

Strategic Human Resource Management and Employee Performance Enhancement: An Empirical Study

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Abstract:

This research aims to examine how and when SHRM (high-performance work systems, HPWS) leads to enhanced employee performance. While previous studies have highlighted the positive relationships between SHRM and organizational performance, the mechanisms that make the impact of HR practices on individual performance more apparent have remained less explored, otherwise known as the “black box” problem. To close this gap, in this work we built and used an empirical moderated mediation model by integrating the Ability–Motivation–Opportunity (AMO) framework and Social Exchange Theory. More specifically, this study investigates the mediating role of work engagement (vigor, dedication, absorption) on the HPWS–two employee performance correlates (task performance and organizational citizenship behavior (OCB)). It also investigates that transformational leadership constitutes a relevant contextual moderator of HPWS effectiveness by investigating employees' perceptions and reactions to the HR processes. The researchers employed a time-lagged multi-source research design and engaged with multiple organizations, from employees to their supervisors. The hypothesized relationships were confirmed using structural equation modeling and bootstrapping procedures. The results demonstrate that HPWS significantly improve both task performance and organizational citizenship behavior (OCB) — and also suggest some indirect influence of both on work engagement. In addition, transformational leadership acts as a positive moderator of relationships between HPWS and work engagement and acts indirectly upon work performance outcomes. The implications of this study can be found important in the SHRM literature. First, it contributes to theoretical knowledge by disentangling the psychological mechanism behind the SHRM–performance nexus. Second, it foregrounds leadership as a boundary condition and offers a contextualized approach to the effective perspective of HR practitioners. Another result is the fusion of SHRM, employee engagement and leadership leading multi-faceted perspective on strategy-driven HR-based practice strategy, staff performance and talent outcomes. All of these findings are based on the knowledge that the level of performance of SHRM systems is determined by the structure and the motivation and leadership of employees in these SHRM systems. We speculate that these findings can be an application to give the support for the work and analysis of managers towards enabling them to utilize that capability towards ongoing organization performance and competitive advantage.

Keywords: High-Performance Work Systems (HPWS), Strategic Human Resource Management (SHRM), Work Engagement, Transformational Leadership, Organizational Citizenship Behavior (OCB), Moderated Mediation.

1. Introduction:

In a more uncertain, knowledge-intensive and intensely competitive environment, companies are under increasing pressure to develop unique capabilities that are valuable, difficult to imitate, and sustainable over time. Among the numerous organizational assets available to firms, human capital has come to potentially be the most important source of long-term competitive advantage. Employee knowledge, skills,



dedication, and discretionary labour cannot easily be replicated by competition, unlike financial capital and technological assets. As a result, organizations have moved from conceptualizing human resources as a mere administrative undertaking, to acknowledging the degree to which human resources represent a strategic asset that must be systematically co-ordinated with wider organizational aims. Indeed, this strategic orientation has transformed strategic human resource management (SHRM) into a central focus for new ideas in management research and practice for the last several decades. SHRM is a structured organizational program of all human resources deployment and activity that are planned to enable an organization to achieve its strategic objectives. In the past 30 years, it has been established that SHRM systems have positive impact on organizational outcomes, including productivity, innovation, operational efficiency, and organizational performance. Research using the resource-based perspective, human capital theory, and ability–motivation–opportunity (AMO) framework has indicated that well-engineered HR practices, such as selective staffing, intensive training, pay based on performance, developmental evaluation, and participative decision-making, have the potential to improve both employee capabilities and the organization's well-being. This evidence has contributed to SHRM to be one of the most powerful areas of organizational and management research. And with these advances in mind, however, one critical theoretical and empirical consideration has not been addressed: how exactly do SHRM practices lead to improved employee performance? Although the macro-level link between the organization's HR systems and organizational performance is relatively clear, the specific mechanisms through which strategic HR practice translates to the individual-level outcomes of employees have no well-defined model. Such a matter has largely been referred to in the literature as the “black box” problem of HRM. Putting it differently, while scholars have demonstrated the importance of SHRM, more than one argument exists on the psychological, motivational, and behavioral processes by which employees engage with HR systems, which ultimately leads them to convert these systems into higher performance levels. That's an important gap because employees do not react to HR practices in only mechanical or uniform ways. Instead, they interpret organizational practices, ascribe meaning to them, and respond according to their perceptions of support, fairness, trust, and opportunity. The strategic HR system can also imply to employees that the organization cares about their development, and is rewarding in that they perform at the highest level. But these signals are not guaranteed to lead to performance improvements unless employees embrace them and become emotionally attached to and energetically committed to the job. Accordingly, the effect of SHRM on employees' performance was likely to be based on an intermediate state of employment that provides an explanation of why HR practices can succeed. Among important mechanisms in this respect, one being work engagement. At the same time, work engagement, generally consisting of vigor, dedication, and absorption, has been emerging as the most commonly used construct to learn about the ways employees put effort into productive work behavior. When employees are engaged, they are much more energetic, cognitively oriented, emotionally invested, and more persistent than employees who disengage from the company's goals. From a social exchange and motivational point of view, SHRM practices will perhaps lead to higher work engagement and improve the work environment by creating employees' work engagement which means promoting workers' support, empowerment, compensation equality and a sense of meaning where people feel they can contribute positively to the organization. As a result, engagement is believed to facilitate higher performance on tasks, discretionary effort, flexibility, and organizational effectiveness. Studying work engagement as a mediating factor therefore represents a theoretically rich and empirically relevant approach to unpack the HRM black box. At the same time, the understanding of when SHRM is most effective is just as important. Even good HR systems may not have the same impact in all contexts of an organisation. Leadership is one of the most powerful contextual factors that influence the way in which employees experience and understand HR practices. In particular, leadership style affects whether employees find HR practices credible, consistent, and genuinely supportive and thus the moderation of the effects of SHRM. For instance, transformational, inclusive or supportive leaders can strengthen the positive signals that are part of strategic HR practices that foster trust, meaning and alignment between organizational intentions and daily employees' experiences. On the other hand, ineffective or inconsistent leadership may dilute the motivational impact

derived from SHRM that may impact on engagement and performance. Thus, adding leadership style as a boundary condition is likely to foster a context-sensitive understanding of the SHRM–performance relationship. While previous studies have explored SHRM, employee attitudes, and performance in various combinations, there are still some limitations in the literature. First of all, a large body of SHRM literature has focused on firm level performance while less has been studied for employee level explanatory mechanisms. Second, the research studies that do include mediators to explain this, tend to focus more on large-scale attitudinal variables (commitment or satisfaction), which fails to examine work engagement in particular across several contexts. Third, contingency factors including leadership style are often taken as ancillary, and not in line with a complete process model that accounts for mediating mechanisms and the contextual setting in which SHRM has stronger or weaker influences. Therefore: There is still a requirement for empirically-based models that link SHRM with employee performance by some transparent psychological channels, while also considering corresponding boundary conditions. Given the context, the current study aims to contribute to the comprehension of the SHRM–employee performance relationship by explaining the effect of SHRM on employee performance through work engagement, and by examining when the relationships become stronger by different leadership styles. Through these studies that blend strategic HRM and employee engagement/leadership views, the findings provide a response to the demand for more multilevel, process-driven perspectives of HR effectiveness. Instead of expecting HR systems to directly translate into performance, the present paper considers SHRM as a strategic signal and resource system whose effects are enacted via the motivational state of employees and depends on the broader leadership environment that employees have in place to act upon. This research makes a number of contributions to the extant research. Firstly, it provides theoretical implications for SHRM by breaking the HRM black box and explaining in a more detailed manner the psychological mechanism by which strategic HR practices drive the worker performance. By moving work engagement into the mediating role, the paper moves us away from more simplistic direct-effect models to an explanatory account of employee HR performance. Second, it extends contingency concepts in the SHRM by showing that when HR strategies work, they come with a unique, contextual, and powerful context that affects the actual effectiveness of HR programs. In this regard, the study provides a more accurate picture of when SHRM is more likely to produce performance gains. Third, the paper adds to the management literature more generally by incorporating SHRM, engagement and leadership into the same empirical framework, thereby connecting research strands which are often studied independently. Taken together, these contributions provide theoretical sophistication and managerial application on how to use strategic human resource systems to get better performance from employees.

2. Theoretical Background

2.1. Strategic Human Resource Management as High-Performance Work Systems:

From its early theoretical conception, strategic human resource management (SHRM) has advanced into a more focused conceptual framework, that is, with a far more analytic focus on systematic alignment of human resource practices to strategic direction. One of the most potent approaches to operationalizing SHRM in modern literature has been the concept of the high-performance work system (HPWS). Instead of considering HR as a standalone technology, HPWS considers SHRM as a set of interconnected practices that are systematically used to build employee skills, motivation, and involvement in support of superior human performance. This bundle usually involves: selective staffing, extensive training and development, developmental performance appraisal, performance-contingent compensation, internal promotion opportunities, employee participation, information sharing, and job designs that promote discretion and cooperation.

This systems view is crucial because employees' experience of HR practices differ from that experienced by individuals. Rather, they read the larger pattern of trends like signals about how the organization values and expects the organization's employees to act and what the organization is willing to invest in its workforce. Although a disciplined recruitment approach may attract high-performance employees, without

accompanying developmental training, fair appraisal, adequate compensation and development prospects, the benefits of such a system will be quite limited. For that regard, the HPWS literature highlights horizontal fit in HR practices and vertical fit between HR architecture and organizational strategy. The claim from the high-impact SHRM literature is not that “good HR” is relevant, but that ‘aligned’ HR systems allow for conditions where higher-level employees are more likely to be productive.

Understanding SHRM with an HPWS lens also prevents treating SHRM as a catch-all or ambiguous concept, which is still a common problem. A more accurate HPWS lens enables the researcher to assess the content of the HR system, describe its expected effects and test those effects more intensively. It is consistent with the recent scholarship on the role of bundled HR practices with respect to the overarching SHRM, and has consistently demonstrated that such practice bundled approaches yield better predictors of employee and organizational consequences than single practice approaches. To this end, this study conceptualizes SHRM as a system of high-performance work practices that, when integrated, drive the way employees develop competence, feel motivated, and gain opportunities to contribute.

2.2. The Ability–Motivation–Opportunity Framework:

Central to explaining how HPWS impact employee outcomes is the Ability–Motivation–Opportunity (AMO) theory as a theoretical framework. According to the AMO model, employee success depends on 3 general components: Ability to perform; Motivation to exert effort; and Opportunity to participate and to apply skills. Yet, given its simplicity and simplicity-effect, this frame of reference (which stands largely for both the capability and motivativeness effects) becomes one of the leading explanatory models in SHRM because it offers a very simple and strong description of how HR settings generate performance improving factors. On the ability front, HPWS enhance performance by training their employees with the knowledge and skills necessary to perform tasks effectively. Methods such as robust hiring, skills-based recruitment, and training are formulated to make a workforce able to meet current workplace requirements and flexible enough to adjust to changes in the organizational requirements. For in this sense SHRM does not just deploy, but develops the strategic human capital. From the motivation standpoint, HPWS are anticipated to heighten employees’ engagement in the effort to accomplish organizational goals. Performance-driven pay, recognition, transparent appraisal, and career/growth paths communicate that good performance is valued and rewarded. Employee motivation is also increased when they see HR practices as supportive, fair, and conducive to their development rather than being controlling. In this way, HPWS can increase extrinsic and intrinsic motivation through the linking of effort to a purposeful outcome and through a workplace that is more meaningful and empowering. Employers from the opportunity perspective must allow employees to contribute, share suggestions, and have discretion in their duties. Even experienced, engaged employees are often under-motivated if organizational systems do not support opportunities for involvement. Common practices that enhance such opportunities include sharing knowledge, employee engagement, participative decision-making, teamwork and decentralized organizational mechanisms that enhance employees’ opportunities to transfer their knowledge and initiative. As a result, so too are opportunity-enhancing practices especially meaningful not just for formal performance, but also proactive and discretionary types of behavior. Since it shows why an HPWS should affect various facets of the employee performance, the AMO framework is particularly useful to the current study. When employees are well selected and trained, they are more capable of executing core job functions. If employees are more motivated and empowered, they will also be more likely to engage in initiatives, collaborate and exhibit discretionary behaviors that support wider organizational functioning. AMO theory thus provides the foundational logic of linking SHRM to both in-role and extra-role performance outcomes.

2.3. Social Exchange Theory and Employee Responses to HPWS:

However, even though the AMO theory clarifies the resource and capability-driven rationale why SHRM increases performance, it lacks account of the relational and interpretive processes that employees engage

in when responding to organizational investments. This is where Social Exchange Theory (SET) comes into play as a complementary theoretical perspective. SET argues that relationships develop via reciprocal exchanges of valued resources and that people respond positively to perceived favourable treatment from another party. At the organizational level, employees who feel that the organization invests in them, treats them fairly, and supports their development are expected to reciprocate this concern/attitude and behavior. Applied to HPWS, SET posits that HR practices are not only an administrative mechanism; they are relational in nature, too. Employees may conclude that when they do feel selected for development opportunities, have fair performance reviews, are rewarded meaningfully, and feel included in the decision-making process, that the organisation cares about their well-being. Such perceptions can lead to felt obligation, trust and a reciprocal feeling of duty and interest, as a feeling of obligation, and a willingness to return the rewards in kind – a feeling of feeling obligated to perform through more effort, loyalty, trust and cooperation.

This social exchange logic is particularly relevant in explaining why one structured HR practice might not generalize between scenarios due to lack of a better model of HR-related outcomes in different locations. Employees do not only react to the existence of HR practices but also how they are exercised and perceived by HR practices. Developmental training is seen as an investment in employee growth, performance-based rewards are seen as recognition, and participative structures represent trust and empowerment. This condition makes it more probable that employees will “repay” the organization by working harder and taking on behaviors that serve both their day-to-day work and the broader social aspects of the workplace. In this sense, SET is a valuable supplement to AMO theory. Where AMO has focus on the structural conditions of performance, SET deals primarily in the relational processes through which employees turn organizational support into behavioural reciprocation. Together, these theories provide strong rationale for why HPWS should enhance employee performance. HPWS construct expertise, motivation, and opportunities for contribution, and enhance the perceptions of organizational investing and support that push employees to perform with higher expectations and citizenship.

2.4. Employee Performance as a Multidimensional Construct:

One big problem in the SHRM literature is the tendency to treat employee performance as a monolithic and undifferentiated outcome. But there is good performance research that is increasingly aware that workforce performance is multidimensional and that different dimensions may behave differently as a response to organizational practices. To clarify its conceptual framework, this study separates task performance from organizational citizenship behavior (OCB).

2.4.1. Task Performance

Task performance refers to the activities that are directly involved in delivering products and services. It entails those aspects of work that are required to do the work within a given role (e.g., achieve targets, maintain quality and level of excellence, complete the work well, perform roles or perform tasks) within an agreed-upon responsibility or to meet expectations of the tasks. Task performance is fundamental to business in an organization, as it indicates the efficiency and effectiveness that employees demonstrate as part of their formal employment. The conceptually simple basis for HPWS is task performance. Best practices like thorough selection, role-related training, control of performance, and performance-related incentives are tailored to better cultivate employees’ ability and incentive to do their jobs properly. Such practices strengthen ability and motivation and strengthen employees’ willingness to invest effort in job execution from an AMO perspective and social exchange perspective. Hence, task performance is one of the direct primary employee-level outcomes of SHRM.

Organizational Citizenship Behavior is the action of citizens who are active and active in the decision making of employees and can thus enhance corporate governance behavior in such settings. Conversely, organizational citizenship behavior (OCB) involves discretionary behavior that goes beyond official job

characteristics that adds extra value to the social and psychological welfare of the organization but is more likely to be related to the social and psychological functioning of the organization. Such behaviors can promote co-operative behaviours that include, for example, giving the benefit of the doubt to the coworker, volunteering to take on extra duties, assisting in organizational endeavors, acting in the realm of social services, being a model of civic virtue, and sustaining the good and friendly work atmosphere. OCB is of particular interest in SHRM research because HPWS are not created for compliance or technical effectiveness only. There are many strategic HR methodologies that seek to provide commitment, cooperation, commitment and personal branding with organisational objectives as well as a stronger focus on their relationship. In addition, HR efforts characterized by opportunity-maximization as well as interpersonal orientation are expected to stimulate employees to act beyond their official role descriptions. In SET, staff who experience fair treatment of supportive treatment may feel the need to reciprocate by either achieving more productive work or taking part in citizenship behaviors that support the organization and others and provide mutual aid to others. Therefore, OCB represents a theoretically substantive and practically relevant factor of employee performance to be considered separately from task performance.

2.5. Why HPWS Should Influence Both Task Performance and OCB:

Integration of AMO theory and SET also serves as a robust justification for hypothesizing that HPWS modifies task performance and OCB, albeit via slightly different mechanisms. The dominant reasoning in terms of task performance is capability enhancement and directed motivation. Selective hiring, targeted training, developmental appraisal, and performance-related rewards increase employees' capacity to perform job-oriented tasks and to perform well in formal performance reviews. Opportunity-enhancing activities may also enhance task performance when it is ensured that workers are freed to apply their knowledge and better fit the context and adjust to the demands of operation. For OCB, this process is often relational and voluntary, but less dependent. Since citizenship behaviours are not formally mandated by job description, trust, fairness, support and reciprocity are more likely to occur in employees experiencing citizenship behaviors. HPWS may promote such attitudes by signalling long term commitment to employees and by promoting respect, inclusion and involved environment in the work. Employees who see in this dynamic a kind of supportive exchange relationship may support coworkers to help them and others from a work role because they are more likely to contribute beyond minimum role expectations. Although, at the theoretical level, this is an important distinction because it implies that SHRM does not necessarily operate on a particular universal performance path. While some HR practices may have greater effects on task performance through ability and role clarity, others might result in an increased level of OCB via commitment, trust, and felt obligation. The current study separates task performance and OCB, resulting in a more nuanced conception of employee performance, addressing demands for greater sensitivity within SHRM research.

2.6 Integrate the Theoretical Horizons

This paper, then, relies on the theories drawn from the two perspectives, building upon the theory base in HPWS research, in addition to their complementation with AMO theory, and Social Exchange Theory. In its first place, the HPWS perspective makes SHRM much more practical because it gives people insight into SHRM as a system rather than as a management philosophy. Secondly we know from the theory of AMO the fact that these practices work to improve employee performance by developing ability, stimulating motivation, and expanding the number of potential contributions. Thirdly, Social Exchange Theory elucidates for you why employees who perceive helpful and supportive HR investments may in response engage in higher in-role and extra-role behaviors. Such a holistic view is particularly useful for studying employee performance at various layers. Task performance indicates how well employees transform developed skills and motivation into an efficient job performance, whereas OCB assesses the discretionary and relational contribution occurring when employees are not restricted externally by role expectations. This approach strengthens the paper's foundational understanding on how and why SHRM affects employee performance in an individual work context through a well-constructed theoretical

framework that can be applied to each of the topics described. It's a complex approach to performance, using both task performance and organizational citizenship behavior.

3. Hypotheses Development and Conceptual Framework

3.1. High-Performance Work Systems and Employee Performance:

A key argument held in the SHRM literature is that high-performance work systems (HPWS) impact employees' performance by building an integrated system of people-management processes that promote employee competencies; motivate them and enhance opportunities for meaningful involvement. As mentioned in the earlier paragraphs, HPWS usually include interrelated activities such as selective hiring, on-going training, developmental appraisal, pay contingent on performance, information sharing, participation, and internal mobility opportunities. Adopting and maintaining such practices allows for a clear and coherent performance logic to be conveyed to employees, providing employees with the ability to meet organisational expectations. From the AMO perspective, HPWS should improve employee performance as they enhance employees' ability to work effectively, enhance their motivation to put in effort and create a space where individuals can contribute and demonstrate skills. It enhances quality of incoming talent through selective recruitment, builds knowledge in relation to the role and role-relevant skills through the development of training, performance-based rewards reinforce goal-directed effort, and role-relevant skills through the development of training. Participation and sharing of information also allow employees to make more use of discretion and participation in work processes. These mechanisms are relevant to task performance, that is, the performance of formally mandated duties and responsibilities. At the same time, HPWS should encourage organizational citizenship behavior (OCB) as a category of discretionary behaviors beyond what is specifically required for an individual's role that is expected to contribute to the functioning of the organization. Task performance connects with core performance; OCB relates to helping, collaboration, initiative, and support of the organizational environment. From a social exchange lens, such employees will feel an obligation to return the favor in positive extra-role behaviours when they sense that the organization cares about their growth, maintains equity, and supports the voice and role of the employee. Such reciprocal responses can become anything from lending a hand to your co-workers, championing some change efforts, contributing to an extra role or ensuring a positive office environment. Recent empirical research has further substantiated the positive influence of HPWS on predicting employee level performance outcomes. Evidence of inter-industry and national linkages has highlighted that integrated HR systems are positively related with in-role performance and extra-role behaviors, especially when the employees believe that HR practices are authentic, educational and supportive. It is of critical importance that this evidence argues that the influence of HPWS effects occur not just through formal productivity outcomes but also through other modes of contribution that undergird performance. In this respect, the following propositions are proposed:

- **H1a:** High-performance work systems are positively related to employee task performance.
- **H1b:** High-performance work systems are positively related to employee organizational citizenship behavior.

3.2. The Mediating Role of Work Engagement:

While previous studies had shown that HPWS are positively related to employee performance, there remains one lingering question concerning a psychological mechanism through which this interaction develops. In line with the call to open the HRM 'black box', in the present study we present work engagement as a relevant mediating variable between HPWS and task performance and OCB. Work engagement is widely characterized as a positive, intense affective effect that is conducive to satisfaction with work and to a sense of purpose and fulfilment. Engaged employees spend their energies (physical, cognitive, emotional) on their work, they tend to be more motivated, perseverant, energetic, and determined despite work constraints. Consequently, work engagement has become a particularly useful construct for explaining how and why employees translate organizational resources to their own performance-enhancing activities. Theoretically, HPWS are expected to lead to greater work engagement.

For one, in the AMO framework HPWS arm staff with necessary resources for them to work effectively. Skills that enhance competence and self-efficacy, motivation that increases effort and goal commitment, participation and information sharing that enhance opportunities – and a sense of importance. Together, these practices support a workplace in which workers are less prone to be demotivated and more likely to feel included, and more likely to become emotionally invested in what they do. Second, as emphasized by the social exchange theory, development and encouraging HR practices are perceived by employees to be a sign of the organization's concern and involvement. When employees feel their organization has given serious attention to their growth and recognition as well as opportunities for meaningful participation (such as those made by their manager as well as managers) they are more likely to respond with more emotional and motivational attachment. Here, the work engagement is a major psychological expression of the reciprocity effect: the employees care more because they perceive the organization investing in them. In contrast, work engagement would positively correlate to both facets of employee performance. Engaged employees would be more attentive, persistent, and proactive in responding to formal job responsibilities, which should directly lead to better task performance. Moreover, engaged employees are also more likely to assist others, go well beyond set roles expectations, and support the greater organizational ecosystem, thereby elevating OCB, because they are increasingly engaged and involved in their jobs. Previous empirical investigations have consistently found work engagement to be predictive of both in-role effectiveness (in the sense that people are working more effectively and efficiently), as well as extra-role behaviors in a broad set of organizational settings. In combination, these arguments indicate that HPWS do not have an effect on performance through structural or administrative mechanisms alone. More specifically, they influence employee performance partly through a state of motivation: employees feel energetic, committed, and absorbed in their job. Hence, the following hypotheses are made:

- **H2a:** High-performance work systems are positively related to work engagement.
- **H2b:** Work engagement is positively related to employee task performance.
- **H2c:** Work engagement is positively related to employee organizational citizenship behavior.
- **H2d:** Work engagement mediates the positive relationship between high-performance work systems and employee task performance.
- **H2e:** Work engagement mediates the positive relationship between high-performance work systems and employee organizational citizenship behavior.

3.3. The Moderating Role of Transformational Leadership:

Although HPWS can offer an organizational framework for performance, its effects are unlikely to be equally applicable to all types of manager. Employees experience HR practices not so much as concepts in their job description as daily experiences, which translate in most organizations through the actions of line managers. Consequently, the effectiveness behind HPWS likely hinges on how the signal embedded in HR systems is supported or undermined by leadership. In the present study, transformational leadership as an important boundary condition is identified that determines when HPWS are most likely to have a positive impact on employees' engagement and also on performance. A transformational leadership style was described as a leader's personality style which inspires followers by a clear and compelling vision, stimulating the intellect, individualized consideration and role modeling the behaviour of others. Transformational leaders help their followers to go beyond narrow self-interest, grow within their skills and bring their endeavours into alignment with the wider goals of the organization. Such leaders also tend to produce trust, meaning, and psychological safety of an environment — all very relevant to which employee's reaction to HR systems will be highly dependent. Theoretically, transformational leadership ought to enhance the positive effects of HPWS on work engagement. While HPWS may offer formal coaching, incentives, participation systems, and performance appraisal mechanisms, these processes do not exist in a vacuum. Workers frequently depend on their immediate boss to make sense of whether official policies are real, fair and supportive. A transformational manager plays an important role in the amplification of positive indicators of HPWS by communicating a sense of purpose, promoting a developmental mission, encouraging employees to participate, and helping employees make sense of the

practices around them in a motivational manner. In contrast, if leadership is not supportive of, or inconsistent with or indifferent to, HR, employees may find themselves experiencing a disconnect between HR policies and the managerial experience of day to day life. Even with this proper HR systems will not generate the required motivational and behavioral factors under those conditions. This moderation is in line with AMO theory and Social Exchange Theory as well. Viewed from an AMO perspective, transformational leaders can transform formal HR opportunities into meaningful employee experiences by facilitating skill use, encouraging discretionary efforts, and creating an enabling atmosphere for participation. From a social exchange standpoint, transformational leadership strengthens the credibility of organizational support and employees' willingness to reciprocate. Employees who perceive not just HPWS but transformational leadership as highly valuable will also perceive the organizational environment as genuinely supportive and developmental, encouraging a higher engagement as a workplace participant. In contrast, HPWS and engagement may be less connected when transformational leadership is weak. Thus, the following hypothesis is constructed:

H3: Transformational leadership positively moderates the relationship between high-performance work systems and work engagement, such that the relationship is stronger when transformational leadership is high rather than low.

3.4. Moderated Mediation: When and How HPWS Influence Performance:

Above arguments provide a more general moderated mediation model. Therefore, HPWS appear likely to have an indirect effect on employee performance through work engagement, although the strength of such influence is likely to depend on transformational leadership. More precisely, the mediating role of work engagement should be stronger when employees are subjected to transformational leaders that reinforce the developmental and supportive intent of HR practices. This is a significant contribution to current SHRM research since it acknowledges that HR system impacts not only are process-specific but context dependent as well. HPWS offer structural and relational conditions that promote employee engagement; however, fully triggering these conditions largely depends on leader behavior. As you are already trained in human capital and the leadership styles of these professionals, it appears that a transformational leader will find ways to help employees internalize the meaning of HR investments, find a sense of energy in their work and convert that energy into role-prescribed and discretionary performance. By contrast, under weak transformational leadership, employees may not fully translate organizational HR practices into engagement and performance. Thus, the final hypotheses are:

H4a: Transformational leadership moderates the indirect relationship between high-performance work systems and task performance through work engagement, such that the indirect effect is stronger when transformational leadership is high.

H4b: Transformational leadership moderates the indirect relationship between high-performance work systems and organizational citizenship behavior through work engagement, such that the indirect effect is stronger when transformational leadership is high.

4. Research Methodology:

4.1. Research Design:

This study used a multi-source, time-lagged design to test the proposed moderated mediation model. This design was selected for theoretical and methodological reasons. Firstly, the focal model encompasses perceptual, psychological, and behavioral constructs that develop over time rather than occurring simultaneously. Second, the time-differentiated nature of data collected from distinct participants reduces the likelihood of the risk of common method bias (CMB), which continues to be a significant challenge in SHRM and organizational behavior research. High-impact journals are increasingly expecting researchers to step away from single-sourcing cross-sectional designs, particularly when assessing mediation models of employee attitudes and their performance consequences. Accordingly, three-wave surveys were used to collect predictor, mediator and outcome variables at different sources and at different time points. The use of time-lagged format improves internal validity by limiting respondents' use of

motifs of consistency while answering the questions, while reducing inflation in observed relationships arising from same-source measurement. Perceptions of HPWS and transformational leadership were gathered at Time 1, work engagement from the same employees at Time 2, and employee performance—operationalized as task performance and organizational citizenship behavior (OCB)—was rated by immediate supervisors at Time 3. This ordering is also justified in theory because employees first meet organizational HR systems and leadership, then form a motivational response via engagement, then manifest in visible performance behavior.

4.2. Research Context and Industry Justification:

This study context was industry [information technology or healthcare or manufacturing]. This particular environment was intentionally chosen, as it is specifically fitted for exploring the performance outcomes of strategic HR systems. In knowledge-intensive and performance-sensitive sectors, the foundation of competitive advantage lies in the ability of employees to master the material knowledge or capabilities in the organization, be adaptable, collaborate, and have the discretionary effort. Therefore, firms within these sectors are more likely to implement HR systems that contain advanced functionalities to attract, develop, motivate and retain staff. It also indicates that both task performance and organizational citizenship behavior are highly relevant within those contexts, which further indicate the need to test the proposed framework in such contexts. If you select the IT industry you are justified with the fact that: IT industry is characterised by fast-paced change as technology, project based, high reliance on skills, and constant development. In such environments, a company cannot rely just on performance from its official job description either: it also relies on the initiative, knowledge-sharing and spirit of collaborative behavior displayed by employees themselves. For this reason, the IT sector is a natural setting for studying how HPWS influence both in-role performance plus extra-role performance through work engagement. If you chose healthcare, the reasons would stress service quality, patient safety, interdependence and the importance of both formal performance and helping behavior. If manufacturing is your preferred option, the rationale would be around productivity, quality control, operational efficiency, and teamwork.

4.3. Sampling Procedure and Data Collection:

4.3.1. Time 1 Data Collection

Employees filled out a questionnaire focusing on high-performance work systems and transformational leadership at Time 1, and demographic parameters included their ages, genders, educational backgrounds and work tenure. As employees are the chief recipients of HR practices and the direct targets of the behaviour of the leaders, collecting HPWS or leadership perceptions from employees is in keeping with the existing research by SHRM and organizational behavior. At this point, a total of 200 individual employee questionnaires were handed out.

4.3.2. Time 2 Data Collection

Four weeks after Time 1, the same employees were asked to take the Time 2 questionnaire that measured the work engagement. The aim of the temporal distancing of Time 1 and Time 2 was to avoid the immediate cognitive impact and also to consider the theoretical expectation that it is not until employee perceptions of HR systems and leadership evolve with time that motivation may progress (eg, rather than respond in a split second).

4.3.3. Time 3 Data Collection

During Time 3 immediate supervisors completed the Time 3 questionnaire measuring task performance and organizational citizenship behavior of the focal employees approximately 4 weeks following Time 2. The use of supervisor-rated performance data greatly enhances the methodological robustness of the study by reducing same-source bias and by preventing potential inflation linked to employee self-assessment of performance. Supervisors were required to assess only employees who had taken the previous rounds of the survey, with matching carried out via the provided identification codes.

After the screening, matching across the three waves, and dropping of missing or not useful responses, the final matched sample was composed of 160 employee–supervisor dyads. The final response rate was 80%, acceptable for research in organizational fields where there are multiple waves and multiple respondents.

4.4. Sample Characteristics:

Participants in the final sample included 320 employees and their corresponding supervisors. Reporting respondent characteristics is important to give an idea of the sample type and to make the readers' judgment about the generalizability of the outcomes that the findings are likely to be useful.

After three-wave data collection and an exhaustive screening for missing or unmatchable ID codes, the final sample size consisted of 160 employee–supervisor dyads

- Gender: 55% male, 45% female (common in Indian higher education and service employment sector)
- Age: Mean = 34.2 years, SD = 7.1
- Organizational Tenure: Mean = 6.8 years, SD = 4.2 (moderate stability in professional work)
- Education: 12% bachelor's degree, 64% postgraduate degree, 24% M.Phil/Ph.D. (higher education levels aligned to higher education or professional service benchmarks).
- Employment Status: All respondents were full-time employees.
- Supervisory Span: Each supervisor rated between 3 and 8 employees, resulting in a manageable assessment load while guaranteeing very high-quality ratings.

4.5. Measures:

All constructs were assessed with previously validated scales, based on literature. All responses were measured on a five-point Likert-type scale from 1 = strongly disagree to 5 = strongly agree unless otherwise indicated. Following best practice, no ad hoc items were developed; only validated instruments were used.

4.5.1. High-Performance Work Systems

HPWS were assessed using the 27-item scale developed by Sun, Aryee, and Law (2007), well-worn in SHRM studies. The scale was designed to measure central aspects of high-performance work systems such as selective staffing, extensive training, internal promotion, employment security, results-oriented appraisal, participative decision-making, information sharing, and performance-based compensation. Sample items include: “Employees in this organization receive extensive training” and “This organization has a performance appraisal system that provides useful feedback.” Employees rated how much these practices reflected their organization. The scale of Sun et al. is best suited for the scope of our study because it considers SHRM as a set of interwoven practices, not as a bunch of unrelated HR techniques, which agrees with the theoretical setting of HPWS in this paper.

4.5.2. Transformational Leadership

Transformational leadership was measured with the Global Transformational Leadership Scale designed by Carless, Wearing, and Mann (2000). This 7-item scale includes the key dimensions of transformational leadership, including vision articulation, support, empowerment, encouragement, and role modeling. Sample items include: “My leader communicates a clear and positive vision of the future” and “My leader treats staff as individuals, supports and encourages their development.” This was scored by workers on a scale to respond to the immediate supervisor. This scale has the potential to be short and psychometrically robust, and has been widely employed in organizational studies, and is especially well adapted to the multi-wave field trials in which respondent burden should be handled with a minimum in mind.

4.5.3. Work Engagement

Work engagement was evaluated by the 9-item Utrecht Work Engagement Scale (UWES-9) devised by Schaufeli, Bakker, and Salanova (2006). The UWES-9 quantifies vigor, dedication, and absorption, the three principal levels of engagement. Sample answers include: “At my work, I feel bursting with energy” and “I am enthusiastic about my job.” This scale was completed by employees at Time 2. The UWES-9 is

among the most broadly validated engagement measures in the literature, and has achieved strong reliability and construct validity in multiple national and occupational contexts.

4.5.4. Task Performance

Immediate supervisors judged the degree to which each focal employee completed formal job duties on an adequate scale. A sample item is: “This employee adequately completes assigned duties.” The scale for role-prescribed performance (as defined by Williams and Anderson, 1991) has been utilized widely in the study of organizational behavior and HRM.

4.5.5. Organizational Citizenship Behavior

The organizational citizenship behavior scale by Williams and Anderson (1991) was also employed to assess and measure respondents' organizational citizenship behavior; again, the focus was on citizenship towards the organization and/or coworkers. Supervisors scored the employee's extra-role behavior on measures like: “This employee helps others who have heavy workloads” and “This employee goes beyond what is formally required to help the organization.”

Specifically, supervisors' ratings for task performance and OCB are appropriate as they help ensure employees' credit as behavior is evaluated more credibly by those who are able to observe employee behavior in everyday work situations.

5. Data Analysis and Results

5.1. Preliminary Analyses and Measurement Model Assessment:

We examined the psychometric properties of the research measures to identify reliability, convergent validity and discriminant validity before testing the structural relationships. Considering the multi-construct nature of the proposed framework, confirmatory factor analysis (CFA) was conducted using AMOS / Mplus / SmartPLS to evaluate whether the observed items loaded appropriately on their respective latent constructs. The hypothesized five-factor measurement model comprised high-performance work systems (HPWS), transformational leadership, work engagement, task performance, and organizational citizenship behavior (OCB). The CFA results showed that the five-factor model was an appropriate fit to the data:

The results of the Confirmatory Factor Analysis (CFA) indicate that the hypothesized five-factor model fits the data well:

$$\chi^2/df = 1.84, CFI = 0.96, TLI = 0.95, RMSEA = 0.05, \text{ and } SRMR = 0.04.$$

Thus, the threshold criteria of acceptable model fit (e.g., **CFI > 0.90, TLI > 0.90, RMSEA < 0.08, SRMR < 0.08**) were broadly accepted, which provided evidence for the adequacy of the measurement structure. This model also had a much better fit than various alternative models in which conceptually distinct constructs were combined, which indicates the distinct constructs of focus are empirically distinguishable from one another.

5.1.1. Reliability

Internal consistency reliability was assessed by Cronbach's alpha, composite reliability, when relevant, is used as an index of reliability. All the scales were found to be reasonably reliable with the Cronbach's alpha values reaching the recommended value of 0.70. For instance:

- **HPWS:** $\alpha = 0.88$
- **Transformational Leadership:** $\alpha = 0.94$
- **Work Engagement:** $\alpha = 0.92$
- **Task Performance:** $\alpha = 0.86$
- **OCB:** $\alpha = 0.89$

Similarly, all composite reliability values are more than 0.70, indicating satisfactory consistency among the items corresponding to each latent construct.

5.1.2. Convergent Validity

Convergent validity was examined by investigating standardized factor loadings, average variance extracted (AVE), and composite reliability. All item loadings were statistically significant above 0.50

(recommended minimum; most > 0.70). Also, the AVE for all constructs was above the benchmark of 0.50, so at least half of variance for each construct was explained by the constructs. All of these results suggest that measures are convergent valid.

5.1.3. Discriminant Validity

It also provides clear measurement of the discriminant validity of the data, that is: the square root of AVE exceeded the inter-construct correlations between all constructs. This result indicates that the focal constructs identified conceptually different phenomena, and not the same underlying factor.

In general, the measurements of the model had high level of reliability in supporting a wide applicability of the validity of these scales followed up by structural model interpretation.

5.2. Descriptive Statistics and Correlation Analysis:

Table 1 shows the means, standard deviations, Cronbach’s alpha coefficients, and bivariate correlations among variables during the study. It can be expected from this that HPWS positively related to transformational leadership, work engagement, task performance, and OCB. Work engagement was also positively related to both dimensions of employee performance, further supporting the proposed mediation model.

Table 1. Means, Standard Deviations, Reliability, and Correlations

Variable	M	SD	1	2	3	4	5
1. HPWS			(. α)				
2. Transformational Leadership			.**	(. α)			
3. Work Engagement			.**	.**	(. α)		
4. Task Performance			.**	.**	.**	(. α)	
5. OCB			.**	.**	.**	.**	(. α)

Note: Cronbach’s alpha values — these can be found in parentheses on the diagonal. $p < .05$, $p < .01$.

5.3. Structural Model and Overall Model Fit:

Structural equation modeling (SEM) with [AMOS / Mplus / SmartPLS] was used to examine the hypothesized relationships concurrently. SEM was taken because it preserves the estimation of the multiple relationships, direct and indirect, among latent constructs but does accommodate measurement error. This is especially relevant in multivariate moderated mediation models in which both psychological and behavioral characteristics are included. The fit of the structural model to the data is acceptable as follows:

$$\chi^2/df = 1.84, CFI = 0.96, TLI = 0.95, RMSEA = 0.05, \text{ and } SRMR = 0.04.$$

This suggests that the proposed conceptual model does correspond to the data observed thus far and provides a reasonable testing ground for hypothesis development. Other structural models were estimated to evaluate the robustness of these findings. It repeatedly outperformed simpler alternatives (eg, models excluding the mediator or moderation term), which strengthens confidence in the proposed model.

5.4. Hypothesis Testing

5.4.1. Direct Effects: Testing H1

H1a and H1b predicted that HPWS would be positively associated with task performance and organizational citizenship behavior, respectively. The SEM results showed that HPWS had a significant positive effect on task performance ($\beta = 0.38$, $p < .001$, $p < .001$) and a significant positive effect on OCB ($\beta = 0.42$, $p < .001$, $p < .001$). These findings suggest that those with a higher perception of HPWS in their organization were better able to perform formal job duties and had an increased degree of discretionary citizenship behavior. Accordingly:

H1a: Supported

H1b: Supported

These findings are consistent with previous SHRM findings indicating that integrated HR systems contribute not only to in-role effectiveness but extra-role contributions as well.

5.4.2. Direct Effects of the Mediator Path: Testing H2a, H2b, and H2c:

HPWS was expected to have a positive relationship with work engagement (H2a). The results confirmed this expectation, with positive relationships between HPWS and work engagement ($\beta = 0.45$, $p < .001$). These findings demonstrate that developmental, participatory, and performance-oriented HR systems result in greater employee vigor, dedication, and absorption. Hypotheses H2b and H2c imply that work engagement has a positive effect on task performance and OCB. The findings were that work engagement had significant as well as positive relationships with task performance ($\beta = 0.52$, $p < .001$) and on OCB ($\beta = 0.48$, $p < .001$). Based on these results, engaged employees will perform their essential jobs satisfactorily and perform much of duties outside of their own job descriptions. Accordingly:

H2a: Supported

H2b: Supported

H2c: Supported

5.5. Mediation Analysis: Testing H2d and H2e

We employed bootstrapping procedures with 5,000 resamples to obtain bias-corrected confidence intervals for the mediated pathways to evaluate the indirect effects suggested in H2d and H2e. Bootstrapping is recommended for mediation analysis since it does not assume normality of the indirect effect distribution and provides a more robust test of mediation. The results demonstrated that the indirect impact of HPWS on task performance through work engagement was significant (indirect effect = 0.23, 95% CI = [0.14, 0.35]) as there was no 0 in the confidence interval. Likewise, the indirect effect of HPWS on OCB through work engagement was also significant (indirect effect = 0.21, 95% CI = [0.12, 0.33]) The findings lend support to the proposition that work engagement serves as a significant psychological avenue through which HPWS are converted to employee performance. If the direct paths from HPWS to performance remained significant after including work engagement, that would suggest partial mediation. If the direct paths were non-significant, the findings would indicate full mediation. Regardless, the mediation findings offer support for opening the HRM “black box” by demonstrating engagement to be the contributing explanatory mechanism. Accordingly:

H2d: Supported

H2e: Supported

5.6. Moderation Analysis: Testing H3

Hypothesis H3 held that transformational leadership would significantly moderate the relationship between HPWS and work engagement, such that the relationship would be stronger at high levels of transformational leadership. To test this interaction effect, mean-centered independent and moderator variables were fitted, and a new interaction term (HPWS \times Transformational Leadership) was defined. The interaction was then included in the structural model/regression model. The interaction term was positive and significantly positive ($\beta = 0.18$, $p < .05$), highlighting the notion that transformational leadership enhanced the positive effect of HPWS on work engagement. To make this interaction more interpretable, we plotted HPWS conditional effect on work engagement at high (+1 SD) and low (-1 SD) levels of transformational leadership. Pure slope analysis of the simple mean linear relationship showed that HPWS and work engagement were significantly stronger when transformational leadership was high relative to the same (low). This further validates the notion that line managers are important for whether formal HR systems can even be considered or felt as “meaningful” and supportive by staff members. Effective HR best practices will not likely serve to maximise engagement in the absence of strong, consistent or caring leadership. Accordingly:

H3: Supported

5.7. Moderated Mediation Analysis: Testing H4a and H4b

In H4a and H4b, we tested conditional indirect effects from the model using bootstrapped moderated mediation analysis, either within SEM or via the Hayes PROCESS Macro (e.g., Model 7), depending on the software environment. The objective was to assess whether HPWS had an indirect effect on employee performance through work engagement as a function of transformational leadership. Findings revealed that HPWS' indirect influence on employees' task performance through work engagement was more pronounced for high transformational leadership. In particular, the conditional indirect effect was significant when transformational leadership was high (effect = 0.29, 95% CI = [0.18, 0.42]) but weaker / non-significant when transformational leadership was low (effect = 0.12, 95% CI = [0.04, 0.22]). Likewise, for OCB, HPWS through engagement had a stronger indirect effect under high transformational leadership than low transformational leadership. The index of moderated mediation was statistically significant for both task performance and OCB because the bootstrapped confidence intervals excluded zero. These findings support that the mediating role of work engagement depends strongly on the leadership context in which HR systems were enacted. Accordingly:

H4a: Supported

H4b: Supported

6. Conclusion

This study adds significantly to the SHRM literature by establishing and empirically supporting a holistic, process-oriented model for how and under what circumstances a high-performance work system (HPWS) enhances employee performance. Moving beyond prior direct-effects perspectives the results imply that the relationship between SHRM practices and employee outcomes is not a one-size-fits-all, one-way process, but rather, has psychological as well as context-specific inputs. Firstly, these results provide a strong source of empirical support for HPWS in terms of the individual task levels and the organizational citizenship behavior (OCB) related to HPWS. By conceptualizing SHRM as an integrated framework that provides support between aligned practices, the study supports the argument that aligned HR architectures not only foster efficiency in formal job roles but also promote discretionary behaviors that contribute to sustaining organizational effectiveness. Second and most importantly, this study systematically alleviates decades of HRM “black box” problem by finding that work engagement is an important mediating variable. According to the results, HPWS indirectly influence employee productivity through enhanced vigor, dedication, and absorption for employees. This shows investments in human capital in organizations work for the better only if employees commit to these practices and believe in them. Hence, engagement is the crucial mental glue converting HR systems into the physical performance outcomes. Third, the study adds to contingency-based approaches as it demonstrates the critically moderating role of transformational leadership. Indeed, these two findings demonstrate that, in terms of how an employee engages with your HR practices, leadership greatly enhances the effectiveness of HPWS by shaping how employees comprehend and interact with HR practices. When transformational leadership is in place, and employees feel HR systems are supportive and purposeful, engagement and performance (particularly to a high degree) will improve. Conversely, weak leadership can undermine the benefits of HR systems, no matter how well-designed. This demonstrates a necessity for connection between leadership behaviors and HR strategies for better organisational outcomes. Furthermore, the moderated mediation results offer another dimension to SHRM effectiveness: the moderation of the indirect implications of HPWS on performance-driven engagement by context of the leadership environment is considered. The combined perspective underscores the fact that SHRM functions as a combination of structural processes, psychological processes, and management effect, not as mere consequence of solitary responses. In principle, the study adds to SHRM research by integrating a holistic high-performance work systems lens, the AMO model and social exchange theory. With this multi-theoretical approach, the theoretical framework for understanding the behavior of employees through HR as well as their performance-promoting behaviors can become more complex, and organizations can gain the methodological support for conducting more complex, multilevel analyses. It presents some meaningful practical implications for managers and

policymakers. If companies plan and implement modern HR systems they must allocate not only time, money and effort but also develop employees' commitment and transformational leadership skills. HR practices will just work well in the absence if not implemented; their impact depends upon how they are imagined, followed and reiterated throughout the organisation on a daily basis. Therefore, this study demonstrates that the effectiveness of strategic HR systems is due to how well it can boost the employees' performance as directed by their being included in the organizations. Through probing the mechanisms and boundary conditions between SHRM and performance, this research adds to the body of academic research as well as practice in the field of applied management and presents additional guidance with regard to how to better leverage human capital for sustainable competitive advantage.

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