.4% of the total variance (Podsakoff et al., 2003).

#### 2.4.1. Participants

The quantitative study sample was obtained through a non-probabilistic sampling procedure and comprised 286 employees. Table 1 presents the characterization of participants and the organizational context.

**Table 1**

*Characterization of Participants and Organizational Context*

<b>Variables</b>	<b>N (%)</b>
<b>Gender</b>	
Male	127 (44.4%)
Female	159 (55.6%)
<b>Age group</b> (M = 46.69; SD = 10.39)	
44 years or younger	96 (33.6%)
Between 45 and 50 years	86 (30.1%)
51 years or older	104 (36.4%)
<b>Educational level</b>	
Below bachelor's degree	98 (34.3%)
Bachelor's degree	92 (32.2%)
Above bachelor's degree	96 (33.6%)
<b>Professional experience</b> (M = 23.13; SD = 10.57)	
10 years or less	49 (17.1%)
Between 11 and 20 years	68 (23.8%)
Between 21 and 30 years	90 (31.5%)
31 years or more	79 (27.6%)

**Table 1***Characterization of Participants and Organizational Context (continuation)*

<b>Variables</b>	<b>N (%)</b>
<b>Functional area</b>	
Human Resources	26 (9.1%)
Quality / Auditing / Management Systems	12 (4.2%)
Operations / Production / Maintenance / Laboratory	24 (8.4%)
Sales / Commercial	26 (9.1%)
Marketing / Communication	28 (9.8%)
Finance / Accounting	76 (26.6%)
Information Technologies	16 (5.6%)
Health / Education / Social Services	48 (16.8%)
Administration / Support Services	30 (10.5%)
<b>Tenure in the current</b> organization (M = 15.34; SD = 11.59)	
5 years or less	88 (30.8%)
Between 6 and 15 years	62 (21.7%)
Between 16 and 25 years	70 (24.5%)
26 years or more	66 (23.1%)
<b>Employment status</b>	
Permanent contract	242 (84.6%)
Fixed-term contract	32 (11.2%)
Self-employed / service provision	12 (4.2%)
<b>Organization size</b>	
Micro-enterprise (1 to 9 employees)	22 (7.7%)
Small enterprise (10 to 49 employees)	46 (16.1%)
Medium-sized enterprise (50 to 249 employees)	62 (21.7%)
Large enterprise (250 employees or more)	156 (54.5%)
<b>Certification status</b>	
Yes	192 (67.1%)
No	36 (12.6%)
Do not know	58 (20.3%)
<b>Certification standards adopted by the organization</b>	
ISO 9001	126 (44.1%)
ISO 45001	54 (18.9%)
ISO 14001	40 (14.0%)
NP 4427	10 (3.5%)
Other standards	12 (4.2%)

Note. N = 286. Certification standards correspond to multiple-response items. The category “Other standards” includes NP 4552, NP 4590, and ISO/IEC 27001 and ISO/IEC IT Service Management standards

#### **2.4.2. Measure**

Data were collected using a questionnaire developed based on the contributions of Studies 1 and 2. The final instrument—the People Management Efficiency Scale (PMES)—comprised 36 items distributed across five dimensions: organizational culture (8 items; e.g., The

organizational culture promotes mutual respect), work organization (7 items; e.g., Work organization promotes consistency), continuous improvement (8 items; e.g., Performance is continuously monitored), transparency (10 items; e.g., Communication between departments is transparent), and people management efficiency (3 items; e.g., People management practices promote employee retention).

Items were rated on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5), according to participants' level of agreement with each statement.

### **2.4.3. Procedure**

The PMES was administered online and disseminated through the researcher's professional networks. Participation was voluntary and anonymous. Confidentiality of responses was ensured, and data were used exclusively for academic purposes.

### **2.4.4. Ethical Considerations**

The study was conducted in accordance with the ethical principles applicable to research involving human participants. Prior to data collection, participants were informed about the study objectives and provided informed consent for the use of their responses for research purposes. Anonymity and confidentiality were ensured throughout the research process. Participation was voluntary, and all procedures complied with the principles established in the Declaration of Helsinki.

## **3. Results**

### **3.1. Exploratory Factor Analysis**

To examine the internal structure of the PMES and assess the adequacy of the items in relation to the proposed theoretical dimensions, an exploratory factor analysis (EFA) was conducted. The Kaiser–Meyer–Olkin (KMO) measure yielded a high value ( $KMO = 0.87$ ), indicating satisfactory sampling adequacy. Bartlett's test of sphericity was significant [ $\chi^2_{(325)} = 1929.52, p < 0.001$ ], confirming the presence of sufficient inter-item correlations.

Factor extraction was performed using principal component analysis (PCA) with varimax rotation. The decision regarding the number of factors was based on the Kaiser–Guttman criterion (eigenvalues greater than 1), scree plot inspection, and the percentage of explained variance. This approach identified a five-factor solution explaining 61.47% of the total variance, which is consistent with the conceptual structure defined in Studies 1 and 2.

Although PCA was used at this exploratory stage to identify a parsimonious factor structure, it is acknowledged that this method does not distinguish between common and unique variance. Therefore, to assess the robustness of the obtained solution, an additional factor analysis was conducted using common factor extraction with oblique rotation, given the plausible correlations among latent dimensions. The results revealed a substantively similar factor structure to the initial solution, reinforcing the stability of the proposed dimensionality.

The initial version of the PMES comprised 36 items; however, the component matrix revealed that ten items exhibited cross-loadings on more than one factor and were therefore removed. The final version retained only items with item–factor loadings equal to or greater than 0.40 and a minimum difference of 0.20 relative to other factor loadings. This procedure contributed to a coherent and psychometrically sound factor structure.

Subsequently, internal consistency of each dimension was assessed using Cronbach's alpha coefficients. The analysis indicated that two items negatively contributed to the reliability of their respective scales and were therefore excluded. The final version of the PMES consists of 24 items distributed across the five identified dimensions (Table 2).

**Table 2***Factor matrix of the PMES after varimax rotation*

Items	D1	D2	D3	D4	D5
OC1	0.797				
OC2	0.797				
OC3	0.730				
OC4	0.685				
OC5	0.672				
OC6	0.660				
OC7	0.644				
OC8	0.551				
WO1		0.840			
WO2		0.781			
WO3		0.763			
WO4		0.721			
T1			0.804		
T2			0.744		
T3			0.676		
T4			0.636		
PME1				0.815	
PME2				0.702	
PME3				0.658	
PME4				0.478	
CI1					0.711
CI2					0.681
CI3					0.680
CI4					0.586
<i>Eigenvalue</i>	9.47	2.35	1.59	1.51	1.05
Explained variance (%)	18.87	11.97	11.86	9.48	9.27
<i>Cronbach's alpha (<math>\alpha</math>)</i>	0.90	0.82	0.81	0.74	0.80

Note. D1 = Organizational culture; D2 = Work organization; D3 = Transparency; D4 = People management efficiency; D5 = Continuous improvement.

Given the ordinal nature of the items, the sample size, and the characteristics of the Likert scale used, skewness and kurtosis coefficients were examined. The values fell within the recommended range of  $[-1.96; 1.96]$ , as suggested by Demir (2022). These results, together with the adequate internal consistency of the dimensions, supported treating the data as approximately continuous and proceeding with CFA.

### 3.2. Confirmatory Factor Analysis

Multivariate normality was assessed using Mardia's coefficient, and no severe deviations were observed, confirming the suitability of the maximum likelihood estimation method.

Model fit was evaluated using the chi-square statistic ( $\chi^2$ ), the Comparative Fit Index (CFI), the Tucker–Lewis Index (TLI), the Root Mean Square Error of Approximation

(RMSEA) with a 90% confidence interval, and the Standardized Root Mean Square Residual (SRMR). The fit indices indicated that, despite the complexity of the model and the exploratory–confirmatory nature of the instrument validation, the measurement model demonstrated an acceptable fit ( $\chi^2/df = 2.81$ ; CFI = 0.88; TLI = 0.86; RMSEA = 0.08; SRMR = 0.06).

Composite reliability (CR) values were satisfactory for all dimensions, ranging from 0.78 to 0.90, indicating adequate internal consistency. Convergent validity was supported for most factors, with average variance extracted (AVE) values equal to or above 0.50, with the exception of the People Management Efficiency dimension, which presented a slightly lower value (AVE = 0.47) but remained within acceptable limits.

Regarding discriminant validity, some factors exhibited maximum shared variance (MSV) values slightly higher than their respective AVE values, indicating conceptual proximity among certain dimensions (Table 3). Considering the integrated nature of people management processes, this result is theoretically plausible and does not compromise the conceptual distinctiveness of the constructs.

**Table 3**

Composite reliability, convergent validity, and discriminant validity of the PMES

<b>Dimension</b>	<b>CR</b>	<b>AVE</b>	<b>MSV</b>
Organizational culture	0.90	0.53	0.55
Work organization	0.82	0.53	0.21
Transparency	0.82	0.53	0.49
Continuous improvement	0.81	0.51	0.55
People management efficiency	0.78	0.47	0.41

*Note.* CR = Composite reliability; AVE = Average variance extracted; MSV = Maximum shared variance

The CFA results corroborate the adequacy of the proposed measurement model for the PMES. Although some fit indices fall slightly below the most conservative reference values, they remain within ranges considered acceptable (Hair et al., 2022). At this stage, CFA was conducted exclusively to validate the PMES measurement model, and structural relationships among dimensions were not tested.

Based on the validated factor structure and the theoretical rationale presented in the previous sections, the relational model among the dimensions of people management efficiency was subsequently specified and is presented in the following section.

### 3.3. Conceptual Model and Research Hypotheses

The model presented in Figure 1 links organizational culture to people management efficiency and incorporates work organization and continuous improvement as parallel mediators, in accordance with the empirical structure of the validated scale and the theoretical framework previously discussed.

The specification of this model was informed by preliminary empirical results, namely correlation analyses and multiple linear regression analyses. These analyses indicated that organizational culture, work organization, and continuous improvement exert positive and statistically significant effects on people management efficiency. Conversely, transparency did not show a significant predictive effect when analyzed jointly with the remaining dimensions. Accordingly, transparency was excluded from the model. This pattern suggests that transparency, as a cross-cutting and more relational dimension, plays a predominantly contextual role rather than functioning as a direct mechanism through which cultural values are converted into operational efficiency in people management.

On the basis of this framework, three research hypotheses were formulated:

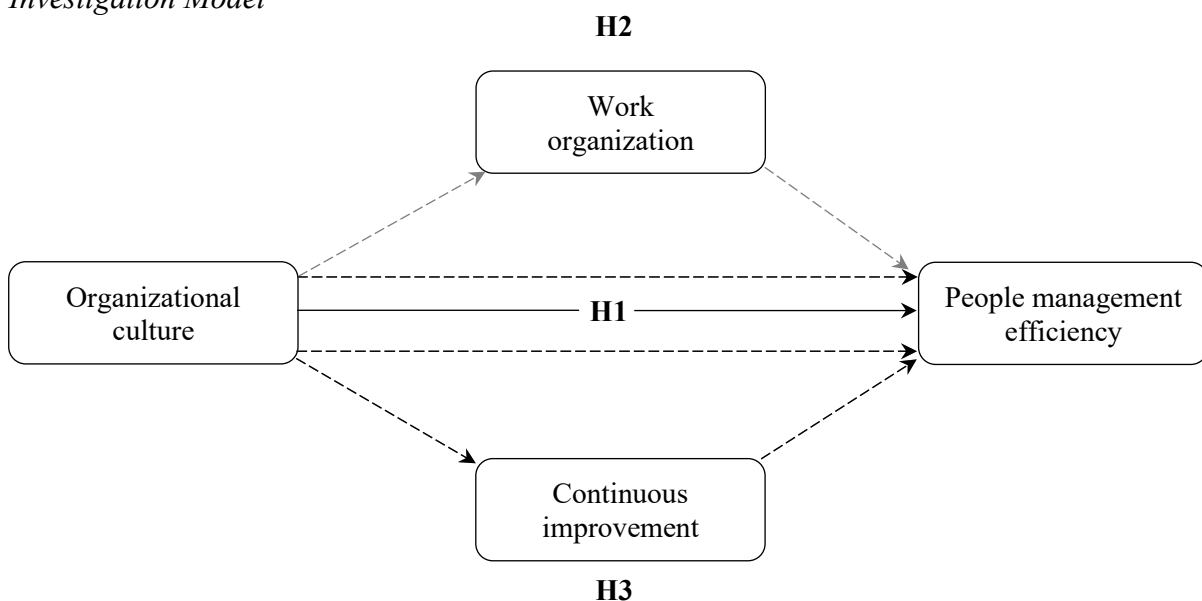
Hypothesis 1. Organizational culture positively influences people management efficiency.

Hypothesis 2. Work organization mediates the relationship between organizational culture and people management efficiency.

Hypothesis 3. The relationship between organizational culture and people management efficiency is mediated by continuous improvement.

**Figure 1**

*Investigation Model*



The conceptual model and the proposed hypotheses were tested using a parallel mediation analysis, as described in the following section.

### **3.4. Parallel Mediation Analysis**

To examine the mechanisms underlying the relationship between organizational culture and people management efficiency, a parallel mediation analysis was conducted using PROCESS Model 4 (Hayes, 2022).

Indirect effects were estimated using a bootstrapping procedure with 5,000 resamples. The results indicated that organizational culture exerts a positive and statistically significant effect on work organization ( $b = 0.267$ ,  $SE = 0.048$ ,  $t = 5.594$ ,  $p < 0.001$ ), accounting for approximately 9.9% of its variance ( $R^2 = 0.099$ ). Organizational culture also showed a positive and significant effect on continuous improvement ( $b = 0.588$ ,  $SE = 0.043$ ,  $t = 13.663$ ,  $p < 0.001$ ), with substantially greater explanatory power ( $R^2 = 0.397$ ). These findings suggest that organizational contexts characterized by strong cultural values tend to organize work in a more structured manner and exhibit a stronger orientation toward continuous improvement. The overall model was also statistically significant [ $F_{(3, 282)} = 52.32$ ,  $p < 0.001$ ] and explained approximately 35.8% of the variance in people management efficiency ( $R^2 = 0.358$ ).

Hypothesis 1, which posited that organizational culture has a direct, positive, and statistically significant effect on people management efficiency, was supported by the results ( $b = 0.224$ ,  $SE = 0.059$ ,  $t = 3.777$ ,  $p < 0.05$ ). A positive and statistically significant indirect effect mediated by work organization was also observed ( $b = 0.054$ ,  $SE = 0.018$ , 95% CI [0.022; 0.094]), supporting Hypothesis 2. In addition, continuous improvement exerted a positive and statistically significant mediating effect on the relationship between organizational culture and people management efficiency ( $b = 0.197$ ,  $SE = 0.040$ , 95% CI [0.118; 0.278]), thereby supporting Hypothesis 3.

These results reveal the presence of parallel mediating roles of work organization and continuous improvement in the relationship between organizational culture and people management efficiency, indicating partial mediation, as the direct effect remained statistically significant. The coexistence of direct and indirect effects suggests that, beyond the organizational mechanisms examined, additional unobserved processes may contribute to explaining the relationship between organizational culture and people management efficiency.

Table 4 summarizes the results of the hypothesis tests, including the direct and indirect effects estimated in the parallel mediation model. Overall, the findings suggest that people

management efficiency depends not only on favorable cultural values but also on organizations' capacity to translate those values into systematic practices of learning, adaptation, and continuous improvement.

In addition to analyzing the explanatory mechanisms underlying the relationship between organizational culture and people management efficiency, it was considered relevant to examine whether statistically significant differences exist in the studied dimensions as a function of organizational certification.

**Table 4***Results of the Parallel Mediation Model Testing*

<b>Hypotheses</b>	<b>Paths</b>	<b>B</b>	<b>SE</b>	<b>LLCI</b>	<b>ULCI</b>	<b>Result</b>
H1	Organizational culture → People management efficiency	0.224	0.059	0.107	0.341	Supported
H2	Organizational culture → Work organization → People management efficiency	0.054	0.018	0.022	0.094	Supported
H3	Organizational culture → Continuous improvement → People management efficiency	0.197	0.040	0.118	0.278	Supported

Note.  $\beta$  = Unstandardized coefficient; SE = Standard error; LLCI/ULCI = Lower and upper limits of the 95% confidence interval, obtained through 5.000 bootstrap samples. The reported coefficients correspond to unstandardized effects, as recommended for mediation models estimated using PROCESS (Hayes, 2022)

Source. Authors' own elaboration

### 3.5. Complementary Analysis: The Role of Organizational Certification

In order to explore potential contextual factors, this analysis examined whether the presence of organizational certification is associated with significant differences across the PMES dimensions, particularly in people management efficiency. To this end, a mean comparison analysis was conducted between certified and non-certified organizations.

Prior to performing independent-samples t-tests, assumptions of normality and homogeneity of variances were assessed. Skewness and kurtosis values fell within acceptable ranges for all analyzed variables, and decisions regarding variance equality were based on Levene's test.

The results indicated that no statistically significant differences were observed in people management efficiency, work organization, or transparency as a function of organizational certification. This finding suggests that certification does not necessarily translate into superior outcomes. Conversely, statistically significant differences were found for organizational culture and continuous improvement, with higher mean scores observed among non-certified organizations in both cases (Table 5).

**Table 5**

*Mean comparisons of PMES dimensions between certified and non-certified organizations*

<b>Dimensions</b>	<b>Certification</b>	<b>M</b>	<b>SD</b>	<b>t</b>	<b>p</b>	<b>d</b>
People management efficiency	No	3.61	0.95	0.49	0.625	0.11
	Yes	3.53	0.74			
Organizational culture	No	4.13	0.60	4.79	< 0.001	0.71
	Yes	3.57	0.81			
Work organization	No	3.97	0.59	0.32	0.749	0.06
	Yes	3.93	0.65			
Transparency	No	3.75	0.86	1.80	0.074	0.33
	Yes	3.48	0.80			
Continuous improvement	No	4.06	0.58	3.74	< 0.001	0.68
	Yes	3.55	0.77			

Note. d = Cohen effect size

The results suggest that organizational certification does not constitute a differentiating factor in overall people management efficiency, reinforcing the relevance of exploring explanatory models centered on internal organizational mechanisms, such as work organization and continuous improvement.

It is also important to note that although statistically significant differences were observed in organizational culture and continuous improvement, the corresponding effects fall within a moderate range. Higher mean values among non-certified organizations may reflect more flexible and less normative organizational dynamics, potentially more oriented toward informal learning practices that are not necessarily influenced by formal certification processes. These findings reinforce the idea that certification, as an institutional mechanism, does not substitute for the existence of effective and internalized organizational practices, which is consistent with the results of the parallel mediation model presented earlier.

#### **4. Discussion**

The development and validation of the instrument proposed in this study contribute to strengthening the understanding of people management efficiency as a systemic and multidimensional construct that results from the articulation of multiple organizational dimensions (Lepak et al., 2018). The identification of five interdependent components—organizational culture, work organization, transparency in organizational contexts, continuous improvement of processes and outcomes, and people management efficiency—is aligned with contemporary HRM approaches that argue that efficiency does not stem from the isolated adoption of practices, but rather from the coherence and articulation among different dimensions (Bozhinovska et al., 2023).

The obtained factor structure indicates that people management efficiency integrates cultural, structural, relational, and processual components simultaneously, corroborating the perspective that HRM systems function as complex organizational configurations whose effects emerge from the interaction between practices, context, and behaviors (Harney & Collings, 2021).

The findings confirm that organizational culture exerts a positive and significant influence on people management efficiency, thereby supporting Hypothesis 1. In line with this, Hartnell et al. (2019) argue that culture shapes how HRM practices are designed, interpreted, and operationalized in daily organizational life. Bozhinovska et al. (2023) further suggest that people management efficiency depends less on formal practices and more on the cultural matrix that gives them meaning and stability over time. Georgescu et al. (2024) reinforce this perspective by demonstrating that organizational culture acts as an integrative element aligning practices, work structures, and employee experiences. Complementarily, Manekar (2024) shows that cultures oriented toward learning, collaboration, and innovation are positively

associated with more efficient people management systems, which is reflected in higher levels of employee engagement and performance.

The data analysis also supported Hypothesis 2, as work organization was found to mediate the relationship between organizational culture and people management efficiency. This evidence aligns with the work of Harney and Collings (2021), who argue that cultural effects manifest through structural mechanisms that shape concrete work experiences. In this context, Cahyadi et al. (2024) contend that cultures oriented toward learning, participation, and development tend to translate into work models characterized by greater autonomy and development opportunities, which in turn foster employee ability, motivation, and engagement. Complementarily, Georgescu et al. (2024) emphasize that HRM efficiency emerges from the effective translation of cultural values into coherent and functionally aligned work structures.

It was also found that continuous improvement of processes and outcomes mediates the relationship between organizational culture and people management efficiency, thereby confirming Hypothesis 3. This result is consistent with organizational learning models that conceptualize culture as an antecedent of organizations' capacity to adapt and evolve in a sustained manner (Crossan et al., 2019). In addition, Gemar et al. (2019) argue that people management efficiency is a dynamic and cumulative process grounded in the organization's ability to adjust practices based on experience and achieved results. In this regard, Rode et al. (2022) demonstrate that learning- and problem-solving-oriented HRM practices foster continuous improvement, through which cultural values are translated into consistent practices and sustained outcomes. Cultures oriented toward critical reflection and participation facilitate continuous improvement practices, which in turn positively influence the quality of HRM practices (Wickramasinghe & Chathurani, 2021).

Taken together, these findings indicate that people management efficiency does not result from a single isolated factor, but rather from an organizational process constructed over time, in which organizational culture guides how HRM practices are experienced within organizations (Harney & Collings, 2021). Nevertheless, this effect is not automatic, as it is through work organization and continuous improvement dynamics that cultural values are translated into consistent practices and concrete work experiences with tangible impacts on organizational functioning (Heffernan et al., 2022). Accordingly, people management efficiency should be understood as a dynamic process resulting from the interaction among cultural values, HRM practices, and internal organizational structures, rather than as the automatic outcome of the isolated adoption of formal practices (Georgescu et al., 2024).

#### **4.1. Theoretical and Practical Contributions**

This research makes a relevant contribution to understanding people management efficiency by adopting an integrated approach that articulates organizational culture, work organization, transparency, and continuous improvement. By demonstrating how these dimensions relate to one another, it reinforces the notion that HRM efficiency does not result from isolated dimensions, but rather from articulated organizational processes developed over time and embedded in organizational functioning.

The first contribution lies in the development and validation of the PMES, designed to capture the multidimensional nature of HRM efficiency. The scale overcomes fragmented or overly instrumental approaches by integrating cultural, structural, relational, and processual dimensions into a single measurement instrument. This development is particularly relevant in a field where recurring difficulties have been identified in empirically operationalizing people management efficiency. From a practical perspective, the PMES constitutes a useful organizational diagnostic tool that enables organizations to assess people management efficiency from employees' perspectives and to identify strengths and vulnerabilities across different dimensions of the HRM system.

Beyond the contribution associated with the instrument, the findings highlight the centrality of organizational culture as a structuring element of people management efficiency. The results show that culture does not operate solely through direct effects but influences efficiency primarily through how work is organized and how organizations learn and adjust over time. This evidence underscores that HRM efficiency depends less on the formal definition of practices and more on their translation into coherent work structures and organizational routines that foster learning, adaptation, and employee engagement. From a practical standpoint, this suggests that people management change initiatives are more likely to be effective when they stem from reflection on cultural values and assumptions and are translated into concrete adjustments in work organization.

The analysis also clarifies the role of transparency in organizational contexts. Although this dimension is relevant within the structure of HRM efficiency, the results suggest that its influence operates mainly as a facilitating condition for system functioning, reinforcing predictability, trust, and coherence of HRM practices. This interpretation has direct practical implications, indicating that transparency should be addressed in articulation with other organizational processes rather than treated as an end in itself.

In addition, the study proposes a critical reinterpretation of the role of organizational certification in people management efficiency. By questioning linear associations between certification and superior HRM performance, the findings reinforce the distinction between normative formalization and substantive internalization of practices. From a theoretical perspective, this contribution advances the debate on the substantive value of certified management systems. From a practical perspective, it alerts organizations to the need to shift the focus from symbolic compliance with standards toward coherence between culture, leadership, practices, and actual work experiences.

#### **4.2. Study Limitations and Directions for Future Research**

Despite the relevance of the findings, several limitations should be acknowledged when interpreting the results, while simultaneously constituting opportunities for future research.

The first limitation relates to the cross-sectional design, which restricts the ability to establish causal relationships among the analyzed variables. Although the proposed theoretical model assumes that organizational culture influences people management efficiency through internal mechanisms, the collected data reflect consistent associations at a single point in time. Therefore, reciprocal relationships or the influence of unobserved variables cannot be ruled out.

Additionally, data collection relied exclusively on self-report measures obtained from employees. While this approach is consistent with the objective of capturing perceptions of people management efficiency, it may introduce biases related to individual perception, social desirability, and reliance on a single source of information. These limitations constrain the generalizability of the findings and highlight the importance of adopting complementary methodological approaches.

A third limitation concerns the validation of the measurement instrument. Although the PMES factor structure demonstrated conceptual coherence and adequate psychometric properties, empirical validation was conducted using a single sample. This approach, common in the initial stages of instrument development, limits the assessment of scale stability across different organizational contexts.

Another limitation arises from how organizational certification was operationalized. By treating certification as a dichotomous variable, it was not possible to distinguish among different types of standards, levels of management system maturity, or degrees of normative internalization. This methodological simplification, although necessary given the available data, restricts the analysis of more differentiated certification effects.

Finally, the adopted structural model privileged a parsimonious approach centered on organizational culture, work organization, and continuous improvement. While this option allowed for a clear test of the proposed internal mechanisms, other factors relevant to people management efficiency – such as leadership styles, organizational justice, or innovation climate – were not included in the model.

These limitations open several avenues for future research. Longitudinal studies may deepen understanding of the temporal dynamics linking organizational culture, internal mechanisms, and people management efficiency, as well as assess the impact of specific organizational interventions over time. It would also be valuable to validate the PMES in samples from different sectors and institutional contexts to strengthen its robustness as a measure of people management efficiency.

In line with the identified limitations, future research may benefit from integrating objective organizational performance indicators and from combining employee perceptions with observable people management outcomes. The role of transparency could also be further examined by conceptualizing it as a moderating or contextual variable.

## **Conclusion**

This study aimed to deepen the understanding of people management efficiency, based on the premise that this phenomenon cannot be adequately captured through isolated indicators or exclusively instrumental approaches. By proposing an integrated approach that articulates organizational culture, work organization, transparency, continuous improvement, and the institutional framework, this research sought to contribute to a more comprehensive reading of HRM efficiency.

The development and validation of the PMES constituted a central axis of this work. The construction of the instrument addressed a widely recognized need in the literature to measure people management efficiency in an integrated manner. By evidencing a consistent multidimensional structure, the PMES overcomes the conceptual fragmentation often observed in this field and provides a solid empirical basis for future research and organizational applications.

The findings demonstrate that people management efficiency does not derive solely from the formal adoption of policies, practices, or certified systems, but primarily from how cultural values are translated into work structures, organizational routines, and continuous learning processes. Organizational culture plays a decisive role in shaping how people management

practices are interpreted and operationalized. The results also show that certification, in isolation, is not associated with higher levels of people management efficiency. Although normative frameworks may create formal conditions for management structuring, they do not guarantee more effective practices. Their contribution largely depends on how these frameworks are interpreted, integrated, and applied within organizations' internal functioning.

The study supports the view that people management efficiency is an organizational capability built over time, resulting from the continuous interaction between culture, work organization, transparency, and continuous improvement. This perspective advances theoretical debates in HRM while simultaneously offering both a measurement instrument and an analytical framework capable of supporting more reflective, coherent, and value-oriented management practices that promote sustainable value creation for employees and organizations.

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