



# Explaining the Relationship between Information Literacy and Intellectual Capital

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## Abstract

The study responds to two key questions: Which one of the information literacy components has a greater impact on intellectual capital and its components? And How are the quantity and quality of effectiveness? This study is based on the relationship between information literacy and intellectual capital among the staff of the Department of Education in Zanjan province. According to objective, result and methodology, this study can be considered descriptive - explanatory, applied and the surveying (field work), respectively. The study population included 245 employees working in the general office of Department of Education in Zanjan that the sample size was determined as 152 subjects by simple random sampling method. The data were collected through a researcher-made questionnaire. The research hypotheses were tested by using structural equation modeling method, dispersion indices, Pearson test and Kolmogorov-Smirnov test and by Lisrel and SPSS applications. The results showed that only some components of information literacy can improve intellectual capital. Among the ten components, five components of the information literacy have significant impact on intellectual capital. Finally, it was suggested due to increasing volume of information within the Department of Education in Zanjan, providing useful programs to empower people in proper understanding of information sources, access to information and purposeful use of them in such organizations can increase information literacy, and thereby, would improve intellectual capital.

**Keywords:** Concept of literacy, Information literacy and its components, Value of information literacy, Information literacy skills, Intellectual capital and its components

## 1. Introduction

Given that we are facing today with the explosion of information, access to information needed among the mass of information requires certain skills, which has been interpreted as information literacy. In fact, those lacking such abilities will be confused continuously in the vast ocean of information (Seifouri & Ghafari, 2012). Intellectual capital includes the portion of the total capital or assets of the company, which is based on knowledge and the company is considered as its holder and owner (NurAliZad & Rezaei, 2015). The intangible aspect of economy is founded on intellectual capital basis and its first and original material is knowledge and information. To participate in today's markets in any form and type, the organizations need information and knowledge to improve their performance (Ahmadian & Ghorbani, 2014).

## 2. The concept of literacy

Despite its simple definition, literacy does not only mean the ability to read and write. In fact, literacy is a prerequisite for intellectual growth and ability to do research. As each research activity is based on systematic thinking and scientific method, then, having literacy in its simple concept is essential (Fatahi, 2005). Different types of specialized literacy and literacy in its general meaning along with (political literacy, scientific literacy, cultural literacy, environmental literacy, social literacy, information literacy, etc.) have been defined differently in today's world. All these types of literacy should be developed in order to foster a generation that the knowledge is to be its greatest asset (Nazari, 2006).

## 3. Information literacy

Information literacy is defined as a set of skills in order to properly understand the sources of information, targeted access and use of them as a tool for individual empowerment. Information literacy is the key to lifelong learning (Parirokh & Moqadaszadeh, 2008).

### 3.1 Value of information literacy

The value of information literacy requires the individuals' ability to operate efficiently in an informational society. This requires critical thinking, awareness of personal and professional ethics, information assessment, imagined information needs, organized information, mutual relationship with job information and making effective use of information in problem solving, decision-making and research. Its enhancement at community level needs



education, culture-making and technology development (Yadegarzadeh, et al., 2008). Some countries have developed national standards for information literacy and included the information literacy courses in the curricula from primary school to higher education levels. The libraries have also welcomed the concept and arranged plans for improve the information literacy of their clients. They aim is to participate in their information literacy fostering and assist them in separating the right information from the wrong information (Mirjalili, 2007).

### *3.2 Information literacy: A basis for lifelong learning*

Since information literacy is the ability to identify, access and effective use of information, the information literates are considered as lifelong learners are considered. This, given the widespread mastery of new technology in production forms the storage. Information literacy enables the learners to master the content of the information and expand their searches; strengthen their self-direction and gain more control over their learning (Qasemi, et al., 2007). The America Library Association has stated their view of the concept of information literacy from the perspective of lifelong learning:

"What we're looking for is to plan for obtaining information. However, the reconstruction of learning process is performed based on the available sources of information for learning and problem solving during the individuals lifetime, which not only strengthens their critical thinking skills, but also empowers them in lifelong learning and more effective performance in their specialized responsibilities of citizenship"(Heidari, 2008).

### *3.3 Seven skills of information literacy (SCONUL)*

The Society of College, National and University Libraries (SCONUL) of England provided the seven skills model of information literacy in 1999.

- First skill: Those people will benefit the information literacy that will equip themselves with these skills. This means they would have the ability to recognize the informational need.
- Second skill: It includes the recognition of relevant information resources, including printed and electronic works and selecting the most appropriate ones.
- Third skill: Obtaining necessary knowledge about the structure of databases and other reference sources
- Fourth skill: It covers skills in searching and recovering the information, use of informational and communication technologies and efficient use of services such as indexing, abstracting, citation indices and current informing and awareness services.
- Fifth skill: It is related to the evaluation and comparing the reliability of the information obtained from various sources.
- Sixth skill: It relates to the skill in optimal organizing and using the retrieved information.
- Seventh skill: It is the ability to combine the data obtained and link them with prior knowledge that can lead to the production of new knowledge (SCONUL, 1999).

Figure 1. The seven skills of information literacy in SCONUL model

## **4. Intellectual Capital**

Intellectual capital is a vulnerable construct that must be constantly supported by a set of interrelated elements (White, 2007). Russ and others (1998, quoted by White, 2007) defined the intellectual capital as follows: "Intellectual capital is considered as a set of techniques enabling the administrator in better management (White, 2007). According to Edvinsson and others, intellectual capital is defined as everything influencing the success of an organization in the future that is determined on its balance sheet (Edvinsson, et al., 2005).

### *4.1 Elements of intellectual capital*

Generally, the IC has three basic interdependent components: Human capital, structural capital and customer (relational) capital

- Human Capital

Human capital is defined as a combined knowledge, experience skill and ability of everyone in the organization (McGill, 2006). Stewart considers human capital as the source of creativity and vision. In fact, human capital represents the knowledge asset of members of an organization (QelichLi & Moshabaki, 2007).

- Structural Capital

Structural Capital is knowledge that stays in the company / organization when the employees go home at night. Thus, the company is the owner of the structural capital. For example, the construction permit or



license is created by the human capital, but after issuance, they belong to the company (Nazari & Hermans, 2007, according QelichLi & Moshabaki, 2007). Structural capital consists of all non-human knowledge resources within the organization. It includes proprietary software, computer programs, databases, organizational structure, patent and exploitation rights, trademarks (brands) and similar assets, which support the productivity of the organization (McGill, 2006, according QelichLi and Moshabaki, 2007).

- Customer (relational) Capital

It is the value considered by the customers for the organization (McGill, 2006). This value is created by communication between the organization and its customers. The customer capital includes things such as the value of company-owned rights, its relationships with people and organizations associated with customers, market share, retention rate or loss rate of customers as well as net profitability per customer. The new definitions have developed the concept of customer capital to capital- relational concept, which covers the knowledge in all the relationships that the organization establishes with customers, competitors, suppliers, associations or the government (QelichLi & Moshabaki, 2007).

#### *4.2 Intellectual capital as a metaphor (intangible factors)*

At the beginning, a common image as a metaphor was being used to introduce intellectual capitals, which included an apple tree with red or green fruits; since, apple is tied to the concept of knowledge in European culture, and the roots of tree are considered essential as intangible factors (metaphor of intellectual capitals) in producing tree's fruits. Thus, one of the main characteristics of intellectual capitals is being intangible (Karp, 2003).

#### *4.3 Intellectual capital and competitive advantage*

IC provides a new resources base through which the organization can compete. Today, the basis of successful organization activities has turned from production-orientation toward knowledge-orientation. The knowledgebased school advocates such as Inkpen (1998) and Zack (1999) believe that if a corporate has better intellectual capital and knowledge assets in the business environment, it will have a competitive advantage (MohseniFard, et al., 2014). Intellectual capital is the intellectual component of organizations of the twenty-first century. Intellectual capital includes the employees, managers, leaders, supervisors, administrative staff, and in general, the company human resources, etc. (Bontis & Serenko, 2009; quoted by Najmabadi & Davari, 2014).

#### *4.4 Importance of intellectual capital and organizational performance*

The emergence of the new knowledge- and information-based economy has led to increased interest of researchers in studying in the field of intellectual capital (IC). Although intellectual capitals were unknown in the past, but now, they play role in various forms in the process of economic, managerial, technological and social development. The resulting revolution in information technology, growing importance of knowledge and knowledge-based economy, changing patterns, creation of a networked society as well as the emergence of innovation, as the most important determinants of competitive advantage are as those factors that have provided the grounds of increased importance of intellectual capital in companies and organizations more than ever (Anvari Rostami & Rostami, 2004; quoted from Nouri Ali Zad, 2015).

### **5. Research background**

In a study, Ghasemi et al. (2008) investigated the standardization of information literacy competencies for Iranian academic community (Universities of Mashhad, Tehran, Shiraz, and Ahvaz Shahid Chamran). The research methodology was a descriptive-surveying one and a questionnaire was used the research tool. The results showed that the information literacy status level of the study population was at an acceptable level with an average higher than 3.7. Also, significant differences were seen between the students of humanities discipline and other disciplines, between students of different areas of university, between girl and boy students and between graduate and Ph.D students. In a research, PandPazir and Cheshmeh Sohrabi (2011) examined the information literacy level of graduate students of Kermanshah University of Medical Sciences based on Eisenberg and Berkowitz's six big skills. The research methodology was a descriptive-surveying approach with a questionnaire as the research tool. Sampling was not done due to the limited population; thus, from 181 people in the statistical population, 152 subjects participated in the study. The results showed that holding short-term and continuous training courses as well as providing pamphlets, educational materials and guidelines of how to use printed and electronic resources seems to be necessary. The general results of this study showed the IL status of graduate students in Kermanshah University of Medical Sciences above the average level with a mean value of 3.37. In a study, Seifouri and Ghafari (2012) evaluated the information literacy status of final year undergraduate students in Kermanshah Razi



University. A descriptive-surveying methodology was used in the research, and the data gathering tool was a questionnaire. The study population included 332 students of final year undergraduate course (198 females and 134 males). The results showed that the mean of commenting on familiarity with printed and electronic resources was equal to 3.38, while the mean on using them was as 3.16. Twelve percents of students had no use of online or in person services for access to the information. A portion of 15.6% of the study population use different technologies as much and very much in studying the interaction of ideas and phenomena. Also, only 12.9% of the study population is greatly and very skilled in evaluating the usefulness of recovered resources. The results also showed that the information literacy of students in different disciplines varies, and the students' information literacy mean rate as 3.27 is lower than the average of 3.5. Thus, the information literacy of the study population remains below the average.

Powell, Ahip & Case-Smith (2003) performed a study titled as "Evaluating the information literacy skills of occupational therapy graduates". The objective of the study was to determine the information literacy skills of Ohio State University graduates. The study results showed that most of the graduates prefer using available information sources such as Internet, and 26% of them have at least used the Medline and Cinhal databases once. Also, 42% of graduates knew the libraries education useful and reported the use of librarian assistant useful. In a study, Baker (2013) provided a theoretical model for intergenerational training in which two categories of information literacy and cultural heritage had been emphasized. In fact, information literacy and cultural heritage are considered a good model for intergenerational learning through lifelong learning, which provide a bunch of training tools. In a study, QelichLi and Moshabaki (2009) examined the role of intellectual capital in creating competitive advantage in two Iranian automobile manufacturing companies. Due to the commitment to protect enterprise data, names of these two companies cannot be mentioned. The study methodology was a descriptive and analytical approach. The research tool used was a questionnaire and a simple random sampling method was used. The study sample included the managers of A and B companies. Of the 500 respondents from Company A, a random sample of 91 subjects (51 Chairmen, 30 Presidents and 10 Managers) was selected. In addition, from the 258 respondents of Company B, a sample of 72 subjects (53 Chairmen, 16 Presidents and 3 Managers) was selected. The results indicated a significant positive relationship between the intellectual capital of the two companies and their competitive advantage. Obviously speaking, with increasing intellectual capital, their competitive advantage would increase as well. In a study, Dehghani and Marrofi (2012) examined the structural relationships between intellectual capitals, knowledge management and entrepreneurship in Kurdistan's Science and Applied University. The study methodology was a descriptive-correlational approach and the research instrument was a questionnaire. The study population included 200 students. The results showed that there is a direct relationship between the intellectual capitals of the university, knowledge management and the individual entrepreneurship. The findings also indicated that a complete harmony must be among knowledge management strategies (Generation, transmission and using it) in the field of education and university system to achieve high performance, and especially, to succeed in institutionalization of a culture of entrepreneurship in the university.

Nahapiet & Ghoshal (1998) discussed three topics in an article entitled as "Social capital, intellectual capital and organizational advantages:

1. The effect of social capital in the creation of intellectual capital
2. The organization ability as a social institution in the production of social capital
3. The effect of social capital in creating competitive advantage for the organization through generating and sharing of intellectual capitals

From the organizational point of view, the social capital is defined as the sum of actual and potential resources within, available through and derived from an individual or a social unit relations network. From their perspective, intellectual capital is one of the important organizational capabilities and assets, which can considerably help the organizations in generating and sharing knowledge and create sustainable organizational advantage for them in comparison to other organizations. In a study, Costa (2012) evaluated the performance and productivity of IC of 17 companies over a period of 4 years (2005-2008) in the manufacturing and building sector of Racing Yachts in Italy. In this study, data envelopment analysis techniques were used to evaluate the efficiency, and the Malmquist Index was applied to assess productivity growth of IC. The study results divided the companied into 4 groups:

1. High-performance and fast-growing group
2. High-performance and slow-growing group
3. Low-performance and fast-growing group
4. Low-performance and slow-growing group

Finally, some recommendations were provided to improve the productivity and efficiency of inefficient listed companies in the industry.



## 6. Methodology

### 6.1 Research objective

The study purpose was to improve the information literacy level of staff in the Department of Education, Zanjan Province, in order to increase intellectual capital.

### 6.2 Research questions

The study seeks for answers to the following two questions:

1. Is there any relationship between information literacy and intellectual capital (and its three dimensions)?
2. How is the quality and quantity, if there is any relationship?

### 6.3 Research Hypotheses

**Main hypothesis 1:** There is a relationship between information literacy and intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-1:** There is a relationship between access to information literacy and structural dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-2:** There is a relationship between access to information literacy and relational dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-3:** There is a relationship between access to information literacy and human dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-4:** There is a relationship between using information literacy and structural dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-5:** There is a relationship between using information literacy and relational dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-6:** There is a relationship between using information literacy and human dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-7:** There is a relationship between evaluating information literacy and structural dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-8:** There is a relationship between evaluating information literacy and relational dimension of intellectual capital in the Department of Education of Zanjan Province.

**Sub-hypothesis 1-9:** There is a relationship between evaluating information literacy and human dimension of intellectual capital in the Department of Education of Zanjan Province.

### 6.4 Research variables and its components

1. Independent variable (predictor): The independent variable in this study is "information literacy", since it is measured by the researcher to determine its effect on the dependent variable. The information literacy components include: access to the information, using the information and evaluation the information
2. Dependent variable (criterion): "Intellectual capital" is the dependent variable in this study, since it is measured to ascertain and determine the effect of IL on it. The IC components include structural capital, relational capital and human capital.

### 6.5 Research Conceptual model

The conceptual model is researcher-made based on the variables and hypotheses of the study. In the following model, the relationship between intellectual capital and information literacy is explained. In fact, the variable that the flash is set out from is considered as the independent variable (predictor), while the variable that the flash is set into is considered as the dependent variable (criterion).

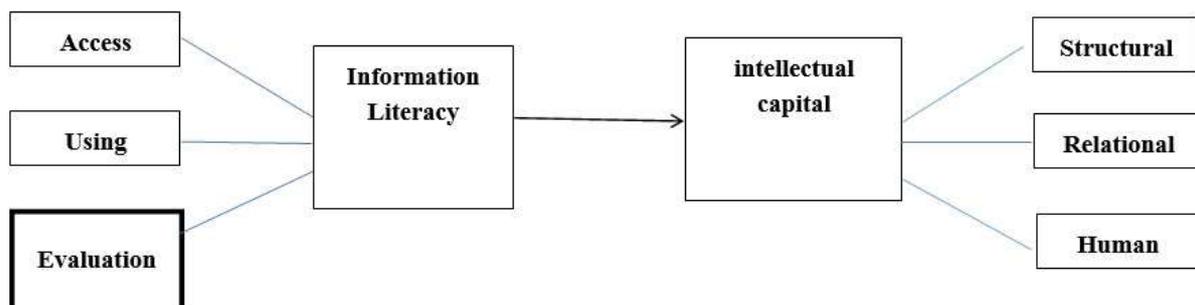


Figure 2: Research conceptual model



### 6.6 Population & Sample

The study population consists of "a number of desired elements that have at least a characteristic trait". The characteristic trait is one that is common among all the population elements and distinctive of the population from other communities (Azar & Momeni, 2012). All employees of the Department, "245" subjects, were considered as the study population. The sample includes "a limited number of the statistical society that reflects the main features of the society (Azar & Momeni, 2012). Using Cochran's formula with a 95% confidence level and possible accuracy of 5%, the sample size was determined as 152 subjects. To access the information of the specified population, 170 questionnaires were distributed in total, and finally, 152 usable questionnaires were completed and collected. Thus, the rate of return is 89%.

### 6.7 Collection tool and data analysis methods

In the present study, the data collection tool was a questionnaire. The questionnaire consisted of two parts. The first part was related to the population demographic information, including gender, marital status, age, education and work experience. The second part was related to the research variables. The IC and information literacy respectively with 15 and 30 questions were analyzed using a 5-item Likert scale. Finally, after gathering the questionnaires, to review and respond to the research hypotheses and data analysis, the following techniques and software were used:

Descriptive and inferential statistics techniques by using the structural equation modeling, dispersion test, Pearson test, Kalmogorov– Smiranov Test and statistical software of SPSS and Lisrel.

### 6.8 Inventory Reliability

Reliability implies that any particular method used for times about a same thing subject would lead to the same result or not (Ahmadi & Kalhorian, 2015). To determine the reliability of this study, the Cronbach's alpha method and SPSS software were used. The Cronbach's alpha method is used to measure the internal consistency of measurement tools, including the questionnaires measuring different characteristics. In these instruments, the response can take a numeric Value. Closer coefficient value obtained to 100% indicates the higher reliability of the questionnaire (Sarmad, et al., 2001). In the present study, the questionnaire reliability was calculated as 0.946.

### 6.9 Inventory validity

The questionnaire validity determines that how much the measurement tool measures the examined feature. The content validity is usually used to examine the components of a measuring tool. The content validity of a measuring instrument depends on its constituent questions. In this study, the views of academics and experts confirmation were used for content validity. The construct validity of a measurement tool represents that how much a measurement tool measures a construct or a feature with a theoretical basis. The construct validity consists of two types (confirmatory factor analysis and exploratory factor analysis) (Sarmad, et al., 2001). To determine the construct validity of the study, the confirmatory factor analysis method was used.

### 6.10 Research area

In terms of the subject, the study was in the area of information literacy and intellectual capital of Department of Education staff, Zanjan province. The period time occurred in 2014-2015.

### 6.11 Demographic (biographical) characteristics of the target community members

- **Gender:** 81.6% (male) and 18.4% (female)
- **Marital status:** 92.1% (married) and 7.9% (unmarried)
- **Age:** 49.3% (41-50); 46.1% (31-40) and 4.6% (20-30)
- **Education:** 61.8% (bachelor's degree); 23% (master's degree); 8.6% (associate degree) and 6.6% (diploma)
- **Work Experience:** 66.5 % (21 to 30 years); 28.3% (11 to 20 years) and 5.3% (1 to 10 years)

### 6.12 Confirmatory factor analysis of intellectual capital variable

The intellectual capital construct is measured by three variables of structural capital, relational capital and human capital with 15 questions.

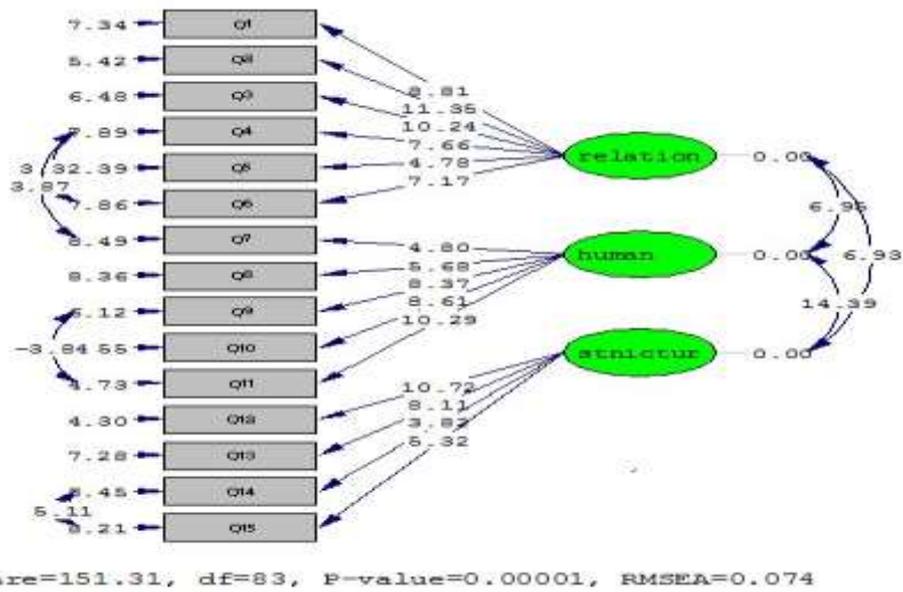


Figure 3: The T-statistic and significance of corrective model coefficients of

### 6.13 intellectual capital

The fit indices of the relevant model are shown in Table 1. Given that all indices are in the acceptable range, thus, the fitness of the data collected with the model is optimal. Thus, the fitness of the final version of measuring the intellectual capital is confirmed.

Table 1: Fitness indices of the measurement model of intellectual capital

CFI	NNFI	NFI	AGFI	GFI	RMSEA	SRMR	$\chi^2_{df}$	Fitness Index
> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	< 0.1	< 0.05	< 5	Acceptance range
0.98	0.97	0.93	0.91	0.91	0.074	0.025	1.823	Result

### 6.14 Confirmatory factor analysis of information literacy variable

The information literacy construct is measured by three variables of access to information, use of information and data evaluation with 30 questions.

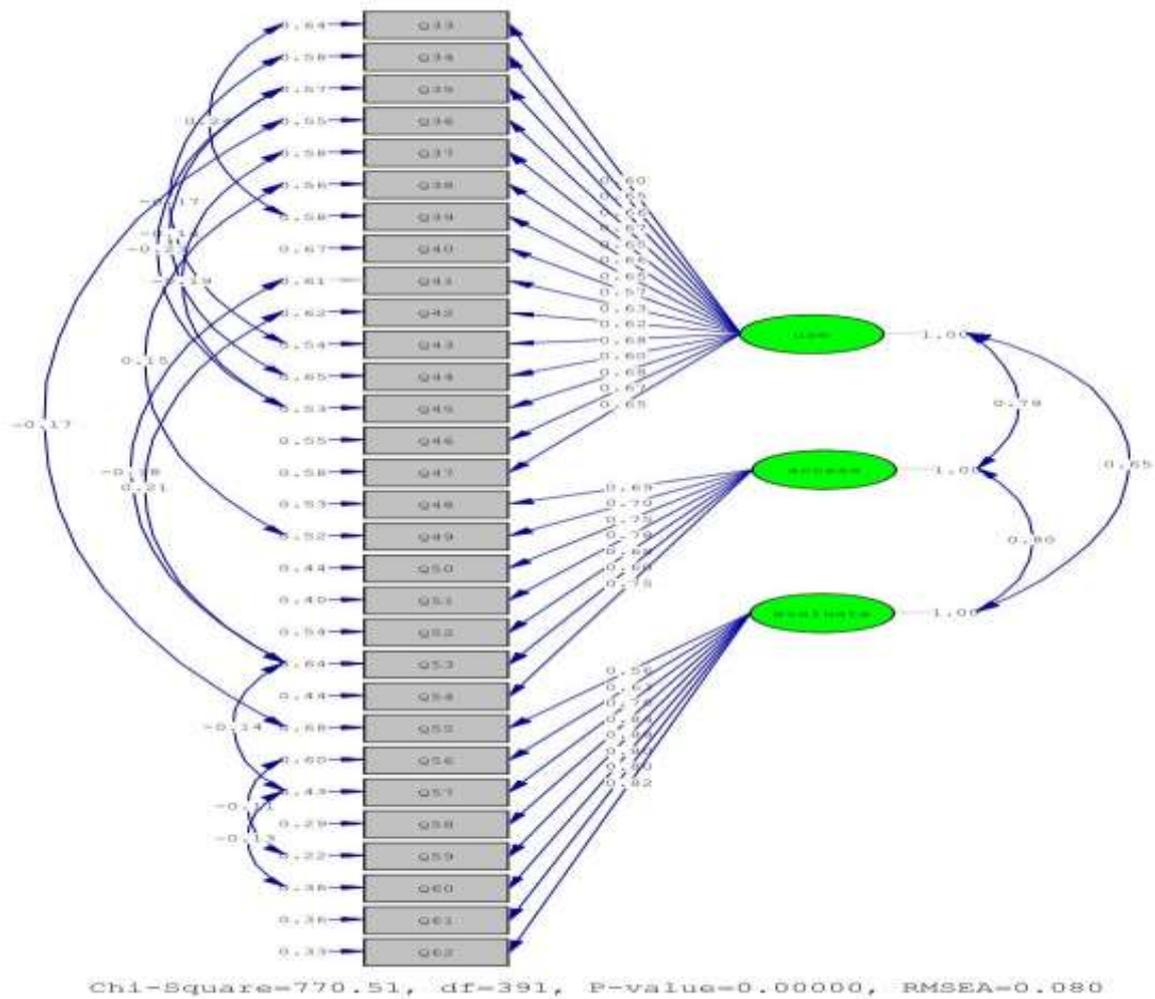
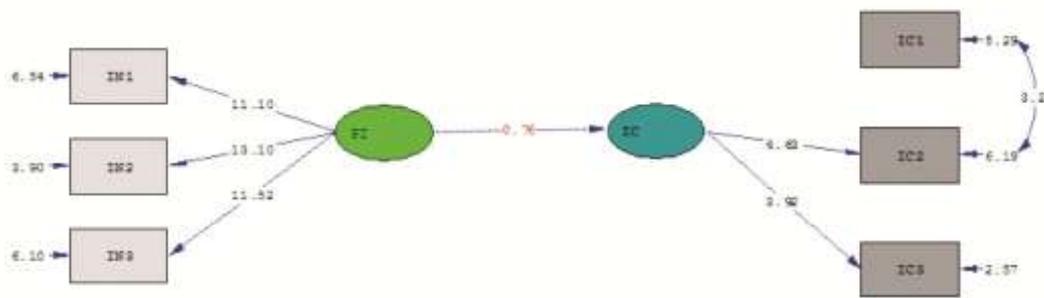


Figure 4: T-statistic and significance of the corrective model coefficients of information literacy

The mentioned model fit indices are shown in Table 2. Given that all indicators are in the acceptable range, thus, the fitness of the data collected with the model is optimal. Therefore, the final measurement model fitness of the information literacy is approved.

Table 2: Fitness indices of the measuring model of the information literacy

CFI	NNFI	NFI	AGFI	GFI	RMSEA	SRMR	$\chi^2_{df}$	Fitness Index
$\gamma$ 0.9	$\gamma$ 0.1	$\gamma$ 0.05	$\gamma$ 5	Acceptance range				
0.98	0.96	0.98	0.92	0.98	0.080	0.032	1.97	Result



Chi-Square=32.26, df=16, P-value=0.00926, RMSEA=0.082

Figure 5: Significance of the relationships in the modified structural model

6.15 Answering to the research hypotheses

Table 3: Distribution test to evaluate the relationship between dimensions of IL and IC components

Standard deviation	Mean	Maximum	Minimum	Sample size	Hypothesis type
.99	3/41	3/57	3/25	152	Main hypothesis 1
1/02	3/42	3/58	3/25	152	Hypothesis 1-1
1/05	3/26	3/43	3/09	152	Hypothesis 1-2
.99	3/59	3/75	3/43	152	Hypothesis 1-3
.96	3/53	3/48	3/37	152	Hypothesis 1-4
.94	3/44	3/59	3/28	152	Hypothesis 1-5
.93	3/96	4/11	3/81	152	Hypothesis 1-6
.99	3/48	3/64	3/32	152	Hypothesis 1-7
.98	3/62	3/78	3/46	152	Hypothesis 1-8
.94	3/46	3/61	3/31	152	Hypothesis 1-9

Table 4: Kolmogorov-Smirnov (KS) test to assess the normality of the research variables

Significance level	Kolmogorov statistic	Sample size	Hypothesis type
.451	.860	152	Main hypothesis 1
.504	.40	152	Hypothesis 1-1
.724	.382	152	Hypothesis 1-2
.377	.429	152	Hypothesis 1-3
.146	1/143	152	Hypothesis 1-4
.241	.395	152	Hypothesis 1-5
.247	.185	152	Hypothesis 1-6
.471	.873	152	Hypothesis 1-7
.651	.581	152	Hypothesis 1-8
.227	.236	152	Hypothesis 1-9

The results showed that the distribution of all the variables in the target population is normal.

Table 5: Pearson test to describe the relationship between information literacy dimensions and intellectual capital components

Test results	Significance level	Correlation coefficient	Sample size	Hypothesis type
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<b>Confirmed main hypothesis</b>	.000	.230	152	<b>Main hypothesis 1</b>
<b>Confirmed sub-hypothesis</b>	.001	.257	152	<b>Hypothesis 1-1</b>
<b>Non- Confirmed subhypothesis</b>	.570	.046	152	<b>Hypothesis 1-2</b>
<b>Confirmed sub-hypothesis</b>	.000	.314	152	<b>Hypothesis 1-3</b>
<b>Non- Confirmed subhypothesis</b>	.571	.055	152	<b>Hypothesis 1-4</b>
<b>Non- Confirmed subhypothesis</b>	.191	-.126	152	<b>Hypothesis 1-5</b>
<b>Non- Confirmed subhypothesis</b>	.750	.031	152	<b>Hypothesis 1-6</b>
<b>Confirmed sub-hypothesis</b>	.004	.233	152	<b>Hypothesis 1-7</b>
<b>Non- Confirmed subhypothesis</b>	.959	.004	152	<b>Hypothesis 1-8</b>
<b>Confirmed sub-hypothesis</b>	.001	.262	152	<b>Hypothesis 1-9</b>

## 7. Summary & Conclusion

Based on the data collected and their processing, 5 of 10 hypotheses were not confirmed. Hence, the following results were obtained:

1. There is a significant relationship between information literacy and intellectual capital in the Department of Education in Zanjan Province. This means in general, information literacy can lead to improved intellectual capital.
2. There is a significant relationship between access to information literacy and the structural dimension of intellectual capital in the study target population. This means, through creation and strengthening of formal and informal relations within the organization, access to the information literacy will increase, which in turn leads to enhanced structural dimension of the intellectual capital.
3. There is a significant relationship between access to information literacy and the relational dimension of intellectual capital in the study target population. Thus, through creation a flexible and dynamic structure, the communication between the experts in informal and formal knowledge groups and access and exchange of information and knowledge become possible, which leads to increased access to information literacy in the Department of Education in Zanjan. This will lead to the improvement and strengthening of the relational dimension of intellectual capital.
4. There is a significant relationship between access to information literacy and the human dimension of intellectual capital in the study target population. This means increased needs of the staff to have access to information literacy will lead to the creation of new ideas among the human resources and the development of skills among the staff, and thereby, the human dimension of the intellectual capital will improve.
5. There is no significant relationship between using information literacy and the structural dimension of intellectual capital in the study target population. Therefore, by creating and strengthening the staff knowledge and effective use of technology, the use of information literacy is increased, and ultimately leads to improved and strengthened the structural dimension of the intellectual capital.
6. There is no significant relationship between using information literacy and the relational dimension of intellectual capital in the study target population. Therefore, with attention to strengthening and use of new communication and informational technologies such as the internet, etc. the information literacy increases and will lead to improved relational dimension of the intellectual capital.
7. There is no significant relationship between using information literacy and the human dimension of intellectual capital in the study target population. Therefore, attention and giving importance to the staff and creating facilities to increase the use of information literacy and managing their knowledge through financial and moral supports will contribute to improved and strengthened human dimension of the intellectual capital within the organization.
8. There is a significant relationship between evaluation of information literacy and the structural dimension of intellectual capital in the study target population. This means valuation and evaluation of information



literacy level and creating a spirit of criticism and bearing failure will lead to increased staff motivation for exchanging and combining knowledge and improves the structural dimension of the intellectual in the organization.

9. There is no significant relationship between evaluation of information literacy and the relational dimension of intellectual capital in the study target population. Therefore, by increasing satisfied social interaction between staff and expanding the network of relationships in addition to developing knowledge, experiences and information between them, the ground for the staff creativity is prepared and a good evaluation of the information literacy is achieved, which will lead to the improvement of the relational dimension of the intellectual capital within the organization.
10. There is a significant relationship between evaluation of information literacy and the human dimension of intellectual capital in the study target population. That is, by increasing monitoring and evaluating information literacy by the authorities, the employees try to increase their efficiency level, which leads to the promotion of the human dimension of the intellectual capital.

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