### TECHNOLOGY BUSINESS INCUBATORS AS A MECHANISM TO SUPPORT SPORTS MANAGEMENT RESEARCH APPLICATIONS: A COMPARATIVE STUDY BETWEEN EGYPT AND IRAQ

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#### Abstract

The research aims to develop a proposed perception of the role of technology business incubators as a mechanism to support sports management research applications through the importance, objectives, requirements, fields and obstacles of technology business incubators in supporting sports management research applications, The researcher used the descriptive (survey) approach, The sample was selected intentionally, using a comprehensive inventory method and consisted of (Teaching staff, Graduates And businessmen) The study population consisted of (133) individuals the study was implemented in the period from 1/12/2020 to 1/10/2021. The most important results of the study were the research sample agreed to develop a proposal for the role of technology business incubators as a mechanism to support sports management research applications. The results showed that there was significant relationship between businessmen in Alexandria and Kirkuk in favor of Alexandria businessmen. One of the most important conclusions was research sample agreed to implement a proposal for the role of technology business incubators as a mechanism to support sports management research applications. One of the most important recommendations of this study was to work on implementing a proposal for the role of technology business incubators as a mechanism to support sports management research applications. The creating a legal framework that organizes the work of these organizations, programs and initiatives concerned with supporting small and medium enterprises to achieve the maximum possible benefits from them.

Keywords: Technology. Business. Incubators support. Sports management. Research applications.

## Introduction and Research Problem

The material scientific progress today has no limits and does not seem to have an end. The progress of the major countries has increased by using information and communication technology, which has proven to be the key to continuous development. While developing countries are trying to catch up, to reduce the scientific and technological gap that separates them from the developed countries. The idea of establishing incubators in many countries, especially the Arab countries, came as a result of the problems that resulted from the implementation of economic transformation policies and the changing nature of the new global economic system, which resulted an increase in unemployment among educated youth, and the absence of providing financing and technical aid mechanisms for small projects (17:1).

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Technology incubators are scientific and technological support units, which is held in cooperation with universities and research centers, it aims to benefit from scientific research and technological innovations, and turn them into successful projects by relying on the infrastructure of these universities, such as laboratories, workshops and research devices, in addition to faculty members, researchers, workers, and experts in their fields (15:9).

It refers its importance to the marketing and transfer of technology, especially in relation to research and educational institutions such as universities and some technology bases, as these incubators focus on supporting, caring and activating the results of technological research and turning them into small projects, and thus they are an effective tool for technological development. (15: 262-268).

It mainly aims to commercialize science and technology through the contracts and agreements that are made between the financial and business community and the applications of scientific research; it is therefore based on partnership and cooperation as a strategy for economic development. Technological progress based on the ability to create and innovate is born as a result of coordination between the initiatives of the research sectors, or those that work to develop technologies and innovation in a hand, and government and private sector resources on the other hand, And that is through and within the local and national framework for economic growth (21:6).

Therefore, technology incubators can support the efforts of society in establishing real technological development, And the revitalization of scientific research by sponsoring cooperation between the owners of creative ideas, researchers and academics in hand, and the investment community and financing agencies on the other hand(6:3).

The researchers believe that higher education institutions in general and physical education colleges in particular are the mainstay of the country's progress in terms of the role assigned to it in the production of knowledge, and the implementation of scientific research aimed at introducing the government economy, and solving the problems of society. Management is considered as a distinct activity that has a direct relationship with most aspects of a person's life, and at the same time, it is an effective and successful way to achieve the desired goals in any field of human's life. Modern management also represents an essential aspect of the productive system in any society, it is affected by the

facts and the nature of society, and then what happens to the society in terms of changes and transformations that give the management a new color, from this standpoint, correct sports management represents the thinking mind of sports, and what leads to a difference between sports advanced countries and other countries is the level of quality and efficiency of sports management in them, consequently, sports management has become a profession that accommodates many disciplines in the labor market, and visions for different tracks or specialties in sports management are still proposed in response to the needs and requirements of the labor market.

Universities have become required to focus on partnership and cooperation between them and the production sectors in the context of the rapid technological and societal transformations taking place in the world, and technology incubators represent one of the mechanisms of that cooperation (16:4).

This is what the results of Khaled Salah Hanafi (2016) study showed in the contribution of universities in developing and activating scientific research and innovation, and serving societies and providing innovative solutions to their problems; At a time when Egyptian universities are suffering from problems that hinder them from fulfilling their roles, This led to a decline in the fields of scientific research and community service, and most Egyptian universities shifted to focus on their teaching and educational role(2: 22).

This proposal is also based on the necessity of eliminating the gap between the academic field and the applied field, and there should be full coordination between the various departments of sports management in the Egyptian and Iraqi colleges and the two countries sectors in a way that unites efforts and supports the performance and achievement of sustainable development plans. And through building strategic partnerships and relevant parties, in addition to promoting common national values and increasing the bonds of citizenship, to become the sports management departments in the Faculties of Physical Education, an important and vital part of the Egyptian and Iraqi universities, which are ambitious institutions pioneering in providing economic and social services to be a source of pride and inspiration for the Arab community.

The research aims to develop a proposed perception of the role of technology business incubators as a mechanism to support sports management research applications, through the importance of technology business incubators in supporting sports management research applications, and the goals of technology business incubators in supporting sports management research applications, as well as the requirements for the success of technology business incubators to support sports management research applications, And the fields of support for technology business incubators for sports management research applications, and the obstacles facing technology business incubators for sports management research applications.

Definition of the term the incubator is an integrated work system that provides both ways from a well-equipped, suitable place, with all the capabilities required to start and develop the project, and this system is managed by a specific specialized department that provides all the necessary support to increase the success rates of small institution.

## **Research Procedures**

### First: Research methodology

The researchers used the survey method, which is considered one of the basic approaches in descriptive research due to its relevance to the nature of the research.

#### Second: Research population and sample

**Research population:** The researchers targeted the Faculties of Physical Education in the Republic of Egypt and the Republic of Iraq as a community to conduct the current research.

**Research sample:** according to the nature of the research objective, and in order for the sample to be representative of the overall population, the two researchers targeted a random sample of (133) individuals, and they were the ones who completed all the items of the questionnaire for the research, A sample of (15) was taken from the original population of the research and outside the basic sample to conduct the statistical transactions to standardized the questionnaire, distributed as shown in table 1 (Table 1). Table 1 shows the description of the basic research sample and the pilot study sample.

#### Data collection tool

The researchers designed a questionnaire form by following the scientific method of examining the most prominent 10 incubators and investment funds that finance entrepreneurs in Egypt and Iraq to determine their goals, requirements, and development. As a first step to benefit when designing the questionnaire for the current research. As well as Referring to Arab and foreign scientific sources, such as scientific letters, periodicals, and literature related to the fields of administration, sports management, investment, and technology business incubators, as well as seeking assistance from the Egyptian Knowledge Bank and international information network (Internet) services. And Putting in a number of phrases and phrasing it to suit the objective and research sample, When choosing them, it was taken into account

that all of them have a positive trend, and a triple Likert scale (agree / agree to some extent / disagree) was made to respond to the sample's opinions on the statements. Thus, the questionnaire form became in its initial form before conducting scientific transactions on it for standardization.

### Scientific transactions of the questionnaire form

Validity of the questionnaire form: Validate internal consistency, the validity of internal consistency was calculated by means of (Spearman) coefficient to calculate the correlation coefficients between the degree of each phrase and the axis it belongs to and the total degree of the questionnaire and also the degree of each axis and the total score of the questionnaire, which is as shown in table 2 (Table 2).

a. Table 2 shows the correlation coefficients between the degree of each phrase, and the axis it belongs to as well as, the degree of each axis and the total degree of the questionnaire. And that ranged between (0.67, 0.88) for phrases within the axes, as it ranged between (0.98, 0.92) for the axes. The total score of the questionnaire form reached (0.94), and all of them were statistically significant at a significant level (0.05) with a value of (0.497), which indicates a high correlation.

b. Reliability of the questionnaire: (the alpha cronbach coefficient)

c. The reliability coefficient of the questionnaire was calculated using alpha cronbach coefficient, and it is as shown in table (Table 3):

d. Table 3 shows the reliability coefficient of the questionnaire using alpha cronbach coefficient, where it becomes clear that the reliability coefficients were high, the values of the reliability coefficients for the phrases within the axes ranged between (0.805, 0.877), It was also less than the reliability coefficient of the axes to which it belongs, meaning that all phrases are constant and reliable, since the interference of the phrases does not lead to a decrease in the overall reliability coefficient of the axes to which they belong. The reliability coefficients for the axes of the questionnaire ranged between (0.817 and 0.881), they are also high reliability coefficients, which indicate their consistency and reliability. The overall reliability coefficient of the questionnaire form was (0.883).

From the previous procedures, by calculating the validity and reliability of the questionnaire, the researchers made sure of its validity and ready to be implemented. It consists of (5) axes and (44) phrases that's fall under it, and it is answered with one of the three answers (agree - agree to some extent - disagree), the three answers presented in the scale are given the scores (3, 2, and 1), respectively.

#### Presentation and Discussion of Research Results

To verify the objectives of the research, the two researchers conducted

Table 1: illustrates the description of the basic research sample and the pilot study sample.

	Basic Research Sample		The total number of	Pilot stu	The total number		
	Egypt	Kurdstan Iraq	the research sample	Egypt	Kurdstan Iraq	of the Pilot study sample	
Teaching staff	20	21	41	3	2	5	
graduates	35	30	65	4	4	8	
businessmen	15	12	27	1	1	2	
total	70	63	133	8	7	15	

Table 2: Correlation coefficients between the degree of each phrase and the axis it belongs to and the total degree of the questionnaire and the degree of each axis and the total score of the questionnaire.

axes of	the questio	nnaire													
first ax	is	second	axis	third a	xis	fourth	Axis			fifth ax	cis				
phrase	Correlation coefficient	phrase	Correlation coefficient	phrase	Correlation coefficient	phrase	Correlation coefficient	phrase	Correlation coefficient						
1	0.83	5	0.71	9	0.67	13	0.82	20	0.68	26	0.83	33	0.69	40	0.86
2	0.86	6	0.86	10	0.79	14	0.71	21	0.85	27	0.78	34	0.83	41	0.84
3	0.84	7	0.69	11	0.74	15	0.68	22	0.75	28	0.79	35	0.88	42	0.79
4	0.88	8	0.83	12	0.76	16	0.76	23	0.68	29	0.74	36	0.86	43	0.74
						17	0.85	24	0.79	30	0.72	37	0.84	44	0.65
						18	0.83	25	0.74	31	0.76	38	0.72		
						19	0.73			32	0.71	39	0.83		
Correla	tion coeffic	ients be	tween the d	egree of	each axis a	nd the t	otal score of	f the qu	estionnaire						
0.90		0.92		0.89		0.90				0.89					
Total s	core for the	questio	nnaire form	(0.94)											

Table 3: Correlation coefficients between the degree of each phrase and the axis it belongs to and the total degree of the questionnaire and the degree of each axis and the total score of the questionnaire.

axes of	the questio	nnaire													
first ax	is	second	axis	third a	xis	fourth	Axis			fifth ax	tis				
phrase	Correlation coefficient	phrase	Correlation coefficient	phrase	Correlation coefficient	phrase	Correlation coefficient	phrase	Correlation coefficient						
1	0.855	5	0.869	9	0.877	13	0.846	20	0.815	26	0.855	33	0.849	40	0.832
2	0.857	6	0.843	10	0.861	14	0.837	21	0.817	27	0.838	34	0.863	41	0.826
3	0.849	7	0.869	11	0.855	15	0.815	22	0.805	28	0.844	35	0.809	42	0.823
4	0.855	8	0.843	12	0.847	16	0.837	23	0.849	29	0.877	36	0.832	43	0.828
						17	0.809	24	0.863	30	0.837	37	0.826	44	0.826
						18	0.844	25	0.809	31	0.826	38	0.823		
						19	0.833			32	0.855	39	0.828		
Correla	tion coeffic	ients be	tween the d	egree of	each axis a	nd the t	otal score of	f the qu	estionnaire						
0.861		0.881		0.869		0.817			(	).852					
overall	reliability c	oefficie	nt of the que	estionna	ire form(0.8	83)									

the following statistical transactions: Table 4 Approval percentages for the opinions of the research sample (n = 133).

The first axis: the importance of technology incubators in supporting sports management research applications: the approval percentage of the opinions of the research sample for (Alexandria University and the University of Kirkuk), ranged between (68.57%, 90%) (70%, 90%), (66.66%, 83.33%) for both graduates, teaching staff and businessmen, respectively, which indicated the need to determine the importance of technology incubators to support sports management research applications (Table 4).

And that result is consistent with what was indicated by the results of Adel Abdel-Fattah Salameh (2010). These incubators are distinguished by the presence of scientific and technological support units, and it is officially and scientifically linked to universities and research institutions, and encourages creative ideas of pioneers, Whether an individual or a group of scientific and academic researchers, and turning them into successful projects, by providing technical, administrative, production, marketing, financial, legal, and technical advisory services for new projects, to overcome all the difficulties associated with the start-up phase, and reduce the risk of failure(5: 101-102).

The second axis the objectives of the technology incubators in supporting sports management research applications: Where the approval percentage of the opinions of the research sample from (Alexandria University and the University of Kirkuk), ranged between (76.66%, 100%), (15%, 100%), (13.33%, 100%) for both graduates, teaching staff and businessmen respectively, which indicated the need to define objectives for technology incubators in supporting sports management research applications.

This confirmed by the results of Mansour Farah's (2001) study to facilitate these incubators in obtaining the necessary funding to provide advice in management, planning, training, marketing, and provide technical support through researchers, technicians and assistive technical tools (13: 16-17).

The third axis the requirements for the success of technology incubators to support sports management research applications: Where the approval percentage of the opinions of the research sample from (Alexandria University and the University of Kirkuk), ranged between (76.61%, 100%), (85%, 100%), (83.33%, 100%) for both graduates, teaching staff and businessmen respectively, Which indicated the need to define the requirements for the success of the technology incubators to support sports management research applications.

 This is what Qaddi Abdul Majeed (2006) confirms that these incubators create communication between universities, training centers and scientific research centers, and various economic activities help in marketing inventions and marketing them to investors, and create for postgraduate students and researchers an optimal use of their competence and capabilities and encourage their initiatives. (10: 6)

Muhammad Haykal (2002) indicates that most of the studies that dealt with this type of incubators point to the importance of their role in developing human resources, whether in terms of training and qualification to establish, manage and develop small and medium projects during their stay in the incubator or by stimulating these resources to work that is productive and economically feasible. (12: 197)

The fourth axis: areas of support for technology incubators for sports management research applications field of sponsorship: Where the approval percentage of the opinions of the research sample from (Alexandria University and the University of Kirkuk), ranged between (80%, 100%), (80%, 100%) for both graduates, teaching staff and businessmen respectively. while the field of support, the approval percentages for the opinions of the research sample (Alexandria University and Kirkuk University), ranged between (76.66%, 100%), (75%, 100%), (66.66%, 100%) for both graduates and teaching staff and businessmen respectively. As for the field of marketing support services, the approval percentages for the opinions of the research sample (Alexandria University), ranged between (76.66%, 90%), (75%, 100%), (66.66%, 100%) for both graduates, teaching staff and businessmen respectively, which indicated the need to identify fields to support incubators technology business for sports management research applications.

This is what Atef Al-Shabrawy (2007) Ibrahim indicates that the technological development process is to establish a management of modern production units, and advanced services, which can be done by importing these technologies from abroad and generating these technologies locally through national technological research and development centers and technological incubators. (7: 24)

Nevin (2013) believes that developing the local community through developing the surrounding business environment and making the incubator a nucleus for regional and local development and a center for spreading the spirit of self-employment among the young people wishing to join the labor market. (14: 89-122)

The researchers believe that higher education institutions need to increase investment in technology transfer offices responsible for establishing combined commercial projects between students and researchers on a hand and industrial sector Authorities on the other hand, In order to enhance commercial utilization of research. Companies and universities must realize that working in collaborative technological research contributes in transforming applied research into technological innovations that can transform society.

The fifth axis: the obstacles facing technology incubators to support sports management research applications (effective legislation, laws and regulations): Where the approval percentages for the opinions of the research sample from (Alexandria University and the University of Kirkuk), ranged between (82.85%, 100%), (80.95%, 100%), (75%, 100%) for both graduates, teaching staff and businessmen respectively. As for the scientific research system obstacle, the percentage of approval opinions of the research sample from (Alexandria University and Kirkuk University) ranged between (85.71%, 100%), (85%, 100%), (83.33%, 100%) for graduates, teaching staff and businessmen respectively. As well as teaching staff obstacle, where the approval opinions percentage of the research sample from (Alexandria University and the University of Kirkuk), ranged between (83.33%, 100%), (80.95%, 100%), (83.33%, 100%) for graduates, teaching staff and businessmen respectively. And also the researchers' obstacle, as the approval percentages for the opinions of the research sample from (Alexandria University and the University of Kirkuk), ranged between (80%, 100%), (76.66%, 100%) for graduates, teaching staff and businessmen respectively. Which indicated that there is agreement between the research sample on the obstacles facing technology business incubators to support sports management research.

This is what is confirmed by the results of the study of Abd al-Basit Muhammad Diab and Hanan al-Badri to solve the problems of scientific research centres and researchers, and convert their work into a productive reality, and support competencies of researchers in scientific research to achieve the desired development. (8: 9) **Table 4:** Shows the approval of the opinions of the research sample from (Alexandria University and the University of Kirkuk), which ranged between (68.57%, 100%), (70%, 100%), (66.66%, 100%) for graduates, teaching staff and businessmen respectively.

Phrase No.	Phrase content	Alexandria University (Republic of Egypt) n = 70			University of Kirkuk (Republic of Iraq) N = 63				
		graduates	Teaching staff	businessmen	graduates	Teaching staff	businessmen		
The first a	xis: the importance of technology incubators in supporting spor	ts managem	ent research	applications					
1	Encouraging researchers, supporting them, and raising their level of applied research directed at community service and economic development.	68.57%	85%	%86.66	%73.33	%80.95	%83.33		
2	Providing an academic, psychological and social environment that supports creativity, distinction, innovation, and refinement of research talents for distinguished researchers	88.57%	70%	%66.66	%90	%76.19	%75		
3	Creating a close institutional link between the government sectors and its various institutions concerned with the fields of sports management research To benefit from the energies of researchers directed towards economic development through applied scientific research	80%	90%	%86.6	%76.66	%85.71	%83.33		
4	Keeping up with the developments in information and communication technology and employing them in the areas of sports management	85.57%	80%	%80.00	%83.33	%85.71	%83.33		
The secon	d axis: the objectives of the technology incubators in support of	f sports mana	igement rese	arch application	5				
5	Providing technical and guiding support to assist researchers in implementing their research projects in the various fields of knowledge for sports management fields and providing them with specialized professional skills.	100%	100%	%100	%96.66	%90.47	%91.66		
6	Providing the necessary mechanisms to incubate and sponsor researchers who have the ability to excel and innovation, and to encourage scientific research and development	80%	100%	%100	%90	%95.23	%100		
7	Taking into account the economics of scientific research, which includes securing the necessary funding and using it efficiently and effectively according to priorities in order to ensure its tributaries with the necessary resources to advance research in the fields of sports management	88.57%	80%	%80.00	%83.33	%76.19	%75		
8	Giving a greater role to the private sector to promote the development of research and applied projects, and to support scientific and technological resources to participate in making the future of sports management research fields	80%	15%	%13.33	%76.66	%28.57	%25		
The third a	axis: requirements for the success of technology incubators to s	upport sport	s manageme	nt research appl	ications				
9	The human factor such as entrepreneurs, inventors, and researchers, teaching staff as houses of academic expertise	100%	100%	%100	%96.66	%90.47	%91.66		
10	The organizational factor represented in administrative structures capable of sound strategic planning with specifying specializations and responsibilities	91.42%	85%	%86.66	%90	%85.71	%83.33		
11	The legislative factor in the availability of incentive systems to develop administrative procedures and implementation mechanisms to ensure the ease and speed of partnership between economic companies, universities and research centers based on knowledge	100%	90%	%93.33	%83.33	%85.71	%83033		
12	The financial factor that ensures easy access of researchers, inventors and innovators to subsidized economic capital	100%	100%	%100	%76.66	%95.23	%91.66		
The fourt	n axis: areas of support for technology incubators for sports ma	inagement re	search applie	cations A - the fie	ld of sponsors	hip			
13	Incubating and nurturing the owners of applied research and research projects and raising the chances of their success towards economic and social development	80%	100%	%100	%80	%100	%100		
14	Providing common basic services to support the owners of applied research and research projects by linking them with the agencies and institutions concerned with implementation	100%	80%	%80.00	%96.66	%85.71	%83.33		
15	Enhancing the leadership role of the owners of applied research and research projects in light of the presence of economic and social factors that support the spirit of creativity and innovation	88.57%	100%	%100	%90	%90.47	%83.33		
16	Providing the appropriate climate to unleash the potential of the talents for researchers in the fields of sports management to ensure new insights that help create an added value for specialized scientific research.	94.42%	90%	%86.66	%90	%95.23	%91.66		
B - sup	port field								
17	The existence of scientific and technological support mechanisms through technical and advisory support between researchers in the fields of sports management and partners concerned with investment and financing	85.71%	95%	%93.33	%83.33	%90.47	%91.66		

18	Providing legal services with their research projects and guaranteeing intellectual property rights and patents	100%	85%	%86.66	%100	%76.19	%75
19	Coordination with financing institutions and investment companies to face costs and set financial budgets and capital equipment for their research projects	82.71%	100%	%100	%80	%95.23	%91.66
20	Work on linking databases and information between researchers in the various fields of sports management and economic companies that support partnership opportunities between them	88.57%	85%	%80.00	%86.66	%90.47	%83.33
21	Training and developing researchers 'skills on modern administrative methods for managing research, research projects, and supervision and evaluation programs	82.71%	90%	%86.66	%76.66	85.71%	%83.33
C- Marketi	ng support services						
22	Transferring the results of applied research and research projects in the fields of sports management to reality by promoting and marketing them	85.57%	100%	%100	%86.66	%100	%100
23	Focusing on electronic marketing to create investment opportunities between the scientific research community and the financial and business community as a strategy for economic development	77.14%	85%	%86.66	%76.66	%90.47	%91.66
24	Disseminating marketing information that support applied research and pilot research projects	88.57%	75%	%66.66	%90	%80.95	%75
25	Building networks of communication between all concerned parties by organizing seminars and forums to find out developments and share experiences.	82.85%	90%	%86.66	%80	%80.95	%83.33
The fifth ax A - E	kis: the obstacles facing technology incubators to support sport Effective legislation, laws and regulations	s manageme	nt research a	pplications			
26	Weak legislation and laws that facilitate joint cooperation between economic companies and community institutions with the Ministry of Higher Education	100%	85%	%86.66	%100	%90.47	%91.66
27	The lack of a mechanism to facilitate the various partnerships by facilitating procedures and reducing time and effort.	82.85%	100%	%100	%80	%100	%83.33
28	Challenges at the level of linking higher education policies with policies adopted in other sectors of society.	88.57%	85%	%80.00	%83.33	%80.95	%83.33
29	The implementation of a highly centralized system in the development With the rigidity of thought for some responsible senior leaders in colleges and universities in making decisions related to scientific research	85.71%	90%	%86.66	%90	%90.47	%91.66
30	The absence of structures specialized in the development process for research in the various fields of sports management that facilitate innovation, creativity	100%	85%	%86.66	%100	%80.95	%75
31	Weakness of communication channels between sports management departments and colleges and the university to provide applied research opportunities commensurate with the sports management specialization.	82.85%	100%	%100	%90	%90.47	%100
32	The existence of deficiencies in the private financial budgets to finance and develop the necessary research tools and assistance	85.71%	85%	%80.00	%83.33	%90.47	%83.33
B - sc	ientific research system						
33	Insufficient financial resources needed to implement the research strategic plans.	100%	85%	%86.66	%96	%85.71	%91.66
34	The challenge of globalization and global competition has changed the course of the applied scientific research movement towards the direction of highlighting a product that can compete in the global market.	85.71%	100%	%100	%90	%90.47	%100
35	The challenge of advancing scientific research to meet the needs and requirements of society	100%	85%	%86.66	%90	%85.71	%83.33
36	The challenge of the information revolution, with the scientific and technological achievements it presented that had a great impact on the increasing gap between different countries.	100%	100%	%100	%100	%95.23	%91.66
C- teaching	g staff						
37	A brain drain of cadres and administrative leaderships from teaching staff in the fields of sports management	85.71%	100%	%100	%83.33	%100	%91.66
38	Failure of the teaching staff to devote completely to the research process	100%	85%	%86.66	%90	%80.95	%83.33
39	Natural resistance to change by some teaching staff members in the specialty or senior leaderships in colleges and universities towards the importance of sports management applications	85.71%	100%	%100	%90	%90.47	%83.33
40	Weakness of the job awareness and professional perception, which achieves the effectiveness of university research performance towards the specificity of applications in sports management fields	85.71%	85%	%86.66	%86.66%	%85.71	%100

	- Researchers							
41	<ul> <li>Weakness of the relationship between researchers and highly qualified scientific and technological competencies in the fields of sports management, especially those related to the labor market</li> </ul>	100%	80%	%80.00	%100	80.95 <b>%</b>	%100	
42	The lack of a clear philosophy between universities and economic companies to assist researchers in marketing the results of applied research, specializing in sports management	100%	100%	%100	%96.66	100 <b>%</b>	%100	
43	The researchers 'economic level is completely unsuitable for the completion of applied research projects	100%	100%	%100	%100	90.47 <b>%</b>	%83.33	
44	Administrative regulations that organize scientific research facing researchers to complete applied research projects	80%	100%	%100	%76.66	95.47 <b>%</b>	%91.66	

Table 5: Results of the (Mann-Whitney) test analysis to see the differences between the responses of the research sample.

sample	university	No.	arithmetic mean	Sum of Ranks	Mann-Whitney	Sig.(2-tailed)	Sig.
graduates	Alexandria	35	36.7	1284.5	395.5	0.086	Not sig.
	Kirkuk	30	28.68	860.5			
teaching staff	Alexandria	20 22.13		442.5	187.5	0.055	Not sig.
	Kirkuk	21	19.93	418.5			
businessmen	Alexandria	15	17.03	255.5	44.5	0.025	Sig.
	Kirkuk	12	10.21	122.5			

The researchers finds out from the results, and what guided the necessity of working on a proposal for the role of technology business incubators as a mechanism to support the applications of sports management research and that's to provide the required services in order to facilitate the marketing of technologies and research results in sports management field (Table 5).

It is clear from the data of table 5 That the arithmetic mean is (36.70) and the sum of ranks was (1284.50) for Alexandria graduates sample, While the arithmetic mean was (28.68) and sum of ranks was (860.50) for Kirkuk graduates sample, and to find out whether this difference is statistically significant or not, it is shown through the results for Nonparametric Mann-Whitney test that the statistical significance (0.086) is greater than (0.05) and this indicates that there is no difference between Alexandria and Kirkuk graduates about the proposal, meaning there is no significant difference among graduates.

As for the teaching staff sample, it shows that the arithmetic mean is (22.13) and the sum of ranks is (442.50) for the Alexandria graduate sample, While the arithmetic mean was (19.93) and the sum of ranks was(418.50) for Kirkuk graduate sample, and the statistical significance (0.055) is greater than (0.05), and this indicates that there is no difference between the teaching staff of Alexandria and Kirkuk regarding the proposal, which is mean that there are no significant differences between the teaching staff.

And for the businessmen sample, it shows that the arithmetic mean is (17.03) and the sum of ranks is (255.50) for Alexandria graduates sample, While the arithmetic mean was (10.21) and the sum of ranks was(122.50) for Kirkuk graduate sample, and the statistical significance (0.025) is smaller than (0.05). This indicates that there is a difference between Alexandria and Kirkuk businessmen about the proposal, meaning that there is a significant difference between businessmen in favour of Alexandria businessmen.

The researchers find out through the results that there is no difference between the teachers and the graduates at the Universities of Alexandria and Kirkuk regarding the proposal, this is due to the similarity of the curricula of the Faculties of Physical Education and Sports Sciences between the Universities of Alexandria and Kirkuk, and the orientation of the teachers and students towards the development of the Sports Management specialization in the field of technology, as for businessmen, there is a disagreement about the proposal, and the reason is due to the interest in the Republic of Egypt in the field of investment, and they have a role in advancing scientific research.

The study of Laila Abdel Rahim and Khadija Ladraa (2011) confirms that building knowledge societies capable of activating the role of technology incubators in adopting Arab thought and creativity and the necessity of utilizing the Arab mind and consider it as a capital, And utilize scientific research to bring changes that serve the Arab community and to reach advanced technical Arab applications. (22: 11)

## Conclusion

### The findings of the study

The research sample agreed to implement a proposal for the role of technology business incubators as a mechanism to support sports management research applications. The results showed that there is no significant relationship

between teaching staff and graduates of the Universities of Alexandria and Kirkuk, while the results showed that there is a significant relationship between Alexandria and Kirkuk businessmen in favour of Alexandria businessmen.

## Recommendations

The recommendations of the study are, the researchers recommend working on a proposal for the role of technology business incubators as a mechanism to support sports management research applications, and creating a legal framework that organizes the work of these institutions, programs and initiatives specialized in supporting small and medium projects to achieve the maximum possible benefits from them. And developing the curricula and outputs of higher education so that the curricula focus on encouraging the spirit of innovation to graduate students who are able to create creative ideas to be the nucleus of small-scale projects, by creating more centers to support creativity, build entrepreneurial ideas and scientific research in universities, and develop their activities, in addition to provide the necessary training for graduates to start their projects and develop them in the future in parallel with academic achievement.

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