

WHEN HR SYSTEMS MATTER: THE ROLE OF INTERNAL PROCESS CLIMATE IN SHAPING TASK COMPLEXITY, INNOVATIVE BEHAVIOR, AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Saif Ullah Qureshi¹, Hareem Jannat², Sidra Sharif³, *Sabeen Khurram Khan⁴

¹ Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

² Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan.

³ Visiting Lecturer, Department of Commerce, Emerson University, Multan, Punjab, Pakistan.

⁴ Assistant Professor, Department of Management Sciences, COMSATS University Islamabad, Pakistan.



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ABSTRACT

The present research aims to explore the effect of Human Resource Management System Strength on Innovative Behavior, Organizational Citizenship Behavior, and Task Complexity, and to investigate whether Internal Process Control moderates the association among these variables. The study is based on HRM System Strength Theory and Social Exchange Theory framework, suggesting that the positive relationship between HRM systems and employee behaviors and work outcomes is mediated by internal process control conditions. A cross-sectional, quantitative research design was used, and data was collected from 300 respondents. The proposed model was examined with the help of PLS-SEM using Smart PLS 4. The results of the structural model showed that HRMSS had a significant positive influence on innovative behavior, organizational citizenship behavior, and task complexity. The same was true for all three endogenous constructs about IPC. Moderation analysis revealed that HRMSS significantly decreased the positive impact on innovative behavior and organizational citizenship behavior but showed no significant moderating effect on task complexity. These results indicate that although strong HRM systems positively influence desirable employee behaviors, strict internal controls may affect employees' discretionary and innovative behaviors. The study adds to the HRM literature by structuring the HRM system strength and the internal process control into a single framework and shows the relationship between HRM system strength, internal process control, and the effectiveness of HR practices. On a practical level, the results suggest that HR systems should be enhanced and the internal control framework should be balanced to allow for governance without compromising the autonomy, innovation, and citizenship behaviors of employees.

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*Corresponding Author's Email: skhan@comsats.edu.pk

INTRODUCTION

Internal process climate might induce excessive rigidity, potentially stifling the flexibility required for employee innovative and citizenship behaviors (Cafferkey et al., 2018). Consequently, an over-reliance on standardized protocols and bureaucratic stability may inadvertently constrain the discretionary efforts essential for fostering organizational citizenship and creative output (Waheed et al., 2024; Heffernan et al., 2016), as the emphasis on tradition and established procedures often disincentivizes the non-routine actions necessary for proactive work (Battistelli et al., 2021). This tension highlights the need for a nuanced investigation into how specific organizational climates either facilitate or hinder the translation of the strength of HRM systems into innovative behaviour of employees (Batistič et al., 2016; Lee et al., 2016). Specifically, while strong HRM systems are designed to align employee actions with strategic objectives, an overly restrictive internal process climate may counteract these efforts by limiting the autonomy required for self-initiated, change-oriented behaviors (Batistič et al., 2013; Hong et al., 2015). Furthermore, while such structured environments effectively standardize routine tasks, they may fail to cultivate the individual discretion and

sense of autonomy necessary for employees to engage in extra-role innovative work behaviors (Černe et al., 2017; Russo et al., 2016). This potential misalignment underscores the importance of examining whether the internal process climate functions as a contingency that limits the efficacy of HR interventions in promoting discretionary performance (Agarwal & Farndale, 2017). Indeed, such bureaucratic constraints may dampen the beneficial outcomes of HRM strength by imposing rigid boundaries that inhibit the psychological empowerment necessary for such proactive contributions (Boemelburg et al., 2022). Accordingly, this research aims to reconcile these competing pressures by evaluating how the interplay between organizational structure and HRM effectiveness influences long-term workforce outcomes (Bowen & Ostroff, 2004; Son, 2015). By identifying these boundary conditions, the study addresses a critical gap in understanding why, despite consistent HRM practices, organizational outcomes may vary significantly across different institutional settings (Ostroff & Bowen, 2015).

Although previous research has consistently demonstrated that HR system strength positively influences employee attitudes and organizational performance, several important gaps remain (Li & Abas, 2024; Ogbonnaya et al., 2022). First, most studies have concentrated on traditional outcomes such as organizational commitment, job satisfaction, employee engagement, and turnover intentions, while comparatively less attention has been given to employees' capability to manage task complexity and demonstrate innovative work behaviors (Ali et al., 2022; Parker et al., 2021). Second, prior research has generally examined these behavioral outcomes independently rather than investigating multiple employee outcomes within a single integrated framework. Third, the contextual conditions under which HR system strength becomes more or less effective remain underexplored (Sanders et al., 2021; Vuorenmaa et al., 2023). In particular, the moderating role of internal process climate has received little empirical attention despite its theoretical relevance in shaping employees' perceptions of organizational support and work processes. Addressing these gaps can improve our understanding of how HR systems translate into employee performance and discretionary behaviors.

LITERATURE REVIEW

HRM System

Research on analysing the linkages between human resource management system strength and other firm related outcomes is getting a great consideration by the academicians (Bowen & Ostroff, 2004) and it is

evident from these research that the human resource system is an essential element that can assist an organisation to become more effective and efficient, and to attain a competitive advantage (Becker, Huselid, Becker, & Huselid, 1998). The HRM system of an organization can be divided into two clearly defined and interrelated aspects, namely (a) what it contains and (b) the process of its creation. The content feature is then further split into two sub-elements: (i) individual practices and (ii) policies, which are expected to help achieve a given objective. Content refers to the practices that are put in place by an organization that are related to the business content and ideally should be aligned with the strategic goals and values of the organization and should be a part of a human resource management system. Hence, a set of HRM practices should be developed to guide the utilization of human resources in achieving the strategic objective (such as efficiency, service, quality, cost, or economy). However, human resource policies are human-centered programmes dealing with human resource practices decisions (Jiang et al., 2012). Human resource management policies are to be understood as the organization's or business unit's stated intentions with respect to the type of HR processes, programs, and techniques that it is to employ in the organization (Wright & Boswell, 2002), and as a guide for action in respect to problems and matters regarding employees (Schuler, 1992). The second feature of an HR system is process, which involves the implementation of practices and policies in the organization (Bowen & Ostroff, 2004). Therefore, it is possible to explain the concept of a human resource (HR) system in Figure 1.

HRM System Strength

The strength of the Human Resource Management system is a situation in which clear and unambiguous communications are made with employees about appropriate behaviour at work (Bowen & Ostroff, 2004). Sanders et al. (2014) state that a good HRM system might be able to influence the outcome variables very significantly by delivering clear messages to the employees about the expectations of an organization. A good HR system enables it to establish a strong situation by effective communication of different kinds of human-oriented information, both content and processes of HR of the organization. In a healthy HR system, people are aware of what the very best management of the company expects from them (Sanders & Yang, 2016). Bowen and Ostroff (2004) used attribution theory to emphasize the essential meta-features for

the communication to be understood and received in a uniform manner (or not) by employees. Kelley (1973) proposed a model of covariation, meaning that people can make confident causal inferences about cause/effect links in specific situations based on the distinctiveness, consistency, and consensus of the cause/effect links. If other people in the organization consider the HRM system to be unique, consensual, and consistent, they will believe the HRM system to be the responsibility of management and hence accept the demand of top management of the company that they make to the HRM system. (Wright & Nishii, 2007).

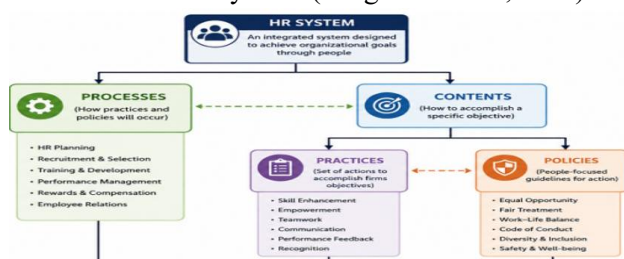


Figure 1: Building blocks of an HRM system

Source: Authors' compilations

Meta-Features of A Strong HR System

Meta-features of HRM system strength are given in detail below:

Distinctiveness is usually described as a situation that allows it to stand out within the organization, thereby capturing attention and consideration and arousing interest. Generally speaking, distinctiveness is considered a high degree of observation of cause-effect relationships in an organizational setting leading to the accomplishment of strategic goals. Four features of HRM system can foster distinctiveness namely (a) visibility (the extent to which HR practices are prominent and readily observable), (b) understandability (the degree to which HR contents are unambiguous and comprehensive), (c) relevance (employees consider a situation relevant to a strategic goal) and finally (d) legitimacy of authority (employees should act what their managers direct as officially sanctioned behaviors).

The second meta feature of HR system strength is consistency, which is usually referred to as the situation of building an effect and modalities over time by which the effect occurs every time the entity remains present, irrespective of the type of communication. Three features of an HRM system can establish consistent interactions, namely (a) instrumentality (creating an unambiguous perception of cause-effect association between HRM system's desired employee behaviors and consequences), (b) validity (extent to which HR system actually

recognizes what employees are supposed to achieve), (iii) consistent HRM messages (stable and compatible signals sent by the HR system).

The third meta feature of HR system strength is consensus, which refers to the degree of agreement among people in the organization in their views of the cause-effect relationships. Consensus can be achieved through (a) the degree of agreement among principal HRM decision makers (b) Fairness (the degree to which HRM practices meet the three elements of justice, namely interactional, distributive, and procedural).

Context of The Study: Banking Sector of Pakistan

Human Resource Management in Pakistan seems to be progressing towards a stage of being a proactive operationally (Ahmad & Allen, 2015). Twenty years back, human resource-related responsibilities were part of Finance or Administration departments that were assigned the duties of filling vacancies, payroll management, administering terminations, and dealing with disciplinary issues. After that, more formal systems of human resources began to emerge with the privatization of the banking industry and entry of foreign banks (Saqib, 2017). The State Bank of Pakistan started to introduce several reforms which invoked the need for a well-trained workforce and well-established human resource infrastructure. A few of these reforms consisted of improving customer service quality, good corporate governance, improved quality of disbursement of loans and borrower assessment, expediting loan recovery, and prudential regulations of consumer, corporate, and SME banking, etc. Therefore, banks in Pakistan felt the need to establish and improve their human resource systems not just to meet the State Bank of Pakistan's regulatory requirements but also to stay competitive and improve service quality. In her study of six Pakistani banks, (Khilji (2003)) found a wide gap between the HRM practices intended and HR practices implemented due to the cultural norms of Pakistan. Obaid (2013) found that banks in Pakistan were moving to performance-based compensation systems from seniority-based compensation systems due to privatization. However, human resource policies were not applied consistently to all employee groups, and HR implementation did not remain smooth. Due to the above-mentioned dynamics in the HR system of the banking industry of Pakistan, it is particularly important to look into the new insights of the HRM system in the Pakistani banking industry.

Internal Process Climate

According to Patterson et al. (2005), internal process climate (IPC) focuses internally on a basis of control orientation, for example, structured rules and formal bureaucracy, etc. It focuses on maintaining stability by applying formalized regulatory guidelines. Internal process climate focuses primarily on tradition as well as formalization in the processes of the organization; therefore, it is expected that in a context that is socially collective like Pakistan. (Hofstede, 1983) greater internal process climate leads to a strong HRM system, causing other organizational outcomes. Kuenzi (2008) refers to internal process climate (IPC) as shared perceived information management, stability, communication, control, and an internal focus. The focus of IPC is on alignment of internal workings with the accomplishment of the organizational strategic objectives. Patterson et al. (2005) identified two components of internal process climate (IPC) that are (i) formalization- strictly following the formal procedures and rules (Pugh, Hickson, Hinings, & Turner, 1968) and (ii) tradition- the degree to which established and defined ways of doing things are emphasized and valued (Coch & French Jr, 1948).

Task Complexity

Task complexity is referred to as a situation in which the task doer is required to place high cognitive demands in performing a particular task (Campbell, 1988) and a high degree of standardization of work (Grabner). Wood (1986) identified three dimensions of task complexity: component complexity, dynamic complexity, and coordinative complexity. In an organizational context, there are several tasks that require a high degree of standardization and formalization, making the task more complex for the task doer. Such a type of task complexity leads the organization toward a negative organizational outcome.

Innovative Behavior

Innovative behavior is referred to as the creation or taking up of useful ideas as well as their implementation, by starting with a problem identification and generating its solutions (Aryee, Walumbwa, Zhou, & Hartnell, 2012). It is the employee initiatives regarding some novelty in the organization and also includes new and useful idea generation, its implementation, and communicating suggestions to co-workers (Pundt, 2015) intended to improve products, practices, or procedures (Fan et al., 2016).

Organizational Citizenship Behaviour

Some employees voluntarily assist or help others in the organization, promote the excellence of their organization without an implicit or explicit promise of reward. This discretionary behaviour of employees is referred to as Organizational Citizenship Behaviour (Organ, 1988). It is a set of extra-role behaviors that go beyond one's basic job requirement and are based on one's own discretion. Williams and Anderson (1991) suggested two broad dimensions of organizational citizenship behaviour that are (i) interpersonal organizational citizenship behaviour (OCB-I)-behaviours that benefit a particular coworker in the organization directly. Examples include, but are not limited to, helping him/her when he/she has an intense workload, staying after office hours to assist you, a coworker in his/her learning, etc., (ii) organizational- organizational citizenship behaviour (OCB-O)-behaviours that benefit the organization altogether.

Hypotheses Generation

HR System Strength and Innovative Behavior

Several empirical studies have analyzed that a strong Human Resource Management (HRM) system directly impacts several organizational outcomes, including employee job satisfaction, organizational commitment, lower turnover intention, innovative behavior, and organizational performance (Li et al., 2011). Therefore, an important proposition of HR System Strength is that it influences individuals' behaviors and attitudes. An individual's perception of a strong HR system positively influences behaviors and attitudes. As described above, one of the positive behaviours of employees is innovative behaviour that is referred to as the creation or taking up useful ideas as well as their implementation, by starting with a problem identification and ending with generating solutions. Sanders et al. (2015) found a positive influence of HR System strength on employees' innovative behavior. Studies conducted by Hurmelinna-Laukkanen and Gomes (2012) and later on by Yanping, Xiaoguang, and Yali (2014) also reported a positive association between a strong HR system and innovative behavior. Therefore, the following hypothesis can be formulated:

H1: *A strong HRM System positively influences innovative behavior in the banking sector of Pakistan.*

HR System Strength and Task Complexity

An HRM system that ensures distinctiveness, consensus, and consistency may provide meaningful

insights to employees regarding the tasks to be performed in the organization to accomplish its strategic goals. This relationship between HR System Strength and task complexity deserves special attention; however, there is a gap in the literature regarding such an association. So, this association needs to be carefully analyzed. The following hypothesis can be formulated to test this association:

H2: *A strong HR System positively influences task complexity in the banking sector of Pakistan.*

HR System Strength and Organizational Citizenship Behavior

HR System Strength influences individuals' behaviors and attitudes. All three dimensions of fairness (interactional justice, distributive justice, and procedural justice) lead the individual to exhibit extra role behavior (OCB). The association of the strength of the HRM system with organizational citizenship behavior is evident from several studies (Katou, 2013; Nishii & Paluch, 2018; Ostroff & Bowen, 2016). However, this relationship needs to be further explored, particularly in Pakistani work settings due to cultural variations. So, the following hypothesis can be formulated:

H3: *A strong HR System positively influences OCB in Pakistan's banking sector.*

The Moderating Impact of Internal Process Climate as A Moderator

Patterson et al. (2005) identified two components of internal process climate (IPC) that are (i) formalisation strictly following the formal procedures and rules (Pugh et al., 1968) and (ii) tradition the degree to which established and defined ways of doing things are emphasized and valued (Coch & French Jr, 1948). When the processes are configured in a way that it becomes too formalized and traditional, it may increase the rigidity that ultimately results in negative individual and organizational outcomes. A study conducted by Agarwal (1999) reported the negative effect of formalization on salespeople's attitude, leading to low organizational commitment. In another study, Agarwal (1993) found formalization to be correlated with higher role stressors (role conflict and role ambiguity). Therefore, it can be hypothesized that a strong HR system, combined with a high internal process climate, may not result in positive organizational and individual outcomes and may lead to lower organizational and individual outcomes.

In another study, Adler and Borys (1996) found that a high level of formalization (bureaucracy)

undermines organizational commitment, job satisfaction, and innovation. Similarly, the negative impact of formalization was also found to be negatively associated with organizational citizenship behavior (Raub, 2008). Therefore, the negative role of internal process climate cannot be ignored. Therefore, based on the above discussion, the following hypotheses can be formulated:

H4a: *IPC moderates the relationship between HR system strength and employee innovative behavior; such that the relationship will be negative when internal process climate is high in the banking sector of Pakistan.*

H4b: *IPC moderates the relationship between HR system strength and task complexity; such that the relationship will be negative when internal process climate is high in the banking sector of Pakistan.*

H4c: *Internal process climate moderates the relationship between HR system strength and organizational citizenship behaviour; such that the relationship will be negative when internal process climate is high in the banking sector of Pakistan.*

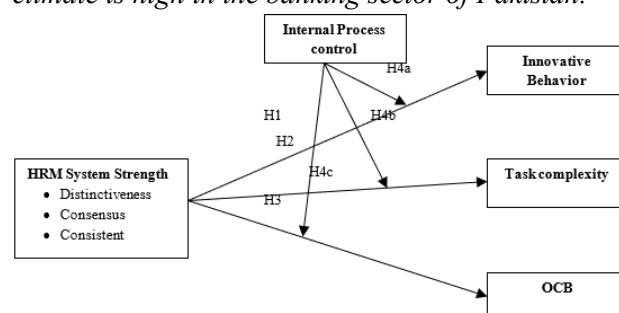


Figure 2: Study Research Model

Source: Authors' compilations

RESEARCH METHODOLOGY

Quantitative research is aimed at studying associations among variables that can be measured numerically and can be analyzed using a range of statistical techniques (Bryman & Bell, 2011). According to Saunders, Lewis, and Thornhill (2009), this strategy is generally related to a deductive research approach, in which the focus is to test theory using structured data collection techniques. Therefore, this research is also aimed at testing the theory and studying associations by quantitatively operationalizing the factors, so a quantitative research strategy was feasible to deduce the research hypotheses. Further, a quantitative strategy is applied because the research intends to generalize the findings of the research.

Data Collection: Survey Method

The survey method is an efficient way of gathering data from a large sample before the quantitative

analysis ([Saunders et al., 2009](#)). The survey method provides quantifiable and measurable data and helps establish relationships among variables more distinctly ([Obaid, 2013b](#)). As the study employs a quantitative research strategy, the study uses a survey method for collecting data using a structured questionnaire because the research is concerned with finding out relationships among various factors/variables.

Research Design: Cross-Sectional

A cross-sectional design involves the collection of data from more than one case (normally in large amounts) at a single point in time ([Bryman & Bell, 2011](#)). This design is appropriate to collect a body of quantifiable or quantitative data in connection with more than one variable (usually two or many), which are then analyzed to identify patterns of relationship. The present research also employed a cross-sectional design of research due to its nature, which makes it suitable for cross-sectional research. This research uses a quantitative paradigm and is also intended to analyze the pattern of association among various study variables. Therefore, these criteria make it feasible to employ a cross-sectional design of research to deduce study hypotheses.

Sample Size & Participants

A total of 300 valid responses were used for the final analysis. This study employed the G*Power tool to estimate sample size. With the largest number of predictors in any endogenous construct, an effect size of $f^2 = 0.15$, $\alpha = 0.05$, and statistical power of 0.95, the required minimum sample was substantially lower than 300. With 300 observations, the present study exceeds the recommended minimum sample requirements, thereby providing adequate statistical power for hypothesis testing of the proposed research model.

Sampling Technique

For the present research, a multistage purposive-quota sampling technique has been employed to collect data from respondents. In the first stage, private commercial banks working in Pakistan were purposively selected subject to the researcher's ability to collect more accurate and engaged responses. In the second stage, branches of the selected commercial banks were targeted to ensure representation across different banking institutions. In the third stage, employees meeting the predefined inclusion criteria, such as minimum educational qualification, work experience, and grade, to evaluate

HR system strength and workplace behaviors, were approached purposively to participate in the research. Finally, quotas were maintained across different bank and job categories to enhance the representativeness of the sample.

Measure of Variables

HR system strength will be measured as a composite of three subscales described by [Bowen and Ostroff \(2004\)](#). A set of sixteen-item scale has been chosen to represent the features of each subscale of HR system strength that were developed and validated by [Delmotte, De Winne, and Sels \(2012\)](#) using a five-point Likert scale. The scale has already been used and validated by [Bednall, Sanders, and Runhaar \(2014\)](#).

Internal process climate will be measured using a composite of two subscales, *formalization and tradition*, described by [Patterson et al. \(2005\)](#). A set of nine-item scale developed by Patterson et al. (2005) will be adopted to measure both facets of internal process climate using a five-point Likert scale. The scale has already been used and validated by [Cafferkey et al. \(2018\)](#) with $\alpha=.85$.

Task complexity will be measured by adopting a nine-item scale developed and used by ([Kyndt, Dochy, Struyven, & Cascallar, 2011](#)) using five point likert scale.

Innovative behavior will be measured using a 5-item innovative behavior scale, developed by [De Jong and Den Hartog \(2005\)](#). This scale measures the degree to which employees try creative ideas and new methods to perform their work and promote the adoption of such ideas by other coworkers. The scale has been used and validated by [Bednall et al. \(2014\)](#) with $\alpha=.81$ and $.86$ in a two-wave study.

Organizational citizenship behavior will be measured using a composite of two subscales, *OCB-Interpersonal and OCB-Organizational*, described by Williams and Anderson (1991). A set of fourteen-item scale developed by Williams and Anderson (1991) will be adopted to measure both facets of organizational citizenship using a five-point scale.

RESULTS AND ANALYSIS

This section presents the empirical findings of the study using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.

Respondents' Demographic Profile

The demographic profile of the respondents is presented in Table 4.1. A total of 300 valid responses

were included in the analysis. Overall, the sample primarily comprised middle-aged, well-educated banking professionals with substantial work experience, indicating that the respondents possessed the knowledge and professional exposure necessary to provide informed and reliable responses to the study questionnaire.

Table 4.1: Demographic Profile

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	198	66.0
	Female	102	34.0
	Total	300	100.0
Age (Years)	20–29	42	14.0
	30–39	141	47.0
	40–49	81	27.0
	50 years and above	36	12.0
	Total	300	100.0
Education	Bachelor's Degree (14 Years)	54	18.0
	Master's Degree (16 Years)	177	59.0
	MPhil/MS (18 Years)	51	17.0
	PhD or Equivalent	18	6.0
	Total	300	100.0
Work Experience	Less than 5 Years	39	13.0
	5–10 Years	78	26.0
	10–15 Years	117	39.0
	More than 15 Years	66	22.0
	Total	300	100.0

Source: Authors' compilations

Outer Loadings

The outer loadings of all measurement items that measured the constructs used in this study are presented in Table 4.2. The results show that the loadings of all the indicators are close to 1 and above 0.70, as recommended by Joseph F. Hair Jr. et al. for reflective measurement models. The high scores show the reliability of the indicators as measures of their constructs, and they make significant contributions to their latent variables.

Table 4.2: Outer loadings

	HRMSS	IB	IPC	OCB	TC	IPC x HRMSS
CONS1	0.842					
CONS2	0.858					
CONS3	0.843					
CONS4	0.846					
CONS5	0.852					
CONS6	0.858					
CONSEN1	0.836					
CONSEN2	0.835					
CONSEN3	0.857					
CONSEN4	0.847					
DIS1	0.858					
DIS2	0.861					
DIS3	0.852					
DIS4	0.842					
DIS5	0.843					
DIS6	0.845					
IB1		0.894				
IB2		0.872				
IB3		0.889				
IB4		0.89				
IB5		0.878				
IB6		0.882				
IPC1			0.861			
IPC10			0.855			
IPC2			0.838			
IPC3			0.842			
IPC4			0.852			
IPC5			0.855			
IPC6			0.842			
IPC7			0.859			
IPC8			0.853			
IPC9			0.839			

OCB1				0.873		
OCB10				0.9		
OCB2				0.868		
OCB3				0.886		
OCB4				0.885		
OCB5				0.894		
OCB6				0.888		
OCB7				0.88		
OCB8				0.878		
OCB9				0.865		
TC1					0.856	
TC10					0.87	
TC2					0.869	
TC3					0.87	
TC4					0.859	
TC5					0.842	
TC6					0.877	
TC7					0.873	
TC8					0.881	
TC9					0.878	
IPC x HRMSS						1

Source: Authors' compilations

Measurement Model

The measurement model created in SmartPLS 4 is presented in Figure 3, which shows how the latent constructs are linked with the observed indicators. It is a five-latent-variable model: HRM System Strength (HRMSS), Internal Process Control (IPC), Organizational Citizenship Behavior (OCB), Innovative Behavior (IB), and Task Complexity (TC). HRMSS is considered a higher-order construct with the dimensions of Consistency, Consensus, and Distinctiveness, and the other constructs are measured with reflective indicators. The outer loadings listed next to the arrows between the latent constructs and the indicators are the values displayed. The loadings vary between 0.835 and 0.900, which is above the recommended loading of 0.70, and this indicates high indicator reliability.

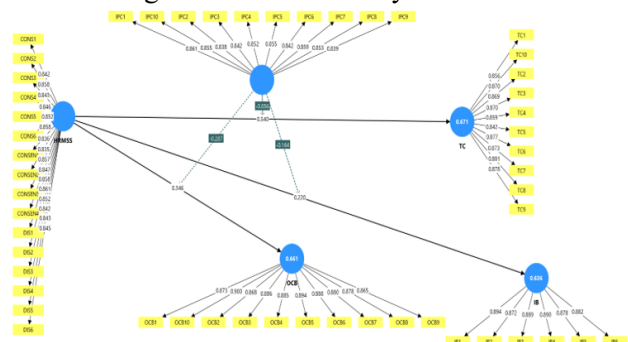


Figure 2: Measurement Model

Source: Authors' compilations

Construct Reliability

The results of the internal consistency reliability and convergent validity test for the study constructs are presented in Table 4.3. The evaluation consists of Cronbach's α , ρ_A and ρ_C , and Average Variance Extracted (AVE). The Cronbach's Alpha, Composite

Reliability, and rho_A values are recommended to be above 0.70 to ensure good reliability and convergent validity, and the AVE value greater than 0.50 is also good evidence of reliability and convergent validity (Joseph F. Hair Jr. et al., 2022).

Table 4.3: Construct reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
HRMSS	0.974	0.974	0.976	0.72
IB	0.944	0.945	0.956	0.782
IPC	0.957	0.957	0.963	0.722
OCB	0.968	0.968	0.972	0.777
TC	0.963	0.964	0.968	0.753

Source: Authors' compilations

Discriminant Validity Using HTMT

The results of the Heterotrait–Monotrait Ratio (HTMT) to determine the discriminant validity of the measurement model are shown in Table 4.4. Table 4 shows the results of the Heterotrait–Monotrait Ratio (HTMT) to determine the discriminant validity of the measurement model, which is used in this study. Traditionally, tests of discriminant validity have been performed, but the criterion proposed by Christian M. Ringle, Marko Sarstedt, and colleagues is claimed to be a more stringent criterion for assessing discriminant validity. The recommended guidelines are that the values of HTMT should be < 0.85 (strict criterion) or < 0.90 (more liberal criterion) to ensure that each construct is empirically separate from the others.

The results indicate that all HTMT values are well below the recommended threshold of 0.90, ranging from 0.041 to 0.818. Since all HTMT values are below the conservative threshold of 0.85 and well below the maximum acceptable threshold of 0.90, the results confirm that each latent construct measures a unique theoretical concept and is sufficiently distinct from the other constructs in the model. Therefore, the measurement model satisfies the criterion of discriminant validity, indicating that no significant overlap exists among the constructs and supporting the appropriateness of proceeding with the structural model analysis.

Table 4.4: Discriminant validity (HTMT ratio)

	HRMSS	IB	IPC	OCB	TC	IPC x HRMSS
HRMSS						
IB	0.697					
IPC	0.774	0.796				
OCB	0.704	0.817	0.724			
TC	0.812	0.818	0.762	0.711		
IPC x HRMSS	0.061	0.237	0.041	0.383	0.113	

Source: Authors' compilations

Discriminant Validity using Fornell- Larcker

Table 4.5 presents the Fornell–Larcker criterion, which was used to further assess the discriminant validity of the measurement model. According to the criterion proposed by Claes Fornell and David F. Larcker (1981), the square root of the Average Variance Extracted (AVE) for each construct, shown on the diagonal of the matrix, should be greater than its correlations with all other constructs presented in the corresponding row and column. Meeting this criterion indicates that a construct shares more variance with its own indicators than with other constructs, thereby confirming discriminant validity. The square root of the AVE of each construct is greater than the correlation with each of the other constructs, satisfying the Fornell–Larcker criterion. These results support the work of others that each of these constructs represents a different underlying concept and is empirically different from the other constructs. In addition, the measurement model shows good discriminant validity that is in line with the HTMT results, and this makes the measurement model suitable for further analysis of the structural model.

Table 4.5: Discriminant validity (Fornell-Lacker)

	HRMSS	IB	IPC	OCB	TC
HRMSS	0.848				
IB	0.67	0.884			
IPC	0.748	0.758	0.85		
OCB	0.684	0.782	0.698	0.882	
TC	0.787	0.781	0.732	0.687	0.868

Source: Authors' compilations

Structural Model Assessment: Path Coefficients

Table 4.6 presents the results of the structural model analysis, including the path coefficients (β), sample means, standard deviations, t-statistics, and p-values obtained through the bootstrapping procedure in SmartPLS 4. The significance of the hypothesized relationships was evaluated using the recommended criteria of t-value > 1.96 and p-value < 0.05 at the 5% significance level.

The results reveal that HRM System Strength (HRMSS) has a positive and significant effect on all three outcome variables. Specifically, HRMSS positively influences Innovative Behavior (IB) ($\beta = 0.220$, $t = 4.345$, $p < 0.001$), Organizational Citizenship Behavior (OCB) ($\beta = 0.346$, $t = 7.429$, $p < 0.001$), and Task Complexity (TC) ($\beta = 0.540$, $t = 12.388$, $p < 0.001$). Among these relationships, the

strongest effect is observed on Task Complexity, indicating that a stronger HRM system substantially enhances employees' perceptions of the organizational training environment.

Similarly, Internal Process Control (IPC) demonstrates positive and statistically significant effects on all endogenous constructs. IPC has the strongest positive influence on Innovative Behavior ($\beta = 0.585$, $t = 12.488$, $p < 0.001$), followed by Organizational Citizenship Behavior ($\beta = 0.425$, $t = 9.017$, $p < 0.001$) and Task Complexity ($\beta = 0.325$, $t = 6.988$, $p < 0.001$). These findings indicate that employees who perceive a stronger ideological psychological contract are more likely to exhibit innovative behavior, engage in citizenship behaviors, and perceive reduced task complexity.

The moderation analysis shows that the interaction term $IPC \times HRMSS$ has a negative and significant effect on Innovative Behavior ($\beta = -0.164$, $t = 6.891$, $p < 0.001$) and Organizational Citizenship Behavior ($\beta = -0.287$, $t = 10.999$, $p < 0.001$). These results suggest that higher levels of ideological psychological contract weaken the positive influence of HRM System Strength on both innovative behavior and organizational citizenship behavior. In contrast, the moderating effect of $IPC \times HRMSS$ on Task Complexity is negative but statistically insignificant ($\beta = -0.056$, $t = 1.819$, $p = 0.069$), as the p-value exceeds the recommended significance level of 0.05.

Table 4.6: Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
HRMSS $\rightarrow$ IB	0.22	0.222	0.051	4.345	0.00
HRMSS $\rightarrow$ OCB	0.346	0.349	0.047	7.429	0.00
HRMSS $\rightarrow$ TC	0.54	0.541	0.044	12.388	0.00
IPC $\rightarrow$ IB	0.585	0.585	0.047	12.488	0.00
IPC $\rightarrow$ OCB	0.425	0.423	0.047	9.017	0.00
IPC $\rightarrow$ TC	0.325	0.326	0.046	6.988	0.00
IPC $\times$ HRMSS $\rightarrow$ IB	-0.164	-0.163	0.024	6.891	0.00
IPC $\times$ HRMSS $\rightarrow$ OCB	-0.287	-0.287	0.026	10.999	0.00
IPC $\times$ HRMSS $\rightarrow$ TC	-0.056	-0.057	0.031	1.819	0.069

Source: Authors' compilations

Structural Model

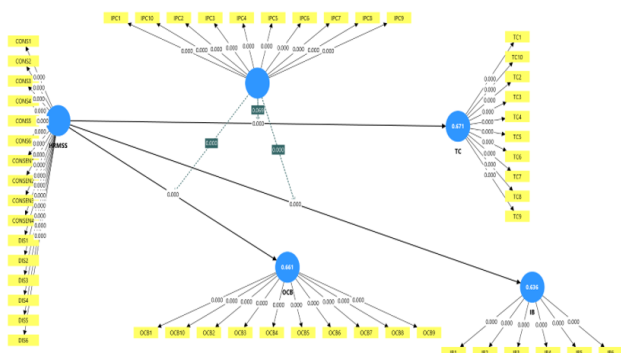


Figure 3: Structural Model

Source: Authors' compilations

DISCUSSION

This study investigated the moderating effect of Internal Process Control (IPC) between Human Resource Management System Strength (HRMSS) and Innovative Behavior (IB), Organizational Citizenship Behavior (OCB) and Task Complexity (TC) and examined the effects of Human Resource Management System Strength (HRMSS) on Innovative Behavior (IB), Organizational Citizenship Behavior (OCB), and Task Complexity (TC). In general, the results confirm the hypothesis that a good HRM system has a positive effect on employee outcomes. Based on IPC, however, if the process is too controlled, it might backfire by reducing the positive effect of HRMSS on behaviors.

The results confirm the hypothesis that HRMSS has a positive effect on innovative behaviour, as Bowen and Ostroff (2004) suggested that HRM systems can send clear, consistent, and distinct signals to the employees, indicating what they are expected to do and what actions the organization considers to be priorities. If HR policies are conveyed in a uniform and equitable manner, staff are more likely to suggest and put into action new strategies. This result aligns with the recent research findings that effective HRM systems inspire employees to be more innovative and creative by creating trust, psychological safety, and empowering employees (Jiang & Messersmith, 2018; Rabl et al., 2024). This study builds on this literature by establishing that the positive effect of HRMSS is still highly sustained in organizations where there is a formal system of internal control.

Likewise, the positive relationship between HRMSS and Organizational Citizenship Behavior suggests that employees tend to be more willing to perform extra-role behaviors if they feel HR practices are perceived as coherent, transparent, and credible. Social Exchange Theory (Blau, 1964) suggests that a positive exchange from an organisation is returned by the employees in the form of discretionary behaviors that are beneficial to the organisation. The results align with prior studies that revealed that good HRM system strength positively influences employee commitment, organizational identification, and citizenship behaviors (Sanders et al., 2021; Zhang et al., 2023). These findings confirm that, in addition to the content of HR practices, the consistency with which these practices are enacted is also important in influencing employee responses.

The strongest direct relationship was found between HRMSS and Task Complexity, indicating that

organizations with stronger HR systems are more able to prepare their employees for complex and challenging job tasks. HR systems that are strong are used to create work environments that are supportive, provide appropriate training, and to clarify expectations of performance, all of which build employee confidence in performing complex tasks. This is consistent with Appelbaum et al. (2000), who suggested the capability, motivation, and opportunity (AMO) theory, which suggests that HR practices increase the capability and opportunities of employees to perform effectively. This finding adds to the existing HRM literature in terms of its impact on employee attitudes, but also on employees' effectiveness in more complex work situations.

It is also shown in the study that Internal Process Control has a positive effect on Innovative Behavior, Organizational Citizenship Behavior, and Task Complexity. Effective internal process control seems to give employees clear processes, accountability, and stability of operations, which promote productive work behaviours. The results of this study align with the literature on governance and organizational control, which indicates that a well-designed control system can help to minimize ambiguity, enhance coordination, and promote knowledge sharing among employees, ultimately aiding in their performance (Simons, 1995; Bedford et al., 2019). The findings do not imply that acceptable employee conduct is limited by internal controls, but rather that an acceptable level of control can be developed that will create an environment that allows the employee to provide innovative ideas without compromising the organization's standards.

The study contributes to the literature in several ways, including the investigation of the moderating effect of Internal Process Control. The results show that IPC has a significant and negative moderating effect on HRMSS and Innovative Behavior and on HRMSS and Organizational Citizenship Behavior. The results indicate that while the strength of the HRM system is a significant contributor to positive employee behaviours, there is a threshold for process control; beyond which, the contribution to positive employee behaviours is diminished. One explanation is that the formalization of procedures reduces employees' autonomy and flexibility, which, in turn, reduces possibilities for experimentation and discretionary behaviors. This is in line with Self-Determination Theory (Deci & Ryan, 2000), which states that too much external control can have negative effects on intrinsic motivation, creativity,

and voluntary contribution to the organization. Thus, there needs to be a balance between governance structures and employee flexibility.

Interestingly, the moderating effect of IPC on the relationship between HRMSS and Task Complexity was not statistically significant. The results also indicate that the effectiveness of the HR systems plays a higher role in the HR employee's ability to perform complex tasks than process control within the HR system. Whether the organizational controls are fairly stringent or lax, the HR systems still improve the employee's ability to handle complex tasks. This finding partially contradicts the idea that organizational controls have a consistent relationship with all HR-related outcomes and suggests that the extent to which a task can be complex may be more strongly related to employee competencies, training, and task design than to procedural controls.

Theoretically, this study adds to the HRM literature by bringing together HRM System Strength and Internal Process Control under one roof. The literature on HRM practices or on internal control systems has focused so far mostly on HRM practices or on the internal control systems separately, while in the present results, it was shown that the effects of the organizational control systems on HR systems differ according to employee outcomes. Specifically, it is internal process control that helps to moderate the behavioral consequences of HRMSS, but does not influence employees' ability to execute complex tasks. This nuanced understanding contributes to the advancement of knowledge by demonstrating the role of governance mechanisms in promoting organizational stability and also restricting employee discretion.

Overall, the results suggest that for organisations to pursue increased innovation and citizenship behaviour, they should prioritise enhancing HRM systems that are characterised by consistency, distinctiveness and consensus, but avoid unnecessarily stringent rules and policies that stifle employee autonomy. Meanwhile, good internal process controls are still useful for ensuring the reliability of operations and helping employees cope with the growing complexity of their work. The results thus offer a more comprehensive picture of the relationship between HR systems and organizational control mechanisms and the behavior of employees in modern organizations.

Practical Implications

The results of this study have significant implications for organizational leaders, HR professionals, and

policymakers. Strong HRM systems that are distinctive, consistent, and consensual should be built to promote employees' innovative behavior, organizational citizenship behavior, and capacity to handle complex work. Meanwhile, managers should adopt internal process controls in a balanced way, balancing governance frameworks with the need to ensure processes are efficient without being too rigid and stifling employee autonomy and creativity. By aligning HR practices with appropriate control systems, organizations can create a supportive work environment that encourages innovation, discretionary employee contributions, and effective performance in increasingly complex job settings. These findings suggest that organizations should view HRM system strength and internal process control as complementary management tools that, when carefully integrated, can improve both employee outcomes and overall organizational effectiveness.

Limitations and Future Research

The study has some limitations which can be addressed in future research. The study was a cross-sectional design and cannot be regarded as providing a basis for establishing cause-and-effect relationships between the study variables, so future studies should use longitudinal and/or time-lagged research designs to more fully elucidate the temporal dimensions of the empowerment-employee outcomes relationship. Second, the study was based only on self-reported survey data, which could be open to common method bias and social desirability bias; thus, further studies should adopt multi-source data including supervisor ratings, peer evaluations, or objective organizational performance indicators to strengthen and validate the findings. Third, the study focused on a single organizational and contextual dimension, meaning the results may not be generalizable to other contexts; this should be done in future studies for the results of the proposed model to have a wider explanatory power and external validity, and to consider additional contextual variables like organizational culture, leadership style, digital transformation, employee psychological empowerment, etc.

CONCLUSION

The purpose of this study was to examine the moderating effects of Internal Process Control (IPC) and the influence of Human Resource Management System Strength (HRMSS) on Innovative Behavior (IB) and Organizational Citizenship Behavior

(OCB), as well as on Task Complexity (TC). The results show that HRMSS has a positive impact on all three employee outcomes, and therefore, the construction of HR systems that are distinctive, consistent, and built on consensus is important. In addition, it was determined that there was a positive direct relationship between IPC and innovative behavior, organizational citizenship behavior, and task complexity, meaning that internal controls that are handled well can facilitate positive employee outcomes. The results of the moderating analysis, however, showed that the effect of HRMSS on positive innovative behavior and organizational citizenship behavior was lowered by IPC, and the effect of HRMSS on task complexity was not statistically significant. The results indicate that while implementing better internal controls enhances organizational governance, too much formality can have a negative impact on the behavioral outcomes of good HRM. The study's findings can be summarized as follows: Overall, this study contributes to the understanding of the interaction between HRM system strength and internal process control in influencing employee behaviours, and offers theoretical and managerial insights for HR practices and governance design that would improve the effectiveness of the organisation.

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