

An Investigation into the Networking Capability of Sports Boards

Sports Networking

ABSTRACT

Purpose: The main purpose of this study was to investigate the networking capability of sport boards which can be considered as a launching pad for the promotion of sport federations. Networking can lead to a series of positive innovative outcomes. If networking is performed in a good way in sport boards, financial circulation is improved. Networking in sports organizations can lead to a drastic increase in the income and the business prosperity of the organization in all respects.

Methodology: The present study was applied in terms of purpose and descriptive in terms of methodology. Sports boards' staff in the north-western provinces of Iran were considered as statistical population. The overall statistical population of the study consisted of 1832 subjects, from which a sample of 318 subjects were randomly selected according to Morgan and Krejcie table. Data were collected through the researcher-made Business Networking Questionnaire. Cranach's alpha was used to assess the reliability of the questionnaire. One-sample t-test and SPSS 26 software were used to test the hypotheses.

Findings: According to the findings, the networking capability of sport boards in the north-western provinces of the country were significantly higher than the average (mean= 3 with 95% confidence) in all respects. The results demonstrated that thanks to the small size of the sport boards, they cannot trust at their own ability alone. Therefore, they should set up for standardizing processes and using new information systems to facilitate the networking processes in their structure.

Originality: This study is a milestone to reach the smart government in the society and is innovative in this regard. If the networks are established in the sport organizations in a good way, the federations can do their duty in the shortest period of time and with the most productivity. By the way, networks play a great role in saving time, energy and money in sport federations and society as a whole.

Keywords: Networking, sport organizations, financial circulation, management capabilities.

Paper type: Research Paper

بررسی قابلیت شبکه‌سازی در هیات‌های ورزشی

شبکه‌سازی ورزشی

چکیده

هدف: هدف اصلی این پژوهش بررسی قابلیت شبکه‌سازی هیات‌های ورزشی است که می‌تواند سکوی پرتابی برای ارتقای فدراسیون‌های ورزشی باشد. شبکه‌سازی می‌تواند به خروجی‌های مثبت در زمینه نوآوری منجر شود. اگر شبکه‌سازی در سازمان‌های ورزشی به خوبی اجرا گردد، گردش مالی در اتحادیه‌های ورزشی بهبود می‌یابد. شبکه‌سازی در سازمان‌های ورزشی می‌تواند منجر به افزایش شدید درآمد سازمان‌ها و همچنین رونق کسب‌وکار سازمان از همه لحاظ گردد.

روش: پژوهش حاضر از نظر هدف کاربردی و از نظر روش توصیفی است. جامعه آماری کارکنان هیات‌های ورزشی استان‌های واقع در شمال غرب کشور ایران در نظر گرفته شد. جامعه آماری پژوهش شامل ۱۸۳۲ نفر بود که از بین آنها ۳۱۸ نفر با توجه به جدول مورگان و کرجسی به طور تصادفی انتخاب شدند. داده‌ها از طریق پرسشنامه محقق‌ساخته شبکه‌های تجاری جمع‌آوری گردید. برای سنجش پایایی پرسشنامه از آلفای کرنباخ استفاده شد. برای آزمون فرضیه‌ها از آزمون t تک نمونه‌ای و نرم افزار SPSS 26 استفاده شد.

یافته‌ها: بر اساس یافته‌ها، توان شبکه‌سازی هیات‌های ورزشی در استان‌های شمال غربی از هر نظر به‌طور معنی‌داری بالاتر از میانگین (میانگین = ۳ با اطمینان ۹۵ درصد) بود. نتایج نشان داد که با توجه به اندازه کوچک هیات‌های ورزشی، آنها نمی‌توانند به تنهایی به توانایی خود اعتماد کنند. بنابراین، آنها باید جهت تسهیل فرآیندهای شبکه‌سازی در ساختار خود به دنبال استانداردهای فرآیندها و استفاده از سیستم‌های اطلاعاتی جدید باشند.

اصالت و ابتکار مقاله: این مطالعه نقطه عطفی جهت رسیدن به دولت هوشمند در جامعه می‌باشد و در این زمینه نقشی نوآورانه ایفا می‌کند. اگر فرایند شبکه‌سازی به خوبی در سازمان‌های ورزشی مستقر گردد، فدراسیون‌ها می‌توانند در کوتاه‌ترین زمان ممکن و با بیشترین بهره‌وری به وظایف خود عمل کنند و این می‌تواند الگویی برای سایر سازمان‌ها در جامعه باشد. به هر حال، شبکه‌سازی نقش بسزایی در صرفه‌جویی در زمان، انرژی و هزینه در فدراسیون‌های ورزشی و در کل جامعه ایفا می‌کند.

کلید واژه: شبکه‌سازی، سازمان‌های ورزشی، گردش مالی، قابلیت‌های مدیریتی.

1. Introduction

In the last two decades, the concept of inter-organizational communication has received much attention in theory and practice (Agostini & Nosella, 2019). The researches carried out in the field of inter-organizational relations put forward a new communication-induced organizational solution called cooperative network. Cooperative networks are operational solutions which develop cooperative relationships based on trust (Gustafsson & Magnusson, 2016). In a cooperative network, all cooperating organizations are seen as a whole, in which the capacities, competences and intellectual strengths of each member are used to gain a competitive advantage and maximize the performance of the entire network. Their emphasis is that organizations should be placed next to each other and in cooperative positions (Sacchetti & Tortia, 2016). Based on this approach, the organizational processes become widespread in which public and private organizations come together and solve mutual problems by applying collaborative solutions. Small and medium-sized companies, which usually have limited skills and resources, need to connect with each other and do joint collaborative activities in order to overcome their limitations. This is called networking. The philosophy of networking is based on establishing cooperative relationships (Hardwick et al., 2013). Networking helps the organizations do branding in the best possible way, whether it is personal branding, corporate branding, product or service branding (Dašić et al., 2021). Networking was initially introduced as a useful and efficient way to find job opportunities by job seekers, but this strategy gradually became very widespread and is now considered as one of the most important pillars of business growth and success (Dašić et al., 2021). Networking is very important in the success of the businesses. Active and effective communication with colleagues, customers and experts provides a basic infrastructure for sustainable business growth and development (Govindan et al., 2020). These connections bring new opportunities, market information and experiences to companies, which can lead to improved performance and increased efficiency (Govindan et al., 2020). Through networking, businesses can easily benefit from diverse resources, use the opinions and experiences of others, and even establish strategic collaborations (Dašić et al., 2021). In addition to creating new business opportunities, these connections create sustainable relationship and credibility in the market. In general, networking as a strategic tool plays a very vital role in the development of sport businesses and can contribute to their success and progress (Agbim, 2018). Mitrega et al. (2017) consider networking capabilities as the capabilities of a company to create, develop and combine relationships with different partners such as customers, suppliers, competitors and research organizations. This capability includes pre-activity in creating organizational communications, communicative capability, and the ability to create coordination in a set of organizational links. Pre-activity is the power of a company to discover and seize new and promising cooperative opportunities. Communicative capability is the ability of an organization to establish relationship with other organizations based on mutual trust and commitment. Finally, coordination

capability refers to the firm's ability to integrate, coordinate, and flow information between partners. These three capabilities are considered as the networking capabilities of the companies (HasanPour et al., 2023).

Along with network capabilities, network strategies should also be taken into consideration in order to make the best use of the networks (Child et al., 2019). We distinguish two broad strategies on how networks are conceptualized – namely, the entrepreneur's business network strategy and the social network strategy (Engel et al., 2017). The business network perspective focuses on the potentially beneficial effects of formal relationships with suppliers, customers, trade associations, and other professional connections. The content of the links influences value and performance. In contrast, the social network perspective has its roots in sociology. Its central idea is that position in a social structure influences the attitudes and behaviors of entrepreneurs, and thus their performance. The two perspectives jointly point to the underlying mechanisms that explain how specific network dimensions actually translate into social capital with positive and/or negative effects on performance, and how entrepreneurs can actively shape their networks and the benefits that come from them (Engel et al., 2017).

Networking in companies is increasing rapidly. By creating relationships between individuals and organizations and also between customers and producers, a very wide network can be guaranteed. Establishing networks with the people who are somehow active in different fields can lead to a series of job offers, business opportunities, strategic collaborations and staying up to date with different changes and trends in the world (Dašić et al., 2021). Networking in the organizations can be performed through professional platforms such as LinkedIn, which provides job opportunities, training and collaborations between people (Ruparel et al., 2020).

One of the most important organizations in every country are sports organizations. According to Green (2016) many sport organizations have adopted networking to communication as it enables them to easily target their audiences, share content and comment via links to videos, blogs and other social networking platforms. Hambrick et al. (2019) state that using networks as a communication tool has several advantages and disadvantages for sport organizations. They state that one of the primary advantages of using networks is that it reduces cost whilst enhancing target audience reach. According to Santos et al. (2019) networking offers sports organizations more direct interaction with fans and other stakeholders, assists them in gaining more knowledge regarding the key issues faced by their audience and stakeholder base and helps tailor messages to support stronger relationships. Jasim (2021) states that despite networking being an important communication tool, it has its own set of disadvantages. According to Temel and Durst (2021) networking tools require in-depth information and technology knowledge and can place an organizations image and reputation at risk due to a lack of control and dedicated time. Heidemann et al. (2012) state that utilizing networks is very time consuming as it may require organizations to stay active in order to keep in contact with its frequent online audiences or users. Therefore, each and every message, comment and feedback that is posted via network tools are not always completely controlled or regulated by the

organization (Hussain, 2015). Negative comments and feedback as well as controversial opinions received from audiences or clients can have a detrimental effect on an organizations image and reputation since numerous online users can view and spread it globally (Temel & Durst, 2021). In addition, information posted on the networks can be misused or abused by competitors or used for fraudulent purposes by hackers. Therefore, companies have the huge responsibility to cautiously monitor and handle all networking processes to avoid potential problems (Hussain, 2015).

Among the most important components of sports organizations, we can mention sports boards. The sports board is a sector within the sport organization which provides a favorable environment for the expansion of the relevant sport and creates motivation and also attracts people to sports and discovers talents and raises the level of sports skills based on the principles and foundations foreseen in the goals of the federation and organization (Ridenhour, 2019). These boards are representative and deputy of the relevant sports federation in the province, which implements and supervises the related activities at the provincial level in coordination with the general department of physical education in the province and in full compliance with the relevant laws and regulations (Ridenhour, 2019).

With significant changes taking place in organizational environments from the early 1980s onwards, sports organizations were also affected and their survival was challenged, so that the continuation of the current approaches in sports organizations and especially sports boards seemed impossible. In order to overcome these challenges, the need for transformation and fundamental changes in the decision-making structure and policy of these boards became necessary and vital (Sage, 2015). Accordingly, sports organizations should look for alternative decision-making methods instead of the traditional ones (hierarchy method and market strategies) in the formulation and designing of their general policy, at least in some parts of their policies (Kikulis, 2000). Recently, networking models have been proposed that strengthen the infrastructure of civil societies and have a very constructive, positive and influential role in the participation of all sectors in order to design public policies. Networking is not only an advertising and communication tool but a comprehensive strategy to achieve business success (Ruparel et al., 2020). This process gives companies the ability to communicate with different people, create new business opportunities and increase brand recognition. Networking in all its forms can help the organizations achieve their business goals (Ruparel et al., 2020). One of the most common forms of network governance is related to the provision of desirable social services and considering the public interest through the participation of various governmental, private and non-profit sectors in decision making processes (Klijn & Koppenjan, 2015). The primary goal of this type of participation is to strengthen the relations between different parts of sports organizations and societies and improve performance in different areas of policy-making through synergy resulting from these relations (Klijn & Koppenjan, 2015). Therefore, it seems logical to abandon the traditional methods of policy and decision making. Because they do not seem to be effective anymore (Putnam, 2015).

On the other hand, in the current era, the technological and scientific changes are happening so rapidly that many scientists believe that the speed of innovation in the products produced with high-level technology and the scientific developments have exceeded the speed of human learning (Makridakis, 2017). Therefore, sports organizations and boards may not be capable of getting at the same pace with learning speed even if they use all their strategies, spend all their time and human investments on learning (Makridakis, 2017). Researchers believe that networking plays an important role in improving the performance of sports organizations and boards and creating growth and competitive advantage for them (Gloor, 2006; Hernández-Carrión et al., 2017).

This research is trying to investigate the factors affecting networking capabilities of the sport boards in the north-western provinces of Iran.

2. Theoretical background

2.1. Networking in Terms of Services and Products

Networking improves the sense of creativity and innovation in sport organizations. Networking makes sports organizations use all their internal and external capacities to achieve the best results out of the products and services and provide new services (Williams & Chinn, 2010). Kornspan and Duve (2013) stated that networking helps to provide high quality services in sports organizations. By networking, sport organizations can submit their services in all aspects such as ticketing, organizing events, selling sportswear and branding in the best way possible (Williams & Chinn, 2010). Considering the lack of research related to the role of networking in providing new products and services in sports boards, the following hypothesis is proposed:

H1: Sports boards of the north-western provinces of Iran have networking capabilities in terms of providing special services and products.

2.2. Networking Capabilities in Terms of Processes

The dynamic features in networks, including components related to buying and selling and distribution of the goods and services in sport organizations, are called the processes which are necessary to achieve the organizational goals and play a vital role in highlighting the organizational functions (Slack & Parent, 2006). The contribution of these relations, structures and dynamic processes in the development of the networks should be taken into serious consideration. These processes should be managed efficiently in order to gain organizational advantage through the use of network structures (Capó-Vicedo et al., 2011). Nicholson et al. (2015) stated that networking in processes improves the performance of sports boards in the commercial dimension. However, no research has been implemented regarding networking of the processes in sports boards, so the following hypothesis is proposed:

H2: Sports boards of the north-western provinces of Iran have networking capabilities in terms of the processes they take to carry out their duties.

2.3. Networking Capabilities of the Employees

Networking capabilities of the employees play a great role in advancing organizational goals (Rohe & Chlebna, 2022). Direct communication between employees and customers through social networking and other means of communication enables organizations to communicate directly with target customers (Govindan et al., 2020). These communications not only enable the sending of attractive and effective marketing messages, but these can improve the customer experience, solve immediate problems, and turn regular customers into loyal ones (Agbim, 2018). Through these communications, organizations can quickly react to customer feedback and update marketing strategies according to needs and preferences. In this way, networking allows organizations to increase sales through new marketing approaches and, as a result, achieve their business goals (Dašić et al., 2021). In sport organizations where the jobs are very specialized, the employees should be equipped with networking capabilities to join these somehow distinct jobs and also to connect the organization with other organizations outside (Kramer, 2010). The researches have shown that the overall ability of the sport organizations in setting networking in the organization depends a lot on the employees' capabilities (Harris et al., 2021). Besides, the employees' ability in working with computer systems plays a great deal in this respect (Erickson, 2017). Networking can lead to better selection of employees in more specialized departments and improves interaction between different departments (Rohe & Chlebna, 2022). Therefore the following hypothesis is proposed:

H3: The employees of the sports boards in the north-western provinces of Iran have networking capabilities.

2.4. Networking Capabilities of the Managers

A capable manager must be able to create a structure of people inside and outside the organization in order to use the power of the networks to manage the relationships related to determining the strategies and leading the employees. In fact, it can be said that networking is a professional activity that is more than anything based on social and psychological processes (Dašić et al., 2021). Smart networking makes businessmen and entrepreneurs use this very practical opportunity to shape their business and job relationships (Riva et al., 2015).

In this way, managers and leaders of organizations can identify and create work opportunities in the best way or plan their organizational strategies based on those opportunities (Dašić et al., 2021). Also, this useful and efficient tool enables the exchange of information between the employees of different organizations, and managers can look for potential permanent work partners by using this tool (Riva et al., 2015). Having examined the development of the networks in the Scottish health care system, Kapucu and Hu (2020) introduced management and governance as the main issues in the effectiveness of the network. Network management involves facilitation and "activation" processes rather than a commanding and controlling one hindering progress and reducing trust between members. Network managers must be

influential and must provide the necessary motivation to keep the network functioning properly (Kapucu & Garayev, 2013). Good management in the sport organization provides collective actions, obtains resources, and creates shared belongings and commitments among members (Knoke, 2019). As a result, managers are of great importance in the networking management of the sport organizations. Therefore, the following hypothesis is presented:

H4: The managers of sports boards in the north-western provinces of Iran have networking capabilities.

2.5. Networking Capabilities in Terms of Informational Systems

Informational systems are a set of interdependent components that support decision-making and control in organizations by collecting, processing, storing and distributing information data. This system helps managers and employees of organizations to analyze or simulate organizational issues in addition to helping to coordinate organizational operations (Joseph & Gaba, 2020). Networking as a rich source of market information, plays a vital role in business success. Communication with colleagues, customers and even competitors enables sharing of vital information about trends, market changes, customer needs and preferences (Dašić et al., 2021). This information can be used as a strategic tool for macro decisions and marketing strategies (Dašić et al., 2021). Through networking, companies can quickly react to market changes and customer needs and adapt themselves with this information to improve the products and services (Hardwick et al., 2013). In addition, this information has a high value for analyzing competitors, predicting market trends, and providing new solutions to achieve greater success. As a result, networking allows companies to make the most optimal use of market information and achieve successful strategies (Rainer & Prince, 2021). Information systems perform three major functions: data input, data processing, and data output. In other words, the data is entered into the information system, processing is executed on it to turn it into some specific form of information, and this information is submitted to the consumers in one way or other (Rainer et al., 2020). In these systems, mainly there should be feedback from consumers to be used for improving the system. Although the mechanism of information systems as described above is very similar to a computer, the nature of an information system is beyond a computer or software. Computer and software are tools and components that make up an information system; but they are not able to produce the information that an organization needs on its own (Murthy & Schafer, 2011). Networking of information systems in the sport organizations has been mentioned as a basic step in order to set up networking in the organization as a whole (Wäsche et al., 2017). Therefore, the following hypothesis is presented:

H5: The information systems among the sports boards in the north-western provinces of Iran have networking capabilities.

2.6. Networking Capabilities in Terms of Organizational Structures

In the past, most sport organizations functioned relatively autonomously and were not directly or indirectly related to other organizations, unless there were some functions that were closely related. However, today the interrelationships between organizations have increased rapidly and there are relationships with diverse types of organizations including public and private sectors. This led to the adoption of the term "inter-organizational networking" where competitors do not act disconnectedly but are related to each other closely leading to a greater amount of cooperation between them where information flows freely among the competitors and organizations (Wäsche, 2015). On the other hand, communication and interaction within the organization are some of the other aspects of organizational structure. Meetings, internal discussions and communication between teams and members of the organization are very important in this regard (Mitrovic et al., 2019). These communications can improve cohesion and coordination in the organization and by increasing communications between members, ideas and criticisms can be exchanged in the best way possible (Rainer & Prince, 2021). Also, networking strengthens the motivation and solidarity within the organization and as a result, helps to succeed and improve the overall performance of the business (Dašić et al., 2021). Therefore, by creating effective internal communication, companies can use their internal potential and talent in the best way (Agbim, 2018). Russell and Smorodinskaya (2018) define inter-organizational networking as follows: "any relatively stable pattern of relationships or links between organizations or between organizations and individuals, where these relationships express a recognizable type of accountability (however weak and yet often limited), whether formal or informal in character, weak or strong, loose or firm, limited or boundless. This makes an advantageous synergy in inter-organizational networks and leverages information sharing and encourages the employees in the sport organization leading to an easier process of decision making due to the ability to exchange information more quickly than non-network competitors (Nave & Ferreira, 2022). Intra-organizational network structures are characterized by an internal configuration that uses a lateral direction of intra-organizational communications rather than a vertical one and exploits advising process rather than commanding ones. Authority is distributed throughout the networks and information is available from many diverse sources at critical moments in decision-making processes (Kato et al., 2011). Accordingly the researcher poses the following hypothesis:

H6: The organizational structures of the sports boards in the north-western provinces of Iran have networking capabilities.

2.7. Organizational Culture

Organizational culture is a new issue that has recently been raised in the field of organizational behavior and management knowledge. In organizations, all the members of the organization agree that an invisible hand guides them through a certain behavior (Chatman & O'Reilly, 2016). That invisible hand is the culture. By knowing

and better understanding the organizational culture, we can justify the behavior of members in a better way and it can be considered as a launching pad for the development of the organization (Chatman & O'Reilly, 2016). By organizational culture we mean a system in which members have a common inference about their organization, which separates two organizations from each other. Facilitating the sharing of experiences creates a cultural cooperative environment where people can easily benefit from each other's experiences and improve their overall performance and achieve greater success by improving the organization's macro knowledge (Anwar & Ali Shah, 2020). This process of sharing long-term experiences allows companies to quickly respond to challenges and create new solutions with their past experiences and those of others (Agostini & Nosella, 2019). Organizational culture as a set of common values affects the behavior and mentality of the organization members. Wells and McLean (2020) think of the organizational culture as a living system. They say organizational culture is a pattern of behavior shown by the members and the way they think and feel and treat with each other (Wells & McLean, 2020). Findings of Mitrovic et al. (2019) have shown that making networks through the organizational cultures is important in the development of sport organizations. Therefore, the following hypothesis is proposed:

H7: Organizational cultures is important in the development of networking capabilities in the sports boards of the north-western provinces of Iran.

Therefore, it can be said that almost all sports organizations and boards, regardless of their national origin and size, are confronted with the fact that they cannot reach their goals in today's competitive environment unless they participate in global markets and networks (Chelladurai, 2014). So, in the current era of competition, sports boards and organizations have come to the conclusion that they cannot reach their desired position in the market without making advantage of the networks (Ferrand & McCarthy, 2008). Accordingly, this research is trying to investigate the possibility of networking in sports boards and proposes the following hypothesis:

H8: The sports boards of the north-western provinces of Iran have networking capabilities.

3. Methodology

The current research is applied in terms of purpose and descriptive in terms of methodology, in which the employees of sport boards in the north-western provinces of Iran in 2020-2023 were selected as sample. The statistical population of the sports board staffs in the north-western provinces was 1832, from which a sample of 318 subjects were randomly selected according to Morgan and Krejcie table. Table 1 provides information about the target statistical population.

Table 1. Frequency Distribution of the Statistical Sample of the Subjects.

Province	Number
sports board staffs of Ardabil province	63
sports board staffs of west Azarbaijan province	82
sports board staffs of east Azarbaijan province	73
sports board staffs of zanjan province	53
sports board staffs of Ghazvin province	47

In this research, data were collected through the researcher-made Business Networking Questionnaire. The researcher reviewed secondary data including the books, magazines and documents to design the questionnaire. The questionnaire was composed of 32 questions and 7 dimensions including: 1- Networking ability of the services and products (4 questions), 2- Networking ability of processes (4 questions), 3- Networking ability of employees (5 questions), 4- Networking ability of managers (6 questions), 5- Networking ability of information system (4 questions), 6- Networking ability of organizational structure (5 questions) and 7- Networking ability of organizational culture (4 questions). The importance of each question in this questionnaire was rated based on a five-point Likert scale from completely agree (1) to completely disagree (5). The face and content validity was confirmed by sports management professors and in order to determine the reliability of the questionnaire, Cronbach's alpha method was used by SPSS 26 software.

Table 2. Results of Reliability Analysis of Research Variables.

Variable	Reliability Coefficient
Networking ability of a product	0.71
Networking ability of processes	0.81
Networking ability of employees	0.82
Networking ability of managers	0.80
Networking ability of information system	0.87
Networking ability of organizational structure	0.72
Networking ability of organizational culture	0.86

Descriptive statistics have been used to classify raw scores, design tables, frequency distribution, and calculate dispersion indices such as the mean and standard deviation of networking features, as well as average responses. The normality of data distribution was determined using the skewness and kurtosis parameters, and one-sample t-test was used to check the significance of the answers. According to table 3, skewness and kurtosis parameters for all the variables is between -2 and +2. So the distribution of the variables in the research groups is normal. SPSS 26 software was used for statistical analysis of data.

Table 3. Normality of the Distribution of the Research Variables

Networking parameters	The parameters of descriptive statistics		
	Sd±Average	skewness	kurtosis
Networking ability of a product	3.72±2.13	0.498	0.441
Networking ability of processes	86.37±1.36	-0.435	0.410
Networking ability of employees	10.32±3.25	0.680	0.818

Networking ability of managers	77.32±4.25	-0/926	0.038
Networking ability of information system	05.07±5.31	0.334	-0/575
Networking ability of organizational structure	28.52±5.24	0.099	0.492
Networking ability of organizational culture	03/97±5.30	-0/233	0.155

4. Results

The results of demographic statistics of the respondents in terms of gender, age and education are presented in Table 4.

Table 4. Demographic profile of the sample.

Gender	F.	P.	Age	F.	P.	Education	F.	P.
Female	242	75.8	20<	26	8.1	Diploma	41	12.6
Male	76	24.2	20-25	47	14.6	Bachelor	195	61.5
			25-30	100	31.5	Masters	75	23.6
			>30	145	45.6	P.H.D	7	2.3

Testing the hypotheses:

H1: Sports boards of the north-western provinces of Iran have networking capabilities in terms of providing special services and products.

Table 5. Comparing the Average of the Networking Capability in Terms of the Products.

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
13.72	2.03	318	317	71.42	0.000

According to Table 5, a one-sample t-test was used to investigate this hypothesis, and the results showed that the average overall score of networking capability in terms of the products (services) was 13.72. According to the significance level obtained ($p = 0.000$), it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities in terms of the products (services).

H2: Sports boards of the north-western provinces of Iran have networking capabilities in terms of the processes they take to carry out their duties.

Table 6. Comparing the Average of the Networking Capability in terms of the Processes.

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
11.66	1.86	318	317	63.17	0.000

According to Table 6, a one-sample t-test was used to investigate this hypothesis, and the results showed that the average overall score of the networking capability of the sport boards in terms of the process was 11.66. According to the significance level obtained ($p = 0.000$), it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities in terms of the processes.

H3: The employees of the sports boards in the north-western provinces of Iran have networking capabilities.

Table 7. Comparing the Average of the Networking Capability of the employees.

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
25.03	3.10	318	317	96.10	0.000

According to Table 7, a one-sample t-test was used to investigate this hypothesis and the results showed that the average overall score of the networking capability of the employees was 25.03. According to the significance level obtained ($p = 0.000$), it can be concluded that the employees in the sports boards of the north-western provinces of Iran have networking capabilities.

H4: The managers of sports boards in the north-western provinces of Iran have networking capabilities.

Table 8. Comparing the Average of the Networking Capability of the Managers.

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
25.03	4.77	318	317	63.47	0.000

According to Table 8, a one-sample t-test was used to investigate this hypothesis and the results showed that the average overall score of the networking capability of the managers was 25.03. According to the significance level obtained ($p = 0.000$), it can be concluded that the managers of the sports boards in the north-western provinces of Iran have networking capabilities.

H5: The information systems among the sports boards of the north-western provinces of Iran have networking capabilities.

Table 9. Comparing the Average of the Networking Capability of the Information Systems

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
31.07	5.05	318	317	75/36	0.000

According to Table 9, a one-sample t-test was used to investigate this hypothesis and the results showed that the average overall score of the networking capability of the sport boards in terms of information systems was 31.07. According to the significance level obtained ($p = 0.000$), it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities in terms of information systems.

H6: The organizational structures of the sports boards in the north-western provinces of Iran have networking capabilities.

Table 10. Comparing the Average of the Networking Capability in Terms of Organizational Structures

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
13.72	5.28	318	317	55.21	0.000

According to Table 10, a one-sample t-test was used to investigate this hypothesis and the results showed that the average overall score of the networking capability of sport boards in terms of organizational structures was 13.72. According to the significance level obtained ($p = 0.000$), it can be concluded that the sport boards of the north-western provinces of Iran have networking capabilities in terms of organizational structures.

H7: Organizational cultures is important in the development of networking capabilities in the sports boards of the north-western provinces of Iran.

Table 11. Comparing the Average of the Networking Capability in Terms of Organizational Culture.

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
30.92	5.03	318	317	75.11	0.000

According to Table 11, a one-sample t-test was used to investigate this hypothesis and the results showed that the average overall score of the effect of organizational cultures on the development of networking capabilities in the sports boards of the north-western provinces of the country was 30.92. According to the significance level obtained ($p = 0.000$), it can be concluded that organizational culture was significantly effective on the development of networking capabilities in the sport boards of the north-western provinces of Iran.

H8: The sports boards of the north-western provinces of the country have networking capabilities.

Table 12. Comparing the Average of the Networking Capability of Sports Boards in the north-western provinces of the country.

Average	Standard Deviation	Number	Degrees of Freedom (DF)	T-test	Significant level
162.41	16.41	318	317	131.37	0.000

According to Table 12, a one-sample t-test was used to investigate this hypothesis and the results showed that the average overall score of the networking capability of sports boards in the north-western provinces of Iran was 162.41. According to the significance level obtained ($p = 0.000$), it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities.

5. Managerial implications

Networking is one of the important pillars of organizational management. Every manager in any position needs special tools, including powerful networking, to be successful in his position, so that after building a coherent organizational network, he can lead this coherent structure to his desired position.

The results of this research have practical implications for the managers of sports boards and organizations in order to adopt the best management networking strategies in their organization. According to the results of this research, the networking process in sports organization plays a great role in the effective management of the organization. That is why sports managers should not only correctly define what their goals are but also consider how to make a network through different elements of their organization including their products, stakeholders, consumers, employees and managerial processes involving their organization. In addition, sport managers should focus on creating a network between all the stakeholders of the organization including the supporters, employees, and consumers etc. to pave the way for the better handling of the organization through the challenges faced.

6. Discussion and Conclusion

According to the significance level obtained, it can be concluded that the Sports boards of the north-western provinces of Iran have networking capabilities in terms of providing special services and products. If we take a deep glance at this point, it is clear that the more we get engaged with networking in our businesses, the more we have access to different resources including knowledge ones, and this factor can increase the ability to offer new products. Regarding the provision of new products and services using networking in sports organizations and boards, it must be said that one of the important applications of networking in these organizations was formed during the Covid 19 pandemic, where the sports managers had to pave the way for the provision of new services and products by networking on platforms such as Eita, Rubika, WhatsApp, etc., and this caused the creation of various jobs in the field of virtual spaces, as well as promoting the business atmosphere (Luo, 2021). Acosta et al. (2018) demonstrated in their research that the components of network operations have a positive and significant effect on the performance of the exporting and importing companies and these companies can improve their performance by coordinating their activities in the networks and using the knowledge and information of the other companies as well.

According to the significance level obtained, it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities in terms of the processes they take to carry out their duties. Networking activities get facilitated after arriving at the distribution channels of a product. That is a reason why production expenses get reduced thanks to using the networks to share the resources. For example, the process of holding sports events can be organized in the best possible way by networking. Using network processes in the computers and media platforms to inform

and carry out all the necessary procedures can help the boards hold the events in an optimal way, and on the other hand, it causes high financial savings, speeds up the processes and earns money for the organization. Moreover, holding sport event is expensive for a small sports board, but these costs are significantly reduced for a group of boards in a city because they share the duties between each other (Agozzino et al., 2024). This issue is reinforced due to the existence of stronger links in sports boards. Also, informing and attracting people for sporting events in sport boards expedites considerably in a networking mode due to the capability of the platforms in gathering the athletes from different parts. All these issues pave the way for the emergence of new businesses and the overflow of the money into the organization.

According to the significance level obtained, it can be concluded that the employees of the sports boards of the north-western provinces of Iran have networking capabilities which is consistent with the findings of Barbu et al. (2018), who pointed to the increase in the sharing of human resources and the improvement of their performance in this field. In other words, the boards achieve better international performance by using network resources such as technical abilities, network management, creating common features with other companies, integrating and deploying valuable information, and sharing information. This is consistent with the findings of Garousi Mokhtarzadeh et al. (2020) who claimed that network capabilities include human resources, synergy and information sharing, which have a positive effect on performance. This issue reflects another prerequisite of networking in the organization, which is training. Organizations and sports boards should spend a part of their expenses to train their employees on the basics of networking. In other words, if sports organizations spend part of their income on training in this field, they will gain a lot of benefits through income generation in the long run (Ezuma & Ismail, 2017).

According to the significance level obtained, it can be concluded that the managers of the sports boards of the north-western provinces of Iran have networking capabilities. Silvers et al. (2019) while examining network development in the Scottish health care system, identified managers as the most effective and efficient members of the networks. Network management involves facilitation and "activation" rather than a command and control approach, and a manipulative style may hinder progress and reduce trust among members (Silvers et al., 2019). Network managers must be influential and must provide the necessary motivation to keep the network functioning properly (Rodan & Galunic, 2004). Good management secures collective action, obtains resources, and creates shared belonging and commitment among members until needed in the network (Flanagin et al., 2006). As a result, the management of the networks should also be taken as granted due to its external influence on the process (Flanagin et al., 2006).

According to the significance level obtained, it can be concluded that the informational systems of the sports boards in north-western provinces of Iran have networking capabilities. It can be said that the informational processes and systems used in the boards provide the basis for the emergence of new activities on one hand and enable clubs to provide integrated services through intelligent systems with

greater coordination on the other hand due to the similarity of the activities within the boards. [Freel \(2005\)](#) stated that technological innovations are not so much observed in small companies such as sport boards. The increase in the business networks can remove this obstacle and sports clubs can standardize their activities and as a result launch new information systems. As mentioned by ([Wicker & Breuer, 2013](#)), this increases the entrepreneurial performances and is considered as a new source of income for the boards of the provinces, all in the shadow of creating a powerful business network.

According to the significance level obtained, it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities in terms of organizational structure. As a result, we can say that networks describe a set of people and their structural connections. This conceptual field allows to examine how the initiation of these interpersonal interactions advantage the organization and the individuals as well. Therefore, as a conceptual research topic, network analysis can be applied to different types of organizations. This is due to the inherent characteristics of communicational matters and the relationships built that can ultimately be used in any organization or management structure to achieve organizational goals.

According to the significance level obtained, it can be concluded that the organizational culture effects the sports boards of the north-western provinces of Iran in terms of having networking capabilities. Organizational culture is the result of a lifetime of organizational activities, which is easily vulnerable in small businesses. [Zapata Cantu and Mondragon \(2016\)](#) reported understanding and receiving organizational norms, values and goals with the help of networks as an important component in the successful communications conducted by organization members. In fact, this capability exists in sports boards that have a network of communities; they can create and develop their own organizational culture and this can even be transferred to the clients in the target society.

According to the significance level obtained, it can be concluded that the sports boards of the north-western provinces of Iran have networking capabilities. This finding is in consistent with the findings of [Salamzadeh et al. \(2020\)](#) and [Norris \(2002\)](#). The sports board is an organization that provides a favorable environment for the expansion of the relevant sports field and creates motivation in the society regarding the relevant sports and also attracts people to sports, discovers talents and raises the level of sports skills based on the principles and foundations foreseen in the goals of the federation and the organization. This board is the representative and successor of the relevant sports federation in the province, which implements and supervises related activities at the provincial level in coordination with the general department of physical education of the province and in full compliance with the relevant laws and regulations. In all, networking capability of the sport boards in the north-western provinces of Iran helps greatly in linking and connecting the collection of the boards in the field of business and sports, as well as attracting people to sports and discovering talents and raising the level of sports skills based on the principles and foundations foreseen in the goals of the federation.

As a conclusion for this study it can be said that the sports boards in the north-western provinces of Iran can advantage the full opportunity of networking in the sport and as a result develop sports in all its aspects.

Limitations and suggestions for further studies

As a limitation for this study, Lazar et al. (2020) mentioned external variables as influencing factors in this regard. These variables include system qualities, instructions provided, teaching, the involvement level of the users, and the way networking is to be implemented (Lazar et al., 2020). Therefore, future researches can focus on these factors. Secondly, examining demographic variables such as gender, age, education, income, etc. can add more comprehensive results to the relevant literature. Thirdly, according to Riva et al. (2015) networking is a professional activity that is more than anything based on social and psychological processes. Therefore, examining psychological variables can provide the possibility of more complex and detailed examination.

Disclosure statement and funding

The authors declare no potential conflicts of interest. The present study received no financial support from any organization or institution.

Acknowledgement

I am grateful of all those who helped me in the implementation of this research.

References

- Acosta, A. S., Crespo, Á. H., & Agudo, J. C. (2018). Effect of market orientation, network capability and entrepreneurial orientation on international performance of small and medium enterprises (SMEs). *International Business Review*, 27(6), 1128-1140.
- Agbim, K. C. (2018). Effect of entrepreneurial networks on family business development: A conceptual consideration. *International Journal of Small and Medium Enterprises*, 1(2), 13-25.
- Agostini, L., & Nosella, A. (2019). Inter-organizational relationships involving SMEs: A bibliographic investigation into the state of the art. *Long Range Planning*, 52(1), 1-31.
- Agazzino, A., O'Hallarn, B., Stensland, P., & Strode, J. (2024). Sport Social Hub: Using the power of collaboration to develop hands-on social media competencies. *The COSMA Journal*, 1(1), 5.
- Anwar, M., & Ali Shah, S. Z. (2020). Managerial networking and business model innovation: Empirical study of new ventures in an emerging economy. *Journal of Small Business & Entrepreneurship*, 32(3), 265-286.
- Barbu, C. M., Bratu, R. Ş., & Sîrbu, E. M. (2018). Business models of the sharing economy. *Revista de Management Comparat International*, 19(2), 154-166.

- Capó-Vicedo, J., Mula, J., & Capó, J. (2011). A social network-based organizational model for improving knowledge management in supply chains. *Supply Chain Management: An International Journal*, 16(5), 379-388.
- Chatman, J. A., & O'Reilly, C. A. (2016). Paradigm lost: Reinvigorating the study of organizational culture. *Research in organizational behavior*, 36, 199-224.
- Chelladurai, P. (2014). *Managing organizations for sport and physical activity: A systems perspective*. Routledge.
- Chen, Y., Kumara, E. K., & Sivakumar, V. (2021). Investigation of finance industry on risk awareness model and digital economic growth. *Annals of Operations Research*, 1-22.
- Child, J., Faulkner, D., Tallman, S., & Hsieh, L. (2019). *Cooperative strategy: Managing alliances and networks*. Oxford University Press.
- Dašić, D., Ratković, M., & Pavlović, M. (2021). Commercial aspects of personal branding of athletes on social networks. *Marketing*, 52(2), 118-131.
- Engel, Y., Kaandorp, M., & Elfring, T. (2017). Toward a dynamic process model of entrepreneurial networking under uncertainty. *Journal of business venturing*, 32(1), 35-51.
- Erickson, B. H. (2017). Good networks and good jobs: The value of social capital to employers and employees. In *Social capital* (pp. 127-158). Routledge.
- Ezuma, K. E., & Ismail, M. (2017). Conceptualizing the Influence of Network Competence on Entrepreneurship Growth in Small and Medium Enterprises. *Global Business & Management Research*, 9(2).
- Ferrand, A., & McCarthy, S. (2008). *Marketing the sports organisation: Building networks and relationships*. Routledge.
- Flanagin, A. J., Stohl, C., & Bimber, B. (2006). Modeling the structure of collective action. *Communication monographs*, 73(1), 29-54.
- Freel, M. S. (2005). Patterns of innovation and skills in small firms. *Technovation*, 25(2), 123-134.
- Garousi Mokhtarzadeh, N., Amoozad Mahdiraji, H., Jafarpanah, I., Jafari-Sadeghi, V., & Cardinali, S. (2020). Investigating the impact of networking capability on firm innovation performance: using the resource-action-performance framework. *Journal of Intellectual Capital*, 21(6), 1009-1034.
- Gloor, P. A. (2006). *Swarm creativity: Competitive advantage through collaborative innovation networks*. Oxford University Press.
- Govindan, K., Shankar, K. M., & Kannan, D. (2020). Achieving sustainable development goals through identifying and analyzing barriers to industrial sharing economy: A framework development. *International journal of production economics*, 227, 107575.
- Green, M. R. (2016). The impact of social networks in the development of a personal sports brand. *Sport, Business and Management: An International Journal*, 6(3), 274-294.
- Gustafsson, O., & Magnusson, J. (2016). INTER-ORGANIZATIONAL COLLABORATION-IN THEORY AND PRACTICE: Based on a multiple-case study in the automotive industry.
- Hambrick, M. E., Svensson, P. G., & Kang, S. (2019). Using social network analysis to investigate interorganizational relationships and capacity building within a sport for development coalition. *Sport management review*, 22(5), 708-723.
- Hardwick, J., Anderson, A. R., & Cruickshank, D. (2013). Trust formation processes in innovative collaborations: Networking as knowledge building practices. *European journal of innovation management*, 16(1), 4-21.

- Harris, S. J., Metzger, M. L., & Duening, T. N. (2021). Innovation in national governing bodies of sport: Investigating dynamic capabilities that drive growth. *European Sport Management Quarterly*, 21(1), 94-115.
- HasanPour, N., Balouei Jamkhaneh, H., & Jalali, R. (2023). Resilience of Home Health Care Providers in the Digital Era: A Scoping Review. *Developments in Information and Knowledge Management Systems for Business Applications: Volume 6*, 445-464.
- Heidemann, J., Klier, M., & Probst, F. (2012). Online social networks: A survey of a global phenomenon. *Computer networks*, 56(18), 3866-3878.
- Hernández-Carrión, C., Camarero-Izquierdo, C., & Gutiérrez-Cillán, J. (2017). Entrepreneurs' social capital and the economic performance of small businesses: The moderating role of competitive intensity and entrepreneurs' experience. *Strategic Entrepreneurship Journal*, 11(1), 61-89.
- Hussain, S. B. (2015). The impact of social media within the sporting industry. *Problems and perspectives in management*(13, Iss. 4 (contin.)), 223-229.
- Jasim, H. B. (2021). An Overview in Disadvantages of the Modern Communications. *New Insights into Physical Science*, 54.
- Joseph, J., & Gaba, V. (2020). Organizational structure, information processing, and decision-making: A retrospective and road map for research. *Academy of Management Annals*, 14(1), 267-302.
- Kapucu, N., & Garayev, V. (2013). Designing, managing, and sustaining functionally collaborative emergency management networks. *The American Review of Public Administration*, 43(3), 312-330.
- Kapucu, N., & Hu, Q. (2020). *Network governance: Concepts, theories, and applications*. Routledge.
- Kato, T., Numagami, T., & Karube, M. (2011). Types of intra-organizational networks and upward strategic communication. *Hitotsubashi journal of commerce and management*, 21-37.
- Kikulis, L. M. (2000). Continuity and change in governance and decision making in national sport organizations: Institutional explanations. *Journal of Sport Management*, 14(4), 293-320.
- Klijin, E. H., & Koppenjan, J. (2015). *Governance networks in the public sector*. Routledge.
- Knoke, D. (2019). *Organizing for collective action: The political economies of associations*. Routledge.
- Kornspan, A. S., & Duve, M. A. (2013). Networking in sport management: ideas and activities to enhance student engagement and career development. *Choregia*, 9(1).
- Kramer, M. W. (2010). *Organizational socialization: Joining and leaving organizations* (Vol. 6). Polity.
- Lazar, I. M., Panisoara, G., & Panisoara, I. O. (2020). Digital technology adoption scale in the blended learning context in higher education: Development, validation and testing of a specific tool. *PloS one*, 15(7), e0235957.
- Luo, C. (2021). Analyzing the impact of social networks and social behavior on electronic business during COVID-19 pandemic. *Information Processing & Management*, 58(5), 102667.
- Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46-60.
- Mitrega, M., Forkmann, S., Zaefarian, G., & Henneberg, S. C. (2017). Networking capability in supplier relationships and its impact on product innovation and firm performance. *International Journal of Operations & Production Management*, 37(5), 577-606.

- Mitrovic, D. M., Simovic, O., & Raicevic, M. (2019). The relationship between leadership styles and organizational culture in sport organizations. *Sport Mont*, 17(3), 85-89.
- Murthy, U. S., & Schafer, B. A. (2011). The effects of relative performance information and framed information systems feedback on performance in a production task. *Journal of Information Systems*, 25(1), 159-184.
- Nave, E., & Ferreira, J. J. (2022). A systematic international entrepreneurship review and future research agenda. *Cross Cultural & Strategic Management*, 29(3), 639-674.
- Nicholson, M., Kerr, A., & Sherwood, M. (2015). *Sport and the media: Managing the nexus*. Routledge.
- [Record #259 is using a reference type undefined in this output style.]
- Putnam, R. D. (2015). Bowling alone: America's declining social capital. In *The city reader* (pp. 188-196). Routledge.
- Rainer, R. K., & Prince, B. (2021). *Introduction to information systems*. John Wiley & Sons.
- Rainer, R. K., Prince, B., Sánchez-Rodríguez, C., Spletstoesser-Hogeterp, I., & Ebrahimi, S. (2020). *Introduction to information systems*. John Wiley & Sons.
- Ridenhour, K. F. (2019). Traditional Sports and Esports: The Patch to Collective Bargaining. *Iowa L. Rev.*, 105, 1857.
- Riva, G., Wiederhold, B. K., & Cipresso, P. (2015). *The psychology of social networking vol. 1: personal experience in online communities*. Walter de Gruyter GmbH & Co KG.
- Rodan, S., & Galunic, C. (2004). More than network structure: How knowledge heterogeneity influences managerial performance and innovativeness. *Strategic management journal*, 25(6), 541-562.
- Rohe, S., & Chlebna, C. (2022). The evolving role of networking organizations in advanced sustainability transitions. *Technological Forecasting and Social Change*, 183, 121916.
- Ruparel, N., Dhir, A., Tandon, A., Kaur, P., & Islam, J. U. (2020). The influence of online professional social media in human resource management: A systematic literature review. *Technology in Society*, 63, 101335.
- Russell, M. G., & Smorodinskaya, N. V. (2018). Leveraging complexity for ecosystemic innovation. *Technological Forecasting and Social Change*, 136, 114-131.
- Sacchetti, S., & Tortia, E. (2016). The extended governance of cooperative firms: inter-firm coordination and consistency of values. *Annals of Public and Cooperative Economics*, 87(1), 93-116.
- Sage, G. H. (2015). *Globalizing sport: How organizations, corporations, media, and politics are changing sport*. Routledge.
- Salamzadeh, Y., Kocherian, M., Plakhin, A., Volovik, T., & Davydova, E. (2020). Analysis of network interaction in the context of physical education and sports activities of universities. E3S Web of Conferences,
- Santos, T. O., Correia, A., Biscaia, R., & Pegoraro, A. (2019). Examining fan engagement through social networking sites. *International Journal of Sports Marketing and Sponsorship*, 20(1), 163-183.
- Silvers, J. A., Squeglia, L. M., Rømer Thomsen, K., Hudson, K. A., & Feldstein Ewing, S. W. (2019). Hunting for what works: Adolescents in addiction treatment. *Alcoholism: Clinical and Experimental Research*, 43(4), 578-592.
- Slack, T., & Parent, M. M. (2006). *Understanding sport organizations: The application of organization theory*. Human Kinetics.
- Temel, S., & Durst, S. (2021). Knowledge risk prevention strategies for handling new technological innovations in small businesses. *VINE journal of information and knowledge management systems*, 51(4), 655-673.

- Wäsche, H. (2015). Interorganizational cooperation in sport tourism: A social network analysis. *Sport management review*, 18(4), 542-554.
- Wäsche, H., Dickson, G., Woll, A., & Brandes, U. (2017). Social network analysis in sport research: an emerging paradigm. *European Journal for Sport and Society*, 14(2), 138-165.
- Wells, S., & McLean, J. (2020). Organizational Change as Emergence: A Living Systems Perspective. *Handbook of Systems Sciences*, 1-24.
- Wicker, P., & Breuer, C. (2013). Understanding the importance of organizational resources to explain organizational problems: Evidence from nonprofit sport clubs in Germany. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 24, 461-484.
- Williams, J., & Chinn, S. J. (2010). Meeting relationship-marketing goals through social media: A conceptual model for sport marketers. *International Journal of Sport Communication*, 3(4), 422-437.
- Zapata Cantu, L. E., & Mondragon, C. E. (2016). Knowledge management in Mexican NPOs: a comparative study in organizations with a local and national presence. *Journal of Knowledge Management*, 20(1), 69-87.