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Investigating the relationship between knowledge management and social capital

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Abstract
Purpose: The purpose of this study is to establish the relationship between knowledge management and social capital in education from the perspective of human resource managers of Tehran industrial companies.
Research methodology: A knowledge management questionnaire and social capital questionnaire were used to collect data. The reliability of the questionnaires was 0.909 and 0.912 by Cronbach's alpha method, respectively. Kolmogorov-Smirnov tests, regression, and Pearson coefficient were used to analyse the data.
Results: The results show that there is a significant relationship between social trust and knowledge management, also there is a significant relationship between networks and knowledge management; In addition to the above, it was shown that there is a significant relationship between cooperation and knowledge management and between relationships and knowledge management.
Limitations: The practical and usable environment for the results of this study is the educational environment.
Contribution: Our research can be very useful for researchers in this field due to the accuracy we had in doing the work and using its results in the educational environment and industrial companies.
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1. Introduction

Organizations need to acquire knowledge in order to be innovative in their operations and to create or deliver innovative products and services. Organizations also need to disseminate knowledge to their employees, so that they can apply the innovation in their day-to-day activities. Only in this way can they meet the demands of a competitive environment and the changing expectations and needs of customers. Recognizing the factors affecting organizational knowledge management is one of the first steps in the effective use of organizational intellectual capital. On the other hand, social capital is a new concept that plays a more important role than physical and human capital in organizations and societies (M. R. Zahedi & Khanachah, 2020). The concept of social capital has been widely used in sociology and economics, and more recently it became more popular in the management of organizations. The concept of social capital refers to the connections between the members of a network as a valuable resource, and through the creation and mutual trust that leads to the realization of the goals of the individual members.

The transfer of information and knowledge at the macro and micro levels between individuals and organizations depends on the individuals who facilitate and accelerate this transfer. As a result, all factors that encourage or hinder interpersonal communication will also affect individuals' information exchanges(M. R. Zahedi & Khanachah, 2019). Therefore, the importance of trust-based communication and interaction between individuals in the development and application of knowledge has been emphasized (M. R. Zahedi & Naghdi Khanachah, 2020). If an organization can increase the effective

interactions among its employees, within the groups and organizational units, it can be more confident in the effectiveness of information exchanges between its people, and thus effective management of organizational knowledge. Therefore, creating and expanding the culture and atmosphere in the organization, that encourages this type of communication and interaction, is one of the necessities of knowledge management (Ghorbani & Khanachah, 2021).

Upon management literature, we conclude that there is no fixed and clear definition of knowledge management. The existing definitions focus mainly on the capabilities of organizations in generating wealth from knowledge-based assets and the role of knowledge management is the discover, collect and use organizational technical knowledge in order to improve processes and effectively train employees(Ayoko, 2021). The process of defining, maintaining, disseminating, and accessing the knowledge produced in an organization for its members in order to increase productivity and efficiency and easier access to the content and knowledge produced is known as knowledge management. Therefore, knowledge management has an impact on all organizational software (Mappadang et al., 2022). This impact ranges from accounting software to human capital management software and even production software.

2. Literature Review

Bourdieu (1986) considers social capital as the relationship of individuals to each other in social settings. Social capital is obtained through purposeful activities and social capital can be introduced in the field of economic rules. The ability to do so depends on the type of social laws, communications, and existing social networks. According to Adler (2012), social capital is a resource for individual and collective actors whose, through configuration and network content, almost stable social relationships include an inventory of active interactions between individuals; That is, trust, mutual understanding, common behaviors and values that connect members of human networks, and groups and enable collaborative activities in the organization (Hajizadeh, Jajarmizadeh, & Mohtashami, 2021).

Organizations and industries have historically relied on the importance of their employees' and researchers' knowledge to produce and develop a new product, and their knowledge was something that could never be touched or recorded anywhere because it was mostly gained through experience and was not collected, codified, recorded and stored for ease of recall (Hamouche, 2021). With the growth of technology and increasing sensitivity of organizations, especially IT activists, the discussion of scientific and intangible assets gradually found its way into the culture of organizations. It was no longer just having scientists or expert researchers that were the key to the success of organizations, but the structured use of their knowledge in the organization and maintaining and sharing it with other employees in order to increase awareness and thus increase productivity in the organization (Sonnentag et al., 2021). In the 1980s, systems based on artificial intelligence developed (Amegayibor & Korankye, 2021). These systems were able to structure and store the knowledge and experience of employees and organizational processes. In 1989, a group of American knowledge-based companies formed a consortium to maintain and oversee the scientific assets of member companies. It was in this year that knowledge management became official and entered the field in earnest (Hatami, Seyednaghavi, Alvani, & Hoseinpour, 2021). In Europe and Asia, companies for the protection and dissemination of knowledge were formed in 1990 and 1996, respectively, and thus a new platform was formed in the field of management called knowledge management.

In any organization, knowledge is stored as a source of power and influence, and the power of knowledge in communication and application is considered a positive and creative force. The problem today is not how to obtain information, but how to manage it (Hajizadeh et al., 2021). Organizations that manage their knowledge achieve a high level of productivity. With more access to the knowledge of their employees, organizations can make better decisions, optimize processes, reduce duplication of work, increase innovation, and ultimately, promote integration and collaboration within the organization. Education, as one of the broadest formal social institutions, should be a pioneer in establishing knowledge management as a core competency compared to other organizations and play a leadership role. Also, the role of knowledge organizations, focuses its main activities on learning,

creating, and disseminating knowledge. Studies inside and outside the country have examined the application of knowledge management in this organization from different dimensions (nili et al., 2021).

Knowledge management seeks to produce, maintain and disseminate existing knowledge in organizations for the proper and principled training of employees. When employees in the organization benefit from basic and accurate training, we will see increased efficiency and improved performance in all aspects. Thus management should encourage knowledge sharing, make those who are interested in learning more enthusiastic, and moves those on the fringes of learning to the center of gravity of knowledge production and sharing. Suppose a unit in an organization conducts an experiment or research a few years ago and enters data into the organization. The results of this research are obsolete over the years and the organization needs up-to-date information. This time the task of collecting information is assigned to another unit. In an organization that does not have knowledge management, all the steps of finding information resources and research methods, etc. must be done from the beginning. However, in the organization that uses it, the methods and results of the research are available to everyone, and the new unit only needs to collect information from sources already stored in the organization's database, and for research methods, if the methods The data used have good data that can be used the same, otherwise in the least case has the advantage that the new group does not go to use that particular method.

Knowledge input to the organization comes from a variety of sources, this information may come from external sources such as customers and suppliers or internal sources such as employees and managers. Gathering, analyzing and evaluating, applying, and sharing knowledge is a critical step and should be of great importance for the organization that uses knowledge management. The knowledge produced in the organization, no matter how unique, is of no use to the organization without the access of experts. The most important areas of the information entred into the organization and how to manage it can be summarized as follows:

1. Customer input is accurately evaluated and analyzed in order to better understand their needs.
2. Input information from staff results in a better and more accurate understanding of their needs leading to efficient human resource management.
3. Input information from sales feedback of products and services, which results in the design and presentation of products and services that become more practical.
4. Input information from experts and designers that is shared when designing the product for the first time.
5. Input information from supply and production managers in order to manage and increase supply chain productivity.
6. Designing a database of organizational knowledge resources in order to more easily share the knowledge generated in different departments.
7. Knowledge-based asset management refers to the intellectual capital of the workforce and the use of their thinking and creativity to improve processes.

Enterprise resource planning (ERP) software is a popular tool for many organizations and businesses these days. The speed of using this software solution has intensified, especially in the last decade and in the era of information explosion. One of the main positive functions of ERPs is their knowledge management system. An integrated and agile system that collects, analyzes, and provides all the knowledge entered into the organization at the moment to its members (Vrabcová & Urbancová, 2022). This system, in full coordination with other departments, provides all the necessary information as soon as the need arises and calls them. With the growth and development of technology these days, we are witnessing the expansion of the use of offices and virtual assistants (Jamil, 2022). One of these technologies is the digital work environment, which reduces the organization's need for physical work offices. Knowledge management is a good tool to digitize organizational processes and help establish this digital environment (Bamdad Sufi, Taghavifard, Dehghanan, & Dehghan Najmabadi, 2021).

Knowledge Management Standard ISO 30401 defines knowledge as "the human or organizational asset that enables effective decisions and activities in a field." Organizational knowledge can be categorized from different perspectives, but one of the most important is the classification of knowledge into two

categories: "hidden knowledge" and "explicit knowledge" (DeCenzo, Robbins, & Verhulst, 2016). Hidden knowledge or tacit knowledge is the knowledge that is in the minds of people and is not documented. Hidden knowledge is abstract and usually unstructured. This knowledge is acquired through practice and learning during practice and is established in the minds of individuals. In contrast, explicit knowledge or explicit knowledge is the knowledge that was objective and codified. In other words, explicit knowledge is the knowledge that is codified and much easier to store and share than hidden knowledge.

The knowledge cycle, also known as knowledge development and conversion processes, consists of five stages: knowledge identification, knowledge creation, knowledge storage, knowledge sharing, and knowledge application.

Knowledge Identification: This important step is the first part of the knowledge cycle in which the critical knowledge required by the organization is identified. At this stage, the knowledge gap and the types of knowledge required in different areas of the organization are defined.

Knowledge creation: Knowledge creation, conversion, and production of new knowledge in order to repair the knowledge gaps of the organization. There are many ways to create new knowledge.

Knowledge storage: Knowledge storage involves the collection and storage of organizational knowledge. Preserved knowledge must be organized in such a way that it can be retrieved quickly and easily by employees.

Knowledge sharing: Sharing occurs when there is a regular and steady exchange of knowledge between members of the organization. The purpose of this process is continuous learning to achieve organizational goals.

Applying knowledge: Applying knowledge means reusing knowledge in the organization. Applying knowledge makes sense when it is used to improve products and services.

Successful organizations are those that distribute new knowledge widely across the organization and apply it quickly to new technologies and products. This process will lead to creativity and innovation and the development of competitive advantage. Managers consider innovation as the greatest result of applying knowledge management in organizations (M. R. Zahedi & Naghdi Khanachah, 2020). Knowledge management is related to the exploitation and development of an organization's knowledge capital in order to advance its goals of organizations. Organizations in knowledge management succeed in considering knowledge as capital and developing organizational values and software that supports the creation and dissemination of knowledge (M. Zahedi, Akhavan, & Naghdi Khanachah, 2022). Organizations have concluded that the only way to develop core competencies and excel in today's competitive world is through knowledge management.

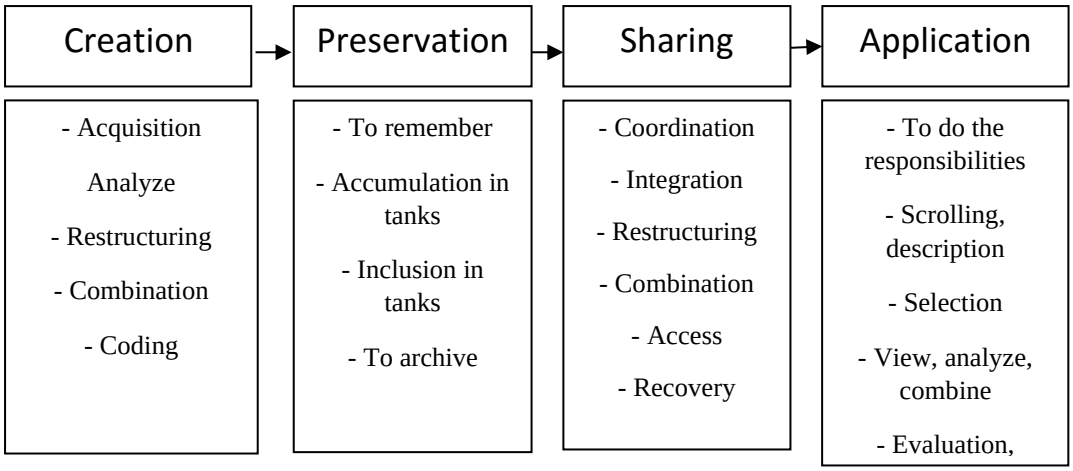

Figure (1): Summary of Key Activities of the Knowledge Management Cycle (Whig, 2019)

A major advantage of Whig's approach to the knowledge management cycle is that a clear and complete description of how organizational memory is used to create value for individuals, groups, and organizations is stated.

2.1. Social capital

Different levels are defined for social capital. Khaki (2011) in summarizing these theories points to several categories. The first category includes both national and organizational levels. Putnam (1999), as well as Adler (2012), have paid more attention to its organizational level. In another category, it refers to three levels: individual, group, and social. (M. Zahedi et al., 2022) believe that due to the phenomenon of globalization and the need to establish appropriate relations with other countries, the transnational level can be added to the previous levels. By combining the two perspectives on social capital levels, the perspective outlined in Figure (2) can be presented:

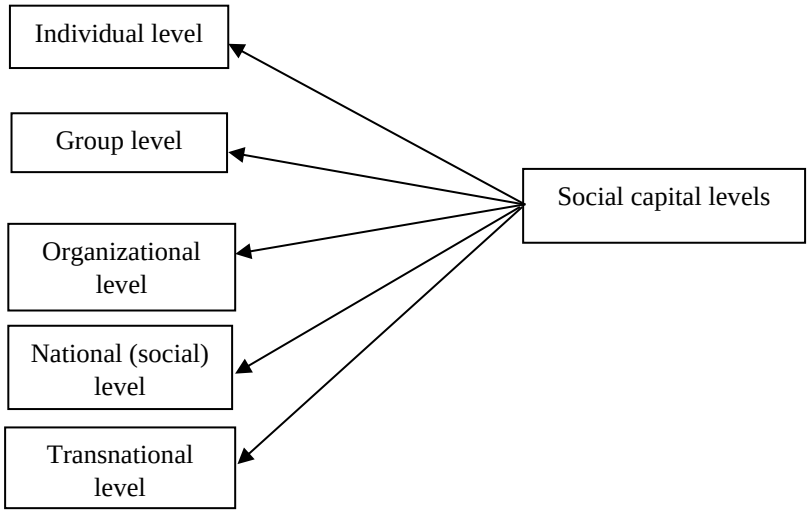

Figure (2): Levels of social capital

2.2. Research hypotheses

1. Main Hypothesis: There is a significant relationship between knowledge management and intra-organizational social capital in Tehran industries education.
2. First sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (trust) in Tehran industries' education.
3. Second sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (networks) in Tehran industries' education.

4. Third sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (cooperation) in Tehran industries' education.
5. Fourth sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (relationships) in Tehran industries' education.
6. Fifth sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (values) in Tehran industries' education.
7. Sixth sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (mutual understanding) in Tehran industries' education.
8. Seventh sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (commitment) in Tehran industries' education.

3. Research Methodology

An applied descriptive research methodology was used in this study. Correlational were tested from the data collected. In this research, the structural equation modeling method and LISREL software will be used to test the hypotheses.

1. Main Hypothesis: There is a significant relationship between knowledge management and intra-organizational social capital in Tehran industries education.
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7. Sixth sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (mutual understanding) in Tehran industries' education.
8. Seventh sub-hypothesis: There is a significant relationship between knowledge management and the component of social capital (commitment) in Tehran industries' education.

The steps that were followed by the authors in the research project were:

1. Library studies (review of thematic literature),
2. Extraction of structures, variables, and factors related to supplier selection,
3. Design of measurement tools,
4. Preliminary field studies,
5. Modification and modification of measurement tools,
6. Collecting field data,
7. Analyzing the collected data and testing the hypotheses,
8. Concluding and presenting suggestions and recommendations.

3.1.Statistical community

A statistical population is a set of people, objects, or things that have at least one attribute in common that the researcher wants to research. Usually in any research, the population under study is a community that the researcher wants to study about the attribute or variable attributes of its units (M. R. Zahedi, 2021). A set of units that have at least one common trait defines a population**.** The population for this study is the managers of Tehran industrial companies, including 873 people whose opinions have been used to answer the questions of the questionnaire, Narration means being correct (M. Zahedi, Abbasi, & Khanachah, 2020). There are different methods for measuring the validity of the questionnaire. The narrative is important because inadequate and inadequate measurements can make any scientific research worthless and inadequate (M. Zahedi, Akhavan, & Naghdi Khanachah, 2020). The validity of this research is content validity (Nugraheni et al., 2022). Content validity is a type of validation used to examine the components of a measurement tool. The content validity of a test is usually determined by experts in the subject (M. Zahedi, Akhavan, et al., 2020). The content validity of

this questionnaire was reviewed and approved by consulting the supervisor, consultant, and experts familiar with the subject. On the other hand, the validity of the structure was tested by confirmatory factor analysis, which confirmed the validity of the structure (Ghorbani & Khanachah, 2020b).

Questionnaire reliability, which is interpreted as a tool of reliability, accuracy, and reliability, is that if a measuring device built to measure variables and attributes is used in similar conditions at another time or place, similar results will be obtained (khaki, 2011). To determine the reliability of measuring instruments, there are several different methods, one of which is to measure their internal consistency (Ghorbani & Khanachah, 2020b). One of the most widely used measurement tools for measuring internal consistency used in most research is Cronbach's alpha coefficient. In this study, Cronbach's alpha coefficient, which was calculated by SPSS software, was 0.911, which indicates the high reliability of the questionnaire (Nili et al., 2021). And considering that the required reliability coefficient is recommended at 0.7, it can be concluded that the questionnaire has good reliability (Ghorbani & Khanachah, 2020a). The following table also shows Cronbach's alpha breakdown for each questionnaire:

Table 1. Breakdown of Cronbach's alpha for each questionnaire (Ghorbani & Khanachah, 2020a)

Components	***Cronbach's alpha***
knowledge creation	***0/908***
Sharing knowledge	***0/906***
Applying knowledge	***0/****908*
Knowledge storage	***0/912***
the trust	***0/910***
networks	***0/913***
Cooperation	***0/914***
Relationships	***0/911***
Values	***0/913***
Mutual understanding	***0/911***
obligation	***0/914***

How to distribute research variables based on central indicators, dispersion, and form of distribution: Data descriptive indices are divided into three groups: central indices, dispersion indices, and distribution shape indices. In this section, how to distribute the research variables based on the most important central indicators (mean), dispersion indices (variance and standard deviation) and distribution shape indices (skewness coefficient, and elongation coefficient) are examined.

Table 2. Central indicators, dispersion, and distribution of variables studied in the research(Ghorbani & Khanachah, 2020a)

Social Capital Questionnaire								***Indicator***	
Social capital	***oblig ation***	***Mutual understandi ng***	***Val ues***	***Relatio nships***	***Cooper ation***	***netw orks***	***tr us t***		
3.02	*3.08*	*3.11*	*2.97*	*3.02*	*3.05*	*2.91*	*3.0 2*	*Average*	***Central***
0.734	*1.179*	*1.193*	*1.175*	*1.159*	*1.190*	*1.225*	*1.1 81*	*Standard deviation*	***Dispersio n***
0.54	*1.39*	*1.42*	*1.38*	*1.34*	*1.42*	*1.50*	*1.3 9*	*Variance*	
-0.152	*-0.035*	*-0.009*	*0.028 -*	*-0.027*	*0.075*	*0.013*	*0.0 -76*	*Compressi on*	***Distributi on form***
0.008	*-0.86*	*-1.05*	*0.786 -*	*-0.856*	*-0.97*	*-1.02*	*0.8 -87*	*Elongation*	
260	*260*	*260*	*260*	*260*	*260*	*260*	*260*	***Sample size***	

Table 3. Central indicators, dispersion, and distribution of variables studied in the research(Ghorbani & Khanachah, 2020a)

Knowledge Management Questionnaire								***Indicator***	
Social capital	***oblig ation***	***Mutual understandin g***	***Val ues***	***Relatio nships***	***Cooper ation***	***netw orks***	***tr us t***		
3.05	*3.26*	*3.18*	*3.15*	*3.11*	*3.05*	*3.26*	*3.1 8*	*Average*	***Central***
1.189	*1.068*	*1.2*	*0.710*	*1.143*	*1.189*	*1.068*	*1.2*	*Standard deviation*	***Dispersi on***
1.41	*1.14*	*1.44*	*0.50*	*1.31*	*1.41*	*1.14*	*1.4 4*	*Variance*	
0.118-	*0.151-*	*0.086-*	*0.021*	*0.043*	*0.118-*	*0.151-*	*0.0 86-*	*Compressi on*	***Distribu tion form***
0.816-	*0.859-*	*1.058-*	*0.472 -*	*0.995-*	*0.816-*	*0.859-*	*1.0 58-*	*Elongation*	
260	*260*	*260*	*260*	*260*	*260*	*260*	***260***	***Sample size***	

4. Results and discussion

The correlation coefficient

The correlation coefficient indicates the intensity of the relationship as well as the type of relationship (direct or inverse). This coefficient is between 1 to -1 and in the absence of a relationship between the two variables is equal to zero. This test examines the relationship between the two variables.

Table 4. How to judge the numerical amount of correlation coefficient

How to judge	**value**
Direct-weak correlation	**0 -0/25.**
Direct correlation - relatively strong	**0/25.-0/5**
Direct-strong correlation	**0/5 -0/75**
Direct correlation - very strong	**0/75 -1**
There is no correlation	**0**
Inverse-weak correlation	**0 - -0/25**
Inverse correlation - relatively strong	**-0/25 - -0/5**
Inverse-strong correlation	**-0/5 - -0/75**
Inverse correlation - very strong	**-0/75 - -1**

Table 7. Correlation coefficient of knowledge management indicators and its dimensions

Test result	Significance level	The value of the correlation coefficient	Variables	
The relationship is meaningful	**0/000**	**0/981**	knowledge creation	the trust
The relationship is meaningful	**0/029**	**0/136**	Sharing knowledge	
The relationship is meaningful	**0/000**	**0/297**	Applying knowledge	
The relationship is meaningful	**0/002**	**0/193**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/669**	knowledge management	
The relationship is meaningful	**0/001**	**0/198**	knowledge creation	networks
The relationship is meaningful	**0/001**	**0/204**	Sharing knowledge	
The relationship is meaningful	**0/001**	**0/201**	Applying knowledge	
The relationship is meaningful	**0/000**	**0/242**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/341**	knowledge management	
The relationship is meaningful	**0/000**	**0/246**	knowledge creation	Cooperation
The relationship is meaningful	**0/003**	**0/183**	Sharing knowledge	
The relationship is meaningful	**0/000**	**0/223**	Applying knowledge	
The relationship is not meaningful	**0/051**	**0/121**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/313**	knowledge management	
The relationship is meaningful	**0/000**	**0/306**	knowledge creation	Relationships
The relationship is meaningful	**0/000**	**0/218**	Sharing knowledge	
The relationship is meaningful	**0/000**	**0/377**	Applying knowledge	
The relationship is meaningful	**0/000**	**0/288**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/488**	knowledge management	
The relationship is meaningful	**0/000**	**0/217**	knowledge creation	Values
The relationship is not meaningful	**0/125**	**0/095**	Sharing knowledge	
The relationship is meaningful	**0/001**	**0/202**	Applying knowledge	
The relationship is meaningful	**0/000**	**0/235**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/307**	knowledge management	

The relationship is meaningful	**0/000**	**0/281**	knowledge creation	Mutual understanding
The relationship is meaningful	**0/020**	**0/144**	Sharing knowledge	
The relationship is meaningful	**0/000**	**0/285**	Applying knowledge	
The relationship is meaningful	**0/000**	**0/314**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/419**	knowledge management	
The relationship is meaningful	**0/001**	**0/208**	knowledge creation	obligation
The relationship is not meaningful	**0/269**	**0/069**	Sharing knowledge	
The relationship is meaningful	**0/000**	**0/223**	Applying knowledge	
The relationship is meaningful	**0/000**	**0/269**	Knowledge storage	
The relationship is meaningful	**0/000**	**0/317**	knowledge management	

To examine the relationship between the variables of "knowledge management" and "intra-organizational social capital", we will use Pearson's parametric correlation coefficient. The results of this test are given in the table below.

Table 8. Correlation coefficient between "knowledge management" and "intra-organizational social capital"

Test result	Significance level	The value of the correlation coefficient	Variables
The relationship is meaningful	**0/000**	**0/657**	"Knowledge Management" and

Identify the factors affecting knowledge management

In the present study, we want to examine the effect of 7 components of social capital (trust, networks, cooperation, relationships, values, mutual understanding, and commitment) on the dependent variable of "knowledge management". To do this, we will use the multivariate regression method. A multiple regression model with 7 response variables will be as follows:

$$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon$$

Table 9 shows the variables added to the model during the implementation of the leading method until the construction of the final model (last model). The values of R^2 for each model are also given in the table.

Table 9. The rate of change in the model's ability to predict with the entry of each of the independent variables

Model	Added variables	Variables in the model	R^2
1	"the trust"	"the trust"	447/0
2	"Relationships"	"Trust", "Relationships"	536/0
3	"Mutual understanding"	"Trust", "Relationships", "Mutual Understanding"	566/0

4	"Networks"	"Trust", "Relationships", "Mutual Understanding", "Networks"	579/0

As can be seen from Table 9, the variables "cooperation", "values" and "commitment" are not recognized as eligible to enter the model. Estimates of the parameters of the final model made are given in Table 10. For each of the estimated regression coefficients, a test called the regression coefficient significance test is performed, which tests whether this coefficient is equal to zero or not. If the assumption that a coefficient is zero is rejected, we call that coefficient significant. But if the result of the test leads to acceptance, the relevant coefficient is not significant.

Table 10. Estimation of regression coefficients and significance test of coefficients

Factors	Significance level	Statistics t	Estimation of coefficients
(Constant)	**0/000**	**11/194**	$\hat{\beta}_0 = 1/247$
"the trust"	**0/000**	**12/102**	$\hat{\beta}_1 = 0/318$
"Relationships"	**0/000**	**5/535**	$\hat{\beta}_2 = 0/151$
"Mutual understanding"	**0/001**	**3/319**	$\hat{\beta}_3 = 0/090$
"Networks"	**0/006**	**2/760**	$\hat{\beta}_3 = 0/071$

The findings of Table 10 show that all the coefficients of the final model are significant. Also, according to the value of the coefficients, it is clear that from the respondents' point of view, the variable "trust" in the first rank influences knowledge management, the variable "relationships" in the second rank, the variable "mutual understanding" in the third rank and the variable "networks" in They are ranked fourth.

Paying attention to the issue of knowledge in organizations is necessary for the transition from the industrial age to the age of knowledge and the establishment of knowledge-based organizations as a key element in the survival of organizations. The growth of information and knowledge in recent years has been very rapid and from this perspective, the present age has been called the age of knowledge explosion. Today, knowledge is considered a valuable and strategic resource and an asset, and providing products and services with appropriate and economical quality without proper management and use of this valuable resource is difficult and sometimes impossible. In today's world, knowledge has become a key resource and is very vital for the survival of organizations (Hassanzadeh et al., 2009). Today, societies are moving towards a knowledge-based economy in which knowledge is the most important element for creating value in organizations (M. R. Zahedi, 2021). With the advent of the information technology revolution and the advancement of technology, the growth pattern of the global economy has changed fundamentally. Today, due to competitive conditions, knowledge as the most important capital has replaced financial and physical capital (M. R. Zahedi & Naghdi Khanachah, 2020). Therefore, knowledge management for many developed countries is a symbol of competition and a factor in achieving power and development. Today, it has been proven that the world of technology is the world of knowledge. Organizations that have found an efficient way to extract, use, and manage knowledge and view knowledge as an asset and value, have increased employee productivity and customer satisfaction, and have achieved the key to their success today and tomorrow. In recent years, knowledge management has become a vital topic discussed in business texts. Both the "scientific community" and the "business" believe that knowledge-based organizations can maintain their long-term competitive advantage, so knowledge sharing as a complex but value-creating activity is the basis of many knowledge management strategies in the organization (Rigg, 2015).

5. Conclusion

5.1. Conclusion

According to the findings of the present study, the impact of social capital on knowledge management in education in Tehran industries was measured. The results obtained from the collected data show that the dimensions of social capital have a positive and significant effect on knowledge management in education in Tehran industries. The research hypotheses were also analyzed using LISREL software, which we refer to the results of these hypotheses: According to the main hypothesis of the research, there is a significant relationship between social capital and knowledge management. Statistical analysis shows that this hypothesis is accepted. According to the results of research conducted by Lazarova and Steinle (2019) in their research entitled Freelance Jobs, Social Capital, and Knowledge Management: A Concept for Organizational Performance, the Impact of Freelance Jobs. They examined the formation and application of organizational social capital in organizations. In the first hypothesis, it was claimed that there is a significant relationship between trust and knowledge management. Statistical analysis of the two shows that this hypothesis is accepted, which is based on the findings of research conducted by (M. Zahedi et al., 2022) is consistent. In the second hypothesis, it was claimed that there is a significant relationship between networks and knowledge management. Statistical analysis shows that this hypothesis is also confirmed, which is consistent with the findings of research conducted by (M. Zahedi, Akhavan, et al., 2020) has it. In the third hypothesis, it was claimed that there is a significant relationship between collaboration and knowledge management, which statistical analysis shows that this hypothesis has been confirmed, which is based on the findings of research conducted by Lazarova and Steinle (2019) is consistent. In the fourth hypothesis, it was claimed that there is a significant relationship between relationships and knowledge management, which statistical analysis shows that this hypothesis is correct, which is consistent with the findings of research conducted by Economopoulou, Dimitriades, and Psyrri (2015). In the fifth hypothesis, it was claimed that there is a significant relationship between values and knowledge management, which statistical analysis shows that this hypothesis is correct, which is consistent with the findings of research conducted by Plessis (2017). In the sixth hypothesis, it was claimed that there is a significant relationship between mutual understanding and knowledge management, which statistical analysis shows that this hypothesis is correct, which is consistent with the findings of research conducted by (M. R. Zahedi & Naghdi Khanachah, 2020). The seventh hypothesis claimed that there was a significant relationship between commitment and knowledge management, which is true, which is consistent with the findings of research conducted by Lazarova and Steinle (2019). As mentioned in previous sections, this study sought to examine the relationship between social capital and knowledge management. The results of confirming or rejecting the hypotheses in this study showed that there is a significant relationship between the components of social capita,l and knowledge management. Also, in this study, it was shown that the dimensions of social capital on knowledge management were confirmed in this study and no unconfirmed relationship can be found in this study.

Also, the results of this study with the results of Lazarova and Steinle (2019) in a study entitled Social Capital And knowledge management in organizational networks in the Netherlands, and Lazarova and Steinle (2019) in their research entitled Freelance jobs, social capital and knowledge management: a concept for organizational performance, the type of impact of freelance jobs on the formation and application of social capital Organization in organizations checked compliance.

Considering the role of social capital in the promotion of knowledge management, it is suggested to the officials and managers of industries to create mechanisms to improve and promote social capital to provide the basis for the promotion of knowledge management. Among these measures, the following can be mentioned:

1. Providing grounds for registering, creating, establishing, and sharing knowledge in industries.
2. Cultivation promotes activities and teamwork at different levels of the industry.
3. Trying to create a supportive culture through the design of incentive and motivational systems to strengthen creativity and innovation, learning and development of human resources in industries.
4. Development of network relations in industries and proper use of communication channels to provide access to organizational knowledge.
5. Using compensation systems that reward team and group work instead of individual work.

6. Human resource policies and effective service compensation of industries should work to develop a wide network of trust-based relationships.
7. Establishment of appropriate organizational structure in industries for access of organization members to resources including information and knowledge.
8. Building relationships based on trust among people and different sectors of the industry.
9. Designing the competency framework of industrial employees, including their knowledge, skills, and abilities, and human resource development planning based on the competency system.

According to the confirmation of the main and sub-hypotheses of this research, the studied industry must make double efforts to improve the level of social capital and its dimensions (cognitive, relational, and structural capital) for the efficient and effective management of its organizational knowledge. Investing by organizations to develop this capital through effective communication training, improving the process of communication and interaction between employees and managers inside and outside the organization, and creating a culture and atmosphere full of cooperation, mutual trust, and teamwork, of them increase the amount of social capital in the organization. and leads this organization to an innovative, creative, and learning organization.

1.1 Limitation

The practical and usable environment for the results of this study is the educational environment**.**

1.2 Suggestion

Also, the results of this study with the results of Lazarova and Steinle (2019) in a study entitled Social Capital And knowledge management in organizational networks in the Netherlands, and Lazarova and Steinle (2019) in their research entitled Freelance jobs, social capital, and knowledge management: a concept for organizational performance, the type of impact of freelance jobs on the formation and application of social capital Organization in organizations checked compliance.

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