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The Role of Contextual Factors in Knowledge Transfer in Transactional Projects

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Abstract

Nowadays, with a significant growth in the number of organizations, they seek to increase their competitive advantages as much as possible. One of the effective approaches is knowledge management, through which organizations try to reuse the experiences and knowledge created in their previous projects. Today, many projects are carried out by forces from other nationalities, in which each participating organization operates within complex national, organizational, and information contexts. So, knowledge is transferred between geographically dispersed individuals and organizations, and across cultural and national boundaries. Given these conditions, knowledge management processes, especially the transfer and acquisition of knowledge, are very important. The purpose of the present study is to design a conceptual framework of the contextual factors affecting the knowledge transfer in transactional projects using meta-synthesis method. For this purpose, firstly the previous research has been studied and interpreted the factors which are effective in transferring knowledge from different sources and then analyzed them using the open coding method to propose a conceptual framework

Indexing terms/Keywords: Knowledge; Knowledge Transfer; Contextual Factors; Meta Synthesis; Transnational Projects

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Introduction

As rich sources of knowledge, projects can build up organizations' competency and therefore be more effectiveness if they are able to transfer their generated knowledge to other organizations and projects. Since the risk of losing project knowledge often remains even after project completion and has taken off as a subject in some studies. A number of studies lay emphasis on the acquisition and sharing of knowledge project so as to mitigate the risk [1, 2, 3, and 4]. Although organization's projects are considered temporary, they are often viewed as efficient means of combining knowledge, and thus optimizing the amount of investment [5].

With increasing uncertainties, time constraints and higher quality requirements in projects, the complexity of projects has increased, which has made projects knowledge management a success key factor. Organizations are required to provide a setting for knowledge sharing, transferring and exchanging among their members, train them to make sense of their interaction, and lay the foundations for the recognition of contextual factors in the deployment of knowledge management in organization [6]. In today's world, with the increasing complexity of projects in all industries, carrying out each project requires a high level of knowledge and expertise, which some countries, particularly developing countries seem unable to get them off their ground, despite their essential foundations within their borders. In an increasingly globalized world, there is a need for companies to go cross-border. The current focus is not only on the home market but also to a great degree abroad, thus a company reaches a much larger market [7]. Today, various types of international contracts are signed and organizations start projects beyond their own borders without a mutual nationality.

Implementing a project outside of organization's borders brings it a lot of competitive advantages. In addition to this, the host country benefits from parent company's knowledge and expertise in an attempt to promote its infrastructure and build up its technical and managerial knowledge. Knowledge transfer is achieved between two individuals, i.e. sender and receiver; the role of sender just like receiver can be assumed by an individual or a group [8]. Author in [9] maintain that knowledge is today shared among individuals and organizations dispersed geographically and situated at various cultural and national boundaries. Firms with geo-graphically dispersed operations face the fundamental challenge of dealing with myriad country differences, including regulations, cultures, and institutions [10]. A study conducted by Shokri-Ghasabeh and Chileshe [11] in project-based organizations deals with obstacles and potentials in an effort to learn from other projects. The importance of geo-graphic proximity for knowledge sharing has been discussed extensively in recent years [12].

There are plenty of gaps in our understanding of transnational knowledge transfer. In the literature of knowledge transfer, such factors as culture, organizational structure, language and other related components that affect the process of knowledge transfer are extremely important, which is why the present research aims to identify and explore these contextual factors so as to provide a consistent and comprehensive vision of these factors, which can be used for the progress of national organizations. The purpose of the present research is to identify and classify contextual factors affecting transnational knowledge transfer in a comprehensive and coherent framework. To this end, a meta-synthesis method was used to compare, interpret, convert and combine various frameworks. This method discovers subjects and offers a new categorization by combining previous studies.

The paper is organized as follows: in the next section, the previous work on knowledge management and also transnational knowledge transfer are reviewed. Section 3 describes our research methodology. In Section 4, the data analysis and our proposed qualitative meta-synthesis procedure consisting of seven main steps is explained. Section 5 lists and classifies all obtained effective factors and presents our comprehensive framework. Finally, the paper is concluded in Section 6.

Literature Review

Knowledge Management

There is no specific definition available for knowledge despite its popularity. In 2008, Koskinen and Philanto defined knowledge as an individual's perception, skills and experience, which are typical what experiences the person's perspective contains in the form of meanings [13]. They underlined one important aspect of knowledge, which is the dependency on the personal and social context an individual is embedded in [14].

The process of knowledge management can be achieved between two organizations, from outside of an organization to the inside, or between internal departments of an organization, i.e. organizational units.



Technical infrastructure plays a central role in intra-organizational knowledge transfer as it allows employees to codify, store and access knowledge [15]. If an organization is able to provide necessary infrastructures for knowledge transfer between organizational units, the way for attracting knowledge from outside of organization will be to a great extent provided. Given the review of the literature, it was revealed that the two concepts namely knowledge transfer and knowledge sharing encompass close definitions, inasmuch as they are even used interchangeably in some cases.

In literature, the term of knowledge sharing is associated with other knowledge process such as knowledge flow, transfer, learning, creation, and distributed collaboration [16]. Knowledge sharing is a set of behaviors that include knowledge and information exchange and provide assistance to others in this regard. Author in [17] states that knowledge sharing is achieved voluntarily in organizations. One of the methods of measuring knowledge management is to measure the amount of knowledge sharing (i.e. explicit and implicit knowledge), which is followed in organizations. Whereas knowledge transfer occurs at higher level. It typically has been used to describe how knowledge can exchange between different units, divisions, or organizations rather than individuals [18]. In the words of Hofer [19], knowledge transfer includes focused and one-way relocation between individuals, groups and organizations in such a way that receiver of knowledge has (a) a cognitive understanding, (b) the ability to operate it, or (c) applies the knowledge.

If we want people to share what they learn in organization, some conditions must be met, in which the result of sharing should have individual advantage. Authors in [20] state that the event through which an organization learns the knowledge and experience of other organizations is referred to as inter-organizational knowledge transfer or inter-organizational learning. By knowledge transfer, we mean a boost in organization's ability to do works, thereby building up its value. In general, the richer and more intangible knowledge is, the more technologies one must utilize to transfer it, is needed. However, values, norms, and behaviors that embody the culture of a corporation are main determinants of knowledge transfer success. The main determinant of success in any knowledge transfer project is the creation of a common language among colleagues. Authors in [9] believe that factors contributing to knowledge transfer in project-based organizations and facilitating it are as follows, though they are not constrained by them:

- Actors; problems associated with culture, motivation, knowledge distance, trust between team members.
- Context; problems associated with inter-organization relations, appropriate partner selection and flexibility of organizations.
- Content; problems associated with goals, focus, and the nature of knowledge to be transferred
- Medium; e.g. language

Transactional Knowledge Transfer

As stated above, the main purpose of this research is effective knowledge transfer in the environment of projects and specifically focuses on transnational projects. Given the definition by the book named "A Guide to the Project Management Body of Knowledge" [21], project is a temporary endeavor undertaken to create a unique product or service, or a unique result. The nature of projects represents a definite end and start. It is an internal contract when signed and implemented within the borders of a country, but international and transnational term refers to parties to a contract traded beyond borders, or it is stipulated that the contract be executed beyond boundaries.

Govindarajan and Gupta [22] state that a transnational project is a project in that organizational unit is temporarily set beyond boundaries, and individuals with different expert and knowledge come together to deal with a common global task. The transnational projects have also the challenge of a diverse group of people from different nationalities who work together for a limited period of time to accomplish a specific project goal [23]. In this research, by transnational projects, we mean those projects where one of the main elements of the project is the host abroad, so project team is comprised of different nations with different languages and cultures who came together to achieve a single purpose. Mei et al. considered the competence, culture, resource, strategy, and organization relationship as the main influencing factors to analyze the project management knowledge transferring [24].



Research Methodology

The quality of a scientific research rests on research purpose, the choice of a good method, and observance of scientific research principles. The research method of this study is meta-synthesis. This method is used to identify the contextual factors for transnational knowledge transfer in order to integrate several studies in order to design a comprehensive and interpretive framework. The existing articles about knowledge transfer come in two forms of qualitative and quantitative. Hence meta-synthesis is a method geared to achieve a comprehensive synthesis of this subject based on translation of qualitative studies and results of quantitative studies. Providing a systematic perspective for researchers through combining different studies, meta-synthesis explores new and fundamental themes. By doing so, it builds up the existing knowledge and comes up with a thorough perspective on issues. Sandelowski and Barroso in [25] proposed a seven-step method which is used in this research.

Meta Synthesis Procedure

In our meta-synthesis study, we followed the seven-step meta-ethnography approach proposed by Sandelowski and Barroso [25]. The steps of this approach are outlined in Fig 1.

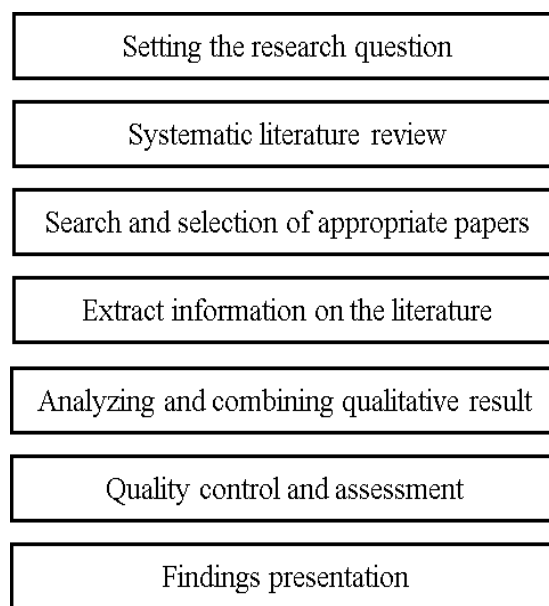


Figure 1: Meta-Synthesis Steps

1.1. Step 1: Identifying the research question

A question or a goal must first be designed for each research activity. To set this question, the first step is to specify "what". In this research, identifying the contextual factors in transferring knowledge in transnational projects is examined. In the next step, the question "Who" indicates the community under investigation, which explores databases and journals in this research. In the next step, the question "When" defines the time frame for the reviewed articles. In this study, studies are conducted between 2002 and 2018. The final question is the word "How" that is the method used to compile the research data. To collect data, all research (including research and review) has been used in the field of transnational knowledge transfer. According to the stated questions, the research question to follow the next steps is as follows:

- What are the contextual factors in knowledge transfer in transnational projects from 2002 to 2018? How can these factors be categorized?



Table 1:Relevant keywords

Keywords	Electronic Databases
Knowledge Transfer	Emerald
Knowledge Sharing	ScienceDirect (Elsevier)
Contextual Factors	IEEE
Projects	Springer
International	ProQuest
Transnational	Emerald

1.2. Step 2: Identifying literature relevant to the research question in a systematic way

In this step, in order to systematically search for articles published in different journals, relevant key words should be defined. In order to answer the first step questions, the terms listed in Table 1 are considered.

1.3. Search and select the relevant studies

At this stage with several reviews, a number of articles are rejected and are not being examined in the process. The review process is briefly summarized in figure 2. Using the Critical appraisal skills program (CASP), the quality of researches can be assessed. In this method, 10 questions can be used to determine the accuracy, validity and importance of the studies. These questions include the following: : 1) Research objectives, 2) Logic of method, 3) Research design, 4) Sampling method, 5) Data collection, 6) Reflectivity, 7) Moral considerations, 8) Data analysis, 9) Clear expression of the results, and 10) Research significance. At this stage, the researcher gives a points to each of these questions, and then creates a form. So, he can add points that are given to each article and easily and briefly review articles and see the results of the evaluation. Finally, the researcher based on a 50-option Rubik scale (listed in Table 2) scores and excludes papers with a score below the good score [26].

Table 2:Rubik 50 points scale

Score	Abbreviation	Definition	Procedure
40-50	VG	Very Good	Accepted
31-40	G	Good	Accepted
21-30	M	Moderate	Accepted
11- 20	W	Weak	Rejected

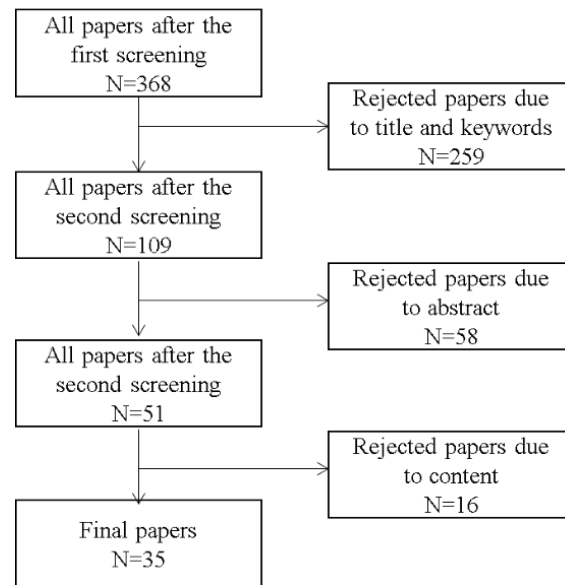


Figure 2:Review Process for Selecting the Intended Papers

Fig. 2 illustrates the review process for selecting the Intended articles. After reviewing articles and rating them, 3 very good papers, 15 good papers and 17 moderate articles were evaluated. In this step, articles whose results are not usable or trustworthy were omitted. In sum, 35 papers were selected as Intended papers.

1.4. Data extraction

In the extract section, the results of the article's information are classified according to the reference for each article, including the full name of the author, along with the year of publication of the article and the components of the coordination expressed in each article. In this step, final articles were studied using content analysis. Content analysis is an accurate study of resources and documents which is used to examine the explicit content as well as the deeper layers of the hidden documents. The results obtained from this step are shown in Table 3.

Table 3:Knowledge transfer factors extracted from selected sources

Authors	Year	Knowledge Transfer Factors
Dawes et al. [27]	2012	Define factors into three categories: 1) Knowledge and information context 2) Organizational context 3) National context
Adenfelt & Lagerström [28]	2006	There are two main categories for knowledge transfer in transnational projects: 1) Social (organizational culture, structure and individuals) and 2) Technological (communication technology and support)
Schomaker & Zaheer [10]	2014	The Impact of Language on Knowledge Transfer in Scattered Geographic Units
Ambos & Ambos [15]	2009	Investigating the Impact of Different Dimensions in personal coordination mechanisms and technology-based coordination mechanisms in Knowledge Transfer. There are three types of distinction: (1-spatial, 2-cultural and 3-linguistic).
Duan et al. [9]	2010	Determination of factors in four main categories: 1) actors 2) context 3) Content 4) media



Makela et al. [29]	2007	Individual similarities play an important role in knowledge sharing, including the context of national cultural back ground, common language and the same organizational status.
Jasimuddin et al. [30]	2015	Investigating the role of geographical distance in knowledge transfer, investigating the role of geographical distance in cultural distance and communication distance and consequently its impact on knowledge transfer.
Bengoa et al. [31]	2015	Investigating the factors that influence the transfer of knowledge, the identified factors are: (knowledge content, skills, motivation, national culture , organization culture, strategy , infrastructure and resources)
Nordtvedt et al. [32]	2008	Investigating the Effectiveness of Knowledge Transfer across Borders, Dividing Knowledge characteristics: 1. Valuable Knowledge 2. Rare Knowledge 3. Inimitable Knowledge 4. Non-suitable Knowledge- (comprehension-usefulness) reflecting knowledge transfer effectiveness and (Speed - Economy) reflecting Knowledge Transfer efficiency- Effective Factors: 1- relationship Quality 2- Sources attractiveness 3- recipient learning intent
Fletcher-Chen [33]	2015	Impact of language diversity and social interaction Knowledge transfer, the definition of two important dimensions includes: communication (discussion quality- richness-openness-accuracy) absorption capacity (assessment-Assimilation - Application.)
Ford & Chan [34]	2003	The study of culture based on Hofsted's cultural dimensions (power distance, collective or individualism, avoidance of uncertainty, gender, long-term orientation), barriers to knowledge sharing: language, time and resources constraints, lack of structure and rewards, power and job security, Lack of proper social networking)
Ahmad [35]	2017	Transfer of knowledge in different language areas - Examining the challenges posed by non-native losses include: 1) ambiguity 2) cost - which suggests three strategies: setting the discourse-setting the transmission device-language setting
Fong Boh et al. [36]	2013	Influencing factors in the transfer of knowledge when the parties have no common national culture: 1- Trust 2- Cultural identity of individualism 3- Cultural-cultural parallelism 4- Distribution-openness to diversity
Ismail et al. [37]	2016	Investigating the individual and social factors in the transfer of knowledge - the division of individual factors into (cultural intelligence and behavioral feedback requests) social factors (common vision - trust) - according to the research the most important factors are: 1. Common perspectives 2- Trust 3. Intelligence Cultural and feedback - this research shows that social factors are more influential
Dobrai et al. [38]	2012	Categorization of factors into three categories: 1- Individual and group level 2- Organizational level 3. Global level - Expression of knowledge transfer factors including: ability to transfer 2- Transfer motivation 3- Transfer method 4- Knowledge type.
Pablos [39]	2006	Definition of mental assets is divided into four categories: 1. Human Capital; 2. relational Capital; 3. Organizational Capital; 4. Technology Capital; Definition of Knowledge Based on Strategic and Negative Value in Four Areas: (Sub-Compulsory-Special-Core) - Determining the factors that have a negative impact on the transfer of knowledge (implicitly - social complexity - causality ambiguity - the distance between organizational culture and the



		distance between national culture)
Killingsworth et al [40]	2016	The factors that affect the sharing of knowledge are the attitude that affects the knowledge sharing of individuals. Attitude is dependent on two factors: (team environment: 1- dependence; 2- trust); (motivation: external: mutual benefit; internal motivation: pleasure); - the study found that affiliation does not affect the attitude for knowledge sharing behaviors
Vuori & Okkonen[41]	2012	Investigating the motivational factors that affect the sharing of knowledge within the organization with the mass media.

1.5. Analysis and combining the findings

Here, the analysis and integration of findings have been done through open coding. At first, we consider all the factors extracted from the studies as codes, then, by considering the meaning of each of these codes, we classify them in the same sense. In this way, we formulate research concepts. In Table 4, the factors are briefly shown.

1.6. Quality control and assessment

In this research, an attempt was made to take out articles from journals and valid databases, and articles with inadequate scientific credibility were excluded from the process of synthesis. To combine main studies, using CASP tool, the quality degree of the articles was assessed. Moreover, in this research in an effort to maintain the quality of the study, Kappa index was used, which will be introduced in the next section.

1.7. Finding presentation

Having completed the processes of meta-synthesis, a framework for contextual factors affecting transfer of transnational knowledge consisting of two layers (criteria and factors) was developed; Table 5 has shown these criteria.

Table 4:The Codes and references of contextual factors affecting knowledge transfer

Concepts	Codes	Recent References
Contextual Factors	Language	Sunaoshi et. al. (2005) [42], Kayes et. al. (2005) [43], Makela et. al. (2007) [29], Welch and Welch (2008) [44], Ambos and Ambos (2009) [15], Schomaker and Zaheer (2014) [10], Fletcher-Chen (2015)[33], Ahmad (2017) [35]
	Cultural distance	Dawes et. al. (2012) [27], Adenfelt and Lagerstrom (2006) [28], Ambos and Ambos (2009) [15], Duan et. al.(2010) [9], Makela et. al. (2007) [29], Jasimuddin et. al. (2015) [30], Bengoa et al. (2015) [31],Fong Boh et,al.(2013) [36], Pablos (2006) [39], Vuori and Okkonen (2012) [41], Welch and Welch (2008) [44], Gang and Bosen (2010) [45],Raab et. al. (2014) [46]
	Geographical distance	Hansen and Lovas (2004) [47], Jonsson and Kalling (2007) [48], Ambos and Amb (2009) [15], Ganga and Bosen (2010) [45], Chan et. al. (2010) [49], Raab et. al. (2014) [46], Jasimuddin et. al. (2015) [30], Dawes et. al. (2012) [27], Duan et. al.(2010) [9]
	Time zone	Gang and Bosen (2010) [45]
	Relational distance	Dawes et. al. (2012) [27], Duan et. al.(2010) [9], Jasimuddin et. al. (2015) [30], Gang and Bosen (2010) [45], Fletcher-Chen (2015) [33], Pérez-Nordtvedt et. al. (2008) [32]



Policies and laws	Duan et. al.(2010) [9].
Technical distance	Duan et. al. (2010) [9], Dawes et. al. (2012) [27], Adenfelt and Lagerstrom (2005) [28], Makela et al. (2007) [29], Bengoa et al. (2015) [31]
Knowledge distance	Duan et. al.(2010) [9], Dawes et. al. (2012) [27], Bengoa et al. (2015) [31],Pérez-Nordtvedt et. al. (2008) [32]
Organizational distance	Dawes et. al. (2012) [27], Bengoa et al. (2015) [31], Makela et. al. (2007) [29], Ismail et, al.(2016) [37], Pablos (2006) [39], Killingsworth et. al. (2016) [40]
Intention distance	Dawes et. al. (2012) [27].

Table 5: The breakdown structure of contextual factors affecting knowledge transfer.

Concepts	Codes	Criteria
Factors	Language	Definition of common language for ease of communication
		The close proximity of the parties makes it easy to communicate
		Language diversity increases the quality of discussions.
		The use of technical words and the use of language media in cases of use
		Language policy (simplification of words and relaxation speed communications) and confirming questions in cases of ambiguity
	Cultural distance	differences in culture make a difference in perceptions of people
		The existence of team-mates with common culture increases the eagerness of the knowledge process
		The common background of national culture, beliefs, values, perceptions and common practices is effective in the amount of transmission.
		The degree of difference between the views of the individual in terms of individualism or group-based vision of organizational power
		The importance of trying to align cultures
	Geographical distance	The existence of the spatial distance affects the knowledge transfer process
		The spatial distance between knowledge exchanges is prevented by staff and, in the event of long-time interaction, the transmission is discouraging.
		Distance creates distrust and enthusiasm for the knowledge transfer



Time zone	The difference in time makes it difficult to interact
Relational distance	Time and rate of previous interactions of individuals in the transfer
	It is more difficult to connect in the first time, and the duration of the collaboration creates more relationships
Policies and laws	The existence of intellectual property in the production of knowledge and privacy protection laws
	The lack of sufficient legal frameworks in contracts and the existence of limiting regulatory infrastructures
	Ineffective implementation and frequent changes in the legal infrastructure
Technical distance	Differences in IT infrastructure and technical knowledge of the parties affect the knowledge transfer process
	The complexity of the infrastructure (due to differences in software and hardware and data) in the course of knowledge transfer
	Program and infrastructure standardization
Knowledge distance	The distance between knowledge (the difference between the current knowledge of the two sides of the project) influences the learning process
	If there is a common knowledge base, the transfer of surplus knowledge is easier
Organizational distance	Degree of lack of solidarity and cultural difference between project partners
	Differences in values, structure and trends in the organization of the parties
	Differences in goals and how organizations decide
Intention distance	Differences in missions and goals of organizations
	The mutual benefits of the transfer process are difficult for the parties
	Defining Guiding and Control Mechanisms for Knowledge Transfer

1.8. Validity and Reliability of the Model

In this research, the researcher took advantage of a comparison between her opinions and another expert's in order to control for elicited concepts. In doing so, two-coders' agreement was used, in that in addition to the researcher formulated a primary coding another researcher separately laid down codes for the same text coded by the researcher without knowing his codes; if the codes of the two researchers are similar, it shows a broad agreement between these two coders and indicates reliability. To calculate the coefficient of two coders' agreement, Cohen's kappa coefficient was used; how this index is calculated is shown by Formula (1).

In this study (in addition to CASP) another method has been used for assessing the quality of the content. In this paper, the researcher took advantage of a comparison between her opinions and another expert's in order to control for elicited concepts. To achieve this, a number of selected literatures were provided to an expert in the knowledge management without the knowledge of how to combine codes and concepts created by researchers to classify codes in categories separately. Then, presented categories by researchers were



compared with presented categories by the person. And finally regarding similar and different categories of the researcher and expert, Kappa indicator has been calculated that indicates the reliability of the above. The indicator calculation has been provided in Equation 1. As seen in Table 6, researchers have created 10 categories and an-other expert has created 11 categories, of which 9 categories are common. As shown below, Kappa Indicator value is equal to 0.74 that according to Table 6 the value is at the level of the valid agreement.

- The number of selected samples by researcher: 10
- The number of selected categories by expert: 11
- The number of common selected categories: 9

Table 6:Crossing by the researcher and the expert

Score	Researcher View		
	Yes	No	Total
Expert View			
Yes	A= 9	B = 2	11
No	C = 1	D = 0	1
Total	10	2	12

$$\text{observed agreement} = \frac{A+D}{n} = \frac{9+0}{12} = 0.75$$

$$\text{agreements chance} = \frac{A}{n} \times \frac{A}{n} + \frac{B}{n} \times \frac{B}{n} + \frac{C}{n} \times \frac{C}{n} + \frac{D}{n} \times \frac{D}{n} = \frac{9}{12} \times \frac{9}{12} + \frac{2}{12} \times \frac{2}{12} + \frac{1}{12} \times \frac{1}{12} + \frac{0}{12} \times \frac{0}{12} = 0.0106$$

$$K = \frac{\text{observed agreement} - \text{agreements chance}}{1 - \text{agreements chance}} = \frac{0.75 - 0.0106}{1 - 0.0106} = 0.747 \quad (1)$$

As can be shown in what follows, Kappa index was estimated to be 0.74, which shows a valid consensus according to Table 7.

Table 7:Kappa Indicator condition

Status Agreement	Numerical Value of Kappa Indicator
Poor	Less than zero
Unimportant	Between 0 - 0.2
Fair	Between 0.21 - 0.4
Good	Between 0.41 - 0.6
Valid	Between 0.61 - 0.8
Excellent	Between 0.81 - 1

In this research, using meta-synthesis method, these factors were elicited from the literature and a framework consisting of two layers (criteria and factors) were presented in three coding steps, in that a number of 10 factors were set. Given elicited factors, Fig. 3 represents a conceptual framework designed based on contextual factors in knowledge transfer in transnational projects.

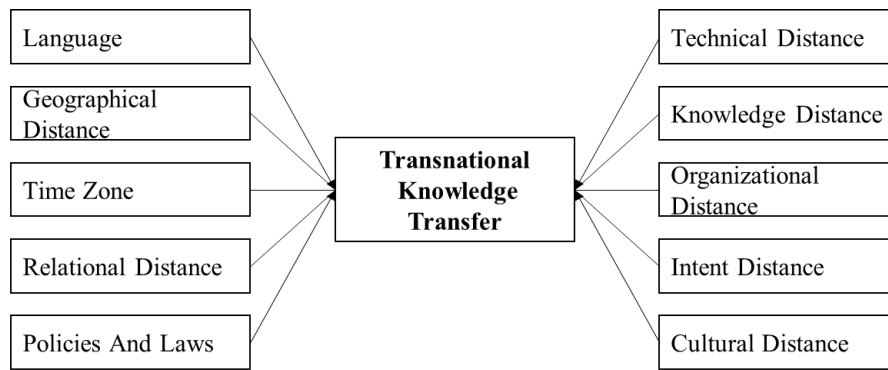


Figure 3:A framework of contextual factors affecting knowledge transfer in transnational projects

Conclusion

Following a review of studies conducted on knowledge transfer, it was revealed that various researchers individually introduce the impact on knowledge transfer by laying emphasis on a special factor; that is, some researchers underline language, culture, and organizational distances, while others deal with other aspects of transfer. Some researchers study factors like technical distance [27, 28, 9, 29, 31], which suggests that process of transfer would be difficult in the face of a great difference in technical infrastructures of parties involved in a project. Some articles by [27, 9, 31, 32] deal with knowledge distance, in that it suggests that individuals' knowledge level is of high significance for knowledge transfer, and in case of almost equal level of knowledge, the process of transfer and acquisition of surplus knowledge would be easier. Among studies done in this area, most of them dealt with a limited number of influential factors and none provided a comprehensive list of influential factors under transnational project circumstances. One of the aspects of the difference between the present research and other related studies is the presentation of a thorough framework with factors other than transfer of transnational knowledge compared to previous studies.

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