

Employing Knowledge Attributes Achieve Entrepreneurial Learning: An Exploratory Study of the Opinions of a Sample of the Teaching Staff at the Technical Institute / Karbala

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Abstract: The current study employing the correlation and influence relationship between the Knowledge Attributes (knowledge embeddedness, knowledge distance) and the Entrepreneurial Learning with its dimensions (explorative learning , exploitative learning)., One main hypothesis was formulated and two sub-hypotheses emerged, 94 questionnaires were distributed to the teaching staff at the Technical Institute of Karbala, of which 86 were returned by 91%, while the questionnaires were not valid for analysis 14 by 9%, which is of vital and prominent importance in the field of education and knowledge and its diverse practices in creating an educated, civilized and educated generation. The data were collected through a questionnaire prepared For this purpose, , SPSS vr programs were used. 24 To extract the results of correlation and influence and test hypotheses, as the validity of the hypotheses was found in the light of the results of the statistical analysis, and a number of recommendations were reached, perhaps the most prominent of which is the existence of a vital and prominent effect of knowledge Attributes in the Entrepreneurial Learning.

Keywords: Knowledge Attributes, Entrepreneurial Learning.

INTRODUCTION

Universities and institutes the most important elements of civilization, due to the role they play in the development and progress of society. They are the main channel for the production of qualified cadres scientifically and practically to achieve economic prosperity and civilizational and technological development, what our universities seek is to develop the cognitive, cultural, emotional and psychological aspects of students.

Providing them with advanced knowledge and renewable culture, building and refining their personalities, and opening the horizons of scientific thinking by providing them with appropriate educational curricula for their specializations and appropriate methods of study and scientific research to enable them first to adapt to the university stage and their requirements and create a spirit of creativity and innovation and then prepare them to play their leading role in society and create cadres in the fields of Various work able to assume responsibility and participate in the movement of renaissance and progress.

This confirms what psychologists indicate that individuals who possess Knowledge Attributes are characterized by with the ability to adapt or modify the conditions with which they interact, which leads to good and perfect performance,

They also have positive beliefs about effectiveness and efficiency that enable them to accomplish what they are assigned. They also have a high ability to control and control themselves, so their performance appears with high mastery and great quality, and this requires him to have a flexible mentality in order to be able to rebuild knowledge in several ways and automatically and adapt Responses to the various changes required by the situation, Entrepreneurial learning builds human resources and contributes to the development of scientific knowledge to form an educated human force in which positive attitudes about work, organization and society are instilled.

Entrepreneurial learning is one of the main drivers of sustainable development. So that entrepreneurial learning it works on building a knowledge society, based on changing the structure of wealth concentration in society into possession of the elements of production and wealth. Entrepreneurial learning also plays the role of a link in bridging the gap between educational institutions and the needs of the labor market. It contributes to providing job opportunities and changing the market structure by creating pioneering experiences for students and learners and producing a generation of pioneers in creativity and innovation to make a leap in building the knowledge economy, which achieves the elimination of unemployment and poverty problems

First, the theoretical framework

1: Knowledge Attributes

Knowledge Attributes According to the knowledge-based view, the implicit control of the knowledge of a system determines the use of knowledge transfer mechanisms. Following Winter's (1987) classification of knowledge and assumptions by Knout & Zander (Kogut and Zander 1993; Zander & Kogut 1995), we use the following attributes of knowledge to measure the latent structure of the extent of tacit knowledge: coding, learnability, and complexity. Coding ability (COD) is the way in which knowledge can be encoded and codified. When coding is high, he has to know the system more.

Knowledge Attributes is the that represent the specific state of knowledge within an organization. Previous studies of these **Attributes** have focused on tacit and explicit knowledge (Nonaka, 1994), or embedding knowledge, **Knowledge empdeddedness**, and **Knowledge distance** (Cummings & Teng, 2003). Using the research of Cummings and Teng (2003), we

choose inclusion and distance as dimensions for the attributes of knowledge to be studied. Several previous studies indicate that changing the **attributes** of knowledge can have a profound impact on company performance, especially on the strategic consequences of innovation (Brusoni et al., 2001; Fixson and Park, 2008) Zahra and George (2002) considered that the characteristics of knowledge sources It can determine the extent to which companies identify and integrate new knowledge, along with old knowledge, into innovation activities. Attributes of knowledge also affect the success of knowledge transfer. They play an important role in the formation and development of the basic technical capabilities of organizations (Birkenshaw et al., 2002). , researchers pay limited attention to how these **attributes** influence the acquisition of additional innovative value. To address this deficiency, we attempt to explore the influence of knowledge **attributes** in relation to entrepreneurial learning, **The first dimension is embodiedness knowledge** ; The notion of embeddedness originates from Karl Polanyi, the leading figure of the substantives school in economic anthropology. According to Polanyi, the different forms of economic integration are bound to certain structural and institutional conditions. The dominant forms of integration in primitive and archaic societies , mbeddedness is not a result of an exchange relationship; rather it preexists and shapes exchange relationships. This indicates the existence of an important underlying latent construct, knowledge embeddedness—or embeddedness for ease—which needs to be explicitly recognized and into-grated in the theory of creation of Entrepreneurial Learning(singh,2005) **second dimension; distance knowledge**; The focus of rough set theory is on the ambiguity caused by limited discernibility of objects in the domain of discourse. Its key concepts are those of object "indiscernibility" and "set approximation". The primary use of rough set theory has so far mainly been in generating logical rules for classification and prediction (Skowron &Rauszer 1992) using information granules; thereby making it a prospective tool for pattern recognition, image processing, feature selection, data mining and knowledge discovery process from large datasets. Use of rough set rules based on redacts has a significant role for dimensionality reduction/feature selection by scaring redundant features; thereby having potential application potential application for mining large data sets (Komorowski et al. 1999).

2. Entrepreneurial learning

Entrepreneurial learning is often described as a continuous process that facilitates the development of necessary knowledge for being effective in starting up and managing new ventures. However, although there have been extensive efforts in investigating the potential learning effects of entrepreneurs’ experiences, there has been very little effort to distinguish between “entrepreneurial experience” and “entrepreneurial knowledge” (or what Reuber, Dyke, and Fischer [1990] refer to as “experientially acquired knowledge”). A starting point for studying the process of entrepreneurial learning could hence be to draw a distinction between the experience of an entrepreneur and the knowledge thereby acquired (Reuber & Fischer, 1994). One way to distinguish between these two concepts is to consider entrepreneurs’ experiences as a direct observation of, or participation in, events associated with new venture creation, while the practical wisdom resulting from what an entrepreneur has encountered represents the knowledge derived from this particular experience (Reuber et al., 1990).The former can be argued to correspond to “experience” (hereafter referred to as entrepreneurs’ experiences), while the latter is considered equivalent to “experientially acquired knowledge” (hereafter referred to as entrepreneurial knowledge). **There are two dimensions to entrepreneurial learning** ; exploitative learning; focuses on multiple experiences and existing solutions to achieve high levels of consistency and efficiency, whereas explorative learning is characterized by experimentation and innovation to generate novel solutions (Eriksson,

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Leiringer, et al., 2017; Eriksson & Leiringer, 2015), involves activities characterized by refinement, efficiency, and execution, **explorative leering** ;exploration involves activities characterized by search, discovery, experimentation, and innovation (He &Wong, 2004). A certain tension exists between these two activities. Exploration and exploitation compete for rare organizational resources. Exploration and exploitation require different organizational structures, processes, strategies, capabilities, and cultures (Zhou & Xue, 2013).

The Research Hypothetical Model

Below is the hypothetical model of the research in Figure (1):

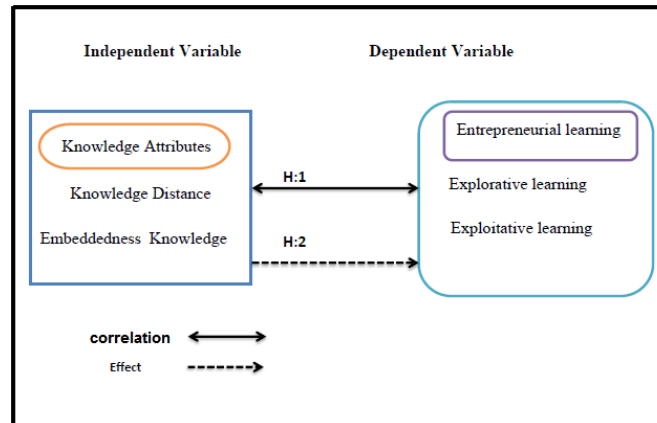


Figure 1. The hypothetical search scheme

V. Research hypotheses

The first main hypothesis / (there is a significant statistically significant correlation between Knowledge Attributes and **Entrepreneurial Learning** with its dimensions (exploratory learning and investment learning) from which the following sub-hypotheses emerge:

- .1 Knowledge Attributes are statistically associated with explorative leering.
- .2 Knowledge Attributes are statistically associated with exploitative leering.

The second main hypothesis / (there is a statistically significant effect between Knowledge Attributes and Entrepreneurial Learning in its dimensions (explorative leering and, exploitative leering) from which the following sub-hypotheses emerge :

- 1. Knowledge Attributes have a significant effect on explorative leering.
- 2. Knowledge Attributes have a significant effect on exploitative leering

Third: Study methodology and procedures

- The sample

The study community is represented by the Technical Institute of Karbala, and the sample that can be reached was represented by the teaching staff in the institute, and the questionnaire was distributed to the 94 teachers inside the institute, and because of apologies or incomplete cases that are not valid for analysis, (8) forms were excluded. Thus, the number of valid forms for study and analysis is (86) questionnaires only, i.e. (91%).

Table (1) presents the characteristics of the research sample in terms of demographic information represented by (age, gender, scientific title and educational attainment), and the frequencies and percentages were extracted to describe the research sample. The results of the table show that the most frequent age of the research sample was within the age group (48-37). And that the majority of the research sample was male, while the percentage of females was the

least. The highest certificate present in the Musayyib College of Technology was for a master's holders and the lowest for a higher diploma, and the dominant category in the research sample in terms of scientific title is for those who hold the title of assistant teacher.

Table (2)
The characteristics of the research sample

Level	Frequency	The ratio
Age		
36-25	21	%24
48-37	30	%35
59-48	22	%26
71-60	13	%15
Total	86	%100
Gender		
male	62	%72
Female	24	%28
Total	86	%100
Qualification		
PhD	14	%16
Master's	68	%79
Higher Diploma	4	%5
Total	86	%100
The scientific title		
Assistant Professor	3	%3
Assistant Professor	16	%19
Teacher	19	%22
assistant teacher	48	%56
Total	86	%100

Fourth: study measurements

1: Knowledge Attributes : The researchers used a scale (zhou et al., 2018) to measure the Knowledge Attributes variable, which includes two dimensions (Knowledge distance and embodied knowledge). Cronbach's alpha coefficient for this variable is (0.804), while the alpha Cronbach's coefficient for dimensions, respectively (0.875, 0.825), which indicates the presence of internal consistency in the answers of the research sample, the direction of this scale. It was based on the zhao et al., 2021 scale to measure the entrepreneurial learning variable, which includes two dimensions (exploratory learning and exploitative learning). This scale consists of (4) items for each dimension of the variable dimension. The Cronbach's alpha coefficient for each dimension reached (0.860, 0.887), which indicates the presence of internal consistency in the answers of the research sample towards this scale.

- data analysis tools

The study used a number of appropriate statistical methods to describe and analyze the study data, which included the arithmetic mean, standard deviation, and the simple correlation coefficient data analysis.

Statistical description:-

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Table (2) presents the statistical description of the study variables. As noted through the arithmetic mean, all the variables were close to the level of moderation, and the standard deviation indicates the consistency of the answers received towards these variables.

Table (3)

Correlation Matrix and Statistics Summary (N = 86)

Var.	X	X1	X2	Y	Y1	Y2
X	1					
X1	.751**	1				
X2	.855*	.741**	1			
Y	.612*	.822*	.870**	1		
Y1	.745**	.455	.511**	.654**	1	
Y2	.674**	.745**	.455	.511**	.654**	1
Means	3.19	3.88	3.87	3.69	3.89	3.74
SD.	1.30	1.01	1.01	1.11	1.00	0.89

* $p < 0.05$; ** $p < 0.01$.

5-Hypothesis testing

1. Correlation hypothesis

(There is a significant statistically significant correlation between Knowledge Attributes and entrepreneurial learning with its dimensions (exploratory learning and exploitative learning). The matrix of correlation coefficients in Table (2) shows that there are statistically significant correlations at the (1%) or (5%) level among most of the study variables, and this provides support and acceptance for the first main hypothesis.

2. Impact Hypothesis

The second main hypothesis / (there is a significant statistical effect between Knowledge Attributes and entrepreneurial learning in its dimensions (explorative learning and exploitative learning)(Table 3) indicates the results of the regression analysis that there are significant influence relationships at the level (0.01-0.05) between cognitive features and entrepreneurial learning in its dimensions (exploratory learning and exploitative learning), and this supports the validity of the sub-hypotheses and therefore the second main hypothesis is accepted.

Table (4)

The results of the second main hypothesis test

regression path	regression coefficients	Values t	ValuesR ²	Values F
Y1 <--- X	.732	5.709**	0.75	**32.750
Y2 <--- X	.803	4.953*	0.81	*46.087

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Conclusions

In this paper we develop and test an attribute Knowledge the selection of entrepreneurial learning mechanisms. According to the knowledge-based view, traits defined from franchisor to franchisor are subject to more system-specific knowledge more implicit, and governed by system knowledge is more explicit. Using complexity, learnability, and scalability through entrepreneurial learning as measures to verify knowledge of the system, data from the

studied population provides some support for the hypotheses. How does our approach expand the findings in the literature? The main contribution of our study is the application of the knowledge attribute-based approach to explain the mechanisms of knowledge transfer to achieve entrepreneurial learning. Our study uses primary data from the learning and education sector that enables an estimate of the factors that theory considers important to influence the choice of entrepreneurial learning mechanisms in its two dimensions to share knowledge, experience, and skills. Knowledge. This study has important limitations: first, due to the small sample size, the generalizability of the results is limited; Further research to analyze data from other institutes with a greater number of systems of excellence would help ensure the general applicability of our research findings. Second, the measurement of attributes of knowledge is not without limitations; It is the first step to measure tacit knowledge through various attributes of knowledge. Third, we have captured trust as a control variable at a fairly general level.

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