





Designing a Model of the Impact of Talent Management on Human Capital with the Mediating Role of Organizational Innovation

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ABSTRACT

Objective: The study aimed to design a model of the impact of talent management on human capital with the mediating role of organizational innovation (a case study of the Tehran Municipality Sports Organization).

Methodology: This research employed a descriptive-correlational method. The statistical population included all employees (managers and experts) of the Tehran Municipality Sports Organization, totaling 300 individuals. The sample size was equal to the population size, employing a census method. Data collection tools included the standard Talent Management Questionnaire by Phillips and Roper (2009), the Organizational Innovation Questionnaire by Omid et al. (2002), and the Human Capital Questionnaire by Ghorbani et al. (2013). For data analysis, SPSS and LISREL software were utilized.

Findings: The results indicated a significant relationship between talent management and organizational innovation and between talent management and human capital. However, while there was a significant relationship between organizational innovation and human capital, the mediating role of organizational innovation in the relationship between talent management and human capital was not confirmed.

Conclusion: The overall conclusion of the research is that human resources are considered the most valuable capital of any organization and are central to development. It is evident that the Tehran Municipality Sports Organization, in its path toward growth and development, requires precise planning for this capital and the utilization of talent management and organizational innovation.

Keywords: Talent Management, Human Capital, Organizational Innovation.

1 Introduction

Talent management holds significant importance in various organizations, particularly in sports organizations such as the Tehran Municipality Sports Organization. This is because human resources in this domain contribute not only to the quality of services provided but also to the achievement of developmental and social goals (Carlson et al., 2019). In such organizations, human capital refers to the collective knowledge, skills, and capabilities that employees and managers bring to the organization, playing a vital role in implementing sports programs, enhancing public health levels, and creating suitable sports platforms for the community (Carrer et al., 2003). The impact of talent management on human capital in the Tehran Municipality Sports Organization can be examined from several perspectives. Firstly, identifying and attracting suitable talents for this organization is of paramount importance (Kersh & Frank, 1999). Through effective talent management, the organization can attract individuals with the necessary expertise and skills who can meet the sporting needs of the community. This leads to improved sports service quality, enhanced citizen satisfaction, and better outcomes in sports programs (Szeremeta et al., 2021).

Secondly, the development and training of employees within the framework of talent management can enhance the organization's human capital. By investing in specialized training and enhancing employee skills, the Tehran Municipality Sports Organization can have more capable employees who more effectively implement sports programs. This development leads to increased productivity, creativity, and innovation in sports services (Fang et al., 2020). Finally, retaining and motivating talents within the organization plays a crucial role in stabilizing human capital. Talent management helps the Tehran Municipality Sports Organization create an attractive and supportive work environment where employees remain motivated and willing to continue their collaboration (Galante et al., 2023). Retaining talents is essential because it prevents the loss of knowledge and skills, leading to increased stability and efficiency within the organization (Sharma et al., 2022).

Overall, the impact of talent management on human capital in the Tehran Municipality Sports Organization directly manifests in improving the organization's overall performance, enhancing the quality of sports services, and increasing public satisfaction. Implementing effective talent management strategies can ensure the organization's

sustainable success in achieving its sports and social goals (Piver, 1996).

The impact of talent management on human capital can be explored through the mediating role of organizational innovation, as a complex and interactive process. Talent management helps identify, develop, and retain talented and capable individuals within the organization, which, in turn, positively affects human capital. However, organizational innovation as a mediator can amplify and accelerate this impact (Zou et al., 2020). When organizations actively engage in talent management, this process creates a dynamic and creative work environment where talents are encouraged to propose new ideas and improve processes (Carlson et al., 2019). This innovative environment provides opportunities for employees to showcase their abilities, contributing to individual and organizational growth and development. In other words, organizational innovation not only leverages the existing talents within the organization but also acts as a catalyst that enhances the value of human capital (Kwon et al., 2021).

Human capital, which includes employees' knowledge, skills, and capabilities, can be significantly strengthened in an innovative environment. Organizational innovation allows employees to utilize their knowledge and skills to create new solutions and improve organizational performance. This process not only increases the organization's productivity and efficiency but also fosters the growth and development of human capital, as employees continuously learn and develop in such an environment (Rugg et al., 2018). Thus, organizational innovation acts as a mediator between talent management and human capital, making the positive effects of talent management on human capital more pronounced (Confino et al., 2019). This process leads to increased employee motivation, improved organizational performance, and ultimately, an overall enhancement of human capital.

As a result, organizations that value both talent management and the promotion of organizational innovation can have a more powerful and dynamic human capital, capable of creating sustainable value for the organization (Xu et al., 2020).

In today's competitive world, organizations, particularly in dynamic and innovation-driven fields such as sports and public services, face numerous challenges in managing their human capital. Talent management, as a strategic process focused on identifying, developing, and retaining talented and capable employees, can play a key role in enhancing human capital. However, talent management alone cannot

lead to maximum productivity and human capital enhancement. In this context, organizational innovation, as a mediating factor, can significantly strengthen this impact (Post et al., 2020). The main issue is that in many organizations, talent management and innovation processes are managed separately, and the connection between these two is not well understood or strengthened. This lack of coordination can lead to the underutilization of human capacities and a reduction in the positive effects of talent management on human capital (Rugg et al., 2018). In other words, if organizations fail to create an innovative environment where talents can flourish, the existing human capital may not only fail to develop but may also suffer from reduced productivity and the loss of key employees (Zou et al., 2020).

As a result, it is essential to examine how talent management affects human capital with the mediating role of organizational innovation. Research in this area can help organizations employ appropriate strategies to not only improve their human capital but also achieve sustainable productivity and growth through strengthening organizational innovation. Understanding this relationship can guide organizations in creating work environments where talent management and innovation synergistically enhance human capital to its highest possible level. Therefore, the present study aimed to design a model to examine the impact of talent management on human capital with the mediating role of organizational innovation (a case study of the Tehran Municipality Sports Organization).

2 Methods and Materials

This research is applied in terms of data collection and descriptive-correlational in terms of method. The statistical population of this study includes all employees (managers and experts) of the Tehran Municipality Sports Organization, totaling 300 people. Given that the research population is considered a limited population, no specific sampling method was used, and the sample size was equal to the population size, using a census method. After coordination with the Tehran Municipality Sports Organization, the necessary permission and introduction letters were obtained for presence in the Sports Organization, district sports departments, and sports facilities, and the research was conducted. The researcher was present on-site to distribute the questionnaires and, after providing the necessary explanations and resolving any

ambiguities, proceeded to distribute and collect the questionnaires after completion.

All the selected questionnaires for this research were standardized and had acceptable validity and high reliability. The questionnaires were evaluated for spelling and grammar, and any errors were corrected. The standard Talent Management Questionnaire by Phillips and Roper (2009), with seven components—talent attraction, talent identification, maintaining positive relationships, talent development and improvement, talent utilization, talent retention, and talent maintenance—was used, which measures talent management with 43 items on a five-point Likert scale (very high, high, medium, low, very low). The reliability of this questionnaire was reported using Cronbach's alpha method (Sarfarazi et al., 2022).

The Organizational Innovation Questionnaire by Omid et al. (2002), which consists of 22 questions and includes components of environmental innovation (questions 1 to 5), leadership innovation (questions 6 to 8), individual innovation (questions 9 to 14), environment-feedback (questions 15 to 18), and individual-feedback (questions 19 to 22), was used. The questionnaire is of the closed-response type, and the scale for measuring the questions was Likert. The questions included options of completely disagree, disagree, neutral, agree, and completely agree (Sadat Mousavi & Ebrahimi, 2024).

To assess human capital, the Ghorbani et al. (2013) questionnaire was used, which includes 40 questions and 7 subscales: motivation, management and leadership, knowledge and skills, commitment, experience, competence, and entrepreneurship. This questionnaire was designed on a Likert scale from very low to very high. Validity was assessed using face validity, and reliability was reported using Cronbach's alpha method ($\alpha = 0.90$) (Ghorbani, 2020).

The Kolmogorov-Smirnov test was used to assess the normal distribution of data. To ensure measurement accuracy for each of the research variables, internal consistency was evaluated, and Cronbach's alpha was used to calculate the reliability of the instruments. To determine the correlation between the research variables, Pearson correlation and multiple correlation with simultaneous regression were used. Finally, structural equation modeling (SEM) was used to test the hypotheses and the conceptual model. For data analysis, SPSS version 18 and LISREL version 8.8 software were used, with a 95% confidence level.

3 Findings and Results

The descriptive demographic results showed that out of 310 participants, 198 (63.87%) were men, and 112 (36.12%) were women. Additionally, among the 310 samples analyzed, 65 (20.96%) were aged between 20 and 30 years, 108 (34.83%) were between 31 and 40 years, 117 (37.74%)

were between 41 and 50 years, and 20 (6.45%) were between 51 and 60 years. As shown in Table 1, the significance level of the normality test for the indicators is greater than $\alpha = 0.05$; therefore, with 95% confidence, the null hypothesis is accepted, indicating that the data follows a normal distribution.

Table 1

Results of the Kolmogorov-Smirnov Test

Variable	K-S	p	Distribution Result
Talent Attraction	0.764	0.604	Normal
Talent Identification	0.670	0.760	Normal
Talent Development and Improvement	0.656	0.783	Normal
Maintaining Positive Relationships	0.533	0.236	Normal
Talent Utilization	0.954	0.323	Normal
Talent Retention	0.696	0.718	Normal
Functional Capability	0.777	0.582	Normal
Environmental Innovation	0.658	0.312	Normal
Leadership Innovation	0.783	0.401	Normal
Individual Innovation	0.814	0.281	Normal
Environment-Feedback Innovation	0.765	0.559	Normal
Individual-Feedback Innovation	0.539	0.570	Normal
Human Capital	0.798	0.324	Normal

The standardized coefficients from the LISREL output and the t-scores for each path coefficient are presented in Table 2.

Table 2

Results of the Structural Model Analysis Between Talent Management, Organizational Innovation, and Human Capital

Pathways	t-value	Result
Talent Management → Organizational Innovation	8.14	Significant (Confirmed)
Talent Management → Human Capital	3.53	Significant (Confirmed)
Organizational Innovation → Human Capital	8.48	Significant (Confirmed)
Talent Management → Human Capital through Organizational Innovation	16.62	Not Significant (Not Confirmed)

As shown, the research model included three variables, all of which were confirmed. To validate the proposed research model, the goodness-of-fit test was used. As indicated in Table 3, the goodness-of-fit test confirmed the research model. The indices and coefficients obtained from the research are listed in the table below. Based on the index values provided for this model in Table 3, the chi-square to degrees of freedom ratio is less than 3, and the fit indices NFI, CFI, IFI, GFI, and AGFI are greater than 0.80, with RMSEA and RMR also being less than 0.10, all of which confirm the model's fit. According to the LISREL output shown in Table 3, the calculated value of χ^2/df is 2.36; a χ^2/df

value less than 5 indicates a good model fit. Additionally, the root mean square error of approximation (RMSEA) should be less than 0.08, which in this model is 0.06. The GFI, AGFI, NFI, and CFI components should be greater than 0.90, and in the model under study, they are 0.89, 0.91, 0.87, and 0.90, respectively. The RMR should also be less than 0.05, which in this model is 0.05. Based on the indices and outputs from the LISREL software, it can be said that the data do not entirely fit the model; however, the indices presented suggest that, overall, the proposed model is reasonably appropriate, and the empirical data approximately align with it.

Table 3

Goodness-of-Fit Indices for the Research Model

Fit Indices	AGFI	GFI	CFI	IFI	NFI	RMR	RMSEA	CMIN/DF
Criteria Value	>0.80	>0.80	>0.80	>0.80	>0.80	<0.10	<0.10	<3
Obtained Value	0.89	0.87	0.91	0.88	0.90	0.05	0.06	2.36

4 Discussion and Conclusion

The findings of the present study indicated a significant relationship between talent management and organizational innovation, as well as human capital. These findings are consistent with previous results (Post et al., 2020). Future talent management will lead to enhanced cohesion and strengthened relationships. This relationship forms between the organization and employees, as well as among the employees themselves, leading to the development and enhancement of social capital. Additionally, retaining talented individuals within the organization creates high levels of cohesion and solidarity among the workforce, which is a topic discussed in management, social sciences, and political science under the concept of social capital (Kersh & Frank, 1999). Social capital is a modern concept that plays a much more critical role than human and physical capital in organizations and societies (Carrer et al., 2003). The concept of social capital refers to the connections and relationships among members of a network as a valuable resource and, by creating norms and mutual trust, facilitates the achievement of the members' goals. In the absence of social capital, other organizational assets, including human capital, which is at the top of the organization's talent, lose their effectiveness, and the path to cultural and economic development becomes rough (Zou et al., 2020).

Today, sports organizations need to manage their human resources differently to address these challenges and opportunities (Fang et al., 2020). It can be said that in today's organizational environment, not only is attracting individuals a challenge, but retaining them poses an even more significant risk. In response, large organizations have implemented and applied talent management strategies to attract, utilize, develop, and retain employees within the organization. Managing sports requires serious attention to organizational structure and management. On the other hand, the neglect of management knowledge is one of the fundamental problems in Iranian sports, as this aspect is weakening day by day. Today, adopting correct and efficient talent management policies, strategies, and practices has become a critical issue in various societies (Piver, 1996).

Identifying the components and elements of talent management in different societies with varying infrastructures, resources, advantages, and markets is the most important research activity for decision-making about talents. Researchers in this field try to monitor the factors affecting the physical stimulation of elites and knowledgeable forces in various ways and, by identifying these factors, influence the decision-making processes and decisions of managers in this field both directly and indirectly (Galante et al., 2023).

It should be noted that human capital is the main focal point of behavior and performance within an organization, and for this reason, it has received the most attention from managers and educational science researchers in the past two decades. According to researchers' findings and managers' experiences, achieving sustainable human and intellectual capital requires the implementation of an efficient human resource management system (Confino et al., 2019). On the other hand, a workforce committed to the organization's goals and values is not only a factor for an organization's superiority over others but is also considered a sustainable competitive advantage for many organizations. In this regard, the optimal use of human resources falls within the responsibilities of human resource managers in organizations, and genuine investment in human capital and implementing human resource actions lead to increased organizational performance and productivity (Xu et al., 2020).

The Tehran Municipality Sports Organization is a local organization with various responsibilities. One of the most important duties of this organization is the development and promotion of sports across different sectors (Kersh & Frank, 1999). The results showed a significant relationship between talent management and organizational innovation in the Tehran Municipality Sports Organization. Managers' focus on innovation, whether directly by implementing new ideas in administrative, technical, and specialized areas themselves, or indirectly by encouraging and supporting innovations within the organization, creates an atmosphere where the routine and repetitive work gradually transforms

into innovative behavior at the organizational level (Carrer et al., 2003).

The overall conclusion of this research is that human resources are considered the most valuable asset of any organization and are central to development. It is evident that the Tehran Municipality Sports Organization requires precise planning for this valuable asset on its path to growth and development. Given that the Tehran Municipality Sports Organization is continually exposed to rapid environmental changes, both the organization and its human resources need to adapt. To properly respond to these changes, it is essential to consider future developments, anticipate the environment, and make impactful decisions about the future. Therefore, flexibility and acquiring sufficient knowledge to respond to these uncertainties in sports organizations are more necessary than ever before.

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.

Transparency Statement

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

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

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

References

- Carlson, L. E., Toivonen, K., & Subnis, U. (2019). Integrative Approaches to Stress Management. *Cancer Journal*, 25(5), 329-336. <https://doi.org/10.1097/PPO.0000000000000395>
- Carrer, P., Cavallo, D., Fustinoni, S., & Maroni, M. (2003). Dall'igiene e tossicologia industriale all'igiene e tossicologia ambientale: problemi e prospettive. *Med Lav*, 94(1), 64-68. <https://air.unimi.it/handle/2434/200101>
- Confino, J., Irvine, J. N., O'Connor, M., Ahmad, C. S., & Lynch, T. S. (2019). Early Sports Specialization Is Associated With Upper Extremity Injuries in Throwers and Fewer Games Played in Major League Baseball. *Orthopaedic Journal of Sports Medicine*, 7(7), 2325967119861101. <https://doi.org/10.1177/2325967119861101>
- Fang, Y. T., Lan, Q., Xie, T., Liu, Y. F., Mei, S. Y., & Zhu, B. F. (2020). New Opportunities and Challenges for Forensic Medicine in the Era of Artificial Intelligence Technology. *Fa Yi Xue Za Zhi*, 36(1), 77-85. <http://www.fyxz.cn/EN/10.12116/j.issn.1004-5619.2020.01.016>
- Galante, N., Cotroneo, R., Furci, D., Lodetti, G., & Casali, M. B. (2023). Applications of artificial intelligence in forensic sciences: Current potential benefits, limitations and perspectives. *International Journal of Legal Medicine*, 137(2), 445-458. <https://doi.org/10.1007/s00414-022-02928-5>
- Ghorbani, Z. (2020). Educational Capacity, Utilization of Labor and Human Capital among the Country's Provinces in 2016. <http://www.sid.ir/paper/410989/en>
- Kersh, F. W., & Frank, A. L. (1999). Environmental awareness among physicians: what are environmental health and environmental medicine? *Tex Med*, 95(10), 39-44. <https://europepmc.org/article/med/10531804>
- Kwon, S., Letuchy, E. M., Levy, S. M., & Janz, K. F. (2021). Youth Sports Participation Is More Important among Females than Males for Predicting Physical Activity in Early Adulthood: Iowa Bone Development Study. *International journal of environmental research and public health*, 18(3), 1328. <https://doi.org/10.3390/ijerph18031328>
- Piver, M. S. (1996). Prophylactic Oophorectomy: Reducing the U.S. Death Rate from Epithelial Ovarian Cancer. A Continuing Debate. *Oncologist*, 1(5), 326-330. <https://doi.org/10.1634/theoncologist.1-5-326>
- Post, E. G., Struminger, A. H., & Hibberd, E. E. (2020). Sport specialization is associated with upper-extremity overuse injury in high school baseball players. *Journal of Shoulder and Elbow Surgery*, 29(9), 1775-1782. <https://doi.org/10.1016/j.jse.2020.01.092>
- Rugg, C., Kadoor, A., Feeley, B. T., & Pandya, N. K. (2018). The Effects of Playing Multiple High School Sports on National Basketball Association Players' Propensity for Injury and Athletic Performance. *American Journal of Sports Medicine*, 46(2), 402-408. <https://doi.org/10.1177/0363546517738736>
- Sadat Mousavi, S., & Ebrahimi, A. (2024). Structural Model of the Effect of Psychological Capital on Innovative Behavior in Teaching: The Mediating Role of Conscientiousness Personality Trait. *International Journal of Education and Cognitive Sciences*, 4(4), 1-10. <https://doi.org/10.61838/kman.ijecs.4.4.1>

- Sarfarazi, B. E., Yaghoubi, N., Mohammadi, M., & Jarrahi, J. (2022). Identifying the Effective Factors Contributing to Talent Management in Knowledge-Based Companies with a Focus on Knowledge Worker Retention. *Journal of Productivity Management*, 16(60), 77-107. <https://www.magiran.com/paper/2414921>
- Sharma, R., Diksha, Bhute, A. R., & Bastia, B. K. (2022). Application of artificial intelligence and machine learning technology for the prediction of postmortem interval: A systematic review of preclinical and clinical studies. *Forensic Science International*, 340, 111473. <https://doi.org/10.1016/j.forsciint.2022.111473>
- Szeremeta, M., Pietrowska, K., Niemcunowicz-Janica, A., Kretowski, A., & Ciborowski, M. (2021). Applications of Metabolomics in Forensic Toxicology and Forensic Medicine. *International Journal of Molecular Sciences*, 22(6), 3010. <https://doi.org/10.3390/ijms22063010>
- Xu, H. G., Kynoch, K., Tuckett, A., & Eley, R. (2020). Effectiveness of interventions to reduce emergency department staff occupational stress and/or burnout: a systematic review. *JBIS Evidence Synthesis*, 18(6), 1156-1188. <https://doi.org/10.11124/JBISRIR-D-19-00252>
- Zou, Y., Zhuang, C., Fang, Q., & Li, F. (2020). Big Data and Artificial Intelligence: New Insight into the Estimation of Postmortem Interval. *Fa Yi Xue Za Zhi*, 36(1), 86-90. <https://europepmc.org/article/med/32250085>