

The Relationship between Intellectual Capital and Entrepreneurship in Private Higher Education Institutions in Benghazi – Libya

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Abstract: The study aims to addressing and defining the concept of intellectual capital and its relation to entrepreneurship in business organizations. Also, to identify the reality of the performance of educational institutions in Benghazi and assess the level of interest in the requirements of the transition to the adoption of intellectual capital as one of the elements of important assets. In addition to reaching results that may help to achieve entrepreneurship for the study sample as well as provide a proposed vision for development. The study population included the members of the teaching staff of the medical colleges at the Libyan of Medical Sciences University for the period from December 2022 to February 2023. The data for this study were collected by distributing a questionnaire form on a random sample of the study population. The study variables included intellectual capital in its three components as an independent variable, and entrepreneurship as a dependent variable. The statistical program SPSS was also used to analyze the data obtained. The results showed that there is a statistically significant correlation between intellectual capital and entrepreneurship, which led to acceptance of the null hypothesis and rejection of the alternative hypothesis. The study also recommended expanding the study to include the other private universities in Libya, as well as conducting such studies to include Libyan business organizations. In addition, to employing intellectual capital components in business organizations more effectively, in order to enhance their positive impact in achieving entrepreneurship.

Keywords: Entrepreneurship, Intellectual Capital, Business Organizations, Private Higher Education Institutions, Benghazi, Libya.

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1. INTRODUCTION

The world is witnessing wide and successive transformations in the fields of scientific, technical, technological and knowledge development. Also, the effects of changes in the business environment are reflected on all kinds of organizations. The developments that have happened and are still happened in the field of business have affected on many concepts of economics and management. The process takes place as long as there is an unstoppable dynamism and continuous movement that remains in

the world of business and organizations, not with the survival of the latter because no one is involved in that, but with the survival of the human mind and continuous thought. This reality is embodied by two well-known facts: The first is that in the past decades, excellence and superiority went to organizations that had large capital, rare natural resources, and a very important strategic location. The second is that we have come to live in a world it is characterized by the great accumulation of knowledge and information, which was accompanied by a change in methods of

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communication and methods of performing work, and this is nothing but the creation of the technology revolution and its endless rapid developments. Therefore, we are not wrong if we care to say that it is an era based on human knowledge as a basis of value and a source of wealth. Therefore, business organizations must strive to invest in, develop, and retain the human resource in order to enhance their strength and competitiveness, that is, to build renewable capital from human ideas, knowledge, and intellectual assets in general, and to pay attention to what develops the spirit of creativity and innovation and raises the performance of their employees. Educational institutions are not exempt from this, of course, and therefore must consider their relationship and position in the knowledge economy. The importance of research lies in the attention given to intellectual capital, as one of the new concepts that is still in the process of construction and development, but it has become a focus that requires attention, preservation and development because of the gains it adds that support the realization of entrepreneurship and the needs it meets and the services it provides. Thus, achieving returns and benefits for business organizations. The study aims to address and define the concept of intellectual capital and its relationship to entrepreneurship in business organizations. And to identify the reality of the performance of educational institutions in the city of Benghazi and evaluate their level of interest in the requirements of transformation to adopt intellectual capital as one of the important assets' elements. In addition to arriving at results that may help in achieving entrepreneurship appropriate to the study sample, as well as presenting a proposed vision for development. The paper unfolds as follows. Section 2 provides a review of the literature, and section 3 provides an overview of intellectual capital and entrepreneurship, followed by section 4 on the research methodology, sample and data, variables, and hypotheses. Section 5 provides discussion on the results while section 6 is the conclusion.

2. LITERATURE REVIEW

Wang, Chao and Chen (2010)

This study is based on a three-dimensional framework of intellectual capital that includes human capital, intellectual property, and reputational capital. This study aims to study the impact of intellectual capital in its three dimensions on corporate entrepreneurship and value creation. 58 companies were selected in the field of electronic industries and registered on the Taiwan Stock Exchange between 1995 and 2002. The results indicated a significant impact of intellectual capital on corporate entrepreneurship. The results also indicated that entrepreneurship leads to value creation in the companies studied.

Talebi and Bahamir (2012)

This study aimed to conduct an empirical review of the role of intellectual capital in organizing organizational entrepreneurship. In addition, it aimed to determine the impact of the dimensions of intellectual capital (human capital, structural capital, and relational capital) in creating an organizational spirit. The study population consisted of managers and employees of the Social Welfare Department in Sharmah Bakhtiari Province, Iran. The questionnaire was used as a tool of collecting study data. The results indicated that intellectual capital has an effective and positive impact on organizational entrepreneurship. However, of the three components of intellectual capital, the most effective influence on the organization of social welfare management projects has been human capital.

Ayar *et al.*, (2016)

This study aimed to examine the effects of the three main elements of intellectual capital on entrepreneurship in government institutions in Iran. The study data was collected by a questionnaire, where the principal's component analysis method and Linear Structural Relationship were used to analyze the data obtained. The results showed that there is a positive impact of each element of intellectual capital on organizational entrepreneurship in Iranian government institutions.

Safariyan and Enaayati (2018)

The aim of this study is to examine the impact of organizational learning on intellectual capital using university entrepreneurship as a mediator between organizational learning and intellectual capital in Islamic Azad universities in Mazandaran Province, Iran. The questionnaire was used as a tool of collecting study data. The study population consisted of 764 professors from Islamic Azad University in Mazandaran Province, and 260 of them were selected as a sample through a random cluster sample. The data were also analyzed using the structural equation approach and LISREL software. The results showed that organizational learning with a standardized coefficient of 0.88 and academic entrepreneurship with a standardized coefficient of 0.20 had a direct impact on intellectual capital, and organizational learning with a standardized coefficient of 0.72 had a direct impact on academic entrepreneurship. The results also showed that organizational learning and academic entrepreneurship have a significant impact on intellectual capital. On the other hand, academic entrepreneurship plays a mediating role in the relationship between intellectual capital and organizational learning.

This study is considered one of the first studies to examine the issue of intellectual capital and

entrepreneurship in the Libyan private university education sector. Previous studies were benefited from in forming a general idea about the study and enriching it, in addition to identifying the research gap between this study and previous studies. Previous studies were also used to design the study tool and help in interpreting and comparing the current results of the study. Previous studies did not examine the relationship between intellectual capital and entrepreneurship in private universities in the city of Benghazi.

Overview of Intellectual Capital and Entrepreneurship

a. Intellectual Capital

Intellectual capital can be defined as an important intangible asset in business today, especially in economies that rely heavily on technology. Intellectual capital, as an invaluable intangible asset, is managed and used to stimulate innovation and creativity, competitiveness, create value and enhance corporate performance (Bontis *et al.*, (2000) and Tayles *et al.*, 2007). According to Brooking (1997), intellectual capital refers to a set of intangible assets that can be used to succeed and improve the image of an organization. According to Sullivan (1999), the appropriate combination of intellectual capital values such as knowledge, experience, financial resources, operational strategy and a good relationship with stakeholders leads to a significant improvement in the performance of organizations. As a result of using intellectual capital as an important asset of global companies such as Microsoft, it has enabled these companies to achieve huge returns. Raja Adzrin *et al.*, (2009). Ross *et al.*, (2005) defined intellectual capital as all non-monetary and intangible resources that the organization controls fully or partially and that contribute to creating the organization's value. Ross *et al.*, (2005) also classified intellectual capital into three components. As follows:

- **Human capital:** It includes knowledge, professional skills, experience, educational level, and creativity of employees. Human capital is the basic element in the process of developing intellectual capital (Yang & Lin, 2009).
- **Structural capital:** It includes innovative capital, databases, software systems, distribution networks, organizational charts, corporate culture, strategies, and policies. Structural capital refers to the mechanism and structure of the organization as it helps support employees for optimal intellectual performance (Bollen, *et al.*, 2005).
- **Relationship capital:** It includes marketing channels, customer relationships, supplier relationships, customer loyalty, government and industry networks, and intermediaries

or partners. Mutual capital results from an organization's relationship with customers, partners, shareholders, and other stakeholders who are critical to organizational performance (Bontis *et al.*, 2002).

b. Entrepreneurship

Entrepreneurship can be defined as the process of creating new organizations or developing existing organizations, and harnessing the opportunities available to develop this organization and advance it in an innovative and innovative manner. In the entrepreneurship process, the entrepreneur takes into account the extent of the risks that he may face and also highlights the returns that he may face. The project may bring about this in addition to creating new businesses or responding to new opportunities in general. (Haidar, 2012). Al-Adwani and Muhammad (2012) defined it as representing a set of characteristics related to choosing, planning, and organizing businesses, taking risks, and creativity in managing them. Al-Faihan and Salman (2012) also defined it as a risky process that includes a combination of capital, technology, and human skill, and it can be applied in all businesses, regardless of their size or activity.

Entrepreneurship is classified into four components. As follows (Al-Hadrawi, 2013):

- **Initiative:** It is keen to enrich the business environment with entrepreneurial individuals, and help them invest in the available opportunities. By relying on the resources available in society (Murad, 2010).
- **Taking risks:** Entrepreneurial organizations bear risks, whether at the individual level or at the group level. This is done by using one means to manage them, and relying on alliances with other organizations (Haidar, 2012).
- **Investing in opportunities:** It is contributing to building, discovering and developing opportunities, and evaluating capabilities based on the existence of a strategic relationship. In order to benefit from it through all motives, whether strategic or not (Morgan & Darroch, 2006).
- **Creativity:** It is one of the phenomena with ancient roots, but interest in it is recent. As humans constantly strive for creativity in all fields, establishments, regardless of the nature of their work, need to use creativity. The best establishments are the ones that apply creativity, and the best managers are the ones who are keen to provide the appropriate climate to help employees fully use their creative skills (Al-Adwani and Muhammad, 2012).

3. RESEARCH METHODOLOGY

The study relied on the descriptive approach, as it is the appropriate approach for the variables of the study, its objectives and hypotheses, in order to know the relationship between intellectual capital and entrepreneurship for the study community.

a. Sample and Data

The study sample included 75 faculty members, technicians, and administrators in the medical faculties of the Libyan of Medical Sciences University. The data of the study were collected using a questionnaire form on a random stratified sample of the study population.

b. Study Variables

The study variables include intellectual capital in its three dimensions (human capital, structural capital, and relationship capital) as an first variable, while the second variable is entrepreneurship.

c. Study Hypotheses

This study assumes that there is a statistically significant correlation between intellectual capital and entrepreneurship. Therefore, the main hypothesis can be formulated as follows:

There Is No Statistically Significant Correlation between Intellectual Capital and the Achievement of Entrepreneurship

The following sub-hypotheses emerge from it:

The First Sub-Hypothesis: There is no significant correlation between human capital (X_1) and entrepreneurship (Y).

The Second Sub-Hypothesis: There is no significant correlation between structural capital (X_2) and entrepreneurship (Y).

The Third Sub-Hypothesis: There is no significant correlation between relationship capital (X_3) and entrepreneurship (Y).

4. EMPIRICAL RESULTS

a. Data Analysis

In order to fulfill the requirements of the study methodology and to test its main hypothesis and its sub-hypotheses, this part presented an analytical description of the study variables and an explanation of the correlations using the Statistical Package for Social Sciences (SPSS) software.

The questionnaire forms that were collected from the study sample were unloaded, and they were analyzed statistically based on the mean, standard deviation, and relative importance according to the questionnaire items as follows:

The study sample was chosen randomly, and the number of questionnaires distributed was 75 questionnaires. 63 questionnaires were received, and the number of valid questionnaires for analysis was 60, with a rate of 80%.

b. The Test of Validity and Reliability of the Study Tool

Reliability means obtaining the same results or close to them in the case of repeating the study in similar circumstances and using the same study tool. Cronbach's alpha equation was relied upon to calculate the stability of the scale, and the stability coefficient was (0.948 and 0.861) for intellectual capital and entrepreneurship, respectively, while the validity coefficient for the same dimensions was (0.975 and 0.927), respectively. These results are positive and can be relied upon, as shown in Table (1).

Table 1: The coefficients of validity and reliability of the study scale

Dimension	Stability coefficient	Validity coefficient
Intellectual Capital	0.948	0.975
Entrepreneurship	0.861	0.927

c. Cell Length in Scale and Degree of Availability

After completing the process of compiling and coding the questionnaires based on the five-point

Likert scale, the cell length of the scale was determined as shown in Table (2).

Table 2: The length of the cell period in the scale and the degree of availability

Period Length	Study scale	Availability
From 1 to less 1.80	Totally Disagree	Very Weak
From 1.80 to less 2.60	Disagree	Weak
From 2.60 to less 3.40	Neutral	Medium
From 3.40 to less 4.20	Agree	High
From 4.20 to 5.00	Totally Agree	Very High

d. General Information

Table (3) showed that most of the study population consists of females at a rate of 60%, while the most age group is the two age groups (25-30 and

31-35) with a rate of 30% each, and that the largest percentage of the study population carries Bachelor's degree by (58.3%), while 40% of the respondents had a period of service of 5 years or less.

Table 3: Characteristics of the study population

Variable	Variable Level	The Number	Percentage
Sex	Male	24	40%
	Female	36	60%
	Total	60	100%
Age	25 – 30	18	30%
	31 – 35	18	30%
	36 – 40	6	10%
	41 – 45	8	13.3%
	46 – 50	2	3.3%
	51 and above	8	13.3%
	Total	60	100%
Qualification	Bachelor's	35	58.3%
	Master and PhD	25	41.7%
	Total	60	100%
Years of Service	Less than 5 years	24	40%
	From 5 to 10 years	12	20%
	From 11 to 15 years	12	20%
	From 16 to 20 years	4	6.7%
	More than 20 years	8	13.3%
	Total	60	100%

Table (4) shows the mean and standard deviation of the study sample's answers to the phrases that make up the dimensions of the study, which shows that the averages are weak, as the

means were (2.24 and 2.30) for the study variables. The t-test showed that there is a significant difference in the averages of the study variables from the hypothetical mean at a significant level of 5%.

Table 4: The responses of the members of the study community towards the dimensions of intellectual capital and entrepreneurship

Dimensions	Mean	Standard deviation	T Test		Test's result	Availability
			T value	P Value		
Intellectual Capital	2.24	0.63	6.57	0.00	Sig.	Weak
Entrepreneurship	2.30	0.72	5.30	0.00	Sig.	Weak

e. Intellectual Capital

After it became clear that there are significant differences for the variables of the study, and that the level of practice is weak, we need to conduct a deeper analysis by reviewing the mean,

standard deviation, relative weight, arrangement, and general direction of the phrases that make up each dimension of the study, as shown in Tables (5) and (6).

Table 5: Dimensions of intellectual capital

		Mean	Standard deviation	Relative weight	Arrangement	General directions
First: Human Capital						
1	The university administration defines the tasks and responsibilities of faculty members and employees in an accurate and detailed manner	2.47	1.07	49.4	4	Weak
2	The university management makes faculty members and staff feel that they are able to manage themselves at the required level	2.33	0.96	46.6	6	Weak

		Mean	Standard deviation	Relative weight	Arrangement	General directions
3	The university management is constantly developing the skills of staff through multiple and continuous training programs	2.43	1.28	48.6	5	Weak
4	The management provides appropriate incentives when initiating a new idea that contributes to the development of work	2.73	1.11	54.6	2	Middle
5	The management seeks continuity of learning for its staff in order to create new experiences	2.63	1.22	52.6	3	Middle
6	The management allocates a specific budget to develop staff and provide them with the required skills and experience	2.76	0.95	55.2	1	Middle
Second: Structural Capital						
7	The applied administrative system in the university helps to retain and attract expertise	2.67	1.09	53.4	1	Middle
8	The university's internal relations provide appropriate conditions for staff to work as a team	1.97	0.96	39.4	5	Weak
9	The organization of work provides the best services for students and reviewers alike	2.13	1.01	42.6	4	Weak
10	The university's capabilities enable it to expand its services to the community	2.17	0.83	43.4	2	Weak
11	Expenditure on the development of university personnel is part of the expenditure on general development	2.13	0.86	42.6	3	Weak
12	The administration emphasizes that faculty members are part of the services provided by the university, and without them, it cannot	1.63	0.72	32.6	6	Very weak
Third: Relationship Capital						
13	The administration seeks to enhance interaction with students and provide them with the largest amount of information, services and communications to ensure the provision of the best services to them	1.83	0.83	36.3	4	Weak
14	The university possesses knowledge competitive advantages that qualify it to distinguish itself among other universities	1.83	0.95	36.6	5	Weak
15	The administration evaluates the performance of faculty members based on the quality of performance and their commitment to quality standards	1.93	1.01	38.6	3	Weak
16	The degree of satisfaction is constantly increasing among students with the services provided to them at the university	2.57	1.07	51.4	1	Weak
17	The administration looks faculty members as an important part of the organization's assets and not as additional costs	1.93	0.91	38.6	2	Weak
The mean of all items for all dimensions		2.24	0.63	44.8		Weak

Table (5) shows the results of intellectual capital dimensions. The results of the first dimension of intellectual capital, which is human capital, show that the response level for this dimension is from weak to middle, with a mean ranging between 2.33 and 2.76, with standard deviations ranging between 0.95 and 1.28, while the relative weight of the human capital is within the middle.

In addition to human capital, the results for structural capital were also from very weak to middle, with a mean ranging between 1.63 and 2.67, with standard deviations of 0.72 and 1.09, while the relative weight of this dimension was relatively weak.

The results related to relational capital also showed that this dimension is also weak, with means

ranging between 1.83 and 2.57, with standard deviations between 0.63 and 1.07, and the relative weight is also weak.

In general, the mean for all intellectual capital items is considered relatively weak, with a

value of 2.24, a standard deviation of 0.63, and a relative weight of 44.8%. This means that interest in intellectual capital is generally weak for the study sample.

f. Entrepreneurship

Table 6: Dimensions of Entrepreneurship

		Mean	Standard deviation	Relative weight	Arrangement	General directions
First: The Initiative						
1	The university administration is interested in modifying and improving capabilities before others.	2.33	0.88	46.6	1	Weak
2	The administration is making a great effort to find new capabilities	2.07	0.83	41.4	4	Weak
3	The university works to be the first in providing services to students and auditors	2.13	1.07	42.6	3	Weak
4	The university aims to be the first in the use of modern educational tools.	1.80	0.89	36	6	Weak
5	Management emphasizes the importance of continuous development and a good understanding of the business and other initiatives	2.03	1.00	40.6	5	Weak
6	The administration embraces the new initiatives, works on maturing them, and provides the appropriate environment for them	2.20	1.00	44	2	Weak
Second: Take Risks						
7	The university implements alternative solutions, despite their high risks	2.30	0.95	46	4	Weak
8	The university has the ability to manage crises, despite their high risks	2.27	0.87	45.4	5	Weak
9	Management believes that high-risk ideas are mostly profitable	2.63	1.00	52.6	1	Middle
10	Management takes high risks in order to find new and innovative solutions	2.50	0.90	50	2	Weak
11	Staff and faculty members have high faith and confidence that routine work will be boring if it is not new and associated with some kind of risk	2.07	0.91	41.4	6	Weak
12	The management constantly evaluates the size of the internal and external risks to take appropriate measures and address them	2.47	0.97	49.4	3	Weak
Third: Investing in Opportunities						
13	Opportunities are evaluated according to cost and revenue criteria	2.50	1.14	50	3	Weak
14	The management monitors changes in the environment and related matters	2.40	0.86	48	4	Weak
15	The management invests in the available opportunities in order to solve problems and provide services to the fullest	2.37	1.00	47.4	5	Weak
16	Management is constantly seeking to obtain or seize opportunities that exceed its current capabilities	2.53	1.07	50.6	1	Weak
17	The administration involves faculty members in periodic meetings specialized in discussing ideas and searching for new opportunities	2.53	1.22	50.6	2	Weak

		Mean	Standard deviation	Relative weight	Arrangement	General directions
18	Management is interested in developing businesses through which it can create and invest in new opportunities	2.20	1.06	44	6	Weak
Fourth: Creativity						
19	The administration motivates faculty members to present new ideas	2.23	1.10	44.6	5	Weak
20	Faculty members invest their relationships in order to get new ideas	2.13	0.97	42.6	6	Weak
21	The administration is constantly making adjustments to its services in order to improve them for the better	2.23	0.97	44.6	4	Weak
22	The university uses the ideas of external experts to develop its services	2.33	0.96	46.6	3	Weak
23	The university is keen to implement new ideas quickly	2.50	1.04	50	1	Weak
24	The administration helps faculty members with creative ideas, and provides an appropriate research environment for them	2.43	1.10	48.6	2	Weak
The mean of all items for all dimensions		2.30	0.72	46		Weak

Table (6) deals with the results related to the second variable, which is entrepreneurship with its four dimensions, which are initiative, taking risks, investing in opportunities, and finally creativity. Where the results showed that the initiative of the study sample is considered weak, with a mean ranging between 1.80 and 2.33, with standard deviations ranging between 0.83 and 1.07, and with relative weights that are considered weak.

While the results obtained for the second dimension (taking risk) were somewhat better than the results obtained for the initiative dimension, these results are still weak, as the mean ranged between weak (2.07) and middle (2.63), with standard deviations between 0.87 and 1.00. And with relative weights, and despite their weakness, they are somewhat better than the relative weights of the first dimension.

In addition, the results obtained from investing in opportunities are also weak, as the mean ranges between 2.20 and 2.53, while the standard

deviations range between 0.86 and 1.22, with weak relative weights ranging between 44% and 50.6%.

Also, the results of the fourth dimension are considered weak, as the arithmetic means for this dimension ranged between 2.13 and 2.50, while the standard deviations were between 0.96 and 1.10. The relative weights for this dimension also appeared weak and ranged between 42.6% and 50%.

In general, the mean for all items of entrepreneurship is considered relatively weak, with a value of 2.30, with a standard deviation of 0.72, with a relative weight of 46%. This means that the interest in entrepreneurship is generally weak for the study sample.

g. Pearson Coefficient for the Correlation between the Dimensions of Intellectual Capital and Entrepreneurship

Table (7) shows the results of the Pearson coefficient for the correlation between the dimensions of intellectual capital and entrepreneurship, as follows:

Table 7: Correlation coefficients between the first and second variable and the level of significance

Intellectual Capital			Human Capital	Structural Capital	Relationship Capital
Entrepreneurship	The Initiative	Pearson's correlation coefficient	0.613**	0.665**	0.838**
		significance level	0.000	0.000	0.000
		Sample Size	60	60	60
	Take Risks	Pearson's correlation coefficient	0.355	0.402*	0.525**
		significance level	0.059	0.028	0.003
		Sample Size	60	60	60
	Investing in Opportunities	Pearson's correlation coefficient	0.584**	0.552**	0.714**
		significance level	0.001	0.002	0.000
		Sample Size	60	60	60

Intellectual Capital		Human Capital	Structural Capital	Relationship Capital	
	Creativity	Pearson’s correlation coefficient	0.739**	0.630**	0.621**
		significance level	0.000	0.000	0.000
		Sample Size	60	60	60

** Correlation is significant at 0.01

* Correlation is significant at 0.05

The results in the above table show that there is a strong correlation between human capital and each of the initiative (0.613), investing in opportunities (0.584), creativity (0.739), and with a degree of confidence (0.99). There is also a medium correlation between human capital and take risks (0.355). Accordingly, the null hypothesis of the first sub- hypothesis is rejected, which states (there is no significant correlation between human capital (X_1) and entrepreneurship (Y), and in return, the alternative hypothesis is accepted.

Also, the results show that there is a strong correlation between structural capital and each of the initiative (0.665), investing in opportunities (0.552), creativity (0.630), with a degree of confidence (0.99), and there is a medium correlation between structural capital and take risks (0.402) and with a confidence level of (0.95). Accordingly, the null hypothesis of the second sub-hypothesis is rejected, which states (there is no significant correlation between structural capital (X_2) and entrepreneurship (Y)), and the alternative hypothesis is accepted.

In addition, the results show that there is a strong correlation between relational capital and each of the initiative (0.838), take risks (0.525), investing in opportunities (0.714), and creativity (0.621), and with a degree of confidence (0.99). Accordingly, the null hypothesis of the third sub-hypothesis is rejected, which states (there is no significant correlation between relational capital (X_3) and entrepreneurship (Y)), and the alternative hypothesis is accepted.

From the foregoing, it is clear that there is a correlation between the dimensions of intellectual capital and the dimensions of entrepreneurship, which resulted in accepting the alternative hypothesis of the three sub- hypotheses. Accordingly, there is a statistically significant correlation between intellectual capital and the achievement of entrepreneurship at the Libyan International University for Medical Sciences in the city of Benghazi. Therefore, the main null hypothesis is rejected and the alternative hypothesis is accepted.

The results obtained in this study are consistent with those of Eren and Kocapinar (2009), Talebi and Bahamir (2012), Ayar *et al.*, (2016) and Safarian and Enaayati (2018), while the results of this

study differed with the results reached by Al-Hadrawi (2013). The reason for the difference between the two studies may be due to the administrative policies adopted in the study community compared to the policies followed in the study sample of Al-Hadrawi.

5. CONCLUSION

The study aims to addressing and defining the concept of intellectual capital and its relation to entrepreneurship in business organizations. Also, to identify the reality of the performance of educational institutions in Benghazi and assess the level of interest in the requirements of the transition to the adoption of intellectual capital as one of the elements of important assets. The study sample included 75 faculty members, technicians, and administrators in the medical faculties of the Libyan of Medical Sciences University. The data of the study were collected using a questionnaire form on a random stratified sample of the study population.

Results showed that the interest in intellectual capital and the interest in entrepreneurship are considered weak in general for the sample of study. In addition, the results showed that there is a statistically significant correlation between intellectual capital and the achievement of entrepreneurship at the Libyan of Medical Sciences University in the city of Benghazi. Therefore, the main null hypothesis was rejected and the main alternative hypothesis was accepted.

The study suggested that focusing efforts on paying attention to intellectual capital and its components as an important asset that may exceed physical capital. Also, suggested that the need to deal with intellectual capital as one of the important assets of the university, and to maintain it constantly because it is an effective element of the success of the university in light of the great development in the business environment.

REFERENCES

- Al-Adwani, A. M., & Muhammad, A. A. (2012). Business incubators are an organizations' gateway to the transformation towards entrepreneurial performance. A study of the opinions of a number of workers in the organizations of the Technical Education Authority in Mosul. *Journal of Economic and*

- Administrative Sciences, University of Baghdad Iraq, 18 (69), 76 – 94.*
- Al-Faihan, E. A., & Salman, S. M. (2012). The role of business incubators in promoting organizational entrepreneurship. *Journal of Baghdad College of Economic Sciences, University of Baghdad Iraq, 30, 69 – 98.*
 - Al-Hadrawi, H., K. (2013). Entrepreneurship as an introduction to contemporary business organizations in light of adopting the concept of intellectual capital (field study). *Journal of Economic and Administrative Sciences, University of Baghdad Iraq, 9 (27), 85 – 125.*
 - Ayar, S., Bakhnoo, M., Abdoullahi, S., & Mahmoodi, A. (2016). Investigating the relation between intellectual capital and organizational entrepreneurship: case study the governmental institutions of west Azerbaijan province in Iran. *International Journal of Humanities and Cultural Studies, 2509 – 2522.*
 - Bollen, L., Vergauwen, P., & Schnieders, S. (2005). Linking intellectual capital and intellectual property to company performance. *Management decision, 43(9), 1161-1185.*
 - Bontis, N., Crossan, M., & Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows. *Journal of Management Studies, 39(4), 439-469.*
 - Bontis, N., Keow, W. C. C., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of intellectual capital, 1(1), 85-100.*
 - Brooking, A. (1997). The management of intellectual capital. *Long range planning, 3(30), 364-365.*
 - Eren, E., & Kocapinar, E. B. (2009). Is Intellectual Capital Antecedent of Entrepreneurship Orientation. *Journal of Global Strategic Management, 3 (2), 121- 135.*
 - Haidar, J. I. (2012). The impact of business regulatory reforms on economic growth. *Journal of the Japanese and international economies, 26(3), 285-307.*
 - Miles, M. P., & Darroch, J. (2006). Large firms, entrepreneurial marketing processes, and the cycle of competitive advantage. *European journal of marketing, 40(5/6), 485-501.*
 - Murad, Z. (2010). Leadership and creativity in small and medium enterprises. International Forum on: Entrepreneurship, Training and Business Opportunities, Faculty of Economic, Commercial and Management Sciences, *Mohamed Kheidar University, Biskra, Algeria.*
 - Raja Adzrin, R. A., Abu Thahir, A. N., & Maisarah, M. S. (2009). Value Creation Strategy for Sustainability. *Accountants Today, 22 (1), 12 – 18.*
 - Roos, G., Pike, S., & Fernström, L. (2005). *Managing Intellectual Capital in Practice*, Oxford: Butterworth-Heinemann.
 - Sullivan, P. H. (1999). Profiting from Intellectual Capital. *Journal of Knowledge Management, 3(2), 132-142.*
 - Tabaghdehi, S. K. H., Safariyan, S., & Enaayati, T. (2018). The effect of organizational on intellectual capital considering the meditating role of academic entrepreneurship in Mazandaran Islamic Azad University. *Revista Publicando, 5(16 (1)), 483-504.*
 - Talebi, K., & Bahamir, A. (2012). Identification of intellectual capital effects on promoting organizational entrepreneurship (Charmahal-E bakhtiari ministry of cooperatives, labour and social welfare). *ZENITH International Journal of Business Economics & Management Research, 2(6), 37-48.*
 - Tayles, M., Pike, R. H., & Sofian, S. (2007). Intellectual capital, management accounting practices and corporate performance: Perceptions of managers. *Accounting, Auditing & Accountability Journal, 20(4), 522-548.*
 - Wang, k. H., Chao, C. F., & Chen, M. (2010). Effects of Intellectual Capital on Corporate Entrepreneurship and Value Creation: Evidence from Taiwan. Retrieved 15 May 2019, from:<https://pdfs.semanticscholar.org/7853/e57ce524f8c0b883782721dd05d5255d1ab2.pdf>
 - Yang, C. C., & Lin, C. Y. Y. (2009). Does intellectual capital mediate the relationship between HRM and organizational performance? Perspective of a healthcare industry in Taiwan. *The International Journal of Human Resource Management, 20(9), 1965-1984.*