

The Role of Athletic Knowledge Management in Obtaining a Competitive Advantage in The Sports Work Environment

¹Hamza Akram, ²Ahmed Usman Khan ³Fatima Naveed

⁴Arsalan Khalid

¹North China Electric Power University

^{2,3,4}Superior University Lahore.

¹hamzaakram739@gmail.com

²usmankhan3151@gmail.com

³fatimanaveed37@gmail.com

⁴arslankhalidmian@gmail.com

ARTICLE DETAILS

History

Received : August

Revised Format : September

Accepted : October

Keywords :

Knowledge Management,
Athletic Competitive Advantage,
Sports Work Environment

ABSTRACTS

The capacity of successful sports companies to maintain their competitive advantage over time and achieve their goals is directly correlated to the level of knowledge management such organizations use. This study's purpose is to investigate the management of athletic knowledge and the necessity of doing so in Pakistan in order to gain a competitive advantage in the sports business. Specifically, the research will focus on the following: The study sample is comprised of sixty male and female students who are currently enrolled inside the Sports Organization and Management Course at a several of higher education institutions in Lahore, Pakistan. These students are from different universities which are studied in HEIs (Higher Education Institutions) of Lahore Pakistan. The research was carried out using a quantitative approach because of the kind of the data that was gathered. To better understand how athletic knowledge management may be used to gain an edge in the sports industry, and how it can be used to improve the sports industry as a whole, a survey was sent to respondents that split its focus between these two areas. The overwhelming majority of respondents, 98%, are in agreement that effective knowledge management is necessary for achieving a competitive advantage in the sports work environment and for making improvements to the sports work environment. In addition, the data imply that knowledge management adds greatly to both the operations of knowledge management and the growth of the sports workplace. According to the findings, there are no distinguishing characteristics between males and females that can be supported by statistical analysis. There have been a number of key proposals made, one of the most important of which is the provision of safe, stable, methodical, and planned conditions for all courses in order to enhance and improve the athletic performance of employees. In order to materialize this concept, the upper management of the organization must place the provision of both physical and moral structure at the very top of their list of responsibilities.

©2022 STIM Lasharan Jaya Makassar

INTRODUCTION

Knowledge management is the process of methodically identifying, organizing, preserving, and disseminating the information that workers in an organization have acquired via their job experience and education. Effective knowledge management aids in the attainment of corporate objectives. This information includes both explicit and implicit information (1). Knowledge is the most precious asset of a business, even more so than the

financial resources put into technology. It is a component of human capabilities and is hence known as human capital (2). The definition of knowledge is the comprehension of the explicit and implicit circumstances, linkages, causal events, theories, and standards underlying a particular subject or situation (3). Information management consists of several primary activities, such as discovering, acquiring, and disclosing knowledge within an organization; motivating employees; transforming and disseminating knowledge throughout the team; and defending the intellectual property rights of knowledge-creators. The following are examples of these fundamental operations: (4). Knowledge management is used by many businesses to make the best use of their resources and physical assets and reach high levels of performance (3).

The only successful sports organizations of the future will be those that can learn to be clever, fast, and responsive (5). The effectiveness of organizations and institutions in meeting the diverse needs and aspirations of the communities and people they serve is determined by their management. In fact, the performance or failure of a company is contingent on its management pattern and style. This is because competent and efficient management is the key to the success of any business as well as the growth and development of any society. To accomplish their objective of creating a competitive edge, management must fulfil their responsibility of acquiring qualified human resources and then managing and organizing those personnel at the lowest possible cost while using the most effective techniques and tools. This must be accomplished devoid of duplication, overlap, or conflicts (5, 6).

Knowledge management, one of the most current trends, prepares employees in any business with the vital skills and experience they need to maximize their expertise, talents, and knowledge. This makes knowledge management one of the most crucial developments of the day. The employee must give their best performance and be able to do future functional duties according to a plan that takes into account both scientific and administrative issues (7-9).

The implementation of knowledge management should result in the formation of a consistent and risk-free environment for all employees and system participants. This setting should facilitate involvement, cooperation, storage, and the discovery of novel facets of the sports sector. To enable the different training techniques, there must be some kind of artificial intelligence between the transmitter and the receiver. The cornerstone of knowledge management is the mix of theory and practice (8, 10). Modern businesses, like sports teams and universities, have come to realize that athletic knowledge management is an important concept that helps them adapt to national and global changes and take key actions that match these changes.

Individuals, companies, and even sports teams are increasingly reliant on their capacity to consistently use and exploit information for a competitive advantage (10). Due to the failure of several contemporary companies, such as athletic and academic institutions, to appreciate the need to provide a secure working environment for employees, technicians, and trainees, these firms are forced to face a variety of difficulties (11, 12). The greatness that distinguishes sports companies depends on the effectiveness of knowledge management in dealing with human resources such as employees, technicians, and trainees to provide them with data, information, and knowledge by enhancing their behavior's and skills. This excellence depends on how well these human resources can be managed by knowledge management (13).

Knowledge management has grown into a pillar of competitive advantage. This may be achieved through providing the necessary amount and quality of human resources, as well as the skills, behavior, and knowledge necessary for people to do their tasks successfully. As a consequence, the company achieves very high levels of efficacy and effectiveness in all of its undertakings. Effective knowledge management greatly facilitates the building of an early

vision of future desires, the creation of policies, and the establishment of long-term objectives. Knowledge will almost certainly be developed through intangible resources in any competitive organisation. Human capital is crucial but also the most difficult to replicate (14-16).

In contrast, the present research is highly noteworthy since it applies the concept of knowledge management to the sports industry. This makes the job very relevant. This notion originally took hold and expanded its roots in the sporting world. In addition, knowledge management is essential since it is acknowledged as a source of competitive advantage, hence enhancing competition in the sports labor market (17). Acquiring new knowledge is essential for enhancing one's performance and gaining a competitive advantage in the industry (4). When knowledge management is correctly applied, it is structured and designed to gather, identify, and store information about the actuality of sports work. This is due to the cognitive explosion of the last several decades, which has made this knowledge the most valuable resource (18). In addition, the research focuses on the knowledge of the athletic domain and its potential to give all employees in the sports industry a competitive advantage via the development and implementation of low-cost or free concepts (19).

The ongoing transmission of information, expertise, and knowledge is one of the numerous ways that knowledge management enhances the competency of technicians, managers, and employees. This type of management educates and teaches employees in a condensed time frame using a methodology supported by solid scientific research. When knowledge management is correctly implemented, individuals have access to the data they need to do their jobs efficiently. This is due to the fact that knowledge management has the ability to stimulate innovation and increase competitive advantage. In addition, it has the ability to eliminate information bottlenecks, improve government expertise, and increase the quality of government services overall (20).

Because a deficiency in any of these areas may have a negative impact on the performance and structure of an athletic organisation, its knowledge management techniques, knowledge generation, information storage, knowledge interchange, and knowledge application must all be enhanced. After gaining academic or athletic exposure to the environment in which sports are played and the sports associations that govern them, it has been observed that those in charge of leading sports activities become more cognizant of the role played by knowledge management in enhancing the quality of service provided and, as a result, raising the level of workers.

Some individuals mistakenly believe that working in the area of knowledge management includes nothing more than spending money and time and not having enough time to really do it. The great majority of training, refereeing, and administrative courses consider these sessions a waste of time since they do not deliver any new material, do not refresh previously covered subjects, and are not provided as part of a structured curriculum (21). In addition, it is considered that all workers in the sports business strive for success while ignoring the natural expansion of administrative and technical people, which will keep costs low in the next few years. This opinion is based on the fact that the sports business is among the most competitive in the world. Their examination into gender variations in knowledge management led them to the conclusion that gender determines the impact of an intangible asset on an organization's performance, namely knowledge sharing. In other words, gender determines the impact of an organization's intangible assets (22). The exchange of knowledge has a 20% greater beneficial influence on the overall organizational performance of organizations that only employ men compared to those that exclusively employ women. In addition, the research (23) indicated that males benefit more from gender differences in terms of knowledge management and attaining a competitive advantage. In contrast, (24) discovered that the ratio of male to female employees at KM is about equal. Also, research (25) shows that gender has a big impact on both social decisions and business decisions.

Therefore, the purpose of this study is to provide evidence to support the role of knowledge management in achieving a competitive advantage and to determine, from the perspective of university students, how knowledge management operations contribute to the development of workers in the sports work environment in Pakistan. In addition, the objective of this research is to assess how knowledge management activities assist in the growth of Pakistani sports employees. Notably, the objective of this study is to analyse the gender gap that exists in the area of sports knowledge management and the impact that knowledge management activities have played in the growth of the sports industry's working environment. So, the goal of this research is to answer the question, "What role does knowledge management play in giving a sports workplace a competitive advantage?".

METHODOLOGY

Statement of the problem

This section describes the study population and the research tools used in this research.

Participants. Students from Pakistani institutions of higher education in Lahore were the respondents for the research sample. This group of students is enrolled in "Sports Organization and Management." There are a total of 60 participants in the research, 36 men and 24 females, and approximately half of them are aged between the ages of 18 and 25.

Study Instruments. Knowledge management refers to the process of planning, organizing, motivating, and managing an organization's strategy, procedures, and systems to guarantee the successful improvement and use of its knowledge and expertise components. The survey instrument, a question, has been modified based on the results of prior research, such as (21, 26, 27). The questionnaire consists of two sections: the role of athletic knowledge management in gaining a competitive advantage in the sports work environment and the benefits of athletic knowledge management in enhancing the sports work environment. A three-point Likert scale was also introduced (agree, disagree, and neutral).

Instrument's Validity. The researcher depends on the material's validity. Six experts in the area of sports administration and organization have been asked for their feedback on the item's language wording, clarity, and relevance to the measured dimensions, as well as any other observations, adjustments, or additions they think are essential to establish the validity of the measuring instrument. This will assure the accuracy of the measurement device. Experts have validated that every article is clear and suitable for all subject areas.

Instrument's Reliability. After administering the questionnaire to fifteen students enrolled in the Sports Organization and Management Course, test-retest reliability and Cronbach's alpha coefficients were used to determine the questionnaire's consistency. Table 1 (Annexure 1) displays the findings of the questionnaire; therefore, we can assume that it is trustworthy.

Data Analysis. The (SPSS) version 20.0 was used as a potent tool for performing an analysis of the acquired data to enable the testing and assessment of hypotheses. In addition, descriptive statistics were used so that the characteristics of each variable could be appreciated in greater depth and so that the means and standard deviations of each study variable could be revealed. The test-retest technique, Cronbach's alpha, and Pearson's correlation coefficient have also been used.

Data Analysis.

In order to test the validity of the hypotheses, the Statistical Package for the Social Sciences (SPSS) 20.0 was used as a powerful instrument for conducting an analysis of the data that was gathered. In addition, descriptive statistics have been used so that the features of each variable can be comprehended in greater depth, as well as so that the means and standard deviations of each research variable may be highlighted. In addition, the test-retest method, Pearson's correlation coefficient, and Cronbach's alpha have all been used.

RESULTS

According to the study's findings indicate that employing knowledge management systems helps athletes obtain a competitive edge. Table 2 (Annexure 2) compares the findings of the research sample with the contribution of knowledge management to competitive advantage and knowledge processes. The two sets of data differ statistically significantly from one another.

How Can Knowledge Management Assist in Obtaining a Competitive Advantage in the Sports Workplace? is the topic of the current research, which provides a summary of the relevant findings. (What Contribution Can Knowledge Management Make to a Competitive Advantage in the Sports Workplace?)

To propose a solution to this dilemma, we computed the algebraic means and standard deviations of estimations of the importance of sports knowledge management in achieving a competitive advantage in the sports workplace. These outcomes are shown in the table 3 (Annexure 3).

The sampling mean score for the function of sports knowledge management in achieving a competitive advantage in the sports workplace environment was 2.950 when the standard deviation was included. This score was generated using the sample's information. The standard deviation around the mean values of the variable. The following are the arithmetic means: 95% of the sample agreed that knowledge management plays a significant role in the organizing of planned and specialized seminars for employees with sufficient time and skilled facilitators. More than 98% of respondents believed that knowledge management is essential for the professional, personal, and intellectual development of workers, as well as for orienting new recruits with a firm foundation in the company's principles and processes, providing them with chances to learn from the accomplishments of others, and grouping people according to their degree of competence. In addition, 97% of sample survey respondents said that knowledge management plays a vital role in the process of systematically providing courses to employees in order to offer them with continuing, dynamic, and current information. The findings of the independent samples t-test, which is shown in Table, indicated that there were no significant differences between the male and female participants. This can be seen in the fact that there is no difference between the means of the two sexes (4). The gender gaps in the management of sports knowledge to acquire a competitive advantage are shown in Table 4 (Annexure 4).

DISCUSSION

This research will survey students at a Lahore university's Sports Organization and Management course. Their replies will be utilized to study the function knowledge management plays in Pakistan's sports business from their viewpoint. Using knowledge management systems helps athletes acquire a competitive advantage, study finds. The researcher emphasizes that knowledge management encompasses several procedures. Sports knowledge management and knowledge process management (discovery, possession, sharing, and application) incorporate information, data, and technology in knowledge

harvesting. Knowledge management can produce, store, and apply knowledge to solve issues. Members of the study sample may also observe and understand that knowledge management in the framework of generating a competitive advantage with its procedures and stages is different from knowledge management processes that may obstruct the researcher's success and task. Possible. Knowledge management's contributions to managing people, products, and overall performance are comprehensive, unbroken, and integrated. Knowledge management practices are interwoven with work-based learning, certification, and knowledge growth.

Information management may have a role in employees' intellectual, psychological, and professional development and performance, according to the findings. This conclusion was in accordance with prior research, such as (28) which established that KM improves employees' knowledge and skills in institutions, inspires those who know to reveal their hidden knowledge, and achieves innovation to assure organizations' sustained development competitiveness. Consistent with these results.

Some facts spark fresh ideas. Converting data into information, knowledge, and wisdom leads to successful knowledge management and a demanding work environment, both of which stimulate various points of view, creativity, and innovation. Most poll respondents feel that athletic knowledge management may help establish a competitive advantage in sports. Knowledge management is a crucial part of educating and training personnel using cutting-edge technology to build on past successes. Knowledge management also helps qualified employees engage in internal and external education programs. These people are categorized by their credentials, specializations, behaviors, and years of experience.

The study shows that leaders must acknowledge the importance of knowledge management in sports. This knowledge will create a future-focused, quality-focused, and competitive generation (29). Knowledge management is considered as a source of competitive advantage (30), which motivates firms to reclassify how they manage their work and human resources (30). The research found that intangible resources are often a company's competitive edge. Intangible resources are the wellspring of knowledge in all competitive organizations. Human capital is the most important intangible resource since it's hard to mimic (6). The research found no significant difference between male and female participants in how sports knowledge management gives a competitive advantage. These results are compatible with others, including: (24). This finding contradicts previous research that found gender differences in information management and competitive advantage. The research found that gender affects social and competitive choices (23, 25). Sports organizations are a good area to create fresh information because of their knowledge-management systems. These strategies assist sports organizations articulate and preserve tacit or explicit knowledge. These strategies can help. Sports organizations should leverage organizational and IT cuts to improve their knowledge management. They'll get competitive advantages and outcomes (15). The knowledge management processes comprise strategy, leadership, culture, and technology, as well as the evaluation of their work related to skills as enablers (KM). Knowledge management success is attributed to other factors, notwithstanding their rationality (31). It's necessary to define the attributes that will ensure the appropriate implementation of knowledge management, and those more directly tied to an organization's internal sports structure are more important.

Knowledge-understanding employees, athletic training, appropriate incentives, motivating aspects, employing and supplying knowledge perspective, supporting knowledge-management efforts, concentrating on knowledge transfer in strategy and leadership, information technology (IT) infrastructure, and databases are all essential components for the successful implementation of knowledge management in sports organizations. Knowledge management seems to help provide employees enjoyable experiences, an information-rich environment, and a scientific and administrative training programme. Up to 98% of

participants believe that knowledge management plays a role in worker education and record preservation using modern technologies.

Knowledge management (KM) success requires a variety of employees, technicians, and trainees. Top managers must develop a knowledge management vision, strategy, and show leadership. KM helps organizations of all sizes generate task-oriented services that meet their strategic goals (32). Several studies have shown that middle and upper-level management provide emotional and financial support for knowledge management's infrastructure (33, 34). Previous studies have emphasized the relevance of knowledge management in ensuring workers can retain sports-related information, expertise, and data. Diagnostics, sharing, acquisition, growth, storage, and application were also addressed. Information sharing is one of the biggest contribution's individuals can make to organizational knowledge, which adds to company success (3, 35).

Effective knowledge management provides employees with explicit and implicit knowledge, according to the study. Knowledge management encompasses the generation, manipulation, storage, and sharing of knowledge in a community of practice and the management of knowledge movements inside an organization (3, 14). (14,3)

KM has a part in diagnosing, obtaining, creating, storing, and implementing its idea to assure success in the sports sector. A company plans, organizes, motivates, and administers its procedures and systems to develop its knowledge-related assets, employees, technicians, and trainers. Like project management (36). Men and women contributed equally to the expansion of the sports workplace via knowledge management. The present findings and a preceding research reveal that men and women are treated equally under the KM principle (24). (24).

Sports knowledge management involves collecting, producing, refining, storing, transferring, and utilizing information. This job controls these processes and encourages employees, athletes, laborer's, technicians, and trainers to engage. Determining the required information that enables others to add to this body of knowledge, building them to better implementation techniques, and preserving them is crucial. Everyone may participate in this system by obtaining eternal knowledge, which is then transferred around in harmony.

CONCLUSION

Through the perspective of knowledge management, this research aims to analyse the function of athletic knowledge management in attaining a competitive advantage in the professional sports arena. Nonetheless, the study's key findings indicate that athletic knowledge management is essential for gaining a competitive edge in Pakistani sports workplaces and that athletic knowledge management operations, such as diagnosis, sharing, acquisition, development, storage, and application, have a significant impact on the growth of Pakistani sports workplaces. The majority of those who participated in this survey believed that knowledge management increases productivity by reducing work duplication. This was followed by participants' opinions that KM significantly improved performance, increased capacities for new sports employees, technicians, and trainers, and that options of a higher quality were available. In addition, there is no difference between men and women in their capacity to obtain a competitive advantage and contribute to the expansion of the sports sector work environment by participating in knowledge management activities. The research is limited by the relatively modest size of the selected study sample. In future research, the advantages and disadvantages of gender differences in the conceptualization and development of sports knowledge management must be investigated.

It is essential to recognize that knowledge management both generates and disseminates information that helps to the enhancement of the performance of organizations,

including sports organizations. On the other hand, knowledge management strategies are a response to labor market demands and technological progress, and they play a crucial part in the educational process. Methods of knowledge management may also be utilized to construct learning processes, as well as to address and manage worker-related challenges. In turn, this may enhance the work experiences of employees, as well as their profitability and job satisfaction.

Recommendations

According to the results of the present research, in order to progress the idea of athletic knowledge management, the top management in the sports environment must recognize and embrace the concept, and the money assigned to this project must be reduced. Additionally, knowledge athletes, workers, and technicians should see the management of knowledge generation as their main job. This work should be performed by the use of better methods, joint effort, and interpersonal connection. In addition, the research suggests categorizing persons according to the knowledge, experience, habits, and practices that they bring to the table. Moreover, the establishment of knowledge-sharing methods guarantees that all athletes, employees, and technicians have access to pertinent data. The research concludes that risk-free, consistent, and painstakingly constructed settings should be provided for all programs that require growth and refinement

REFERENCES

- Theriou NG, Chatzoglou P. The impact of best HRM practices on performance - identifying enabling factors.”. *Employee Relation Int J.* 2014;36(5):535-561. doi: 10.1108/ER-02-2013-0025
- Sveiby KE. A knowledge based theory of the firm To guide strategy formulation. *J Intellectual Capital.* 2001;2(4):344-358. doi: 10.1108/14691930110409651
- Firestone JM. Key Issues in Knowledge Management. *Knowledge and Innovation. J KMCI.* 2001;1(3):8- 38.
- Al-Aama A. Technology knowledge management (TKM) taxonomy: Using technology to manage knowledge in Saudi municipality. *Inform Knowledge Manage Sys.* 2014;44(1):2-21. doi: 10.1108/VINE- 12-2012-0052
- Mohajan H, <https://doi.org/10.18034/abcjar.v6i1.66>. The roles of knowledge management for the development of organizations2017.
- Theriou G, N., Chatzoglou P, D. Enhancing performance through best HRM practices, organizational learning and knowledge management: A conceptual framework. *Europe Business Rev.* 2008;20(3):185- 207. doi: 10.1108/09555340810871400
- Jackson M, H., Williamson J. Challenges of implementing systems for knowledge management: Static systems and dynamic practices. In: *Communication and Organizational Knowledge.* Routledge2010.
- Yoong P, Molina M. Knowledge sharing and business clusters. *PACIS 2003 Proceed.* 2003;31:84.
- Lee LT, Sukoco BM. The effects of entrepreneurial orientation and knowledge management capability on organizational effectiveness in Taiwan: the moderating role of social capital. *Int J Manage.* 2007;24(3):549.

- Duru-Bellat M, Suchaut B. Organisation and context, efficiency and equity of educational systems: what PISA tells us? *Europe Educat Res J*. 2005;4(3):181-194. doi: 10.2304/eerj.2005.4.3.3
- Womack JP, Jones DT. *Lean Thinking*, Second edition. Simon & Schuster 2010.
- Marcu V, Buhaş SD. Sports organizations-management and science. *Procedia Soc Behav Sci*. 2014;117:678-682. doi: 10.1016/j.sbspro.2014.02.281
- Ratten V. Sport entrepreneurial ecosystems and knowledge spillovers. *Knowledge Manage Res Pract*. 2021;19(1):43-52. doi: 10.1080/14778238.2019.1691473
- Hislop D, Bosua R, Helms R. *Knowledge management in organizations: A critical introduction*. Oxford university press 2018.
- Herden TT. Explaining the competitive advantage generated from Analytics with the knowledge-based view: the example of Logistics and Supply Chain Management. *Business Res*. 2020;13(1):163-214. doi: 10.1007/s40685-019-00104-x
- Kabene S, M, King P, Skaini N. Knowledge management in law firms. *J Inform Law and Technol*. 2006;1(1):1-21.
- MacIntosh EW, Burton L. Organizational behavior in sport management. *Human Kinetics* 2018. 18. Won D, Chelladurai P. Competitive Advantage in Intercollegiate Athletics: Role of Intangible Resources. *PLoS One*. 2016;11(1):e0145782. doi: 10.1371/journal.pone.0145782 pmid: 26731118 19. Pham NT, Do AD, Nguyen QV, Ta VL, Dao TTB, Ha DL, et al. Research on Knowledge Management Models at Universities Using Fuzzy Analytic Hierarchy Process (FAHP). *Sustainabilit*. 2021;13(2):809. doi: 10.3390/su13020809
- Sanchez P, McCauley D. Measuring and managing engagement in a cross-cultural workforce: New insights for global companies, *Global Business and Organizational Excellence* 2006
- Karamitri I, Kitsios F, Talias MA. Development and Validation of a Knowledge Management Questionnaire for Hospitals and Other Healthcare Organizations. *Sustainabilit*. 2020;12(7):27-30. doi: 10.18034/abcjar.v6i1.66
- Moreno EF, Ávila M, García-Contreras R. Can gender be a determinant of organizational performance and knowledge sharing in public sector organizations? *AD Minister*. 2018(32):137-160.
- Aldosari SAM. The relationship between leaders' mastery of tacit knowledge management skills and the achievement of competitive advantage at universities. *J Sustainable Finance Invest*. 2021;1-19. doi: 10.1080/20430795.2021.1886552
- Bakkabulindi FEK, Sekabembe B. Age, gender and culture as correlates of use of knowledge management systems in Makerere University. In *IFIP Conference on Information Technology in Educational Management* 2010.
- Croson R, Gneezy U. Gender differences in preferences. *J Economic Literature*. 2009;47(2):448-474. doi: 10.1257/jel.47.2.448

- Hesamamiri R, Mazdeh MM, Jafari M. Measuring the reliability of knowledge management: instrument development and validation. In Aslib proceedings: New information perspectives. Emerald Group Publishing Limited 2013.
- Jackson M, H., Williamson J. Challenges of implementing systems for knowledge management: Static systems and dynamic practices. In: Communication and Organizational Knowledge. Rutledge 2010.
- Tonial G, Cassol A, Selig PM, Giugliani E. Intellectual capital management and sustainability activities in Brazilian organizations: A case study. *Int Capital Manage Driver Sustainabil.* 2019;119-138. doi: 10.1007/978-3-319-79051-0_7
- Dingsøyr T. Knowledge management in medium-sized software consulting companies. *Empiric Software Engine.* 2002;7(4):383-386. doi: 10.1023/A:1020579408810
- Palacios D, Gil I, Garrigos F. The impact of knowledge management on innovation and entrepreneurship in the biotechnology and telecommunications industries. *Small Business Econom.* 2009;32(3):291-301. doi: 10.1007/s11187-008-9146-6
- Manev G, Jakimovski J. Role of knowledge management in sport organizations. *Škola Biznisa.* 2017;2:150-171. doi: 10.5937/skolbiz2-16091
- Razaghi ME. Successful knowledge management establishment in sport organizations with an emphasis on Iranian localization. *Int J Sport Stud.* 2013;3(1):30-37.
- Hage J. The impact of knowledge on the survival of American manufacturing plants. *Soc Force.* 1993;72(1):223-246. doi: 10.2307/2580167
- Gholipour R, Esmaeili MR, Honari H, Ghorbani MH. The factors affecting knowledge sharing at the Iranian Ministry of Sports. *Annal Appl Sport Sci.* 2018;6(1):87-94. doi: 10.29252/aassjournal.6.1.87 35.
- Trong Tuan L. Knowledge sharing in public organizations: The roles of servant leadership and organizational citizenship behavior. *Int J Pub Admin.* 2017;40(4):361-373. doi:10.1080/01900692.2015.111355035. Orr
- M, Inoue Y. Sport versus climate: Introducing the climate vulnerability of sport organizations framework. *Sport Manage Rev.* 2019;22(4):452-463. doi: 10.1016/j.smr.2018.09.007