

RESEARCH ARTICLE

WWW.PEGEGOG.NET

The availability degree of the Intellectual Capital Components in Public Education Schools in the Kingdom of Saudi Arabia

Maher Ahmed Hassan

Foundations of Education Department - College of Education Imam Abdulrahman Bin Faisal University,
P.O Box 2375 , City (Dammam), Saudi Arabia

ABSTRACT

Intellectual Capital (IC) of schools is an important strategic resource that can be invested and used in achieving school objectives, increasing its efficiency, competitive capacity and continuously developing its performance. Intellectual Capital is characterized by distinguished individuals who have knowledge, skills and capabilities that enable them to bring about change and development in schools, Intellectual capital consists of four basic components represented in human capital, structural capital, relational capital and social capital, which represent a source of competitive advantage for schools; which enable to develop its productivity and develop its capabilities for innovation and creativity and the growing investment in people. Therefore, this study was to identify the availability of Intellectual Capital components in public education schools in Saudi Arabia. The study used the survey descriptive approach. A questionnaire was collected from a random sample of (649) male and female teachers in the elementary, middle, and secondary schools. The study concluded that Intellectual Capital components are significantly available in public education schools, and there are statistical differences at the level of significance ($\alpha \leq 0.01$) between male and female schools in the availability of Intellectual Capital components in favor of female schools. There are also statistically significant differences at the level of significance ($\alpha \leq 0.001$) between primary, middle and secondary stages in the availability of Intellectual Capital components in favor of primary stage.

Keywords: Intellectual Capital, Public Education Schools, Saudi Arabia

INTRODUCTION

Humanity today lives a rapidly changing era, which is very complex. It is characterized by the continuous flow and variety of knowledge and multiplication sources of access. It leads to the emergence of the so-called Knowledge Economy, where the knowledge became one of the main essential elements in economic progress, scientific and technological development, and the basic engine of nations and means communities to occupy a decent place within developed countries. Therefore, the real competition in the world today has been competing for knowledge with exploitation and using it. The strong nation became the most knowledgeable, the richest by its two intellectuals and creators who add to knowledge everything is new.

Intellectual Capital, under the competitive economy and the information era, is the real capital of enterprises as primary axes in the innovation and renewal process. It is the basic substrate of the development and creativity process. It is characterized by its ability to convert knowledge to value, and then to a competitive advantage, which means that the center of weight in generating value has moved from the exploitation of natural resources to the exploitation of intangible intellectual assets (Yousef, 2019).

The interest in Intellectual Capital has increased as one of the best strategies used to invest outstanding category in the educational institution, the transformation of focus on the general category of workers to focus on this distinct category, given the knowledge, capabilities, skills, expertise and ideas, leading to improved educational institutions (Attia, 2018, 255).

Intellectual Capital is formed of knowledge, expertise, skills and achievements owned by educational institutions, contributing to the development of its performance and giving it a competitive advantage that is not available to other institutions (Najm & Qishta, 2021).

The importance of Intellectual Capital in educational institutions lies through its ability to collect accumulated balance of knowledge, information and expertise, in which obtained as a result of their interaction with others and directed in favor of the activities and innovations of the institution, which achieves its competitive advantage by improving its performance and productivity of its work (Abdul Qadir, 2016). Intellectual Capital reflects the cognitive inventory of educational institutions. It includes patents for individuals and academic certifications (i.e. qualitative intellectual assets), and that the effectiveness assessment of

Corresponding Author e-mail: Mamohamed@iau.edu.sa

https://orcid.org/0000-0001-8070-8129

How to cite this article: Hassan MA (2023). The availability degree of the Intellectual Capital Components in Public Education Schools in the Kingdom of Saudi Arabia. Pegem Journal of Education and Instruction, Vol. 13, No. 3, 2023, 47-56

Source of support: Nil

Conflict of interest: None

DOI: 10.47750/pegegog.13.03.06

Received: 10.03.2022

Accepted: 29.12.2022

Publication: 01.07.2023

the educational institution is to combine Intellectual Capital into the economic potential (Gogan et al , 2016).

The studies of (Abdualdaem, 2021; Ashiba 2020; Al-Tahat et al, 2019 ; Mahmoud, 2018; Mohammed & Al-Zaidi, 2015; Othman, 2021) confirm the importance of Intellectual Capital and investment in educational institutions, as the basic resource to increase its efficiency and effectiveness, achieve their objectives and improve the quality of its services, and increase the satisfaction of beneficiaries of their services and build structural relationships with them.

The study of Qassas & Areiqat (2021) also confirmed that attention to intellectual capital contributes to increasing the competitive advantage of educational institutions, and the study of Cheng & Lee (2018) confirmed the existence of a strong positive relationship between intellectual capital and knowledge management processes in schools.

The importance of intellectual capital lies in its being a renewable and inexhaustible element, but its value is constantly increasing, through increasing the skills, knowledge, and capabilities of workers in educational institutions, that is, its productive life increases with the increase in the creative capabilities of workers that work to increase technological and functional proficiency, which gives them a competitive advantage. And increases its market share (Radia, 2021).

Hence, The attention to the development of Intellectual Capital in public education schools has become a necessity rather than a choice, and this imposes on these schools the necessity of evaluating their intellectual capital, to find out the strengths and weaknesses in all its aspects and components, and to enhance their strengths to build the intellectual capabilities of their employees so that they can produce new ideas and develop them to ensure the achievement of school objectives and raise its performance, improve its competitive efficiency, and improve its competitiveness

Study Problem and Questions

The importance of intellectual capital arises from the fact that it represents in itself a competitive advantage for organizations, especially since these organizations compete today based on the knowledge, information, and skills they possess. Therefore, attention to intellectual capital is an inevitable issue imposed by the nature of contemporary scientific and technological challenges (Shet el al, 2022).

Despite the importance of Intellectual Capital and investment, there are some studies confirmed to weaken attention to the development of Intellectual Capital components and investment well in public education schools. Othman's study (2021) emphasized the weakness of Intellectual Capital development requirements in schools in light of requirements for community knowledge. The study of Al-Zabon & Al-Ashkr (2016) confirmed the weakness of the development of

Intellectual Capital among teachers in schools, while the study of Abdel-Azim (2019) confirmed the weakness of professional capital components of teachers in schools.

Most schools in Saudi Arabia suffer from the misuse of available intangible assets, which negatively affects the quality of educational services provided to their students. Hence, the management of intellectual capital in schools contributes to giving intangible assets a competitive advantage by strengthening human resources, discovering their capabilities, exploiting Their mental and intellectual energy. the current study seeks to identify the components of intellectual capital in schools and their role in the educational process. Hence, the current study problem in the following research is determined in the question: *what is the availability degree of the Intellectual Capital components in public education schools in Saudi Arabia?*

This question is subdivided into a number of sub-questions as follows:

1. What is the availability degree of the Intellectual Capital components in public education schools in Saudi Arabia?
2. What are the statistically significant differences between the responses of male and female teachers in the degree of availability of intellectual capital components in public education schools according to the variables of school gender and educational stage?

This study will benefit officials and leaders in the Ministry of Education in identifying the availability of the components of intellectual capital in public schools at the primary, intermediate and secondary levels, and how to develop intellectual capital to increase the capabilities and skills of teachers in public schools

STUDY OBJECTIVES.

he study aimed to

- Uncover the degree of availability of the components of intellectual capital (human, structural, relational, social) in public education schools.
- Identify the differences between the responses of male and female teachers in the degree of availability of the components of intellectual capital in public education schools according to the variables of school gender and educational stage.

STUDY BACKGROUND

Intellectual Capital Concept

Intellectual Capital (IC) is from the modern concepts that appeared at the beginning of the 20th century. Actually, attention to this concept began in industrial and commercial institutions, and then moved to the service institutions,

including to educational institutions, as an attempt to take advantage of intellectual assets and intangible assets they owned to maximize their competitive capacities and strengthen their position among other institutions (Attia, 2018).

Abdul Qadir (2016) is identified Intellectual Capital as a group of intangible values that are part of the educational institution's capital, including human, structural and relational components. It contributes to the production of new and innovative ideas, helping the institution to survive, continue and improve its market share and maximize its competitiveness. While Al-Rashidi (2017) is identified it as a group of ideas and creative knowledge owned by individuals in educational institutions, which contribute to the development of the institution's performance and achieving material and moral revenues characterized by other institutions.

Al-Rabawi & Abbas (2015) identified Intellectual Capital as the precious human resource with core capacity, which possesses the ability to analyze, creativity and meet the developments, that could affect and perform institutions effectively through its ability to manage all activities in the institution.

Hence, Intellectual Capital is an intangible resource that can't be valued because it is a latent mentality that some school workers have. It is the strongest competitive weapon to achieve added value enables them to access performance levels inside them to a high degree of efficiency and excellence. It is the source from which all knowledge and creativity, in which the school can cope with all variables in the external environment.

Intellectual Capital Characteristics

Intellectual Capital is characterized with several characteristics

- It has a cumulative nature, because it is increasing and continuously developing within the institution.
- It includes the explicit knowledge inherent in the minds of individuals in the institution such as skills, knowledge, ideas, expertise, and explicit knowledge produced by individuals (Mahmoud, 2018).
- A resource that is not capable of switching to another resource, it does not arise from vacuum and can not be compensated.
- It is characterized by scarcity and uniqueness that are difficult to do in all institutions and then constitutes a competitive advantage of the educational institution (Radia, 2021).
- It has added value, where Intellectual Capital value exceeds the value of tangible resources available within the institution.
- It has mental ability of a high-level mentality owned by a few individuals within the institution without others.
- Intellectual Capital is treated as an integrated unit of continuous interaction and may not be divided into its core components (Najm & Qishta, 2021).

Importance of Intellectual Capital in Schools

The importance of Intellectual Capital lies in being the main source through which educational institutions can achieve academic excellence, where institutions are measured at present, with human knowledge and cadres that have creative ideas and knowledge that can increase their competitiveness and performance of the institution. Intellectual Capital helps schools to cope with external and internal competition and improve their competitive position, Increasing the capacity of schools to invest knowledge in the educational process, develop new models and methods of work, and attract more new customers (Mahmoud, 2018).

Intellectual Capital Increasing the capacity of schools to develop their productivity and develop their capacity to renew, creativity and growing investment in humans through good preparation for learning plans, learning and training programs, and development of research and development plans (Al-Rashidi, 2017), and Supporting creativity and innovation by focusing on innovative energies that are detected, invested and preserved (Abdul Qadir, 2016), it also Enabling schools to configure a new cognitive balance, as a result of interaction between the underlying knowledge of its members and explicit knowledge of their own experience and dealings, and Maintaining the expertise and knowledge of workers and ensuring that they remain in school to achieve their results and desired objectives (Yousef, 2019).

Intellectual Capital Enabling schools to raise their performance, improve their operations and achieve many competitive advantages depending on its distinctive human resources, and then Enhancing school stability as a social system, creating a reference framework for school activities and business and development of responsibility.

Intellectual Capital Components in Educational Institutions

The identification of intellectual capital components in educational institutions is important for their efforts to invest, manage and develop efforts effectively, benefiting the educational institution where it represents a new addition to the institution and earns competitive advantages. Intellectual Capital consists of:

Human Capital

Skills, knowledge, expertise and abilities owned by workers within the school, a source of competitive advantage and one from sources of creation and innovation if they are invested effectively. Human capital is characterized by developing through education and continuing training plans and programs, by attracting more distinguished individuals (Secundo et al , 2018) .

Structural Capital

All knowledge stores remain in schools when staff departed to their homes, including databases, organizational databases,

hardware, equipment, regulatory culture, publications, technical and cognitive means, administrative processes, organizational processes and programs, as well as the procedures and strategies that support and help workers within schools to perform their jobs efficiently and in high quality (Abdulaali, 2018). Al-Atrbi (2017) sees that structural capital includes two types: a) The capital of innovation represents the elements that help to renew and innovate the school; and b) The capital of operations and represents the culture of the institution, its strategies and investment rate in knowledge management and information technology.

Relational Capital

It reflects the formal and informal relations with parents and community institutions and its competitors, and all the beneficiaries of the services provided by schools, associated knowledge, their satisfaction and confidence, including partnerships, alliances and joint projects between school and community institutions (Abdulaali, 2018).

Social Capital

It reflects social resources included in internal and external social links of the school, whether these links between teachers and workers within the school or between school and parents, students and external society (Niqab et al, 2020). The social capital is a mixture of properties and features that combine confidence, cooperation, human relations, and positive participation among school workers, leading to maximize the value of teamwork, communication and integration with others (Ashiba, 2018).

METHODOLOGY

Study Methodology

The study was used the descriptive approach, using questionnaire to collect information on the availability of Intellectual Capital components in public education schools.

Study population

The study population is all male and female teachers in public education schools in Saudi Arabia.

Study sample

A random sample was selected (649) teachers in public schools in the cities of Dammam and Khobar in Saudi Arabia, distributed over the study variables as follows: the gender school variable (253 males, 396 females), and the educational stage variable (308 teachers from primary stage, 77 teachers from middle stage, 264 teachers from secondary stage)

Design of Questionnaire

The study used a questionnaire of two sections, 1st section: General information, and the 2nd section consists of

two axes, (I): To identify the availability of intellectual capital components in public education schools, in which consists of (25) phrases divided by four dimensions: the first dimension: the human capital consists of (7) phrases, the second dimension: structural capital consists of (6) phrases, third dimension: relational capital consists of (7) phrases, fourth dimension: Social capital consists of (5) phrases. Five-points Likert Scale was used (5 is so very large agree, 4 is large agree, 3 is a medium-sized agree, 2 is a weak agree and 1 is so very weak agree) to answer the questionnaire.

Validity

The questionnaire has been verified by presenting its (13) expert, to identify their views on its axes, dimensions and phrases as well as the extent to which it relates to its dimensions, have been modified in the light of their views. The validation of the internal consistency of the questionnaire has been verified by calculating the Pearson correlation factor between the degree of phrase and the total degree of the dimension to which it belongs, and the correlation coefficients for the human capital ranged between (0.80-0.88), the structural capital ranged between (0.75-0.93), the relational capital ranged between (0.80-0.91), and the social capital ranged between (0.76-0.90).

Reliability

The questionnaire has been verified as a whole and its axes by calculating Alpha Cronbach. Reliability correlation for intellectual capital has reached to (0.95), the structural capital (0.95), the relational capital (0.94) the social capital (0.94), and the questionnaire as a whole (0.97).

3.7 Study Procedures: A question was prepared and ensured its validity and reliability for application, and applied electronically on teachers in primary, middle and secondary schools in the cities of Dammam and Khobar.

Statistical Treatment

SPSS 24 has been used to calculate the Pearson correlation factor for verifying the validity of the questionnaire, and Alpha Cronbach to verify the reliability of the questionnaire, the calculation of the arithmetic mean (AM), and the standard deviation (SD) of the dimensions and phrases of the questionnaire, calculation of T-test and ANOVA test to know the differences between study variables, as well as The "Scheffe" test was used to determine the difference between more than two variables.

To identify the approval of the sample individuals on the phrases and dimensions of the questionnaire, the weight of responses is calculated, and the response is therefore very weak on dimension or phrase if the arithmetic mean is (1,79) and less, weak if the arithmetic mean is limited to (1,80-2,59), agree in medium if the arithmetic mean is limited to (2,60-3,39), very

large agree if the arithmetic mean is limited to (3.40-4.19), and so large agree if the AM is (4,20) and more.

RESULTS

Results of the Availability degree of the Intellectual Capital Components as a Whole in Public Education Schools (Table 1):

It is clear from Table (1) that the calculations of mean for the total intellectual capital components reached (3.48) and SD = 0.96, the degree of sample approval was large in all intellectual capital components except for structural capital was medium. The mean of IC components limited between (3.36-3.58), and standard deviation between (0.98-1.07), which confirms the converging views of the study sample. The mean for the social capital was the highest (M=3.58) and ranked first, followed by the relational capital (M = 3.50) as second rank, then the human capital in the third rank (M = 3.46), and finally structural capital ranked last (M = 3.36).

Table 1: The mean and standard deviation for the availability of intellectual capital components:

No.	Dimension	M	SD	Rank
1	Human Capital	3.46	1.06	3
2	Structural Capital	3.36	1.07	4
3	Relational Capital	3.50	0.98	2
4	Social Capital	3.58	0.98	1
Reality of the Intellectual Capital Components as a Whole		3.48	0.96	

Results for the Availability of Social Capital in Public Education Schools (Table 2)

It is clear from Table (2) that mean for social capital phrases are limited between (3.63 - 3.75), and the degree of approval for the sample was considered to be a large, and the standard deviation is between (1.02 -1.39), and these values appear to be converging views for the availability of social capital in public education schools. The phrase (23 & 24) “*School establishes the value of teamwork and work in the spirit of the team among workers.*” and “*School is concerned with strengthening human relations among all members of the school community.*” have got the highest mean (3.75, 3.69) respectively, with first and second ranks. Whereas the phrase (21) “*School establishes the principle of cooperation and positive participation among workers in order to achieve common objectives*” has got the lowest mean (3.63) to be in the last rank.

Results for the Availability of Relational Capital in Public Education Schools (Table 3)

It is clear from Table (3) that The mean of relational capital phrases are limited between (3.12-4.14). The degree of approval for the study sample between (large - medium), and the SD (1.01 -1.29). These values appear to be converging views for the availability of relational capital in public education schools. The phrases (18, 17) “*School strengthens its relationship and reputation with students and their parents.*” and “*School is interested in students and parents’ satisfaction for its*

Table 2: The mean and standard deviation for the Availability of Social Capital

No.	Phrases	AM	SD	Rank
21	School establishes the principle of cooperation and positive participation among workers in order to achieve common objectives.	3.63	1.15	5
22	School supports the principle of mutual trust between staff and school management.	3.68	1.02	3
23	School establishes the value of teamwork and work in the spirit of the team among workers.	3.75	1.05	1
24	School is concerned with strengthening human relations among all members of the school community.	3.69	1.06	2
25	School provides a mechanism for the exchange of ideas, information and experiences between employees.	3.64	1.19	4
Total Social Capital		3.58	0.98	

Table 3: The mean and standard deviation for the Availability of the Relational Capital

No.	Phrases	AM	SD	Rank
14	There are effective channels between school and community institutions.	3.20	1.15	6
15	School employs the views of students and parents in the development of the educational process.	3.31	1.29	4
16	School shares information with community institutions according to specific criteria.	3.12	1.25	7
17	School strengthens its relationship and reputation with students and their parents.	3.89	1.01	2
18	School is interested in students and parents’ satisfaction for its educational services.	4.14	0.81	1
19	School gains good methods to communicate with surrounding society.	3.54	1.18	3
20	School has a clear policy to develop its relationship with community institutions	3.29	1.29	5
Total Relational Capital		3.50	0.98	

educational services.” have got the highest mean (4.14, 3.89) respectively, with first and second ranks and the degree of sample’s approval was large. Whereas the phrase (14, 16) “*There are effective channels between school and community institutions.*” and “*School shares information with community institutions according to specific criteria.*” have got the lowest mean (3.20, 3.12) respectively with the two last ranks and the degree of sample’s approval was medium (Table 4).

It is clear from Table (4) that The mean of human capital phrases are limited between (3.24 -3.63). The degree of approval of the study sample is between (large-medium), and SD (1.09-1.37). These values appear to be converging views for the availability of human capital in public education schools. The phrases (4, 5) “*School encourages workers to share knowledge with others.*” and “*School encourages workers to share their practical expertise to solve work problems.*” have got the highest mean (3.63, 3.59) respectively, with first and second ranks and the degree of sample’s approval was large. Whereas the phrases (3, 2) “*School benefits from accumulated expertise among strategic decision-making of workers.*” and “*School gives an opportunity for employees to try their initiatives and creative ideas.*” have got the lowest mean (3.39, 3.24) respectively, with the two last ranks and the degree of sample’s approval was medium (Table 5)

Table 4: Results for the Availability of Human Capital in Public Education Schools

Results for the Availability of Structural Capital in Public Education Schools:

It is clear from Table (5) that The mean of structural capital phrases are limited between (3.22-3.53). The degree of approval of the study sample is between (large-medium), and standard deviation (1.19 -1.40). These values appear to be converging views for the availability of structural capital in public education schools. The phrases (11, 10) “*The organizational procedures in school support the process of creativity and innovation.*” and “*School is available with a flexible and open system for communication facilitates the knowledge exchange between workers.*” have got the highest mean (3.53, 3.46) respectively, with first and second ranks and the degree of sample’s approval was large. Whereas the phrases (8, 12) “*School applies sophisticated administrative systems to develop their performance constantly.*” and “*School provides electronic information to enable workers to obtain modern knowledge.*” have got the lowest mean (3.29, 3.22) respectively with the two last ranks and the degree of sample’s approval was medium.

Table 4: The mean and standard deviation for the Availability of Human Capital

No.	Phrases	M	SD	Rank
1	School encourages workers to enroll professional development programs to develop their abilities and creative skills.	3.41	1.36	5
2	School benefits from accumulated expertise among strategic decision-making of workers.	3.24	1.37	7
3	School gives an opportunity for employees to try their initiatives and creative ideas.	3.39	1.24	6
4	School encourages workers to share knowledge with others.	3.63	1.09	1
5	School encourages workers to share their practical expertise to solve work problems.	3.59	1.28	2
6	School encourages workers by continuing learning to keep up with cognitive developments in the field of specialization.	3.46	1.16	4
7	School enables workers to constantly review	3.54	1.21	3
Total Human Capital		3.46	1.06	

Table 5: The mean and standard deviation for the Availability of Structural Capital

No.	Phrases	M	SD	Rank
8	School applies sophisticated administrative systems to develop their performance constantly.	3.29	1.19	5
9	School gives freedom to workers to carry out their work and career.	3.31	1.32	4
10	The organizational procedures in school support the process of creativity and innovation.	3.46	1.21	2
11	School is available with a flexible and open system for communication facilitates the knowledge exchange between workers.	3.53	1.18	1
12	School provides electronic information to enable workers to obtain modern knowledge.	3.22	1.40	6
13	School is interested in spreading creativity and innovation among workers.	3.34	1.22	3
Total Structural Capital		3.36	1.07	

Results of Differences Between AMs of Study Sample on the Availability of Intellectual Capital according to Variables of the Type of School & Educational Stage

Differences between Average Degrees of Study Sample on the Availability of Intellectual Capital Components according to the Variable of School Type:

It is clear from Table (6) that there was statistically significant differences at the level of significance ($\alpha \leq 0.01$) between male and female schools on the availability of intellectual capital components as a whole, and social capital in favor of female schools, there was statistically significant differences at the level of significance ($\alpha \leq 0.001$) between male and female schools in the dimension of human capital in favor of female schools, While, there are no statistically differences between

boys and girls schools in structural capital, and relational capital.

4.6.2 Differences between Average Degrees of Study Sample on the Availability of Intellectual Capital Components according to the Variable of Educational Stage:

It is clear from Table (6) that there were statistically significant differences between schools in the primary, middle and secondary stages in the availability of intellectual capital components as a whole and its four components at the level of significance ($\alpha \leq 0.001$). When applying the “Scheffe” test to identify the differences between the variables of the study, we find that there was statistically significant differences in the level of significance ($\alpha \leq 0.001$) between the responses of the

Table 6: Results of “T- Test” between Male & Female Schools in the Availability of intellectual capital Components.

<i>Dimension</i>	<i>School Type</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>DF</i>	<i>T-test value</i>	<i>Sig</i>
Human Capital	Male Schools	253	3.29	1.08	647	3.343	0.001
	female Schools	396	3.58	1.04			
Structural Capital	Male Schools	253	3.27	1.09	647	1.669	0.096
	Female Schools	396	3.41	1.06			
Relational Capital	Male Schools	253	3.42	0.97	647	1.727	0.085
	female Schools	396	3.55	0.98			
Social Capital	Male Schools	253	3.47	0.99	647	2.373	0.018
	female Schools	396	3.66	0.96			
IC Reality	Male Schools	253	3.36	0.98	647	2.431	0.015
	female Schools	396	3.55	0.94			

Table 7: ANOVA Test between Averages Degrees of Study Sample on the Availability of intellectual capital Components depending on the Educational Stage Variable.

<i>Dimension</i>		<i>SUM of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig</i>
Human Capital	Between Groups	51.98	2	25.990	24.735	0.00
	Within Groups	678.78	646	1.051		
	Total	730.76	648			
Structural Capital	Between Groups	57.02	2	28.510	26.738	0.00
	Within Groups	688.81	646	1.066		
	Total	745.83	648			
Relational Capital	Between Groups	70.53	2	35.264	41.682	0.00
	Within Groups	546.54	646	.846		
	Total	617.07	648			
Social Capital	Between Groups	23.74	2	11.868	12.821	0.00
	Within Groups	597.99	646	.926		
	Total	621.73	648			
IC Reality	Between Groups	48.83	2	24.414	28.693	0.00
	Within Groups	549.66	646	.851		
	Total	598.49	648			

study sample in the reality of intellectual capital and its four components between the primary and middle stages in favor of the primary stage, and between the primary and secondary stages. In favor of the primary stage, while there were no statistical differences between middle and secondary stages..

DISCUSSION RESULTS

The availability of IC Components in Public Education Schools:

- **For IC Components as a Whole:** The results showed that intellectual capital components are largely available in public education schools ($M = 3.48$). In view of these results, they are consistent and compatible with the efforts of the Ministry of Education to provide intellectual capital components through the provision of trained and scientifically qualified scientific and administrative cadres, providing appropriate infrastructure, processing and networking of appropriate websites, the development of administrative systems and regulatory procedures, strengthening school relationship with households and community institutions, and providing the educational environment that encourages work. This result is agreed with the findings of (Al-Momani et al., 2018; Mashmash, 2018), which emphasized the high availability of intellectual capital components in educational institutions. This result is different with the results (Abdul-Azim, 2019; Al-Zabon & Al-Ashkr, 2016; Othman, 2021), which indicated weakness of IC development in schools.
- **For Social Capital:** it has been ranked first from the point of view of teachers ($M = 3.70$), and this confirms the high availability of social capital with public education schools, due to the interest of schools to consolidate the principle of cooperation, positive participation and work in the spirit of the team among workers to achieve common objectives, strengthen the principle of mutual trust between staff and school management, strengthen human relations among all members of the school community and provide mechanisms to exchange ideas, information and expertise among staff. This result is agreed with the findings of (Ashiba, 2018; Niqab et al, 2020) Which emphasized the need to attention to Social Capital in schools.
- **For Relational Capital:** it has been ranked second from the point of view of sample ($AM = 3.50$), and this confirms the high availability of relational capital with public education schools, due to the interest of schools by strengthening their relationship and reputation with students and their parents, measuring their level of satisfaction for educational services, and the interest in giving its workers with good methods of communication with surrounding community. This result is agreed with the findings of studies (Ashiba, 2020; Al-Momani et al., 2018; Mashmash, 2018). In contrast, the responses of sample members were medium in the aspects of communication channels between schools and community institutions, the employment of student views and parents in the development of the educational process and exchange information with community institutions according to specific criteria.
- **For Human Capital:** It has been ranked third from the point of view of sample ($M = 3.46$), and this confirms the high availability of human capital significantly in public education schools, due to the efforts of schools to encourage staff to share knowledge and share their expertise with others to solve work problems, encourage them to enroll professional development programs and ongoing learning programs to keep up with cognitive developments in the field of specialization and enable them to review their professional practices to discover and modify their mistakes. The result is agreed with the findings of studies (Ashiba, 2020; Al-Momani et al., 2018; Mashmash, 2018), which emphasized the interest of educational institutions to develop its human capital.
- **For Structural Capital:** it has the fourth and final rank from the point of view of sample ($M = 3.36$). This confirms the availability of structural capital with a medium degree in public education schools and that the degree of availability of phrases for this dimension is limited (large - medium), as regulatory measures are greatly available in schools supporting creativity and innovation. A flexible and open system is available that facilitates the process of exchange of knowledge among staff. This result is agreed with the results of the studies of (Abdulaali, 2018; Othman, 2021) which emphasized the importance of the provision of structural capital in schools. In contrast, the responses of sample members were medium in the administrative systems applied by schools to develop their performance and grant freedom to their workers to carry out their work and careers and attention to spread a culture of creativity and innovation among workers.

Differences Between the Averages of Teachers' Responses according to the Variables of Gender and Educational Stage:

- **Gender of schools:** The results showed there are statistically significant differences at the level of significance ($\alpha \leq 0.01$) between boys' and girls' schools in the availability of intellectual capital components as

a whole, human capital, and social capital in favor of girls' schools. This result is attributed to the interest of the Ministry of Education to provide IC with its human and social dimensions in girls' schools further than boys' schools to achieve the principle of equal educational opportunities and the provision of distinguished educational services for girls to achieve the requirements of the Kingdom's vision 2030. While there are no statistical differences between boys and girls' schools in the structural capital, the relational capital, due to the centralized school administration, where regulatory, administrative, policies and communication channels linking schools, community institutions and student parents are consolidated, This result is consistent with the findings of the Ashiba (2020) that there are differences between males and females schools in favor of females schools, This is due to the increased interest in developing intellectual capital in females schools

- **Educational Stage:** The results showed statistically at level of significance ($\alpha \leq 0.001$) between the averages of sample members in primary, middle and secondary stages on the availability of intellectual capital components for the primary level. This result is due to the interest of the Ministry of Education by providing intellectual capital components more than other stages to accommodate all of them in age of education as the basic base of all stages of education and the minimum education that should be obtained by the individual in Saudi society.

CONCLUSIONS

The study found that The components of intellectual capital are largely available in public education schools in Saudi Arabia, where the mean of Total intellectual capital ($M=3.48$), social capital ($M=3.58$), relational capital ($M=3.50$), and human capital ($M=3.46$), and structural capital ($M=3.36$). The Intellectual Capital Components are available in female schools more than in male schools, There were statistically significant differences at the level of significance ($\alpha \leq 0.01$) between male and female schools in favor of female schools, and the Intellectual Capital Components are largely available in primary stage more than the middle and secondary stages, There were statistically significant differences at the level of significance ($\alpha \leq 0.01$) between primary, middle and secondary stages in favor of primary schools.

RECOMMENDATIONS

In the light of the findings, the study recommends the need to Work to invest intellectual capital and support its continuity as a national wealth of high economic value

among educational institutions, Increasing school interest in attracting the outstanding human cadres to take advantage of their expertise and capabilities in the application of modern scientific methods to develop their performance and raise its efficiency, Developing strategic plans to develop school staff to develop their abilities, acquaintances and humanitarian relations to improve their performance and efficiency in the educational process.

The study also recommends the need to develop clear scientific standards to measure and evaluate intellectual capital in schools, Developing the reorganization and engineering of all administrative and academic processes in schools contributing to the development and reorientation of intellectual capital services, in addition to Turning schools to educational institutions seeking learning processes, and encouraging continuous self-learning for all members of the school community.

REFERENCES

- Abdualdaem, A.(2021).The effect of intellectual capital on the Total quality management of higher education and scientific research institutions in Baghdad. *Journal of Economics and Administrative Sciences*, 27(127), 1-9. <https://doi.org/10.33095/jeas.v27i127.2138>
- Abdul Qadir, H. (2016). Intellectual Capital in Palestinian Universities & Promote Competitive Advantage. *Journal of Financial, Accounting & Administrative Studies*, 3 (2), 9-28, <https://www.asjp.cerist.dz/en/downArticle/58/3/2/5277>
- Abdulaali, A.** (2018). The Impact of Intellectual Capital on Business Organization, *Academy of Accounting and Financial Studies Journal*, 22 (6), 1-17, <https://www.researchgate.net/publication/331483552>.
- Al-Momani, H., Al-harashaja, F. & Hyajnah, W. (2018). Degree of Availability of Intellectual Capital Components in Jordanian Universities from the Point of View Academic Leaders in Light of some Variables. *Educational Sciences*, 45 (4), 207-224, <https://journals.ju.edu.jo/DirasatEdu/article/view/13547/9547>.
- Al-Rabawi, S. & Abbas, H. (2015). *Intellectual Capital*, Amman: Dar Ghaida for Publishing & Distribution.
- Al-Rashidi, H. (2017). *Intellectual capital management in educational institutions*, Al Riyadh: King Fahd National Library.
- Al-Tahat, S., Matarneh, A. & Ali, O. (2019). The Impact of the Intellectual Capital of the University Administration in Achieving the Quality of Education. *International Journal of Economics and Finance*, 11(2), 137-154, <https://doi.org/10.5539/ijef.v11n2p137>
- Al-Zabon, M. & Al-Ashkr, A. (2016). Proposed Educational Foundations for the Developing of Teachers' Intellectual Capital Based on the Requirements of Sustainable Development. *Psychological & Educational Studies*, (16), 177-194, <https://www.asjp.cerist.dz/en/downArticle/117/9/1/5363>.
- Ashiba, S. (2020). Intellectual Capital Development in Secondary School Principals in Light of the Requirements of Knowledge Community. *Journal of Education in the 21st Century for Educational & Psychological Studies*, 2 (15), 1-25, <https://jsep.>

- journals.ekb.eg/article_119088_297d96afcb6712e0869978795e666ee1.pdf
- Attia, A. (2018). A Proposed Model for Intellectual Capital Management in Higher Education Institutions & Requirements for its Application. *Educational Management Journal*, (18), 249-375, <https://search.mandumah.com/Record/953040>.
- Cheng, E. & Lee, J. (2016). Knowledge Management Process for Creating School Intellectual Capital. *Asia-Pacific Education Researcher*, 25 (4), 559-566, ERIC - EJ1180876
- Gogan, L. ; Artene, A. ; Sarca, I. & Draghici, A. (2016). Impact of Intellectual Capital on Organizational Performance. *Procedia - Social and Behavioral Sciences*, 221 , 194 – 202, <https://doi.org/10.1016/j.sbspro.2016.05.106>
- Hejan, A. (2019). *Work Pressure & Career Satisfaction*. Al Riyadh: King Abdul Aziz Public Library
- Mahmoud, W. (2018). A Proposal for Intellectual Capital Development in Egyptian Universities in Light of Knowledge Management Portal. *Journal of Faculty of Education in Benha*, 29 (116). 1-92, <https://www.researchgate.net/publication/331642245>
- Mashmash, A. (2018). Reality of Intellectual Capital Development in Palestinian Universities in the Gaza Strip from the Point of View of Supervisory Staff. *Arab American Research Journal*, 4 (2), 101-135.
- Mohammed A. & Al-Zaidi, A. (2015). *Professional Learning Communities as an Entrance to the Development of Intellectual Capital at Secondary Schools: A Proposal*. *Scientific Journal*, (1), 1-82, <https://www.researchgate.net/publication/338225269>.
- Najm, M. & Qishta, A. (2021). The Requirements of the Intellectual Capital Development in the Palestinian Universities. *IUG Journal of Educational and Psychology Sciences*, 29(1), 106-131, <https://doi.org/10.33976/IUGJEPS.29.1/2021/5>.
- Niqab, M., Hanson, J., Bangert, A., Kannan, S., Sharma, S., Abdul Ghaffar, A. & Mubarik, M. (2020). Measuring Intellectual Capital in Schools in the Developing Country of Pakistan. *International Journal of Learning and Development*, 10(1), 1-34, <https://doi.org/10.5296/ijld.v10i1.16397>
- Othman, Y. (2021). Intellectual Capital Development in Secondary Schools in the Light of the Requirements of Knowledge Community. *Educational Sciences Journal*, 4 (1), 23-286.
- Qassas, K. & Areiqat, A. (2021). Management Intellectual Capital and Its Role in Achieving Competitive Advantages at Jordanian Private Universities. *International Journal of Higher Education*, 10 (2), 92-107, <https://doi.org/10.5430/ijhe.v10n2p92>
- Radia, B. (2021). Requirements for the Development of Intellectual Capital in Universities in the Light of Contemporary Global Trends and ISO Standards :An Sociological and Analytical Approach. *Dirassat & Abhath- The Arabic Journal of Human and Social Sciences*, 13(1) , 2-9, <https://www.asjp.cerist.dz/en/article/144416>
- Secundo, G., Lombardi, R. & Dumay, J. (2018). Intellectual Capital in Education. *Journal of Intellectual Capital*, 19 (1), 2-9, <https://doi.org/10.1108/JIC-10-2017-0140>.
- Shet, S. , Del Giudice, M. & Rammal, H. (2022). Managerial challenges to promoting competency-based intellectual capital in emerging market economies – developing a framework for implications. *Journal of Intellectual Capital*, 23(1), 85-102, <https://doi.org/10.1108/JIC-01-2021-0018>.
- Yousef, M. (2019). Impact of Intellectual Capital to Innovate Knowledge in Education Sector: Jeddah Education Management as a Model. *The Jordanian Journal for Library and Information Science*, 54 (1), 41-105, <https://platform.almanhal.com/Reader/Article/136716>.