The Impact of Intellectual Capital on Sustainable Competitive Advantage and Organizational Learning with mediating role of University Entrepreneurship: Evidence from Private Universities in Egypt

Abstract: - The purpose of this research is to empirically investigate the relationship between Intellectual Capital and Organizational Learning in the Private Universities in Egypt. The objectives of this research are: to test the relationship between Intellectual Capital and Sustainable Competitive Advantage, to examine the relationship between Intellectual Capital and University Entrepreneurship, to investigate the relationship between University Entrepreneurship and Sustainable Competitive Advantage, to examine the relationship between University Entrepreneurship and Organizational Learning, to investigate the mediation role of University Entrepreneurship between Intellectual Capital and Sustainable Competitive Advantage, to examine the mediation role of University Entrepreneurship between Intellectual Capital and Organizational Learning and to develop a theoretical framework illustrates the relationship amongst selected variables using structural equation modelling. The methodology will be based on quantitative analysis by using a questionnaire tool to gather required data and structural equation model analyses (SEM) using AMOS software. The main conclusions drawn from this study are the direct effect between Intellectual Capital and Sustainable Competitive Advantage is statistically significant, the direct effect between Intellectual Capital and University Entrepreneurship is statistically significant, the direct effect between University Entrepreneurship and Sustainable Competitive Advantage is statistically significant, the direct effect between University Entrepreneurship and Organizational Learning is statistically significant. Finally, the study found that the University Entrepreneurship mediates the relationship between Intellectual Capital and Sustainable Competitive Advantage and the study found that the University Entrepreneurship mediates the relationship between Intellectual Capital and Organizational Learning.

Keywords: Intellectual Capital, University Entrepreneurship, Sustainable competitive advantage, Organizational Learning, Egyptian private universities.

Introduction

Intellectual capital is considered as an intangible asset inside the organization that has a significant influence on the innovation and entrepreneurship of the organization (Jafari et al., 2020). Therefore, the management of intellectual capital represents a vital issue in any organization. The proper management of those intangible resources helps in improving the cooperative working and developing the knowledge, which leads to achieving a competitive advantage (Kamukama, 2013). Intellectual capital was firstly described by the economist Kenneth Galbraith in 1969, as a process of creating value and at the same time a bundle of assets. Intellectual capital could be defined as intangible resources of the corporate that contain knowledge and value creation, in which those resources need to be managed efficiently and properly aiming to accomplish the goals of the
corporate as well as achieving a sustainable competitive advantage (Koçoğlu et al., 2009). In addition, Osman and Ngah (2016) defined intellectual capital as the intellectual material that the company owned and can use it to create wealth. Intellectual capital has three types, which are: relational capital, structural capital and human capital, in which each type affects the other one whether positively or negatively. The well management of intellectual capital leads to sustainable competitive advantage of the corporate. Competitive advantage could be defined as the ability of the corporate to carry out its own activities in a special way that cannot be adopted by other corporates. The arisen of sustainable competitive advantage of the corporate occurs when the resources of the corporate are valuable, inimitable, rare and appropriate (Osman and Ngah, 2016). Sustainable competitive advantage has two dimensions, which are: flexibility and responsiveness. Flexibility is defined as the capabilities of the company to create specific real options for the purpose of reconfiguring of value propositions to the customer (Agha et al., 2012). Responsiveness is defined as the ability of the company to respond to the needs of the customer in a quick way (Sousa et al., 2010).

In addition, intellectual capital affects the organizational learning (Farsani et al., 2012). Learning is defined as the change of knowledge of the organization that depends primarily on its experience. Therefore, organizational learning could be defined as changes that occur in the routine, knowledge or performance of the organization depending on its experience (Argote and Todorova, 2007). Intellectual capital can affect the corporate entrepreneurship (Bahrami et al., 2016). Moreover, previous studies had proved that corporate entrepreneurship is related to sustainable competitive advantage (Pongklee and Usahawanitchakit, 2008) and organizational learning (Erić-Nielsen, 2015). Corporate entrepreneurship is defined as the process in which individuals inside the organization create new business or make some improvements in the company's strategies regarding the existing processes, practices and products (Otache and Mahmood, 2015). Corporate entrepreneurship consisted of many dimensions; Management Support, Work Discretion, Rewards/Reinforcement, Time Availability and Organizational Boundaries (Hornsby et al., 2002). This study aims to investigate the impact of Intellectual Capital (Relational Capital, Structural Capital and Human Capital) on each of Sustainable Competitive Advantage (Flexibility and Responsiveness) and Organizational Learning through the mediating role of university entrepreneurship.

2. Literature Review

Intellectual Capital is considered as the independent variable, University Entrepreneurship is considered as the mediator variable and Organizational Learning and Sustainable Competitive Advantage are considered as the dependent variables. In the following subsections we will discuss:

2-1 Intellectual Capital in Higher Education Institutions (IC)

Over the last three decades, a crucial engine of national economic growth and corporate development, IC intangible assets have attracted the interest of several academics in recent years (Buenechea-Elberdin, 2017). These scholars underscore the fact that firms' competitiveness and future perspectives tend to become more and more dependent on IC assets, which in turn affect both ventures' ability to advance high-tech and/or knowledge-based activities and the ability to acquire, cultivate, and share new knowledge (Bianchi Martini et al., 2016).

Higher education provided by universities has a significant role in the growth and reinforcement of IC in both individuals and businesses (Bae et al., 2014). The university system has traditionally sustained the industrial system by attempting to make up for a lack of intangible resources (Rae, 2010) and by encouraging resource transfer and collaboration processes.

Etzkowitz et al. (2000) defined higher education institutions (HEIs) as organizations that provide education, research, and social services to society. In the globalized knowledge economy, HEIs confront rising difficulties and possibilities, such as competitiveness, innovation, quality, accountability, funding, accreditation, and social responsibility (Altbach et al. 2009). To improve their performance, quality, and competitiveness in a dynamic and complex environment, HEIs have to develop their IC and SCA (Secondo et al. 2015).
Higher education institutions are knowledge-intensive, intellectual capital-dependent organizations. The knowledge, expertise, and skills of faculty, staff, and students, as well as the organizational processes, systems, and structures that support teaching and research, are all included in the intellectual capital system of higher education institutions. According to a study by Al-Ajlouni and Al-Sarayreh (2017), intellectual capital is a crucial resource for Egyptian higher education institutions, and it is essential for promoting their performance and competitiveness.

2-2 University Entrepreneurship (UE)

UE is defined as the process of creating and utilizing stakeholder possibilities within or beyond the environment of the university, engaging students, faculty members, alumni, and other stakeholders (Etkowitz, 2003). With the intention of commercializing their research and knowledge, university entrepreneurship is defined as the process of creating and managing new ventures by academic researchers and students. In addition, the term "university entrepreneurship" refers to the process of creating and managing entrepreneurial ventures within institutions of higher education. It includes activities like transferring technology, incubating startups, commercializing breakthroughs, and encouraging faculty and students to adopt an entrepreneurial attitude (Kickul and Lyons, 2019).

Due to its potential to promote innovation, economic growth, and knowledge transfer, UE in HEIs has attracted significant interest on a global scale. Altbach et al. (2019) claim that through offering entrepreneurial education, supporting businesses, and enabling technology transfer, HEIs are important stakeholders in fostering entrepreneurship. The term "university" refers to a group of people who work in the field of education and research.

In recent years, university entrepreneurship in Egypt has undergone significant growth. The term "ecosystem" refers to a group of people who work together to solve problems. In their 2017 article, Hamdy and Khater underline the role that entrepreneurship centers and incubators play in supporting entrepreneurship in Egyptian higher education institutions.

2.3 Sustainable Competitive Advantage (SCA) in Higher Education Institutions (SCA)

Competitive advantage is often described as an advantage a firm or group of competitors has over a competitor or group of competitors in a specific market, strategic group, or industry (Kay, 1993). Competitive advantage is everything that distinguishes a firm or its goods from those of its competitors from the viewpoint of its consumers or end-users (Fahey, 1989). However, the emphasis here is not just on the question of a firm's competitive advantage, but also on understanding its long-term sustainability. Sustainability does not refer to a certain period of calendar time, nor does it indicate that advantages last forever (McGrath, 2007), but rather depends on the potential and amount of competitive replication. Possessing an edge over others is not the main goal of the firm, but sustaining it is more relevant and important.

Additionally, the phrase "sustainable competitive advantage" refers to a superior performer's qualities and resources that are unable to be reproduced by its current or potential competitors in an industry. Therefore, the likelihood of competitive duplication is critical to the long-term viability of a firm's competitive advantage (Barney, 1991). Reference (Barney, 1991) defines competitive advantage as the implementation of a value-creating strategy that is not simultaneously being implemented by any current or potential competitors; whereas sustainable competitive advantage is seen as the implementation of a value-creating strategy that is not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy.

For higher education institutions to stay competitive, draw students, and finance, they need to maintain an ongoing competitive edge. Through a variety of strategies, such as cost leadership, differentiation, and innovation, higher education institutions can maintain a sustained competitive advantage. According to a 2017 study by Al-Ajlouni and Al-Sarayreh, intellectual capital is a key source of sustained competitive advantage in higher education institutions in Egypt.

2-4 Organizational Learning in Higher Education Institutions (OL)
Organizational learning (OL) is the process of developing, acquiring, transferring, and using knowledge inside an organization in order to improve its performance and flexibility (Argote and Miron-Spektor, 2011). Organizational learning is seen as a critical capacity for organizations to survive and develop in a dynamic and complex environment (Easterby-Smith and Lyles, 2011). Organizational learning refers to the process of collecting, sharing, and applying knowledge within an organization in order to improve performance (Argote and Miron-Spektor, 2011).

The properties of the learning organization have been investigated from a variety of perspectives, and a number of methods to defining the learning organization have evolved (Senge, 1990; Pedler et al., 1991; Garvin, 1993; Watkins and Marsick, 1993). After examining various definitions of the organizational learning process (Senge, 1990; Nonaka, 1991; Pedler et al., 1991; Garvin, 1993; Watkins and Marsick, 1993; Moilanen, 2001; Rtenblad, 2002), it can be seen that all authors identify similar aspects of the organizational learning process: continuously pressed individuals; transformation is a natural part of the organization; learning is a well-organized and skillfully carried out process; an organization has resources and systems that promote number of authors have written on the university as a learning organization (Lorange, 1997; Martin, 1999; Willcoxson, 2001; White and Weathersby, 2005; Strandli Portfelt, 2006; Örtenblad and Koris, 2014; Janssen, 2015).

In a similar vein, organizational learning is essential for higher education institutions to adapt to changing contexts and improve their performance. The term "research" refers to the process of collecting and analyzing data. According to a study by Khechine et al. (2018), intellectual capital is a significant factor in organizational learning in Tunisian higher education institutions.

3. Conceptual Framework and Research Hypotheses

The independent variable “Intellectual Capital” is measured by Mogahed et al. (2018). The variable “University Entrepreneurship” is measured by Hornsby et al. (2002); the variable “Sustainable Competitive Advantage” is measured by Agha et al. (2012); and the variable “Organizational Learning” is measured by Yavas and Celik (2020).

Based on the conceptual framework, the hypothesized model and reviewing of the related studies and theories, the study hypotheses were formulated as below:
**H1**: IC has an impact on SCA in the Egyptian Private Universities. **H2**: IC has an impact on OL in the Egyptian Private Universities. **H3**: IC has an impact on UE in the Egyptian Private Universities. **H4**: UE has an impact on SCA in the Egyptian Private Universities. **H5**: UE has an impact on OL in the Egyptian Private Universities. **H6**: UE mediates the relationship between IC and SCA in the Egyptian Private Universities. **H7**: UE mediates the relationship between IC and OL in the Egyptian Private Universities.

4. **Research Methodology**

The research population in this study is referred to of students of Egyptian private universities. The questionnaire was divided in two broad categories. The first category is made up of general information and the second category is the body of the questionnaire that includes three sections: first: Intellectual Capital. Second section: University Entrepreneurship and Third section: Sustainable Competitive Advantage. Fourth section: organizational learning. A Likert-scale was used to measure opinions.

The research questionnaire was given to 700 Customers, and 449 questionnaires representing 64.1% were returned, and 54 questionnaires representing 7.7% were incomplete or ineligible or refusals and 251 (35.9%) were not reached. There were 395 acceptable responses, a response rate 56.4%, which is very good given the nature of the study. The structural equation modelling (SEM) software package was utilized in this Research Paper to investigate the interrelationships between the constructs of the hypothesized model. Testing Hypotheses After completing a confirmatory factor analysis, the structural model is valued by evaluating the hypotheses that underpin the research model.

5. **Results and Findings**

The reliability of a construct in the measurement model is possibly calculated using Composite Reliability (CR). CR determines the consistency of the construct itself and is a more presenting method of overall reliability (Hair et al., 2019). The research result shows the CR of (Relational Capital = 0.878, Human Capital =0.909, Structural Capital =0.691, Organizational boundaries = 0.875, Management Support =0.843, Rewards/Reinforcement = 0.907, Time availability = 0.873, Sustainable Competitive Advantage = 0.780 and Organizational Learning = 0.946). As a result, it is evident that all of the constructs in the measurement model are reliable.

The Average Variances Extracted AVE should always be above 0.50. (Hair et al., 2019). Overall, the (AVE) of the constructs (Relational Capital = 0.591, Human Capital =0.629, Structural Capital =0.574, Organizational boundaries = 0.584, Management Support =0.574, Rewards/Reinforcement = 0.709, Time availability = 0.697, Sustainable Competitive Advantage = 0.521 and Organizational Learning = 0.717) are more than 0.500. Overall, the measurement results are satisfactory, indicating that the structural model may be evaluated.

**Measurement model result**: The 9 factor was subjected to CFA using the AMOS software. DF was 997 (it should be more than 0), \( \sqrt[3]{DF} \) has a value of 1.990, that is less than 3.0 (it should be less than or equal 3.0). The RMSEA was .046 (it should be less than 0.08). The TLI index was .931 which is very close to 1.0 (a value of 1.0 indicates perfect fit). The CFI was .936 which is very close to 1.0 (a value of 1.0 indicates perfect fit). The CFI was .936. All indices are close to a value of 1.0 in CFA indicating that the measurement models provide good support for the factor structure determined through the CFA.
Structural Model validity: The findings of the structural model using the AMOS software shows that DF was 1022 (it should be more than 0), $\chi^2/\text{DF}$ has a value of 2.268, that is less than 3.0 (it should be less than or equal 3.0). The RMSEA was .052 (it should be less than 0.08). The TLI index was .912 which is very close to 1.0 (a value of 1.0 indicates perfect fit). The CFI was .916 which is very close to 1.0 (a value of 1.0 indicates perfect fit). All indices are close to a value of 1.0 in CFA, indicating that the measurement models provide good support for the factor structure determined through the CFA.

The findings and hypothesis testing revealed that:

1- Intellectual Capital has a substantial direct association with Sustainable CompetitiveAdvantage. ($\beta = 0.688$, CR (Critical Ratio) = 10.008, CR > 1.96, $p = 0.000$, $p<0.05$).

2- Intellectual Capital has a substantial direct association with Organizational Learning. ($\beta = 0.408$, CR (Critical Ratio) = 3.826, CR > 1.96, $p = 0.000$, $p<0.05$).

3- Intellectual Capital has a significantly positive effect on University Entrepreneurship. ($\beta = 0.777$, CR (Critical Ratio) = 10.267, CR > 1.96, $p = 0.000$, $p<0.05$).

4- University Entrepreneurship has a significant direct relationship with Sustainable Competitive Advantage. ($\beta = 0.284$, CR (Critical Ratio) = 6.341, CR > 1.96, $p = 0.003$, $p<0.05$).
5- University Entrepreneurship has a significant direct relationship with Organizational Learning. (β = 0.513, CR (Critical Ratio) = 4.194, CR > 1.96, p = 0.003, p<0.05).

6- The results indicate that partial mediation effect of the University Entrepreneurship between the relationship of Intellectual Capital and Sustainable Competitive Advantage in the Private Universities in Egypt. (P = 0.003, P<0.05).

7- The results indicate that partial mediation effect of the University Entrepreneurship between the relationship of Intellectual Capital and Organizational Learning in the Private Universities in Egypt. (P = 0.001, P<0.05).

6. Discussions

The focus of this research paper is to investigate into the relationship between intellectual capital, sustainable competitive advantage and organizational learning, with the role of University Entrepreneurship as a mediating variable. The study used a quantitative approach to obtain primary sample data from 406 employees working in the Egyptian Private Universities. The analysis is performed using structural equation modeling technique (SEM) using AMOS software.

The first objective is to investigate the relationship between Intellectual Capital and Sustainable Competitive Advantage (H1: IC has an impact on SCA in the Egyptian Private Universities) is supported. This is consistent with Al-Ajouni and Al-Sarayreh (2017); Anggraini et al., (2018) and Hu et al., (2019) whom emphasized that IC has a positive and significant impact on SCA in HEIs, and human capital, structural capital, and relational capital are all critical components of IC for SCA. Regarding the Egyptian context, a study by Elsharnouby and Elbanna (2018) found that relational capital and human capital had a significant positive impact on SCA in Egyptian HEIs. Moreover, Eltahir et al. (2019) found that IC has a significant and positive impact on the financial and non-financial performance of HEIs in Egypt. This supports the thesis advanced by Kadir et al. (2021), who proposed a conceptual framework for building the IC of leaders in Egyptian universities in order to accomplish SCA. They argued that IC was a good starting point for reaching SCA because it allowed leaders to generate value, develop, adapt, and differentiate themselves from competitors. They also suggested that education, training, mentorship, coaching, and networking might help to build IC.

The second objective is to investigate the relationship between Intellectual Capital and Organizational Learning (H2: IC has an impact on OL in the Egyptian Private Universities) is supported. This is consistent with Wang et al.'s (2017); and Khechine et al. (2018) who demonstrated that intellectual capital is a crucial driver of organizational learning in Tunisian higher education institutions. Similarly, Elsharnouby and Elbanna (2018) found that human and relational capital have a significant positive influence on OL at Egyptian HEIs. In addition, a study by Eltahir et al. (2019) found that IC had a significant and positive impact on OL in Egyptian HEIs. The impact of intellectual capital on organizational learning at Egyptian HEIs was also investigated by Rami and Maged (2018). They found a significant positive relationship between human capital and organizational learning, proving the importance of highly qualified and competent employees in promoting a learning culture inside universities.

The third objective is to test the relationship between Intellectual Capital and University Entrepreneurship (H3: IC has an impact on UE in the Egyptian Private Universities) is supported. This result is in the same vein with Cepoiu-Martinovici et al., (2019) who examined the impact of IC on CE in Romanian HEIs. They found that IC had a positive and significant influence on CE, and that structural capital, relational capital, and human capital were all relevant components of IC for improving CE. Moreover, Elbeltagi and Hegazy (2019) found that IC has a direct and significant impact on university entrepreneurship in Egyptian HEIs. The study found a significant positive influence of all three components of IC (human, structural, and relational capital) on university entrepreneurship. Similarly, a study by Abdel-Basset et al. (2021) found a positive relationship between intellectual capital and the innovation performance of higher education institutions in Egypt. El-Sayed et al. (2020) investigated the impact of IC on UE in Egyptian HEIs. They found that IC had a positive and significant influence on
UE and human capital was the most important IC factor for improving UE. They also found that UE mediated the relationship between IC and organization performance.

The fourth objective is to examine the relationship between University Entrepreneurship and Sustainable Competitive Advantage (H4: UE has an impact on SCA in the Egyptian Private Universities) is supported. This finding is consistent with El-Gohary and Eid’s (2019) and Eltahir and Abdelmoneim (2021) whom found a positive impact of university entrepreneurship on the innovation capabilities of Egyptian HEIs. The study found that university entrepreneurship may improve HEIs’ ability to generate and commercialise new ideas, which can lead to sustainable competitive advantage. Further, Hashim et al. (2022) investigated the role of digital transformation in the development of SCA for HEIs. They proposed a qualitative approach that argued for the use of digital transformation as a driving factor in the development of SCA for universities. They argued that digital transformation allows HEIs to provide value, innovate, adapt, and differentiate themselves from competitors. They also suggested that using evolutionary learning techniques, digital transformation may be integrated and governed within HEI strategies.

The fifth objective is to examine the relationship between University Entrepreneurship and Organizational Learning (H5: UE has an impact on OL in the Egyptian Private Universities) is supported. This finding is consistent with Sam et al. (2016) who examined the impact of UE on OL at Malaysian public universities. They discovered that UE had a significant and positive impact on OL, and that UE dimensions like entrepreneurial orientation, entrepreneurial education, entrepreneurial support, and entrepreneurial culture had an impact on OL dimensions like knowledge creation, knowledge acquisition, knowledge transfer, and knowledge application. They also found that OL mediated the relationship between UE and organization performance. Likewise, the Egyptian higher education sector has highlighted university entrepreneurship as a source of organizational learning. For instance, a study by El-Gohary and Eid (2019) found that university entrepreneurship had a positive learning impact on the organization of HEIs in Egypt. The University of Texas at Austin has a policy that requires all students to participate in the program.

Objective number six is about investigating the mediation role of University Entrepreneurship between Intellectual Capital and Sustainable Competitive Advantage (H6: UE mediates the relationship between IC and SCA). The results indicate that partial mediation effect of the University Entrepreneurship between Intellectual Capital and Sustainable Competitive Advantage. This finding is consistent with Ceponiu-Martinovici et al., (2019) whom evaluated the impact of IC on corporate entrepreneurship in Romanian higher education institutions. They found that IC had a significant and positive impact on CE, and that human capital, structural capital, and relational capital were all key dimensions of IC for improving CE. They also discovered that CE served as a bridge between IC and SCA. Also, Eltahir and Abdelmoneim’s (2021) study found that university entrepreneurship and intellectual capital had a positive impact on HEIs’ capability to innovate and SCA. The relationship between intellectual capital and SCA at Egyptian HEIs is also found to be mediated by university entrepreneurship, according to a study by El-Said et al. (2020). The study found that university entrepreneurship may improve the utilization of intellectual capital and promote the development of unique resources and competencies, both of which can lead to a sustainable competitive advantage.

The seventh objective is to investigate the mediation role of University Entrepreneurship between Intellectual Capital and Organizational Learning (H7: UE mediates the relationship between IC and OL in the Egyptian Private Universities). The results indicate that partial mediation effect of the University Entrepreneurship between the relationship of Intellectual Capital and Organizational Learning in the Private Universities in Egypt. The following studies suggested that UE mediates the relationship between IC and OL in HEIs, as it enables them to create, acquire, transfer and apply knowledge within their organizations. However, there is still a lack of empirical evidence on how UE mediates the relationship between IC and OL in HEIs in Egypt, which is a developing country with a large and diverse higher education system. As a result, our research addressed this gap by exploring how UE mediates the relationship between IC and OL in Egyptian HEIs. In this regard, university entrepreneurship and intellectual capital have been considered as sources of organizational learning for Egyptian HEIs. For example, a study by Fathi and Chakroun (2021) found that intellectual capital and university entrepreneurship had a positive impact on the knowledge management and organizational learning.
of HEIs in Egypt. Furthermore, El-Said and Khalil's (2020) study found that in Egyptian HEIs, university entrepreneurship mediates the relationship between intellectual capital and organizational learning. The study found that university entrepreneurship may improve the utilization of intellectual capital and promote the development of organizational learning, which can lead to improved performance.

7. Authors contributions

This study fulfilled the research gaps in literature and contributed in the body of literature. In the Egyptian context, there is a shortage of research regarding the mediation role of University Entrepreneurship between Intellectual Capital and Organizational Learning especially in the Egyptian private universities. The findings of this paper give insights to practitioners and policy makers in the Egyptian universities to consider great effect of intellectual capital on sustainable competitive advantage and how it affects the performance of the university.

According to the analysis, At the 5% significance threshold, all are considered significant. The estimated structural model corroborated the seven hypotheses, as Intellectual Capital construct explained 60.3% of University Entrepreneurship variance (R² = .603), Besides, Intellectual Capital through University Entrepreneurship explained 75.6% of Organizational Learning variance (R² = .756). And Intellectual Capital through University Entrepreneurship explained 85.8% of Sustainable Competitive Advantage variance (R² = .858).

8. Research limitations

The degree to which the conclusions may be extrapolated to a larger population, cases, or situations is referred to as external validity. (Saunders et al., 2019) As a result, the researcher cannot presume that the findings apply to other situations, so the study excludes:

First, Because the participants in this study come from just one nation (Egypt) and are all private universities, the research was conducted in a very specialized context, it is believed that the findings can be applied to a variety of other sectors, industries, and countries.

Second, cross-sectional data were used in this study to examine the relationship between Intellectual Capital and Sustainable Competitive Advantage and between Intellectual Capital and Organizational Learning, as well as the mediating role of University Entrepreneurship in the Private Universities in Egypt. As a consequence of this, the study only offers a picture of a single instant in time. This suggests that the findings of the research are only useful under certain conditions, including when external factors such as governmental regulations, economic activity, the competitive climate, and so on are unaffected.

Third, Data gathering from respondents over a set period of time utilizing a convenience sample approach had its limitations. The scope of potential responders was constrained by the short time span for data gathering. Because responses are collected based on the accessibility of respondents, this method may not produce a representative sample and may also lead to potential limitations in the range of respondents who would participate.

9. Future research Suggestions

The following areas for further investigation are suggested based on the findings of this study: First, a study should be undertaken utilizing a qualitative technique or a mixed strategy using both qualitative and quantitative approaches in order to acquire Intellectual Capital on Sustainable Competitive Advantage and Intellectual Capital on Organizational Learning views and expectations.

Second, a longitudinal study should be done to examine the long-term relationship between Intellectual Capital and Sustainable Competitive Advantage and between Intellectual Capital and Organizational Learning in the Private Universities in Egypt, with the mediating role of University Entrepreneurship.

Third, because the sample was limited to only Private Universities in Egypt, a sample derived from other sectors, industries would improve the generalizability of the findings in the future. This would also help
comparing the relationship between Intellectual Capital and Sustainable Competitive Advantage and between Intellectual Capital and Organizational Learning, as well as the role of University Entrepreneurship in mediating the relationship between Intellectual Capital and Sustainable Competitive Advantage and between Intellectual Capital and Organizational Learning, in other sectors and industries.

References:


[34] Hair, j. f., hult, g. t. m., ringle, c. m., & sarstedt, m. (2019). a primer on partial least squares structural equation modeling (plis-sem). sage publications. doi:10.4135/9781526404687.


[37] Hu, s., chen, w., & huang, l. (2019). the impact of intellectual capital on sustainable competitive advantage in higher


59. Strandli portfelt, m. (2006). the university as a learning organization: the importance of organizational culture and leadership. higher education research & development, 25(3), 267-281. doi:10.1080/07294360600788053


