

ORIGINAL ARTICLE



Athletic Knowledge Management and Its Role in Achieving Competitive Advantage in Sports Work Environment

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ABSTRACT

Background. Knowledge management in successful sports organizations is associated with their sustainability, continuity, and achievement of long-lasting competitive sports results. **Objectives.** This study aims to identify athletic knowledge management and its role in achieving a competitive advantage in the sports work environment in Jordan. **Methods.** The study sample consists of (60) male and female students studying the Sports Organization and Management Course at the Faculty of Physical Education and Sport Sciences at Hashemite University. Due to the nature of the study, the quantitative approach has been used. Data has been collected by distributing a 2-domain questionnaire: the role of the athletic knowledge management in achieving the competitive advantage in the sports work environment and the contributions of the athletic knowledge management in improving the sports work environment. **Results.** The results show that 98% of the participants believed that knowledge management plays a crucial role in achieving a competitive advantage in the sports work environment and improving the sports work environment. Also, the results indicate that knowledge management plays a vital role in contributing to knowledge management operations and developing the sports work environment. Regarding gender, the results show no significant differences between males and females. **Conclusion.** Several significant recommendations have been made, i.e., providing physical and moral infrastructure as a priority by senior management to be taken into account to implement this concept and offering safe, stable, systematic, and programmed conditions for all courses to improve and develop the level of sports performance among workers.

KEYWORDS: *Knowledge Management, Athletic Competitive Advantage, Sports Work Environment.*

INTRODUCTION

Knowledge management is the conscious process of defining, structuring, retaining, and sharing the knowledge and experience of employees within an organization. Knowledge management assists the organization in achieving organizational goals. This knowledge consists of both explicit and implicit knowledge (1). Knowledge is a critical asset in any organization, even more than technological capital. It is a component of human abilities, and as a result, it is human capital (2).

Knowledge is defined as experience, information, and data that can be a much greater understanding of explicit and implicit situations, relationships, causal phenomena, theories, and rules underpinning a given domain or problem (3). Knowledge management includes several main activities such as searching, accumulating, and sharing knowledge in an organization, motivating employees, converting and distributing knowledge among the team, and protecting the rights of knowledge of the creative

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persons (4). Many organizations rely on knowledge management to successfully apply the tangible assets and natural resources to achieve high performance (3).

The sports organizations learning how to be intelligent, quick, and responsive are the ones that will survive in the long run in the future (5). The institutions' success and failure in satisfying the different needs and requirements of the individuals and communities depend on the management of these organizations and institutions. Moreover, the institutions' success and failure depend on the adopted management pattern and style, as effective and successful management is the key to the organization's success and building and development of any society. The management's role is to recruit qualified human forces by guiding and coordinating them at the lowest possible costs using the best methods and tools without duplication, overlapping, or conflicts to achieve a competitive advantage (5, 6).

Knowledge management is one of the most critical modern trends helping to provide the person with the necessary methods and experience in any institution so that the person's experience, skills, and knowledge are appropriately used. The employee is required to provide the best performance and be able to carry out future functional tasks according to a scientific and administrative plan (7-9).

Implementing knowledge management must provide a stable and safe environment for all workers and participants in this system, allowing participation, cooperation, storage, and discovery of new aspects of the sports occupation. Artificial intelligence between the sender and the recipient is essential through the diversity of training methods. Knowledge management is based on theory and practice (8, 10). Modern organization, including sports and academic institutions, has realized that athletic knowledge management is a very up-to-date important concept that can make changes and carry out tasks required to do in a manner that goes with the national and the global changes and developments.

Individuals, organizations, and even sports institutions' competitiveness is increasingly dependent on their ability to apply and leverage knowledge continuously (10). Many modern organizations, including sports and academic institutions, fail to recognize the importance of a safe work environment for workers, technicians, and trainees, and as a result, they face numerous challenges (11, 12). Achieving excellence that

makes the sports institutions distinguished is based on the effectiveness of knowledge management in dealing with human resources, i.e., employees, technicians, and trainees, to provide them with data, information, and knowledge by developing their behaviors and skills (13).

Knowledge management has become a basis for achieving a competitive advantage by providing the appropriate human resources in terms of quantity and type and the necessary skills, behaviors, and knowledge to do their work efficiently. Consequently, high efficacy and effectiveness in all the institution's works are appropriately achieved. Knowledge management plays a significant role in putting an initial perception of the future objectives and formulating its policy, determining its goals in the long term. Intangible resources are likely to produce knowledge in any competitive organization. Human capital is an essential element; it is the most challenging component to imitate (14-16).

Against this, the current study is very significant since it uses the concept of knowledge management in the athletic domain. This concept is firmly rooted in the athletic society. Furthermore, knowledge management is crucial since it is considered the strategic source in building a competitive advantage, enhancing competition in the sports work market (17). Knowledge is an important force in driving performance and creating a competitive advantage (4). When knowledge management is efficiently used, it is organized and planned to gather, discover, store and let others participate in the realities of sports work since it is the most significant resource in light of the cognitive explosion (18). Additionally, the study focuses on the knowledge in the athletic domain and its ability to achieve a competitive advantage to all the workers in the sports sector through developing their ideas and using them at low costs or without additional costs (19).

Knowledge management contributes to increasing the knowledge of technicians, managers, and workers by providing knowledge, skills, and information regularly. This kind of management teaches and trains the workers in a short period using a perfect scientific method. Knowledge management provides employees in an organization with the knowledge they need to do their work effectively, as it can empower innovation and drive competitive advantage if implemented effectively. It can also reduce

information bottlenecks, enhance governments' competence, and raise governments' service quality (20).

A sports organization shall enhance its knowledge management practices, knowledge creation, knowledge storage, knowledge sharing, and knowledge application, as any gap in these elements can affect its performance and structure. It is also observed that getting close to the sports environment and the sports associations, either academically or athletically, make the persons who are in charge of leading the sports activities aware of the role played by the knowledge management in improving the quality of the service presented and thus developing the level of workers.

Some people believe that working in knowledge management is all about spending money needed in other arenas, wasting time, and insufficient time to practice it. In most of the training, refereeing, and administrative courses, they are considered gatherings that waste time, provide no new information, refresh zero old ideas, and are not presented within a planned curriculum (21). It is also perceived that all workers in the sports domain aim to reach their achievements while ignoring the natural development of all the administrative and technical staff, which makes the costs low in the coming days and years. Their investigation regarding gender differences in knowledge management concluded that gender determines the effect of an intangible asset, i.e., knowledge sharing, and its influence on the performance of organizations (22). If the organizations are made up of men only, then knowledge sharing positively affects organizational performance by 20% more than when organizations are made up of women. Besides, gender differences, as shown in the study (23), found that differences regarding knowledge management and achieving a competitive advantage is in favor of males. On the other hand, (24) found that both males and females are equally at KM. Furthermore, (25) reported that gender plays a significant role in social and competitive preferences.

Accordingly, this study aims to provide a piece of evidence to support the role of knowledge management in achieving a competitive advantage and identifying how knowledge management operations contribute to developing the workers in the sports work environment in Jordan from the perspective of the students studying the Sports Organization and Management Course at the Faculty of Physical Education and Sport Sciences at

the Hashemite University. Notably, the problem of this paper lies in identifying the gender differences concerning sports knowledge management in achieving the competitive advantage and contributions of the knowledge management operations in developing the sports work environment. Hence, this study aims to answer the following question "How does knowledge management play a role in achieving a competitive advantage in the sports working environment?"

MATERIALS AND METHODS

This section gives an insight into the study sample and the study instruments adopted in this study.

Participants. The study sample consists of the students studying the Sports Organization and Management Course at the Faculty of Physical Education and Sport Sciences at Hashemite University. The participants are 36 males and 24 females, as 50% of the participants are aged 18-25 years.

Study Instruments. Knowledge management is the planning, organizing, motivating, and controlling of an organization's people, processes, and systems to ensure that its knowledge-related assets are effectively improved and used. The study instrument, a questionnaire, has been modified based on previous pieces of research such as (21, 26, 27). The questionnaire includes two domains: the role of athletic knowledge management in achieving a competitive advantage in the sports work environment and the contributions of athletic knowledge management in improving the sports work environment. Also, a 3-point Likert scale was used (agree, disagree, & Neutral).

Instrument's Validity. The researcher depends on the content validity. To verify the validity of the measurement instrument, it has been presented to a group of (6) validators specialized in the sports management and organization domain to express their views on the validity of the linguistic wording of the items, its degree of clarity, and its relevance to the measured dimension, and any observations or modifications or additions they deem appropriate. The experts have verified that all the items are clear and fit all the study's domains.

Instrument's Reliability. The test-retest reliability and Cronbach's alpha coefficients have been used to verify the questionnaire's consistency after distributing it to a 15-student sample studying the Sports Organization and Management Course. Accordingly, the questionnaire is considered valid and reliable as shown in Table 1.

Table 1. Test-Retest Reliability and Cronbach's Alpha Coefficients

No.	Dimensions	Test-retest	Cronbach's Alpha
1	The role of knowledge management in achieving the competitive advantage	93.	95.
2	The knowledge management operations' distribution in developing the workers	95.	95.

Data Analysis. To test the hypotheses, the Statistical Package for the Social Sciences (SPSS) 20.0 software has been used as a powerful instrument to help in analyzing the collected data. Descriptive statistics have also been used to better understand each variable's characteristics and illustrate each research variable's means and standard deviations. Furthermore, the Pearson correlation coefficient, test-retest, and Cronbach's alpha have been used.

RESULTS

The results indicated that knowledge management processes contribute to achieving sports competitive advantage. Table (2) shows statistically significant differences between the study sample results on the contributions of knowledge management in achieving competitive advantage and knowledge processes.

Table 2. The contributions of knowledge management to achieve a competitive process and knowledge management processes

Scale Dimensions	N	mean	SD	T	Sig.
Contributions of knowledge management to achieve the competitive process	60	2.95	0.18	40.782	0.001
Knowledge management processes	60	2.979	0.161	47.00	0.001

Table 3. The role of the sports knowledge management in achieving a competitive advantage in the sports work environment

No.	Items	Mean	Std.	(%)
1	Knowledge management plays a role in holding specialized and programmed workshops for workers with enough time by qualified individuals.	2.866	0.4304	95.56
2	Knowledge management plays a role in developing the workers cognitively, psychologically, and professionally and logically raising awareness.	2.983	0.1291	99.44
3	Knowledge management plays a role in retouching the new data and information, which leads to being applied and encourages to express the opinions, creativity, and innovation	2.900	0.3541	96.67
4	Knowledge management plays a role in systematically holding courses to the workers, which provides ongoing, changeable, and new knowledge.	2.916	0.3814	97.22
5	Knowledge management plays a role in holding courses for the workers on a scientific basis and in interactive seminars.	2.983	0.1291	99.44
6	Knowledge management plays a role in formulating a curriculum lectured by specialists and scientifically develops the workers through groups.	2.983	0.1291	99.44
7	Knowledge management plays a role in preparing the new workers during the written curriculum, exposing them to successful experiences, benefiting from others' previous mistakes, and discussing work in groups.	2.983	0.1291	99.44
8	Knowledge management plays a role in classifying workers upon their knowledge and information first and their experiences and behaviors.	2.983	0.1291	99.44
	Total	2.950	0.1800	98.33

The current study gives an insight into the results related to the study question, "How does knowledge management play a role in achieving the competitive advantage in the sports work environment?"

To answer this question, arithmetic means and standard deviations of the estimates of the role of the sports knowledge management in achieving the competitive advantage in the sports work environment are calculated, as shown in Table (3).

The average score of the role of the sports knowledge management in achieving the competitive advantage in the sports work environment in the statistical sample was 2.950 taking into account the standard deviation. The distribution score of the role of the sports knowledge management in achieving the competitive advantage in the sports work environment variable was dispersed at .1800 around the mean values. 95% of the sample

believed that knowledge management plays a crucial role in holding specialized and programmed workshops for workers with enough time by qualified individuals. More than 99% showed that knowledge management plays a significant role in developing the workers cognitively, psychologically, and professionally and in preparing the new workers during the written curriculum, exposing them to successful experiences, along with classifying workers upon their knowledge and information first and their

experiences and behaviors second. Also, 97% of the sample study found that knowledge management plays a primary role in systematically holding courses to the workers, providing ongoing, changeable, and new knowledge. The independent samples t-test showed no statistically significant differences between the female and male participants, as shown in Table (4). Table (4) presents the gender differences concerning sports knowledge management in achieving a competitive advantage.

Table 4. Gender differences regarding the role of the sports knowledge management in achieving a competitive advantage in the sports work environment

Gender	N	Mean	Std. Deviation	T	Sig.
Male	36	2.9375	0.21153	-0.612	0.272
Female	24	2.9663	0.13018		

Table 5. The contributions of the Knowledge Management operations in developing the sports working environment in Jordan

No.	Items	Mean	Std.	(%)
1	Knowledge management plays a crucial role in providing the workers with positive experiences, a knowledge environment, and a scientific, administrative curriculum to develop.	2.98	0.129	99.44
2	Knowledge management plays a central role in providing new cognitive scientific bulletins and CDs with every new thing to help the workers express their opinions.	2.96	0.258	98.89
3	Knowledge management plays a significant role in diagnosing, acquiring, developing, storing, and applying its concept to ensure work quality to reach the sports domain achievements.	2.98	0.129	99.44
4	Knowledge management plays a primary role in providing the classical knowledge in a discovery method with new technological methods.	2.98	0.129	99.44
5	Knowledge management believes in the principle of exact tolerance.	2.98	0.129	99.44
6	Knowledge management plays a primary role in attracting the workers scientifically within standards.	2.98	0.129	99.44
7	Knowledge management plays a crucial role in providing explicit and implicit knowledge to the workers.	2.96	0.258	98.89
8	Knowledge management plays a vital role in teaching the workers, storing knowledge, information, and data in stored documents and memory in the brain using the new technology.	2.98	0.129	99.44
Total		2.97	0.161	99.31

Table 6. Gender differences regarding the contributions of the knowledge management operations in developing the sports work environment in Jordan

Gender	N	Mean	Std. Deviation	T	Sig.
Male	36	2.9632	0.21437	-0.873	0.193
Female	24	3.0000	0.00000		

Based on Table (5), the result showed that the athletic knowledge management operations have a central role in developing the workers in the sports work environment. Table (4) presents descriptive statistics for the knowledge management operations and their role in developing the workers in the sports work environment.

The results indicated that more than 99% of the sample study found that athletic knowledge management operations have a crucial role in developing the workers in the sports work

environment with a mean of (2.97) and standard deviation (.161). The results showed that knowledge management plays a crucial role in teaching the workers, storing knowledge, information, and data in stored documents and memory in the brain by using the new technology and providing the classical knowledge in a discovery method with new technological methods. Besides, it plays a significant role in diagnosing, acquiring, developing, storing, and applying its concept to ensure work quality to reach the sports domain achievements with a

more than 99% rating. Moreover, no gender differences were found regarding the contributions of the knowledge management operations in developing the sports work environment in Jordan. The independent samples t-test also showed no statistically significant differences between the female and male participants, as shown in Table (5). Table (6) presents the gender differences concerning the contributions of the knowledge management operations in developing the sports work environment.

DISCUSSION

The current research aims to investigate the role of knowledge management in achieving a competitive advantage in the sports work environment in Jordan from the perspective of the students studying the Sports Organization and Management Course at the Faculty of Physical Education and Sport Sciences at the Hashemite University. The results indicated that knowledge management processes contribute to achieving sports competitive advantage. The researcher explains that the concept of knowledge management and its contributions is a broad concept consisting of knowledge management processes, as sports knowledge management and knowledge management processes (discovery, possession, sharing, and application) include information, data, and use of technology in harvesting knowledge. Correspondingly, knowledge management can create, store and apply knowledge and find solutions to the problems it faces in general. It is also possible that the members of the study sample feel and realize that knowledge management in achieving competitive advantage with its procedures and steps is separate from knowledge management processes as it may hinder the researcher's work and performance. From the standpoint of the study sample, the contributions of knowledge management are comprehensive, continuous, and cohesive in the management of workers, products, and systemic performance. In contrast, knowledge management processes are linked to form and content in education, qualification, and development of knowledge of the workforce.

The results indicated that knowledge management plays a crucial role in developing the workers cognitively, psychologically, and professionally and improving their performance. This result was in line with previous studies, such as (28) that showed KM contributes to raising the

level of workers' skills in organizations to use knowledge, motivate those who know to release their latent knowledge, and achieve innovation to ensure sustainable development competitiveness organizations.

Knowledge-creating concepts begin life as specific data. Transforming data into information to knowledge to wisdom helps to shape effective strategies to manage knowledge, and a competitive work environment, which, when applied, encourages the expression of opinions, creativity, and innovation. Most of the study sample realizes that applying athletic knowledge management dramatically contributes to achieving a competitive advantage in the sports domain. Knowledge management has a significant role in teaching and training workers through a scientific program using the most modern technological methods to benefit from previous successful experiences. Furthermore, knowledge management works on letting qualified persons attend training courses in their internal and external work domains. These individuals are classified upon their qualifications, knowledge, behaviors, and experiences.

The study emphasizes the necessity that the leaders believe knowledge management has a key role in achieving competitive advantages in the sports environment, leading to creating an aware generation with a bright future, raising the quality level, and providing a competitive work environment (29). Also, (30) showed that KM is considered another wellspring of competitive advantage that makes organizations everywhere reclassify their work and human resource management strategies (30). As put by the researcher, the competitive advantage of organizations is usually controlled by intangible resources, as intangible resources are likely to produce knowledge in any competitive organization, with human capital being the most important because it is the most difficult to imitate (6). The study found no gender difference between female and male participants concerning sports knowledge management in achieving a competitive advantage. The present study results are also consistent with the findings of (24). This result contrasts all of the other studies that indicated differences regarding knowledge management and achieving a competitive advantage in favor of males. The study also reported that gender plays a significant role in social and competitive preferences (23, 25).

Sports organizations are the natural location for knowledge creation within their boundaries due to knowledge management practices. These practices assist sports organizations in appropriating an individual's or group's tacit or explicit knowledge by systematically articulating and storing it. Sports organizations should regard knowledge management as an advanced asset for reaching competitive sports advantages and results and doing that by using modern, sophisticated organizational and information technology (15). The knowledge management processes include strategy, leadership, culture, technology, and evaluating their work related to skills as enablers that can support the operation of KM. Although these factors are eminently sensible, it is believed that KM's success depends on more aspects (31). It is necessary to detect factors guaranteeing the successful establishment of knowledge management, and even those factors more associated with the internal sports structure of organizations are deemed more essential.

Human resources of knowledge understanding, athletic training, appropriate incentives, motivational factors, using and providing knowledge perspective, supporting knowledge management projects and targeting knowledge transfer in strategy and leading, IT infrastructure, and databases are effective factors to succeed in establishing knowledge management in sport organizations, identify how knowledge management operations contribute to developing the workers in the sports working environment in Jordan from the perspective of the students studying the Sports Organization and Management Course at the Faculty of Physical Education and Sport Sciences at the Hashemite University and identify the gender differences concerning the contributions of the knowledge management operations in developing the sports work environment. The results indicated that knowledge management plays a role in providing the workers with positive experiences, a knowledge environment, and a scientific, administrative curriculum to develop. Up to 99% of the participants believe that knowledge management plays a role in teaching the workers, storing knowledge, information, and data in stored documents using the new technology.

The success of KM requires human resources such as workers, technicians, and trainees at various levels in an organization. Top managers

must provide a KM vision, produce a detailed KM strategy, and practice their leadership role. KM provides techniques and approaches to build up task-oriented services for solving the strategic needs of different organizations (32). Some previous studies emphasized the financial and moral support presented by the upper and middle management to the infrastructure that helps the knowledge management achieve its goals (33, 34). The previous studies emphasized the knowledge management operations in making the knowledge, information, and data related to the sports domain remain in the worker's mind and emphasized the concepts of diagnosis, sharing, acquisition, development, storage, and application. Sharing knowledge is one of the key contributions of employees to amplify organizational knowledge, leading to the organization's high performance (3, 35).

The study's main finding showed that knowledge management plays a key role in providing workers with explicit and implicit knowledge. This result also agrees with researchers (3, 14), who indicated that knowledge management consists of explicit and implicit knowledge that involves creating, manipulating, storing, and sharing knowledge among people in a community of practice and managing knowledge flows in an organization (3, 14).

However, the current study showed that KM plays a role in diagnosing, acquiring, developing, storing, and applying its concept to ensure the quality of work to reach the achievements in the sports domain. This was also affirmed by (36), indicating that knowledge management is the planning, organizing, motivating, and controlling of an organization's processes and systems to ensure that its knowledge-related assets, workers, technicians, and trainers are effectively improved (36). No gender differences were found concerning the contributions of the knowledge management operations in developing the sports work environment. The current result agrees with the study (24) that showed both males and females are equally treated by the concept of KM (24).

Sports knowledge management processes include knowledge acquisition, creation, refinement, storage, transfer, sharing, and utilization. The organization's sports knowledge management function oversees these processes, develops approaches and systems to support them, and motivates employees, athletes,

workers, technicians, and trainers to participate in them. Thus, it is essential to discover the required knowledge that lets others participate in this knowledge, develop them to improve the implementation methods, along with storing them. As a result, all people can participate in this system without exception by acquiring this everlasting knowledge that shall go among them harmoniously.

CONCLUSION

In a few words, the objective of this study is to investigate athletic knowledge management and its role in achieving a competitive advantage in the sports work environment. However, the most critical conclusions attained by the current study show that athletic knowledge management plays a crucial role in achieving the competitive advantage in sports work environments in Jordan and the athletic knowledge management operations, including the concepts of diagnosis, sharing, acquisition, development, storage, and application play a significant role in developing the sports work environment. Most of the participants in this study have affirmed that KM leads to higher efficiency in less duplication of work, followed by notably better performance, enhancing new athletic workers, technicians, and trainers' capabilities, and better quality decisions. Moreover, both males and females are equal in achieving the competitive advantage and contributions of the knowledge management operations in developing the sports work environment. The research limitation is seen in the small size of the adopted study sample. In future work, researchers are required to explore the potentialities and limitations of gender

differences in developing the concept of athletic knowledge management.

Importantly, knowledge management develops and creates knowledge that contributes to improving the performance of institutions in general and sports institutions in particular. In contrast, knowledge management processes play a significant role in the education process and respond to the labor market and technology requirements. Knowledge management processes can also appropriately build learning processes and solve and address problems that workers face, increasing their work experience, profits, and job satisfaction.

APPLICABLE REMARKS

- To develop the concept of athletic knowledge management, the current study recommends adopting the concept of athletic knowledge management and reducing the budgets of this project by the upper management in the sports environment.
- Moreover, management of knowledge creation should be regarded as the primary responsibility of knowledge athletes, workers, and technicians and accomplished through the adoption of better practices, collaboration, and interpersonal interaction.
- The study also recommends classifying the workers upon their knowledge, experience, behaviors, and practices.
- Furthermore, knowledge-sharing strategies ensure that athletes, workers, and technicians access the correct information.
- Finally, the study recommends providing safe, stable and programmed conditions to all courses that lack development and improvement.

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