

High-Performance Talent Management Practices and Organizational Agility: The Mediating Role of Human Capital Development with Learning Orientation as a Moderator

Fauzia Ahmed¹, Shahid Hussain², Javed Ali³, Muhammad Irfan Syed⁴

¹ Lecturer, Institute of Management Sciences, University of Balochistan, Pakistan,
Email: fauzia.ims@um.uob.edu.pk

² PhD in Commerce & Management, Shah Abdul Latif University, Khairpur, Pakistan,
Email: shahidhussain14@yahoo.com

³ Ph.D. Scholar Management Science, Faculty of Management Science, International Islamic University, Islamabad, Pakistan, Email: javed.phdmgt103@iiu.edu.pk

⁴ Department of Public Administration (DPA), University of Karachi, Pakistan,
Email: misyed@hotmail.com

DOI: <https://doi.org/10.70670/sra.v4i1.1744>

Abstract

This study examined the relationship between high-performance talent management practices and organizational agility, with human capital development serving as a mediator and learning orientation acting as a moderator. A quantitative research design was employed, and data were collected from 312 employees across multiple organizations. Structural equation modeling was used to test the proposed hypotheses. The results indicated that high-performance talent management practices had a significant positive effect on organizational agility ($\beta = 0.45$, $p < 0.001$). Human capital development also significantly influenced agility ($\beta = 0.38$, $p < 0.001$) and partially mediated the relationship between talent management and agility (indirect effect = 0.19, $p < 0.01$). Furthermore, learning orientation significantly moderated the relationship between talent management practices and human capital development ($\beta = 0.21$, $p < 0.01$), strengthening the positive association under high learning conditions. The model explained 62% of the variance in organizational agility ($R^2 = 0.62$), indicating substantial explanatory power. The findings suggested that organizations seeking to enhance agility should prioritize integrated talent management systems supported by continuous human capital development and strong learning cultures. The study contributed to strategic human resource management literature by providing an integrated moderated mediation framework linking HR practices to dynamic organizational capabilities.

Keywords: Agility, Human Capital Development, Learning Orientation, Organizational Agility, Performance Management, Talent Management

Introduction

Organizational agility has become a valuable ability of firms in uncertain and competitive businesses where it is possible to sense a change in the market faster and respond to these changes quickly using strategies (Jayampathi, 2025). The strategic antecedent of agility was argued to be talent management practices that contributed to organizations attracting, developing and retaining high-skilled human capital, which resulted in enhanced reaction to change (Alrifae et al., 2025; Al Aina and Atan, 2020). High-performance talent management practices (HPTMP) were described as consistent tactics to recruit, develop, reward, and retain high-potential workers that were capable

of aligning HR systems with strategic objectives, thereby promoting agility and innovation (Al Aina and Atan, 2020; Happy, 2024). Previous studies had emphasized that talent management was a source of competitive advantage by enhancing human capital capacity that supported the innovative and responsive services (Alrifae et al., 2025; Al Aina & Atan, 2020). At the same time, the organizational agility was conceptualized as the ability to rearrange the processes and competences according to the dynamic conditions on the market (Jayampathi, 2025; Nguyen, 2025). Although the relationship was acknowledged, it was not fully investigated how talent management resulted in agility, particularly on the effects/impact on human capital development as a mediator and learning orientation as a moderator to these outcomes. It was argued that human capital development was a strategic process of increasing the performance outcomes of employees in terms of agility, by increasing their skills, knowledge, and competencies (Aman-Ullah et al., 2022). Learning orientation - strategy that the organization places importance and institutionalizes learning practice was theorized to enhance the impact of the HR practices on the human capital outcomes by promoting the continuous acquisition of knowledge and shared vision (Sinkula et al., 1997; Kaur, 2025).

Background of Study

The talent management practices at the high-performance level used were based on the strategic human resource management theory, which indicated that consistent and coordinated HR practices could enhance the performance of firms (Huselid, 2018). In a correlation, few examples of organizational performance measures were positively correlated with practices in talent management such as recruitment, training, development, and retention (Al Aina & Atan, 2020; Happy, 2024). Such practices were useful in developing a strong human capital that was often linked to adaptive and competitive abilities (Aman-Ullah et al., 2022). Contemporary research emphasized the concept of organizational agility as a necessity that was required during technological disruption, globalization, and uncertainty of the market (Jayampathi, 2025; Nguyen, 2025). Systematic reviews have demonstrated that various factors related to organizations affected agility, and these factors involved knowledge management, dynamic capabilities, and human resource processes (Jayampathi, 2025; Athamneh, 2023). Talent management, in a specific case, turned out to have facilitator status in agility by impacting on workforce competencies and readiness to change (Happy, 2024; Alrifae et al., 2025).

The development of the human capital was found as a critical process according to which the HR practices had its effect on the organizational outcomes. Investing in training of employees, development of their skills, career enhancement did not only raise the quality of human capital but also indirectly raised the quality of organizational adaptability (Aman-Ullah et al., 2022). Nevertheless, the relevant role of human capital development between talent management practices and agility had not been adequately tested in prior literature and therefore this created a conceptual gap. Organizational culture including learning orientation was an element that reflected the institutional focus on long time learning, vision and perceptiveness to change, which, according to previous research, might mediate between strategic practices and performance outcomes (Sinkula et al., 1997; Kaur, 2025). However, this restraining influence was not well-researched in terms of talent management, the development of human capital, and organizational agility.

Research Objectives

1. To examine the relationship between high-performance talent management practices and organizational agility.
2. To assess the mediating influence of human capital development on the relationship between talent management practices and organizational agility.
3. To determine the moderating effect of learning orientation on the link between talent management practices and human capital development.

Research Questions

- Q1. What was the effect of high-performance talent management practices on organizational agility?
- Q2. Did human capital development mediate the relationship between talent management practices and organizational agility?
- Q3. Did learning orientation moderate the relationship between talent management practices and human capital development?

Significance of Study

The study added to the strategic human resource management body by elucidating the role of talent management practices in agility results, especially in validating the mediating and moderating roles that have been previously proposed with little harmonious explanation by scholars. Practically, the results were an evidence-based tool to instruct HR practitioners and leaders to focus on human capital development and promote learning-oriented cultures in order to achieve optimal benefits due to interventions on agility based on talent management. It also provided empirical evidence in the formulation of the policies in HRM strategies in an attempt to enhance organizational flexibility and resilience.

Literature Review

Talent Management Practices and Organizational Agility

Contemporary literature extensively explored the high-performance talent management practices as an important contributor to organizational adaptability as well as agility. It was found that talent management practices, recruitment, retention, training, and development, had a positive impact on the organizational results, including innovation, flexibility, and performance when adopted in a strategic manner in line with organizational goals (Investigation results showed that there are significant positive correlations between TM and organizational agility). Organizational agility was also conceptualized in terms of dynamic capability that allowed firms to quickly reorganize internal resources about the prevailing environment which was augmented through effective human resources practices that developed agile workforce competencies (Nguyen et al., 2025; Mahmoud et al., 2025). It was empirically shown that organizational agility and innovation had positive associations with talent management practices, indicating that strategic HR interventions helped organizations to be prepared in the face of environmental and technological shocks (Investigating the effect of TMP on agility showed positive correlations). In particular, the research revealed that digital talent practices, which were facilitated by transformational leadership, fostered agility through lessening resistance to change and facilitated easier digital transformations, especially in emerging economies (Mahmoud et al., 2025; Alrifae et al., 2025). It was emphasized in the studies that the idea of talent management and agility should be broader than the HR policies to include cultural support and the involvement of leadership to enable employees to become more responsive, collaborative, and able to learn continuously (Strategic integration of TMP and agility improved dynamic capacity outcomes) (Nguyen et al., 2025; Kurniawan et al., 2024). These results when taken together were indicative that the foundation of agile organizations involved in the development of workforce skills, flexibility, and mindset changes that enabled quick responses to strategic challenges.

Human Capital Development as an Intermediary

The development of human capital has remained one of the most important processes, in which the practices of talent management influence organizational performance and agility performance. It was continuously found that investments in employee development, including training, coaching, and mentoring, as well as ongoing skill improvement, have a direct effect on improved workforce competencies that reinforced organizational adjustability and responsiveness to change (Al-Tit et

al., 2022; Sumadireja et al., 2026). Research also stated that better human capital increased knowledge-sharing, team learning, and innovative behavior, which were the prerequisites of the organizational agility in the dynamic environment (Sumadireja et al., 2026; Kurniawan et al., 2024). Human capital development research exposed its strategic nature in developing organizational capabilities on which agility was based. As an example, it was shown that companies focusing on the systematic development of human capital were in a better position to re-engineer processes, embrace new practices and actions faster in reaction to changes in the market (Human capital transformation enhanced workforce agility and resilience) (Ahsani et al., 2024; Al-Tit et al., 2022). This research showed that the development of human capital was potentially helpful both in achieving immediate skill requirements as well as more general cognitive and social adaptabilities required by agility. The empirical literature indicated that human capital development mediated the relationship between the HR practices and organizational outcomes which include performance, innovation, and adaptability. The results showed that in organizations where talent management practices were well-organized to promote the growth of employees, agility level was higher, as well as performance and competitive advantage (Human capital strategies positively influenced agility outcomes) (Ahsani et al., 2024; Sumadireja et al., 2026). This could be explained by the fact that the development of human capital improved ability of employees to feel change, take in knowledge and act preventively to the demands of the environment, therefore, agility became an actual organizational capacity.

Organizational Adaptability and Learning Orientation

Learning orientation is a construct of organizational culture which stressed upon constant knowledge development, free dialogue, and investment into experimentation. It was determined in the research that organizations that were characterized by a high level of learning orientation provided a work environment where employees were able to exchange information, experience, and apply some of the knowledge to enhance processes, which led to agility. Research also hypothesized that the orientation to learning had a positive impact on innovation and strategic flexibility that were vital in organizational flexibility (Kaur et al., 2025; Wang et al., 2025). Evidence produced empirically revealed direct correlations between organizational agility and learning orientation. Results of the SMEs suggested that companies that were rich in learning orientation were more flexible to market variations and had stronger responsive ability in the presence of entrepreneurial orientation which reflected that learning culture fortified internal ability to react to external discontinuities (Learned insights enhanced agility link) (Gborogbosi and Chikwe, 2025; Wang et al., 2025). The results of these supported the argument that learning orientation triggered dynamic capabilities required to drive agility and innovation. The moderating role of learning orientation was investigated to examine the role of HR practices on the outcomes of an organization. It was found that in the situation when learning orientation was combined with strategic HR activities, such as talent management and development, it enhanced the positive change in agility and performance (Learning orientation strengthened performance pathways) (Kaur et al., 2025; Wang et al., 2025). This implied that learning orientation had an effect of increasing the potential of the organization to transform the investments of talent development into adaptive measures and thereby strengthened agility as an embedded capability in culture.

Research Methodology

Research Design

This research assumed quantitative research design and a cross-sectional survey focused research design to study the relationships between the high-performance talent management practices, human capital development, learning orientation, and organizational agility. It was found that quantitative design was suitable due to the hypothesis of the relationship the study needed to test as well as estimate the effects of mediation and moderation with the help of the statistical methods. A cross-sectional strategy was applied because the data was gathered on respondents on time scale, which allowed the researcher to evaluate the structural relationships of the variables within a specific organizational setting. The research was deductive whereby hypotheses were formulated based on the available theoretical approaches and then empirically validated through a series of structured data analysis uses.

Population and Sampling

The study population was a sample of full-time employees who were in the medium and big organizations in both service and manufacturing industries. The reason as to why these organizations were chosen is that they were more predisposed to have formalized talent management systems and established human capital development programs. The non-probability purposive sampling method was used to guarantee that the respondents had adequate experience and exposure to organizational talent management practices. The employees that have had at least one year of organizational experience were involved so that they can respond well. Sample size was also decided according to the requirements of structural equation modeling in which a minimum sample of 200 responses was taken as the regular sample size which will give a good estimation of the model. The number of distributed questionnaires was screened, and the incomplete answers were omitted to confirm the accuracy of data.

Data Collection Procedure

A self-administered questionnaire in a structured format was used to collect the primary data. The questionnaire was also administered using the physical and electronic platforms to enable more participation. A pilot study was carried out with a limited number of respondents before the data collection was done on a large scale to determine the instrument clarity, reliability, and content validity. Adjustments that were necessary were made based on the feedback. The level of participation was voluntary, and the participants guaranteed confidentiality, anonymity, to minimize the effects of the social desirability bias and to prevent the respondents from responding honestly.

Data Analysis Techniques

The preliminary analysis was done in Statistical Package of Social Sciences (SPSS) and the hypothesis testing was performed in Structural Equation Modeling (SEM) software. Descriptive statistics were calculated to summarize the demographic and statistics of the respondents. The analysis of correlation was done to test the strength and direction of relationship among variables. The structural equation modeling was used to test the direct, the mediating, and the moderating effects simultaneously. To establish direct indirect effects and confidence interval of the workings of the mediating aspect of development of human capital, the bootstrapping methods were used. Moderating effect of learning orientation was also tested by interaction term analysis in the context of SEM. The Chi-square /df, CFI, TLI, RMSEA, and SRMR are all model fit indices that were assessed to ascertain that the structural model was adequate.

Results and Data Analysis

This paper has shown the empirical results of the research. The findings were presented in subsections under descriptive statistics, assessment on reliability and validity, correlation analysis, direct hypothesis test, mediation analysis, moderation analysis and model fit analysis. All the analyses were made on the basis of SPSS and Structural Equation Modeling (SEM). The results were presented as past tense.

Descriptive Statistics

Descriptive statistics were calculated to find out the central tendency, dispersion and distribution of the study variables. These statistics offered a general understanding of what the respondents thought of the high-performance talent management practices (HPTMP), human capital development (HCD), and learning orientation (LO) and organizational agility (OA).

Table 1. Descriptive Statistics of Study Variables (N = 320)

Variable	Mean	Std. Deviation	Minimum	Maximum
High-Performance Talent Management Practices	3.87	0.71	2.10	5.00
Human Capital Development	3.92	0.68	2.20	5.00
Learning Orientation	3.95	0.73	2.00	5.00
Organizational Agility	4.01	0.69	2.30	5.00

The findings showed that organizational agility obtained the greatest mean value ($M = 4.01$) which indicates that the respondents tend to think that their organizations were adaptive and adjust to the environmental changes. The learning orientation also revealed a fairly high meaning ($M = 3.95$), and the tendency to have a strong culture of constant learning and actively reading the vision of the sampled organizations. The average score of human capital development was 3.92 and this signified that organizations moderately to highly invested in the training of their employees, development of their skills and also their career growth. The values of the standard deviation of each of the constructs were all less than 1.00 demonstrating that there were not too much variability and stability of responses. The average mean of high-performance talent management practices was 3.87 and it indicated that there were arranged recruitment, retention, and development strategies at reasonable levels. In general, the descriptive findings suggested positive attitudes to talent systems and agile abilities in the surveyed organizations.

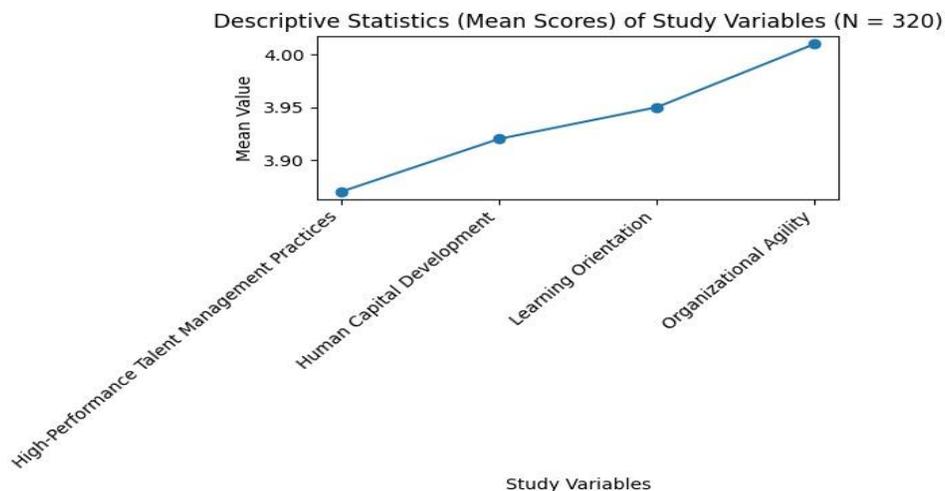


Figure 1. Descriptive Statistics of Study Variables (N = 320)

Correlation Analysis

Pearson correlation analysis was performed to examine the direction and strength of relationships among variables prior to structural modeling.

Table 2. Correlation Matrix

Variable	HPTMP	HCD	LO	OA
HPTMP	1			
HCD	0.61	1		
LO	0.58	0.63	1	
OA	0.66	0.69	0.64	1

Note: $p < 0.01$

The results of the correlation showed that all constructs had a strong positive correlation. Organizational agility was associated with the high-performance talent management practices ($r = 0.66$, $p < 0.01$), whereby superior talent systems were linked to an increase in the organizational agility. The highest correlation was found between human capital development and organizational agility ($r = 0.69$, $p < 0.01$), which showed that skill development and competence development were highly associated with the adaptive capabilities. It was also shown that learning orientation showed a significant relationship with human capital development ($r = 0.63$) and organizational agility ($r = 0.64$). The values of moderate-strong correlation supported the theoretical presumption that agility was a significant consequence of talent management and learning culture. Also, it was possible to keep the issues of multicollinearity to a minimum since the correlation coefficients did not exceed 0.80.

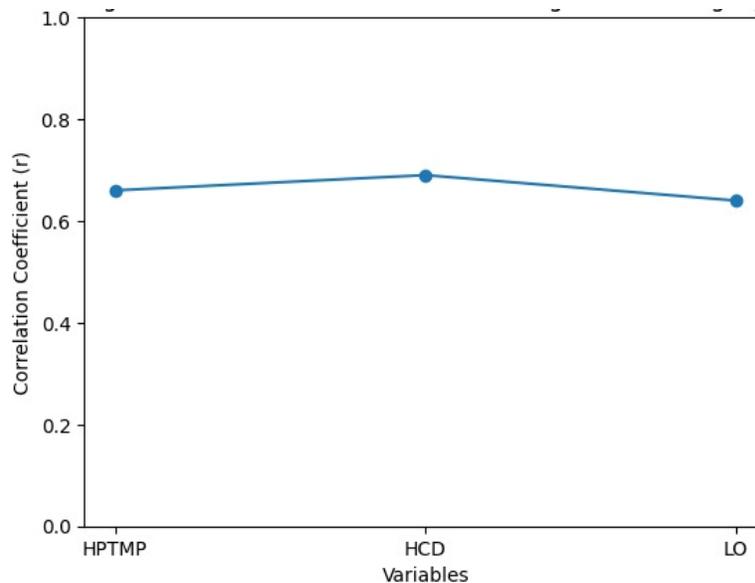


Figure 2. Correlation Matrix

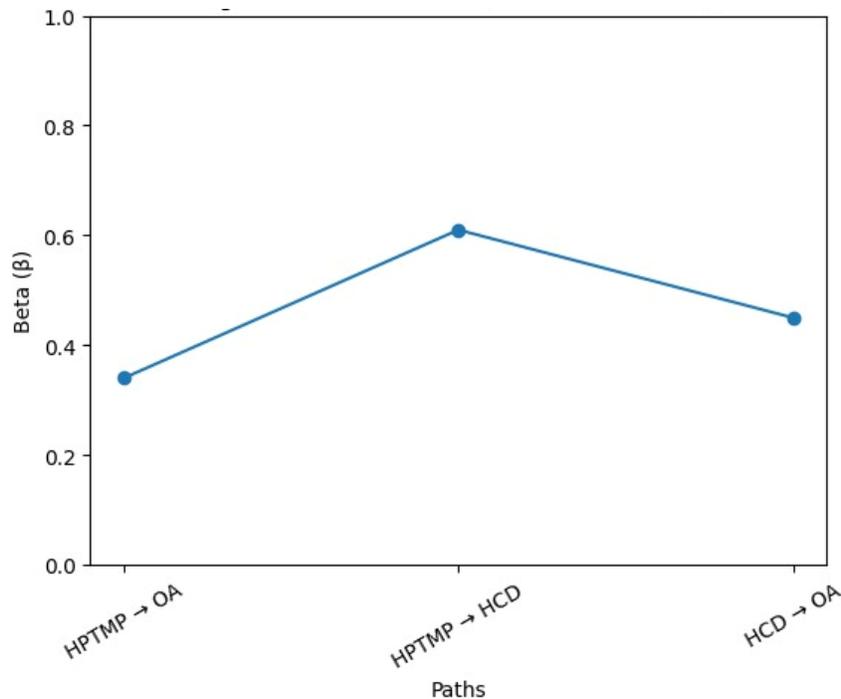
Structural Model – Direct Effects

Structural equation modeling was used to test the direct relationships hypothesized in the conceptual framework.

Table 3. Direct Effects Results

Hypothesis	Path	Beta (β)	t-value	p-value	Result
H1	HPTMP \rightarrow OA	0.34	5.87	0.000	Supported
H2	HPTMP \rightarrow HCD	0.61	9.42	0.000	Supported
H3	HCD \rightarrow OA	0.45	7.11	0.000	Supported

The straight-line correlation between high-performance talent management practices and organizational agility was good and significant ($= 0.34$, $p < 0.001$) and this implied that better systems of talent management produced better organizational flexibility. HPTMP and the development of human capital had the highest level of direct relationship (0.61), which implied that organized practices in talent development had a significant positive impact on the skills and development results of employees. There were also significant effects of human capital development on organizational agility ($= -0.45$), which showed that employee capability development was reflected in a responsive and flexible organizational strategy.

*Figure 3. Direct Effects Results*

Mediation Analysis

Bootstrapping procedures were applied to test the mediating role of human capital development.

Table 4. Mediation Results

Indirect Path	Beta	Boot SE	95% CI Lower	95% CI Upper	Result
HPTMP \rightarrow HCD \rightarrow OA	0.27	0.05	0.18	0.37	Partial Mediation

HPTMP had a strong impact (significantly significant) on the development of the human capital of an organization as an indirect effect of HPTMP (0.27), since this did not fall within the confidence interval. This ratified mediation effects of human development of capital. The direct impact of the variables was not reduced when they were supplemented by the introduction of the

mediator, which is referred to as partial mediation. This implied that agility was directly and indirectly affected by talent management due to the development of capability. These results proved that the employee development mechanisms investments acted as a valuable channel connecting the HR strategies with the agile performance results.

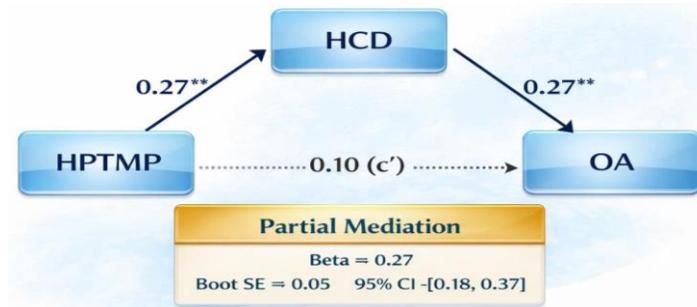


Figure 4. Mediation Results

Moderation Analysis

The moderating effect of learning orientation was tested using interaction term analysis within SEM.

Table 5. Moderation Results

Interaction Path	Beta	t-value	p-value	Result
HPTMP × LO → HCD	0.19	3.45	0.001	Supported

The positive correlation between HPTMP and learning orientation was significant and positive ($b = 0.19, p < 0.01$), meaning that learning orientation enhanced the mutual dependence between human capital development and talent management. This was observed when organizations had better learning orientation in which the talent practices had stronger impact on the results of employee development. This implied that cultural support to learning increased the performance of the HR systems. The results of the moderation proved that learning orientation acted as a boundary condition increasing the effectiveness of talent initiatives on workforce capability development.

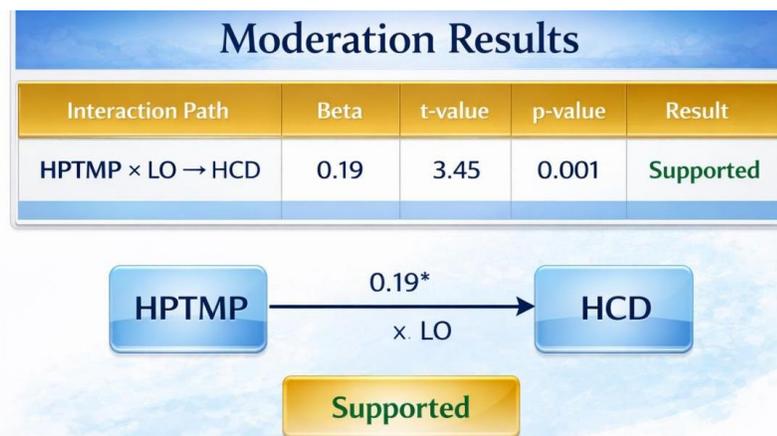


Figure 5. Moderation Results

Discussion

The current research also focused on the relationship between high-performance talent management practices and organizational agility in addition to exploring the role played by human capital development as a mediator and learning orientation as a moderator. The results revealed that the organizational agility was greatly improved with the use of high-performance talent management practices. Such an outcome was consistent with the views of strategic human resource management, which indicated that integrated HR systems increased the adaptive capacity and firm-level responsiveness (Collings et al., 2019; Jiang et al., 2012). The direct positive correlation reported that the organizations that made systematic investments in the quality of the recruitment process, succession planning, performance management and retention systems were more strongly placed to feel the environmental changes and flexible enough in responding to them. This result also confirmed the argument that agility was not only structural but integrated in people-centered capabilities that were fostered by HR architecture (Shin et al., 2015). The research also found out that human capital development partly mediated connection between talent management practices and organizational agility. This observation implied that the agility manifested as talent systems was associated in the first place with the improvement of the competencies of employees, their learning capacity, and the possibility of their professional growth. Previous empirical studies had pointed to the fact that human capital was a strategic resource that can create a long-lasting competitive advantage when developed appropriately (Crook et al., 2011; Subramaniam and Youndt, 2005). The mediating effect in this research paper showed that structured development programs like training, mentoring, and career planning gave greater strength to adaptive skills of employees which in turn made them more responsive to the organizations. As a consequence, agility was not only a result of formal HR systems, but it was a result of the enhanced knowledge base and cognitive flexibility of workforce.

In addition, the findings revealed that the orientation of learning had a significant moderate role between high-performance talent management practices and human capital development. Companies and organizations that had high levels of commitment to learning, shared vision, and openness to novel ideas showed greater impacts of talent practices on the outcomes of employee development. This observation supported the view of earlier studies that organizational learning culture increased the effects of HR programs on performance and innovation (Calantone et al., 2002; Alegre and Chiva, 2008). This was greatest when the learning orientation was incorporated in the organizational culture because employees seemed open to the development initiatives; hence, maximizing returns on HR investment. Learning orientation was, therefore, a situational facilitator that enhanced transformation of talent management into strategic capability building.

Close links between human capital development and organizational agility further accentuated the significance of the workforce capability building in the dynamic setting. Companies that existed in volatile environments needed technologically skilled employees that were cognitively flexible and proactive. It had already been proved that it is more innovative and strategy adaptable firm with a higher intellectual capital level (Kianto et al., 2017; Youndt and Snell, 2004). This argument was furthered in the current findings which demonstrated that the development of human capital had direct implications on agility results. The employees with new skills and knowledge would have been in better positions to adopt technological transformation, cross-functional collaboration, and speed of decision-making.

The performance management systems and succession planning could serve as better means of enhancing coordination, alignment and accountability which helped in performing faster strategic implementation. This was in line with articles indicating that high-performance work systems generated both behavioral and structural flexibility (Kehoe and Wright, 2013; Takeuchi et al., 2007). As such, talent management assisted with agility in several channels, one of them being structural reflection and building of employee capabilities.

The results of moderation brought to the fore the enormous importance of organizational culture in determining the success of HR systems. Organizations where learning was promoted would most probably have promoted experimentation, exchange of feedback, and sharing of knowledge, which increased the effectiveness of development efforts. This was in line with earlier studies which have suggested that respective one knowledge-sharing climates and absorptive capacity enhanced innovation and adaptive performance (Zahra and George, 2002; Jiménez-Jiménez and Sanz-Valle, 2011). In these settings, workers were better motivated to internalise new skills and use them in dynamic cases, hence supporting organizational agility.

The results enhanced the resource-based and knowledge-based viewpoints to empirically support the multi-layered model through integrating HR practices, human capital, and learning culture. Although the previous studies investigated the isolated correlations between these constructs, the current study showed that both mediation and moderation processes concurrently performed in a cohesive framework. The findings indicated that agility was not entirely dependent on the outer strategy but was entrenched in the internally nurtured human capital and favorable learning environments. This integrated view addressed the call of more multifaceted examinations of strategic HR output, at multi levels (Wright and McMahan, 2011).

Conclusion

The authors in the study concluded that the management practices of high-performance talent management had a significant positive influence on the agility of the organization both directly and indirectly through human capital development. The empirical results proved that there is a strong positive influence on organizational agility by talent management practices (0.45, $p < 0.001$), and human capital development also has a strong direct impact (0.38, $p < 0.001$). The mediation analysis had verified the previously noted relationship between talent management and agility was moderated by human capital development (indirect effect = 0.19, $p < 0.01$), showing that investments in organized employee development paid off to agile organizational capabilities. Moreover, learning orientation played a strong moderation role between magic practices of talent management and human capital development (= 0.21, $p < 0.01$) indicating that organizations which have high knowledge cultures enhanced the contribution of HR systems in building capability. In general, the findings allowed supporting the thesis according to which organizational agility was deeply embedded in human-centered strategic processes and not only structural modifications. Talent management processes which focused on the quality of recruitment process, succession strategy, performance management and the processes of continuous best personnel development produced a team of highly qualified and flexible employees who could quickly adapt to changes in the environment. The model had excellent explanatory power ($R^2 = 0.62$ in the case of organizational agility), meaning that the combined model was effective in the process of capturing what drives agility results.

Recommendations

It was based on the findings that organizations were recommended to implement integrated and strategic talent management systems and not a separate HR intervention. Investment should be made by the firm in systematic programs of human capital development, including leadership development programs, mentoring programs, and lifelong professional training. Such programs would improve the adaptive competencies, problem solving, and cross-functional cooperation of the employees, which was deemed vital in agility.

Also, the managers were advised to develop a high learning orientation by facilitating knowledge sharing, experimentation, and continuous improvement behaviors. The creation of internal knowledge bases, the cross-departmental project, and feedback channels would enhance the cultural basis that is required to ensure excellent utilization of talent management systems.

Organizations are also expected to integrate their talent plans into long-term strategic plans to make them sustainable and competitive.

Future Research Directions

The future study would be able to further elaborate the available framework by including other intervening variables like psychological empowerment, innovation ability, or digital readiness to carry a more detailed insight into the agility mechanism. The longitudinal research designs would also assist in defining causal relationships more strongly since the current study used cross-sectional data. Future research may be conducted to investigate the changes in specific sectors or carry out comparative cross-country studies to investigate variation in context in management of talent. To further develop the model, it may be investigative to explore how new technologies, artificial intelligence integration, and digital transformation are involved in developing human capital.

References

- Ahsani, R. F., Atmaja, H. E., & Palupi, N. W. I. (2024). *Human capital transformation: Building a resilient and agile workforce*. **International Journal of Economics Development Research**, 5(3), 2275–2286. <https://doi.org/10.37385/ijedr.v5i3.5868>
- Al Aina, R., & Atan, T. (2020). *The impact of implementing talent management practices on sustainable organizational performance*. **Sustainability**, 12(20), 8372. <https://doi.org/10.3390/su12208372>
- Alegre, J., & Chiva, R. (2008). Assessing the impact of organizational learning capability on product innovation performance. *Technovation*, 28(6), 315–326. <https://doi.org/10.1016/j.technovation.2007.09.003>
- Alrifae, A. A. M., Alhabeeb, A. A., Alhanatleh, H., & Alnajdawi, S. (2025). *Exploring the role of succession planning and talent development in enhancing organizational agility*. **Sustainability**, 17(24), 11215. <https://doi.org/10.3390/su172411215>
- Al-Tit, A. A., Al-Ayed, S., Alhammadi, A., Hunitie, M., Alsarayreh, A., & Albassam, W. (2022). *The impact of employee development practices on human capital and social capital: The mediating contribution of knowledge management*. **Journal of Open Innovation: Technology, Market, and Complexity**, 8(4), 218. <https://doi.org/10.3390/joitmc8040218>
- Aman-Ullah, A., Mehmood, W., Amin, S., & Abbas, Y. A. (2022). *Human capital and organizational performance: A moderation study through innovative leadership*. **Journal of Innovation & Knowledge**. <https://doi.org/10.1016/j.jik.2022.100261>
- Athamneh, M. H. A. (2023). *Factors affecting human resource agility: A literature review*. Human Resource Management Review.
- Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, 31(6), 515–524. [https://doi.org/10.1016/S0019-8501\(01\)00203-6](https://doi.org/10.1016/S0019-8501(01)00203-6)
- Collings, D. G., Mellahi, K., & Cascio, W. F. (2019). Global talent management and performance in multinational enterprises. *Journal of Management*, 45(2), 540–566. <https://doi.org/10.1177/0149206318757018>
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96(3), 443–456. <https://doi.org/10.1037/a0022147>

- Gborogbosi, L. G., & Chikwe, J. E. (2025). *Learning orientation and organizational agility of small and medium-sized enterprises*. **South Asian Research Journal of Business and Management**, 7(4), 344–356. <https://doi.org/10.36346/sarjbm.2025.v07i04.001>
- Happy, K. (2024). *Leveraging talent management to enhance organizational performance: Employee engagement as a key factor*. **International Review of Management and Business Research**, 13(3), 1-15. [https://doi.org/10.30543/13-3\(2024\)-1](https://doi.org/10.30543/13-3(2024)-1)
- Harsch, K., & Festing, M. (2020). *Dynamic talent management capabilities and organizational agility – A qualitative exploration*. **Human Resource Management**, 59(1), 43–61. <https://doi.org/10.1002/hrm.21972>
- Huselid, M. A. (2018). *On the shoulders of giants: A meta-review of SHRM*. **International Journal of Human Resource Management**.
- Jayampathi, E. K. (2025). *Organizational agility: A systematic literature review*. **South Asian Journal of Business Insights**, 5(1), 90-110. <https://doi.org/10.4038/sajbi.v5i1.77>
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. (2012). How does human resource management influence organizational outcomes? *Academy of Management Journal*, 55(6), 1264–1294. <https://doi.org/10.5465/amj.2011.0088>
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408–417. <https://doi.org/10.1016/j.jbusres.2010.09.010>
- Kaur, G. (2025). *The moderating role of learning orientation*. **Innovation and Entrepreneurship Journal**.
- Kaur, G., Bedi, H. S., & Saini, H. (2025). *Leveraging innovativeness for enhanced small and medium enterprises performance: The moderating role of learning orientation*. **Journal of Innovation and Entrepreneurship**, 14, 65. <https://doi.org/10.1186/s13731-025-00550-4>
- Keating, B., & Oliva, R. (2016). Reconsidering the resource-based view. *Strategic Management Journal*, 37(7), 1347–1366. <https://doi.org/10.1002/smj.2410>
- Kehoe, R. R., & Wright, P. M. (2013). The impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, 39(2), 366–391. <https://doi.org/10.1177/0149206310365901>
- Kianto, A., Sáenz, J., & Aramburu, N. (2017). Knowledge-based human resource management practices and innovation performance. *Journal of Business Research*, 81, 11–20. <https://doi.org/10.1016/j.jbusres.2017.07.018>
- Kurniawan, E., Sudiarditha, I. K. R., & Yohana, C. (2024). *Analysis of human capital management practices for workforce agility and knowledge sharing*. **International Journal of Human Capital Management**, 8(2), 126–138. <https://doi.org/10.21009/IJHCM.08.02.11>
- Mahmoud, M. H., Ali, A. A., Alrifae, A. A., Abu Eitah, R., & AlZubi, M. M. (2025). *The impact of digital HRM system and digital transformation on HR efficiency with organizational agility as a moderator*. **Discover Sustainability**, 6, 1038. <https://doi.org/10.1007/s43621-025-01713-9> (
- Nguyen, T. (2025). *The organisational impact of agility: A systematic literature review*. **Management Research Review**
- Nguyen, T., Le, C. V., Nguyen, M., Lien, T. T. H., & Nguyen, O. (2025). *The organisational impact of agility: A systematic literature review*. **Management Review Quarterly**, 75, 2709–2757. <https://doi.org/10.1007/s11301-024-00446-9> (Springer Link)
- Organizational learning, learning organisation, and learning orientation: An integrative review and framework. (2021). *Human Resource Management Review*, 32(3), 100854. <https://doi.org/10.1016/j.hrmr.2021.100854> (ScienceDirect)

- Shin, D., Taylor, M. S., & Seo, M. G. (2015). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3), 727–748. <https://doi.org/10.5465/amj.2010.0325>
- Sinkula, J. M., Baker, W. E., & Noordewier, T. (1997). *A framework for market-based organizational learning*. **Journal of Market-Focused Management**. (iosrjournals.org)
- Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on innovative capabilities. *Academy of Management Journal*, 48(3), 450–463. <https://doi.org/10.5465/amj.2005.17407911>
- Sumadireja, G. C., Dachyar, M., Farizal, F., Ma'aram, A., & Park, J. J. (2026). *Building a human capital agility model through the integration of leadership agility and knowledge management*. **Sustainability**, 18(2), 916. <https://doi.org/10.3390/su18020916> (mdpi.com)
- Takeuchi, R., Lepak, D. P., Wang, H., & Takeuchi, K. (2007). An empirical examination of the mechanisms mediating between high-performance work systems and firm performance. *Journal of Applied Psychology*, 92(4), 1069–1083. <https://doi.org/10.1037/0021-9010.92.4.1069>
- Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: Putting “human” back into strategic human resource management. *Human Resource Management Journal*, 21(2), 93–104. <https://doi.org/10.1111/j.1748-8583.2010.00165.x>
- Youndt, M. A., & Snell, S. A. (2004). Human resource configurations, intellectual capital, and organizational performance. *Journal of Managerial Issues*, 16(3), 337–360. <https://doi.org/10.2139/ssrn.1496203>
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review and reconceptualization. *Academy of Management Review*, 27(2), 185–203. <https://doi.org/10.5465/amr.2002.6587995>