KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 27 August 2024
Revised 01 November 2024
Accepted 07 November 2024
Published online 01 May 2025

International Journal of Innovation Management and Organizational Behavior

Volume 5, Issue 3, pp 1-12

IJIMOB International Journal of Innovation Management and Organizational Behavior

E-ISSN: 3041-8992

Identification of Strategic Human Capital Components and Examination of Its Impact on Innovative Work Behaviors with Job Embeddedness Moderation

Hasan Hadi. ALI Al-Luhaibi[1], Ghasem. Eslami[2*], Fariborz. Rahimnia[3], Ali Reza. Khorakian[3]

[1] Ph.D. Student in Human Resource Management, Ferdowsi University of Mashhad, Mashhad, Iran
[2] Associate Professor, Department of Management, Faculty of Economics and Administrative Sciences, Ferdowsi University of Mashhad, Mashhad, Iran
[3] Professor, Department of Management, Economics and Administrative sciences, Ferdowsi University of Mashhad, Mashhad, Iran

*** Corresponding author email address**: gh.eslami@um.ac.ir

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
ALI Al-Luhaibi, H. H., Eslami, G., Rahimnia, F., & Khorakian, A. R. (2025). Identification of Strategic Human Capital Components and Examination of Its Impact on Innovative Work Behaviors with Job Embeddedness Moderation. *International Journal of Innovation Management and Organizational Behavior*, *5*(3), 1-12.
https://doi.org/10.61838/kman.ijimob.5.3.15

A B S T R A C T

Objective: This study aimed to identify the components of strategic human capital and its impact on employees' innovative work behaviors with the moderating role of job embeddedness in Karbala municipal offices.

Methodology: The present research adopted a mixed-method (qualitative and quantitative) approach, gathering data through systematic review, Delphi method, and questionnaires.

Findings: In the systematic review section, 27 primary indicators of strategic human capital were identified, from which, following Delphi surveys and exploratory factor analysis, three main components were extracted: "value creation and strategic competitiveness," "agility and strategic adaptability," and "alignment and strategic participation." In the quantitative phase, using structural equation modeling, the positive impact of strategic human capital on innovative work behaviors was confirmed, and the moderating role of job embeddedness in this relationship was found to be significant.

Conclusion: The results indicate that strategic human capital effectively enhances innovative behaviors and creates a conducive environment for improving organizational performance. By identifying the components of strategic human capital and examining its effective mechanisms, this study contributes to filling gaps in the research literature and provides practical suggestions for enhancing human resource management.

Keywords: *Strategic Human Capital, Innovative Work Behavior, Job Embeddedness, Karbala Municipalities, Human Resource Management*

1 Introduction

Today, human resources have emerged as organizational capital, and human resource managers with knowledge are positioning themselves to create competitive advantages for the future of organizations. This shift has led to increased attention towards the strategic role of human resources in developing strategic roles (Thuda et al., 2019). Organizations that have a strategic perspective on their human resources rank highly in the list of the world's top 500 companies (Shela et al., 2023). Studies in human resource management indicate that two-thirds of the top 500 global companies prioritize human capital as one of their top five strategic priorities in achieving competitive advantage (Boon et al., 2018). The mutual dependence between a company's business strategy and its human resource strategy forms the foundation of strategic human resource management (Alam, 2022). The trajectory of human resource studies reflects a shifting focus towards human resources within organizations. Initially seen as administrative units for managing employees, over time this department evolved into a human resource unit. With an understanding of the importance of human resources, it has moved towards human resource management, where the term "strategic human capital" is now used. More organizations realize that their employees are a source of competitive advantage. Consequently, the human resources department has shifted from being purely administrative to a strategic partner in achieving business goals (Boon et al., 2018). The resource-based view (Barney, 1991) regarding human capital holds true (Ployhart, 2021) and demonstrates that sustainable competitive advantage can be achieved with valuable, rare, inimitable, and non-substitutable employees (Delery & Roumpi, 2017). On the other hand, proponents of "human capital advantage" believe that rare, non-reproducible, and irreplaceable human resource activities are not repeatable (Boxall, 1998). Human resource management activities aimed at increasing human capital are viewed at best as a simple lever in the relationship between human capital and sustainable competitive advantage (Delery & Roumpi, 2017). Accordingly, the concept of strategic human capital has been highlighted as capable of enhancing the effectiveness of human resource management activities (Boon et al., 2018). Indeed, when strategists began to identify those organizational resources that meet the key criteria of the resource-based view (valuable, rare, and imitable), human capital emerged as a resource that can help organizations achieve competitive advantage and ultimately superior performance (Barney, 1991; Barney & Wright, 1998). The main idea was that human capital has the potential to become a source of competitive advantage because: (1) Human capital can significantly determine the quality of outputs and/or operational efficiency (i.e., valuable human resources); (2) Human capital is unevenly distributed among organizations (i.e., human capital can be rare); (3) Factors such as specificity, social complexity, and causal ambiguity can hinder the flow and replication of human capital resources (i.e., human capital replication is difficult) (Barney & Wright, 1998).

Since initial studies(Hitt et al., 2001) have shown a positive relationship between organizational human capital and organizational performance, the focus of strategic management research efforts on human capital as a unique strategic resource has increased (Boon et al., 2018), and the concept of strategic human capital has emerged. Following this trend, the role of strategic human capital in strengthening job resources and enhancing innovative work behaviors of employees has also been highlighted (Choudhary et al., 2020). Although strategic human capital is vital for organizational success, there is little compatibility in the methods used so far to measure it (Wright & McMahan, 2011). Therefore, the present study identifies the components of strategic human capital for municipal administrations in Karbala province.

Studies have identified a positive relationship between strategic human capital and employee behaviors (Boon et al., 2018). Strategic human capital resources can improve employees' social ties in the workplace and increase their innovative work behaviors. Innovative work behavior, which is part of organizational behavior based on a complete understanding of tasks and responsibilities in the workplace, is driven by motivation to advance actions (Lukeš & Stephan, 2017). It includes identifying problems, generating ideas or new solutions for them, and supporting those solutions (Bakker et al., 2011). This as a strategic human capital activity leads to greater transparency of job roles, values, organizational goals, and vision (Wood & de Menezes, 2011). As a result, the work environment appears less uncertain, and the likelihood of employees' innovative behaviors increases (Karatepe & Vatankhah, 2014). On the other hand, job embeddedness also increases the impact of human capital on job outcomes such as innovative work behaviors (Campbell et al., 2017). Job embeddedness is a newly emerging concept in management literature focused on composite forces that keep employees in their jobs. The dimensions of job embeddedness are links, fit, and sacrifices

IJIMOB
E-ISSN: 3041-8992

(Karatepe & Vatankhah, 2014). This concept has many positive implications, such as creative performance and customer service, and is therefore a strengthening factor in strategic human capital in organizations, profoundly influencing human capital studies.

The present research examines this issue in Iraqi organizations. Overall, in the section on providing governmental services in Iraq, human resources have not been optimally used as a driving force for organizational performance, and job embeddedness with less job examination has been studied. In particular, initial studies indicate that managers of provincial government organizations in Karbala have paid less attention to the role of strategic human capital in government organizations. Furthermore, the employment of employees in public roles and the apparent work of jobs in the municipalities of this province show that the job embeddedness of human capital as a source of innovative work behaviors has not been considered. This study aimed to identify the components of strategic human capital and its impact on employees' innovative work behaviors with the moderating role of job embeddedness in Karbala municipal offices.

2 Methods and Materials

The current research, in terms of orientation, falls under developmental research and employs an action-oriented paradigm. It aims to understand individuals' interpretation and attribution of phenomena around them (qualitative research), as well as examining the impact of these meanings in practice (quantitative research). The qualitative analysis strategy in this study involved systematic review and Delphi panel with identified experts. Its quantitative analysis method included structural equation modeling and hierarchical multiple regression.

The qualitative study population in this research consists of experts in the field of human resource management in Iraq, characterized by a minimum of 5 years or more experience in human resources in municipalities and academic specialists with education in human resources and organizational behavior. In the qualitative section, the sample size of 12 participants was determined based on judgmental sampling and theoretical saturation principle. The quantitative study population comprises 400 staff members from the administrative sector of Karbala municipalities, with a sample selected randomly. The sample size was determined as 196 using Cochran's formula, with 197 questionnaires ultimately collected and analyzed.

Qualitative data were gathered through systematic review, aligned with the Delphi process and as a prerequisite for survey method. In other words, the qualitative segment utilized library study tools in scholarly sources. In the quantitative section, data were collected using a questionnaire that combined standardized and researcher-developed items: a 27-item tool developed in the qualitative section of this research was used to assess strategic human capital. Job satisfaction was measured using the 9-item Mitchell et al. (2000) questionnaire. The 9-item questionnaire by Jansen et al. (2001) was employed to measure innovative work behavior. This study validated and confirmed the reliability, transferability, trustworthiness, and validity of statistically inferred indices from the literature review during the final stage of systematic review to substantiate qualitative content analysis. The validity and reliability of quantitative data were also confirmed through structural validity and reliability assessment.

3 Findings and Results

As mentioned, this study posited one research question and two hypotheses. The research question addressed was: What are the components of strategic human capital in the municipal offices of Karbala province? To answer this question, strategic human capital indicators were first identified from past research through a systematic review. Subsequently, these indicators were localized using the Delphi technique, and finally, using exploratory factor analysis, these relevant indicators were categorized into three dimensions. Following these steps, a questionnaire comprising all three variables was designed and distributed among the statistical population. Based on the results obtained, the research hypotheses were tested. The findings are presented in detail below.

The first step in conducting a systematic review was the selection of relevant keywords, ensuring comprehensive coverage of all pertinent studies and exclusion of irrelevant ones during an internal refinement process. Accordingly, several singular and combined keywords such as "human capital," "strategic human capital," etc., were utilized to extract relevant studies from the research literature. Two main characteristics received particular attention in defining the extracted research summary table: first, the validity of the research (emphasizing journal credibility and the number of citations referring to other studies); and second, the research context (emphasizing service organizations). Based on these criteria, 3290 studies were identified in this phase.

IJIMOB
E-ISSN: 3041-8992

In the second step, relevant scholarly sources were identified. In this stage, those articles that somehow employed components and indicators of strategic human capital were selected from among the studies. To select suitable articles for the research objective, the extracted studies were reviewed in several stages to determine which ones corresponded most closely to the research question. The review process included examining the title, abstract, and content of these articles. Accordingly, out of 3290 studies initially identified, 3251 articles were excluded after reviewing the title, abstract, and content. In essence, articles that were not relevant to the research question were set aside, and the most relevant studies were selected for extracting the answer to the specific research question. In this phase, 42 articles were found, duplicate articles were removed from multiple databases, leaving 36 articles.

In the third step, studies with content relevant to the concept of strategic human capital were selected from the identified studies based on criteria such as qualitative nature, relevance to the target population, validity, etc. Each study had to be evaluated for eligibility based on the entry criteria, and articles with full text that met the entry criteria were retrieved. After selecting studies with full text, the remaining studies were evaluated using a significant evaluation framework, and the methodological quality was examined. Studies with poor quality were removed according to the evaluation and ranking method mentioned in Chapter Three. In this phase, 36 articles were reviewed, 10 articles were excluded due to scoring 3 or lower, and 26 articles proceeded to the full-text review stage.

In the final stage, the content of relevant studies was reviewed, and initial indicators were identified to clarify the concept of strategic human capital. Subsequently, the findings obtained from the selected studies regarding their quality, the diversity of conducted studies, their potential impact, and the practicality of the findings were discussed. In other words, the findings from all studies were synthesized together, and the final conclusion was examined regarding effectiveness, feasibility, suitability, and significance of the findings. As observed, a total of 27 primary indicators were extracted from the research literature (Table 1).

Table 1

Strategic Human Capital Components

No.	Extracted Indicators	Source
1	Uniqueness of Employees	(Cabello-Medina et al., 2011; Campbell et al., 2017; Huang et al., 2016; Kiazad et al., 2015; Ployhart, 2021; Ployhart et al., 2014)
2	Inimitability of Employees	(Cabello-Medina et al., 2011; Huang et al., 2016; Kessel et al., 2012; Kiazad et al., 2015; Nyberg et al., 2014)
3	High Knowledge Employees	(Amrutha & Geetha, 2020; Bakker et al., 2011; Boon et al., 2018; Cabello-Medina et al., 2011; Campbell et al., 2017; Shah et al., 2020)
4	Economic Value Creation Capability	(Boon et al., 2018; Campbell et al., 2017; Kessel et al., 2012)
5	Possession of Core Competencies	(Janssen, 2000; Ployhart, 2021; Ployhart et al., 2014)
6	Bargaining Power	Bunn et al. (2018)
7	Commitment to Continuous Learning / Necessary Actions for Full Development of Potential Abilities	(Cabello-Medina et al., 2011; Campbell et al., 2017; Lee & Lee, 2018; Shah et al., 2020)
8	Problem-Solving Skills	(Ployhart, 2021; Ployhart et al., 2014; Reitz, 2014)
9	Provision of Innovative Ideas for Organizational Problem Solving / Innovative Thinking	(Choudhary et al., 2020; Delery & Roumpi, 2017; Hitt et al., 2001; Shela et al., 2023)
10	Job Role Clarity	(Choudhary et al., 2020; Movahedi et al., 2017)
11	Emotional Stability	(Alam, 2022; Boon et al., 2018; Wright & McMahan, 2011)
12	Cognitive Competency	(Boon et al., 2018)
13	Flexibility and Ability to Adapt Strategically	(Cabello-Medina et al., 2011; Choudhary et al., 2020; Nyberg et al., 2014; Thuda et al., 2019)
14	Willingness to Share Information and Knowledge Among Employees	(Cabello-Medina et al., 2011; Delery & Roumpi, 2017; Hitt et al., 2001; Holtom et al., 2006; Movahedi et al., 2017; Nyberg et al., 2014; Ployhart, 2021; Ployhart et al., 2014)
15	Possession of Specific Education Related to the Organization	(Cabello-Medina et al., 2011; Hitt et al., 2001; Thuda et al., 2019)

IJIMOB
E-ISSN: 3041-8992

16	Possession of Work Experience Related to the Organization	(Choudhary et al., 2020; Nyberg et al., 2014; Ployhart, 2021)
17	Mastery of Employees in Job Roles Across Different Units	(Cabello-Medina et al., 2011; Campbell et al., 2017)
18	Mastery of Employees in Organizational Techniques and Methods	(Campbell et al., 2017; Hitt et al., 2001; Movahedi et al., 2017)
19	Mastery of New Technologies	(Movahedi et al., 2017; Wojtczuk-Turek & Turek, 2015; Wright & McMahan, 2011)
20	Alignment of Employees' Performance and Strengths with Strategic Goals	(Alam, 2022; Choudhary et al., 2020; Movahedi et al., 2017; Nyberg et al., 2014; Ployhart, 2021; Ployhart et al., 2014; Shela et al., 2023; Thuda et al., 2019)
21	Commitment and Diligence in Achieving Organizational Goals	(Hitt et al., 2001; Holtom et al., 2006; Movahedi et al., 2017; Nyberg et al., 2014; Ployhart, 2021; Ployhart et al., 2014; Shela et al., 2023)
22	Spirit of Cooperation and Interaction with Colleagues	(Delery & Roumpi, 2017; Shela et al., 2023)
23	Inspiration Capability	(Wright & McMahan, 2011)
24	Positive and Clear Attitude Toward the Organization	(Wright & McMahan, 2011)
25	Analytical Skills	(Boon et al., 2018; Wright & McMahan, 2011)
26	Adaptability to Expected Organizational Culture / Cultural Fit	(Boon et al., 2018; Ployhart et al., 2014; Wright & McMahan, 2011)
27	Employees' Commitment to Understanding and Recognizing the Organization's Key Values	(Boon et al., 2018; Delery & Roumpi, 2017; Hitt et al., 2001; Holtom et al., 2006)

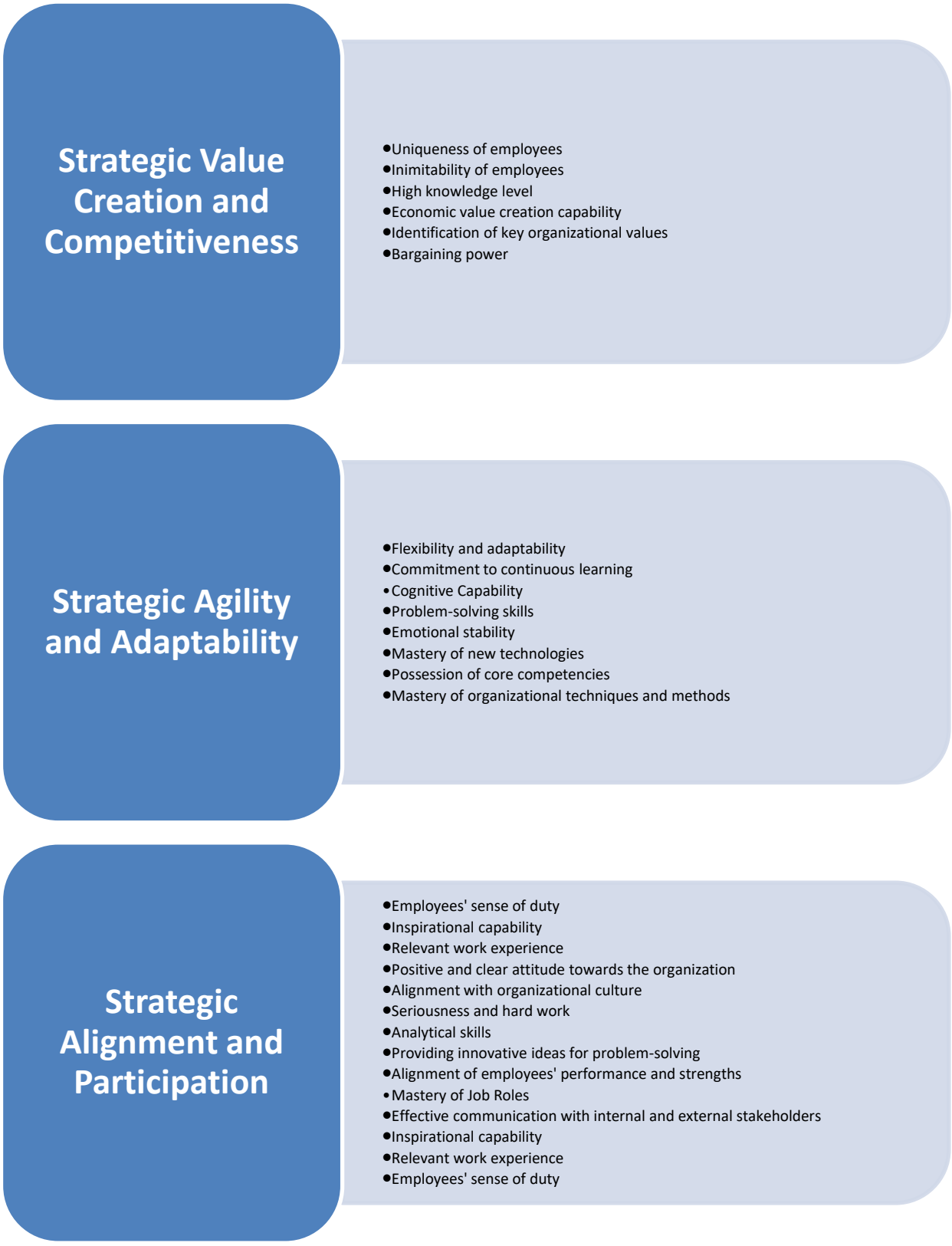
In this phase, Delphi analysis was employed to localize the extracted indicators from the previous phase for the municipal offices in Karbala province and to determine the significance of each component. After conducting a systematic review of the literature, the initial list of strategic human capital indicators was extracted. At this stage, a Delphi panel was formed to incorporate expert opinions and finalize the research model. The Delphi process concluded after three iterations. The first stage aimed to identify meaningful indicators and extract proposed components from the experts. In this phase, the relevance of the identified indicators to the research subject was examined. Two indicators, "Willingness to Share Information and Knowledge Among Employees" and "Possession of Specific Education Related to the Organization," were discarded due to a consensus ratio lower than 0.50 (0.41). Notably, two new indicators, "Risk Management Capability" and "Effective Communication with Internal and External Stakeholders," were introduced by the experts, leaving 27 indicators to be analyzed in the second phase. Based on the results obtained from the second phase, the third phase was also repeated. In the second and third phases, experts were asked to rate the importance of each indicator using a five-point Likert scale. In these phases, Kendall's W statistic was used to confirm or reject the primary indicators, and the Kendall's coefficient of concordance was 0.42 in the second phase and 0.60 in the third phase, with a significance level of 0.000. These values indicate that the null hypothesis, which suggests random (inconsistent) opinions, is rejected. Therefore, it can be concluded that the extracted strategic human capital indicators were validated by the experts.

Since strategic human capital in the existing literature has not been clearly and comprehensively divided into specific dimensions, and its structure and characteristics have not been fully clarified in previous research, the need for identifying the dimensions of this variable and accurately categorizing its related indicators was felt. To this end, exploratory factor analysis (EFA) was used in the continuation of the Delphi process to identify the components and extract the appropriate model. After performing the exploratory factor analysis test on the field data, and based on the classification performed by the software in its default mode on the indicators of strategic human capital, the 27 identified indicators were categorized into three dimensions. Subsequently, the researcher named and defined the three dimensions based on the related indicators and the theoretical foundations of the study. These three dimensions are: 1) Strategic Value Creation and Competitiveness, 2) Strategic Agility and Adaptability, and 3) Strategic Alignment and Participation. Figure 1 presents the final model of the strategic human capital components along with their relevant indicators.

IJIMOB
E-ISSN: 3041-8992

Figure 1

Strategic Human Capital Model



IJIMOB
E-ISSN: 3041-8992

After conducting the exploratory factor analysis and extracting the components of strategic human capital, and ensuring the appropriateness of the identified indicators based on the obtained factor loadings, a new questionnaire was designed including questions on strategic human capital, innovative work behavior, and job embeddedness. This questionnaire was distributed to employees of the municipalities in Karbala, and the results are presented below.

Before evaluating the proposed structural model, it is essential to examine the significance of the factor loadings of the various constructs in predicting the related items to ensure the fit of the measurement models and the validity of their indicators in measuring the constructs. This process was performed using confirmatory factor analysis and AMOS software. The results of the confirmatory factor analysis for the items of the questionnaire are presented in Table 2. The validity indicators of the model include convergent validity and discriminant validity. In convergent validity, each factor loading (regression coefficient) should be significant and greater than or equal to 0.5. Otherwise, the acceptable and optimal limits for composite reliability (CR) and average variance extracted (AVE) should be examined. The acceptable CR value is at least 0.7, and the acceptable AVE value is at least 0.5. In discriminant validity, to check for overlap between the constructs of the questionnaire in relation to the items being assessed, the correlation between two constructs should not exceed the square root of the AVE of both constructs. The results of the CR and AVE analysis are provided in Table 2, and the results of the discriminant validity analysis are shown in Table 3. Additionally, the reliability analysis results indicate that the corresponding Cronbach's alpha is greater than 0.7, which shows the adequacy of the questionnaire's reliability.

Table 2

Results of Confirmatory Factor Analysis for Questionnaire Items

Variable	Dimension	Indicators	Factor Loading	Significance	Result	AVE	CR	Cronbach's Alpha
Strategic Human Capital	Strategic Value Creation and Competitiveness	Q1	0.737	0.000	Significant	0.509	0.789	0.911
		Q2	0.812	0.000	Significant			
		Q3	0.729	0.000	Significant			
		Q4	0.787	0.000	Significant			
		Q5	0.709	0.000	Significant			
		Q6	0.551	0.000	Significant			
	Strategic Agility and Adaptability	Q7	0.633	0.000	Significant			
		Q8	0.649	0.000	Significant			
		Q9	0.810	0.000	Significant			
		Q10	0.724	0.000	Significant			
		Q11	0.762	0.000	Significant			
		Q12	0.761	0.000	Significant			
		Q13	0.718	0.000	Significant			
		Q14	0.787	0.000	Significant			
	Strategic Alignment and Participation	Q15	0.765	0.000	Significant			
		Q16	0.801	0.000	Significant			
		Q17	0.684	0.000	Significant			
		Q18	0.822	0.000	Significant			
		Q19	0.688	0.000	Significant			
		Q20	0.722	0.000	Significant			
		Q21	0.770	0.000	Significant			
		Q22	0.613	0.000	Significant			
		Q23	0.604	0.000	Significant			
		Q24	0.693	0.000	Significant			
		Q25	0.705	0.000	Significant			
		Q26	0.717	0.000	Significant			
		Q27	0.555	0.000	Significant			
Innovative Work Behavior	Generating New Ideas	Q28	0.756	0.000	Significant	0.510	0.725	0.847
		Q29	0.816	0.000	Significant			

IJIMOB
E-ISSN: 3041-8992

		Q30	0.471	0.000	Significant			
	Acceptance and Support for New Ideas	Q31	0.512	0.000	Significant			
		Q32	0.631	0.000	Significant			
		Q33	0.819	0.000	Significant			
	Implementation and Execution of Ideas	Q34	0.702	0.000	Significant			
		Q35	0.783	0.000	Significant			
		Q36	0.837	0.000	Significant			
Job Embeddedness	Fit	Q37	0.700	0.000	Significant	0.521	0.768	0.863
		Q38	0.517	0.000	Significant			
		Q39	0.709	0.000	Significant			
	Sacrifice	Q40	0.746	0.000	Significant			
		Q41	0.619	0.000	Significant			
		Q42	0.780	0.000	Significant			
	Bond	Q43	0.682	0.000	Significant			
		Q44	0.609	0.000	Significant			
		Q45	0.832	0.000	Significant			

As observed in the fitted factor analysis model, the factor loadings of all items across variables and dimensions were significant. Therefore, none of the items were excluded from the analysis process. The basis for the significance of the items is that their significance level should be below 0.05. As a result, a total of 45 items from the questionnaire were analyzed. Additionally, considering that some items' factor loadings, although significant, were less than 0.5, to ensure convergent validity, the CR and AVE values for all variables and components were examined. The CR and AVE values for all variables and components were found to be greater than 0.7 and 0.5, respectively. Based on these results, we can confirm the convergent validity of the questionnaire.

As mentioned earlier, in discriminant validity, the correlation between two variables should not exceed the square root of the AVE related to the variables in question. Table 3 presents the results of the discriminant validity for the study variables. As seen, the correlation between none of the constructs exceeds the square root of the AVE (values presented in the main diagonal), indicating that discriminant validity is assured.

Table 3

Results of Discriminant Validity Analysis

Variables	Strategic Human Capital	Innovative Work Behavior	Job Embeddedness
1. Strategic Human Capital	0.713		
2. Innovative Work Behavior	0.699	0.714	
3. Job Embeddedness	0.537	0.421	0.721

After ensuring the validity and reliability of the research instrument through questionnaire data analysis, the following structural equation model was obtained.

The examination of the effect coefficient of strategic human capital on innovative work behavior in the municipalities of Karbala province shows that this path coefficient is estimated at 0.64. Considering the p-value of 0.000 and the significance value of 8.455 (which is greater than 1.96 and less than 0.05), it can be concluded that this path coefficient is significant at the 0.05 error level. In other words, strategic human capital has a significant and positive impact on innovative work behavior. That is, improving strategic human capital leads to enhanced innovative work behaviors in the municipalities of Karbala.

Table 4 presents the results of the moderation hypothesis test, where hierarchical regression was used for analysis. In this table, Model 1 represents the effect of strategic human capital and job embeddedness as independent and moderator variables on innovative work behavior. Model 2 indicates the moderating effect of job embeddedness. The results in Model 2 show that job embeddedness moderates the effect of strategic human capital on innovative work behavior ($\beta = 0.152$, $p < 0.05$). Therefore, the moderation hypothesis for job embeddedness is confirmed due to significant changes in the R^2 value (ΔR^2 model = 0.020). According to Jaccard et al. (1990), if the difference in R^2 values between Models 1 and 2 is statistically significant ($P < 0.05$), the moderating effect exists; otherwise, it is rejected.

IJIMOB
E-ISSN: 3041-8992

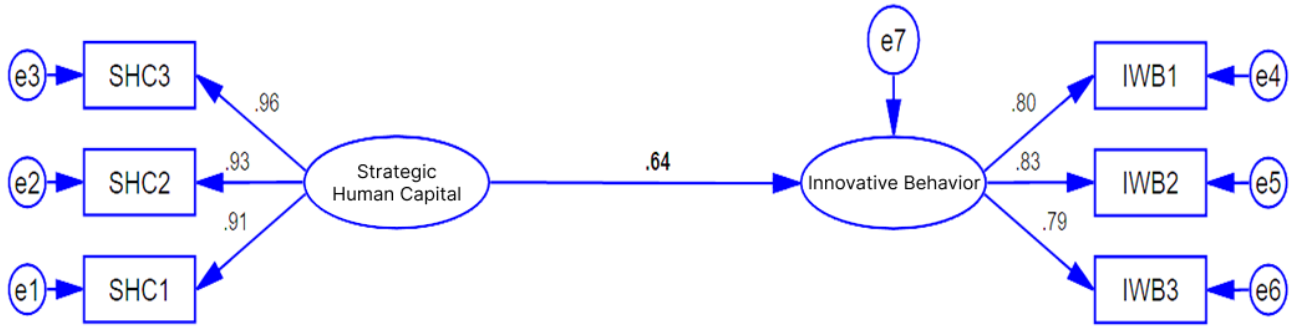
Table 4

Results of Moderation Analysis for Job Embeddedness Variable

Model	Independent Variable	Dependent Variable	β	Sig.	R^2	R Square Change	F Change	Sig. F Change	f	Sig.
Model 1	Strategic Human Capital	Innovative Work Behavior	0.321	0.000	0.498	0.498	96.291	0.000	96.291	0.000
	Job Embeddedness		0.412	0.000						
Model 2	Strategic Human Capital	Innovative Work Behavior	0.255	0.000	0.518	0.020	8.022	0.005	69.192	0.000
	Job Embeddedness		0.424	0.000						
	Strategic Human Capital * Job Embeddedness		0.152	0.005						

Figure 2

Fitted Model of the Study



4 Discussion and Conclusion

The purpose of this study was to identify the components of strategic human capital and examine its impact on innovative work behavior, considering the moderating role of job embeddedness in the municipalities of Karbala province. Initially, through systematic review, Delphi method, and exploratory factor analysis, three dimensions of "Strategic Value Creation and Competitiveness," "Strategic Agility and Adaptability," and "Strategic Alignment and Participation" were identified for strategic human capital.

The dimension of strategic value creation and competitiveness refers to employees' capabilities in generating economic, social, and cultural values that can differentiate the organization in a competitive environment. These values may include knowledge, skills, and abilities that help organizations leverage their human resources as a sustainable competitive advantage. The dimension of strategic agility and adaptability focuses on employees' ability to quickly adapt to environmental changes, utilize modern technologies, and maintain efficiency under variable conditions. Strategic agility and adaptability reflect individuals' capacity for continuous learning, change management, and responsiveness to new organizational needs. The dimension of strategic alignment and participation emphasizes aligning employees' behaviors, values, and performance with organizational goals and strategies. Additionally, effective interaction and collaboration among employees with other departments and internal and external stakeholders are integral to this dimension. The goal of this dimension is to ensure the achievement of the organization's vision through synergy and active employee participation.

In the second part of the study, the research hypotheses were tested. The results revealed that strategic human capital has a significant positive effect on the innovative work behavior of employees in the municipalities of Karbala province. These findings align with the research literature and confirm concepts from Resource-Based View (RBV) theory. According to RBV, human capital, as a strategic resource with valuable, rare, inimitable, and non-substitutable characteristics, can help create a sustainable competitive advantage for organizations (Barney, 1991; Barney & Wright, 1998; Delery & Roumpi, 2017). One

IJIMOB
E-ISSN: 3041-8992

reason for this positive relationship can be found in the ability of strategic human capital to enhance intra-organizational interactions and relationships. As Cabello-Medina et al. (2011) suggest, human capital can empower employees and foster a sense of trust and reciprocal norms among them (Cabello-Medina et al., 2011). These norms, particularly in public sector environments such as the municipalities of Karbala, can drive employees to engage in more effective interactions and generate innovative ideas. Moreover, this finding indicates that strategic human resource management, through specific actions such as targeted training, creating opportunities for continuous learning, and designing motivational systems, can enhance extra-role behaviors among employees. These behaviors include generating and promoting new ideas and implementing them to improve organizational performance (Wojtczuk-Turek & Turek, 2015). From a practical perspective, these results highlight the importance of human capital planning. Municipal managers in Karbala can encourage creativity and innovation among their employees by developing human capital development programs. Specifically, focusing on value creation, adaptability to change, and alignment with strategic goals can play a key role in achieving this objective. The confirmation of this hypothesis is consistent with the findings of Oparaocha (2016), which indicate that informal interaction norms and collaboration in the workplace can facilitate the path to creativity and innovation (Oparaocha, 2016). Therefore, strengthening the organizational culture that values strategic human capital can create an environment conducive to the development of innovative work behaviors.

Additionally, the results of the current study revealed that job embeddedness significantly moderates the effect of strategic human capital on innovative work behavior. This finding underscores the importance of employees' job interactions in optimizing the use of human capital and achieving innovative behaviors in the municipalities of Karbala. Previous studies (Holtom et al., 2006; Shah et al., 2020) have shown that job embeddedness, which includes dimensions such as connection, fit, and sacrifice, plays a crucial role in reducing turnover intentions and strengthening job commitment. This concept, as an alternative to organizational commitment theory, provides a tool for predicting employee retention. The current study found that employees with higher job embeddedness are more likely to utilize their human capital to achieve organizational goals. These employees, due to their positive assessment of the work environment, better interactions with colleagues and managers, and a stronger sense of belonging to the organization, play a more active role in innovation and generating new ideas. These findings are consistent with the studies of Jia et al. (2020) and Holtom et al. (2006), which view job embeddedness as an effective factor in strengthening the positive outcomes of strategic human capital. In the specific context of the municipalities of Karbala, which face challenges such as limited resources and bureaucratic structures, job embeddedness plays a key role in employee productivity (Holtom et al., 2006; Jia et al., 2020). The findings suggest that strengthening job bonds, ensuring fit between tasks and skills, and creating incentives for employees can more effectively convert strategic human capital into innovative behaviors. From a practical standpoint, municipal managers should adopt strategies that enhance job embeddedness. These strategies could include strengthening organizational communication, job fit, and both material and non-material incentives. These results confirm that job embeddedness, as a moderating factor, plays a key role in facilitating the transfer of human capital into innovative behaviors. Human resources managers in the municipalities of Karbala should use this concept as a strategic tool to improve employee productivity. As the findings of this study suggest, investing in creating strong and culturally aligned job bonds can help achieve strategic goals and improve organizational innovation. Finally, these results, expanding on previous research, show that job embeddedness, in interaction with strategic human capital, is an effective tool for strengthening innovative work behaviors in public organizations such as the municipalities of Karbala. Based on the results, it is recommended that future researchers identify the dimensions of strategic human capital using a qualitative approach based on interviews and compare them with the results of this study. Furthermore, studying the effect of other moderating variables such as organizational culture, managerial support, and job satisfaction in the relationship between strategic human capital and innovative work behavior could provide suitable topics for future research.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

IJIMOB
E-ISSN: 3041-8992

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

References

Alam, M. M. (2022). The intelligent management and monitoring human capital asset model for network monitoring organization using machine learning model. 2022 International Interdisciplinary Humanitarian Conference for Sustainability (IIHC),

Amrutha, V. N., & Geetha, S. N. (2020). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner Production*, *247*, 119131. https://doi.org/10.1016/j.jclepro.2019.119131

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of work and organizational psychology*, *20*(1), 4-28. https://doi.org/10.1080/1359432X.2010.485352

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120. https://doi.org/10.1177/014920639101700108

Barney, J. B., & Wright, P. M. (1998). On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management*, *37*(1), 31. https://doi.org/10.1002/(SICI)1099-050X(199821)37:1<31::AID-HRM4>3.0.CO;2-W

Boon, C., Eckardt, R., Lepak, D. P., & Boselie, P. (2018). Integrating strategic human capital and strategic human resource management. *The International Journal of Human Resource Management*, *29*(1), 34-67. https://doi.org/10.1080/09585192.2017.1380063

Boxall, P. (1998). Achieving competitive advantage through human resource strategy: towards a theory of industry dynamics. *Human Resource Management Review*, *8*(3), 265-288. https://doi.org/10.1016/S1053-4822(98)90005-5

Cabello-Medina, C., López-Cabrales, Á., & Valle-Cabrera, R. (2011). Leveraging the innovative performance of human capital through HRM and social capital in Spanish firms. *The International Journal of Human Resource Management*, *22*(04), 807-828. https://doi.org/10.1080/09585192.2011.555125

Campbell, B. A., Kryscynski, D., & Olson, D. M. (2017). Bridging strategic human capital and employee entrepreneurship research: A labor market frictions approach. *Strategic Entrepreneurship Journal*, *11*(3), 344-356. https://doi.org/10.1002/sej.1264

Choudhary, S., Memon, N. Z., & Mishra, K. (2020). Examining the influence of human capital on employees' innovative work behaviour: A moderated serial mediation model. *South Asian Journal of Human Resources Management*, *7*(2), 189-213. https://doi.org/10.1177/2322093720942660

Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: is the field going in circles? *Human Resource Management Journal*, *27*(1), 1-21. https://doi.org/10.1111/1748-8583.12137

Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management journal*, *44*(1), 13-28. https://doi.org/10.2307/3069334

Holtom, B. C., Mitchell, T. R., & Lee, T. W. (2006). Increasing human and social capital by applying job embeddedness theory. *Organizational Dynamics*, *35*(4), 316-331. https://doi.org/10.1016/j.orgdyn.2006.08.007

Huang, Y. H., Lee, J., McFadden, A. C., Murphy, L. A., Robertson, M. M., Cheung, J. H., & Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied Ergonomics*, *55*, 248-257. https://doi.org/10.1016/j.apergo.2015.10.007

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, *73*(3), 287-302. https://doi.org/10.1348/096317900167038

Jia, J., Yan, J., Jahanshahi, A. A., Lin, W., & Bhattacharjee, A. (2020). What makes employees more proactive? Roles of job embeddedness, the perceived strength of the HRM system and empowering leadership. *Asia Pacific Journal of Human Resources*, *58*(1), 107-127. https://doi.org/10.1111/1744-7941.12249

Karatepe, O. M., & Vatankhah, S. (2014). The effects of high-performance work practices and job embeddedness on flight attendants' performance outcomes. *Journal of Air Transport Management*, *37*, 27-35. https://doi.org/10.1016/j.jairtraman.2014.01.008

Kessel, M., Hannemann-Weber, H., & Kratzer, J. (2012). Innovative work behavior in healthcare: The benefit of operational guidelines in the treatment of rare diseases. *Health policy*, *105*(2-3), 146-153. https://doi.org/10.1016/j.healthpol.2012.02.010

Kiazad, K., Holtom, B. C., Hom, P. W., & Newman, A. (2015). Job embeddedness: a multifoci theoretical extension. *Journal of Applied Psychology*, *100*(3), 641. https://doi.org/10.1037/a0038919

Lee, J. Y., & Lee, Y. (2018). Job crafting and performance: Literature review and implications for human resource development. *Human Resource Development Review*, *17*(3), 277-313. https://doi.org/10.1177/1534484318788269

Lukeš, M., & Stephan, U. (2017). Measuring employee innovation: A review of existing scales and the development of the innovative behaviour and innovation support inventories across cultures. *International Journal of Entrepreneurial*

Behavior & Research, *23*(1), 136-158. https://doi.org/10.1108/IJEBR-11-2015-0262

Movahedi, R., Samian, M., & Mohammadi-Mehr, S. (2017). Investigating the impact of intellectual capital on innovative behaviors of employees in the Agricultural Jihad Organization of Kermanshah Province. *Iranian Journal of Agricultural Economics and Development Research*, *48*(1), 123-136. https://ijaedr.ut.ac.ir/article_62014.html?lang=en

Nyberg, A. J., Moliterno, T. P., Hale Jr, D., & Lepak, D. P. (2014). Resource-based perspectives on unit-level human capital: A review and integration. *Journal of Management*, *40*(1), 316-346. https://doi.org/10.1177/0149206312458703

Oparaocha, G. O. (2016). Towards building internal social network architecture that drives innovation: A social exchange theory perspective. *Journal of Knowledge Management*, *20*(3), 534-556. https://doi.org/10.1108/JKM-06-2015-0212

Ployhart, R. E. (2021). Resources for what? Understanding performance in the resource-based view and strategic human capital resource literatures. *Journal of Management*, *47*(7), 1771-1786. https://doi.org/10.1177/01492063211003137

Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead; long live human capital resources! *Journal of Management*, *40*(2), 371-398. https://doi.org/10.1177/0149206313512152

Reitz, O. E. (2014). The job embeddedness instrument: An evaluation of validity and reliability. *Geriatric Nursing*, *35*(5), 351-356. https://doi.org/10.1016/j.gerinurse.2014.04.011

Shah, I. A., Csordas, T., Akram, U., Yadav, A., & Rasool, H. (2020). Multifaceted role of job embeddedness within organizations: development of sustainable approach to reducing turnover intention. *Sage Open*, *10*(2), 2158244020934876. https://doi.org/10.1177/2158244020934876

Shela, V., Ramayah, T., & Noor Hazlina, A. (2023). Human capital and organisational resilience in the context of manufacturing: a systematic literature review. *Journal of Intellectual Capital*, *24*(2), 535-559. https://doi.org/10.1108/JIC-09-2021-0234

Thuda, A., Sari, J., & Maharani, A. (2019). Employees Perception of Human Capital Practices, Employee's Productivity, and Company Performance. *Integrated Journal of Business and Economics*, *3*(3), 240-250. https://doi.org/10.33019/ijbe.v3i3.188

Wojtczuk-Turek, A., & Turek, D. (2015). Innovative behaviour in the workplace: The role of HR flexibility, individual flexibility and psychological capital: the case of Poland. *European Journal of Innovation Management*, *18*(3), 397-419. https://doi.org/10.1108/EJIM-03-2014-0027

Wood, S., & de Menezes, L. M. (2011). High involvement management, high-performance work systems and well-being. *International Journal of Human Resource Management*, *22*(7), 1586-1610. https://doi.org/10.1080/09585192.2011.561967

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

E-ISSN: 3041-8992