Entrepreneurial Behaviors: Are the People Restricted by Knowledge Inertia?

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ABSTRACT: The purpose of this study is to scrutiny the impact of knowledge inertia on entrepreneurial behaviors of university students. Two dimensions of knowledge inertia – learning inertia; to acquire knowledge insistently on the same source and experience inertia; to use the former methodology and past experience persistently while encountering the difficulties- and entrepreneurial behaviors are investigated through the questionnaire. In this regard, the relationship of the two dimensions of knowledge inertia with entrepreneurial behavior was investigated. After collecting and analyzing the data, the results indicate that there is a meaningful relation between knowledge inertia and entrepreneurial behavior. There is also meaningful negative relation between learning inertia and entrepreneurial behavior. On the other hand, there is a positive relationship between experience inertia and entrepreneurial behavior.

Keywords: Knowledge inertia, learning inertia, experience inertia, entrepreneurial behavior.

JEL Classifications: M00; M10

1. Introduction

As a term entrepreneur was firstly introduced and identified by French scientist Cantillon early in eighteenth century and the expression was created under the condition of division of the society into two classes; fixed income wage earners and non-fixed income waged earners. However, entrepreneur that is understood in modern times was mainly credited by Schumpeter. Schumpeter (1928) described an entrepreneur as making new alternatives possible or a producer who manufacture the known or unknown with the new ways of doing it. Another description of entrepreneur is identified by Kuratko (2008) who addressed the entrepreneurs who foresee and capture the opportunities and convert them into marketable designs and innovative ideas. In addition to the former classifications, Drucker (1986) paved the way for a new understanding of the concept by adding the dynamics of ever-changing uncertain environment and creating new value by gathering resources under the vagueness. In this context, entrepreneurs are those who predict future events, adapt the alterations and at last but not least creating value from the change of events.

Before proceeding through the entrepreneurial behaviors, it is crucial to define entrepreneurship. As Stevenson and Jarillo (1990) explained as a process by which individuals – either on their own or inside organizations – pursues opportunities without regard to the resources that they currently control. Notions are weighted and underlined in definition as follows: entrepreneurship is not a distinct or
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Entrepreneurial behaviors are a comprehensive term that captures all actions taken by an entrepreneur which changes the way an organization operates, creating and developing new ventures and technologies. Entrepreneurial behaviors involve the firm and its members with the use of new resources, new ideas through the production of goods, services and/or business processes. According to Samuel (2000) innovation is using new production methods and fostering business processes in production of goods and services. Consequently, first dimension refers to the ability to generate ideas that will result in production of new products, services and technologies Scheepers (2008).

First dimension of entrepreneurship is innovativeness. Innovativeness or having the capacity to be innovative is one of the key ingredients to gain competitive advantage in last three decades. Innovativeness is depicted by Thomson (1965) as successfully implementation and acceptance of new ideas through the production of goods, services and/or business processes. According to Samuel (2000) innovation is using new production methods and fostering business processes in production of goods and services. Consequentially, first dimension refers to the ability to generate ideas that will result in production of new products, services and technologies Scheepers (2008).

Pro-active manner on the other hand, is envisioned as the second dimension of entrepreneurship and defined by Lumpkin and Dess (1996) as pursuing the new opportunities or taking the initiative of entering the new markets. Introducing the new goods and services, processes and technological advances to the market before rivals is the essence of pro-activeness. In other words, it comprises the inquiry of opportunities, revealing the new goods and services or forgoing the current products. Pro-activeness indicates the stance of management towards opportunities, encouragement of initiative, competitive aggressiveness and confidence in pursuing enhanced competitiveness (Antoncic and Hisrich 2001; Kreiser et al., 2002; Morris, 1998).

The last dimension of entrepreneurship is the risk-taking and it involves the determination and courage to make resources available for projects that have uncertain outcomes that is to say, involves risk Scheepers (2008). Risk-taking activities are regarded as a natural tendency and a component of innovativeness, pro-activeness and new venture startups. Behavior of taking risk is confirming the risk of new product and uncertainty in this perspective therefore; entrepreneurship involves acceptable and feasible amount of risks.

Entrepreneurial behaviors are distilled from the concept of the entrepreneur and regarded as the focal point of the taking action. There are numerous amounts of definitions of entrepreneurial behavior. As Bird and Schjoedt, (2009) define; it is the study of human behavior involved in identifying and exploiting opportunities through creating and developing new ventures as well as exploring and creating opportunities while in the process of emerging organizations. In its broadest conception, entrepreneurial behavior is a comprehensive term that captures all actions taken by a firm’s members that relate to the discovery, evaluation, and exploitation of entrepreneurial opportunities (Shane and Venkataraman, 2000; Smith and DiGregorio, 2002). Defined by newness, entrepreneurial actions involve the firm and its members with the use of new resources, interactions with new customers, involvements with new markets and/or with new combinations of its existing resource portfolio, customer base, and served markets (Kuratko et. al 2005).

Entrepreneurs exhibit many different personality types; searching for a specific personality pattern is very difficult. There are probably as many personality varieties among entrepreneurs as there are entrepreneurs. According to notable researcher social psychologist David McClelland (1987) these personality traits are: High need for achievement; especially growth-oriented entrepreneurs need to succeed, to achieve and to accomplish challenging tasks and achievement leads them to a desire for independence. Low need to conform; growth-oriented entrepreneurs have a propensity to listen but rarely implement what they do. They take the unpopular course of action. Persistence; growth-oriented entrepreneurs focus heavily on the success of the business thus; they work hard on the details and try hard to become more profitable. High energy level; the capacity for sustained effort requires a high energy level. Risk taking tendency; growth-oriented entrepreneurs believe so strongly in their ability to achieve that they do not see much possibility of failure. Thus they accept risk and find it motivating.

Both as power and resources, knowledge is strategically important for individuals and enterprises. The third industrial revolution is based on knowledge which changes the way an individual, an enterprise or even a nation can create wealth and prosperity. Thus, successful
knowledge management can be the chief determinant for the survival of an enterprise in a knowledge-based economy (Liao et al. 2008). Drucker (1986) considers knowledge the only source of an enterprise’s competitive advantage. In preceding two decades, attentiveness of investigation of knowledge management and development of knowledge management theories spurred. Yet, knowledge management has an inherent drawback called knowledge inertia. In physics, the principle of inertia states that objects continue in a state of rest or of uniform motion unless acted upon by forces. Unless interrupted, an object’s motion is subject to physical constraints and objects will move in the predicted trajectory. Human can track and reach moving objects by predicting where objects are going (Liao, 2002). This truth suggests that human cognition also has inertia (Hofsten et al., 1998; Kavcic et al., 1999). The overall procedure explains several things. Firstly, prediction based on understanding that there is a trajectory if objects move then we can track and reach them according to their inertia. Secondly, changes in moving trajectory only happen if objects are interrupted by outside forces. This means that any change of inertia is caused by outside forces. Thirdly, change does not spontaneously, but must be implemented (Liao et al., 2008).

According to Liao (2002) when we are used to solving problems or dealing with something repeatedly with the same method, it can infer a similar thing and explain it with similarity matching and analogical reasoning in terms of saving time to think and avoiding risk of change. However, if everything comes from past experience and knowledge without revision and update, the method for problem solving will be predictable and inertial. Once, in a highly competitive environment some predicts the trajectory of what you are thinking or doing, tracking and reaching of predictive action from others could cause failure and loss.

In both individuals and organizations, a high degree of the solution of a problem is generated by the knowledge acquired from past experience and its extension to fit new situations (Sternberg, 1985). People use a memory of past experiences and knowledge as a guide to generate planning for new problems. Re-using past knowledge to solve a new problem becomes a law or principle that similar things will remain static or uniform until the situation is no longer feasible and then is changed by outside forces (Liao et al. 2008).

The definition of inertia as Huff et al. (1992) made, overarching concept that encompasses personal commitments, financial investment sand institutional mechanisms supporting the current ways of doing things ... inertia describes the tendency to remain with the status quo and the resistance to strategic renewal outside the frame of current strategy (p.55). Applying the concept of inertia to human behavior, individuals use their prior knowledge and experience to solve problems, that is, knowledge inertia (Liao et al, 2002, 2008). Everything stemming from past experience and knowledge without revision and update would imply predictable management behavior and problem solving strategy of an enterprise. Knowledge inertia would result in lack of creative thinking and innovative behavior and has negative impact to learning and utilizing knowledge efficiently and effectively (Fang et al, 2010). According to Liao et al (2008), knowledge inertia is provided the empirical evidence to support that is comprised of two dimensions: experience and learning inertia. Experience inertia is defined as individuals solve problems with prior experience and knowledge. Learning inertia is referred as individual learn knowledge from the same source (Fang et.al 2010).

Over the last two decades, competitive business environment circumstances are needed to be relentless. Managers and prospective managers (specifically university students) tend to be more competitive in every single area. In this context, entrepreneurial behavior within organizations is generally regarded as a vehicle of increased organizational growth and profitability (Thornberry, 2001), strategic renewal (Zahra, 1996), organizational change and customer value added services (Kuratko et al., 2005). Therefore, the main objective of this study is to measure entrepreneurial behavior under the influence of knowledge inertia and the correlation among them.

**Figure 1. Research model**

<table>
<thead>
<tr>
<th>Knowledge Inertia</th>
<th>(-)</th>
<th>Entrepreneurial Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience inertia</td>
<td></td>
<td></td>
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<tr>
<td>Learning inertia</td>
<td></td>
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</tbody>
</table>
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2. Material and Method

Sample
The sample consisted of 273 (115 female, 158 male) third and fourth class students of three faculties (Economics and Administrative Sciences, Engineering and, Arts and Science) at Osmaniye Korkut Ata University. The questionnaires were distributed to the students at lecture time. Their ages ranged from 20 to 39 years, with a mean of 22.7 years. Ages of the 199 (72.9%) persons of the sample are between 21-23 years old. In this sample, 76 (27.8%) were living in metropolises, 157 (54.9%) were living in provinces, 37 (13.6%) were living in counties, and 10 (3.7%) were living in towns and villages.

2.1 Measures
A three-part questionnaire was designed for the study that included self-report measures of knowledge inertia, entrepreneurial behavior, and descriptive data. One part of the scale included knowledge inertia (KIN) which consisted of two subscales: learning inertia (LIN), and experience inertia (EXIN) (adapted from Liao et al., 2008). For the this sample, reliability coefficients (Cronbach’s alpha) are 0.87 for learning inertia, 0.84 for experience inertia, and 0.84 for knowledge inertia.

The second part of the scale, which was designed by Zampetakis et al. (2009), measured entrepreneurial behavior (ENB). In Turkey, Akkoç, Çalışkan, and Turunç (2012) adapted this scale to Turkish and found high reliability (α=.82). Zampetakis et al. (2009) findings show that this measure has got one strong factor and measure of internal consistency of the test items, reliability coefficient of 0.71 has been obtained. The KIN and ENB scales used the five point Likert scale (1= strongly disagree to 5= strongly agree). The third part of the scale consisted of demographic question that includes age, gender, and living area.

2.2 Data Analyses
Descriptive statistics were computed for all study variables using the Statistical Package for Social Sciences (Version 16.0). Cronbach’s alpha reliability analyses were also conducted for all scale variables. The hypothesized model was tested using Pearson correlation analyses (p< 0.05) and multiple regression analyses.

2.3 Results
Descriptive statistics and reliabilities for all major study variables are presented in Table 1 which show that lower level learning inertia(Mean 1.9, SD 0.7) and medium level experience inertia(Mean 3.0, SD 0.6), knowledge inertia (Mean 3.2, SD 0.6) and entrepreneurial behavior (Mean 3.5, SD 0.6).

Pearson correlation analysis was used to analyze the relationships between learning inertia(LIN), experience inertia (EXIN), knowledge inertia (KIN), and entrepreneurial behavior(ENB). Based on the results of Table 1, ENB was significantly negatively correlated with LIN among university students.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>LIN</th>
<th>EXIN</th>
<th>KIN</th>
<th>ENB</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIN</td>
<td>1.978</td>
<td>0.71258</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXIN</td>
<td>3.015</td>
<td>0.59161</td>
<td>0.399**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN</td>
<td>3.219</td>
<td>0.63628</td>
<td>0.263**</td>
<td>0.981**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ENB</td>
<td>3.585</td>
<td>0.60686</td>
<td>-0.320**</td>
<td>-0.012</td>
<td>-0.032</td>
<td>1</td>
</tr>
</tbody>
</table>

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

As predicted, knowledge inertia was negatively and partially related to entrepreneurial behavior. The correlations between entrepreneurial behavior and knowledge inertia (r = -0.032), and its two subdimensions which are learning inertia (r = -0.320, p < 0.01), and experience inertia (r = -0.12).

The linear regression model was used to test model and relationships. Table 2 describes results of regression analyses. Our model was also significant (F = 12.178, p < 0.001) and explained that the variance of all variables in ENB is 12 % (Adj. R² = 0.11, p < 0.001). R squared (R²) is the percent of the variance in the dependent variable explained uniquely or jointly by the independent variables.

Table 1. Mean, standard deviation and inter-correlation of LIN, KIN, EXIN and ENB
As shown in Table 2, while learning inertia ($\beta = -0.416, p<0.000$) explained significant variance of entrepreneurial behavior, no relationship existed between the experience inertia, knowledge inertia and entrepreneurial behavior.

Table 2. Results of regression for entrepreneurial behavior

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3,817</td>
<td>.188</td>
<td>20,331</td>
<td>.000</td>
</tr>
<tr>
<td>LIN</td>
<td>-.354</td>
<td>.078</td>
<td>-.416</td>
<td>-4,530</td>
</tr>
<tr>
<td>EXI</td>
<td>.423</td>
<td>.472</td>
<td>.412</td>
<td>.895</td>
</tr>
<tr>
<td>KIN</td>
<td>-.251</td>
<td>.417</td>
<td>-.263</td>
<td>-.602</td>
</tr>
</tbody>
</table>

Dependent Variable: ENB

3. Discussion

Apparently, for individuals, knowledge and management of knowledge capital is playing the determinative role for entrepreneurial behaviors to succeed or to be a failure. Individuals, who have a significant tendency to explore new knowledge rather than exploiting the existing ones strongly, make the organizations and projects more innovative and prosperous. According to former research findings, Sinha et al. (2009) suggest that students can easily be accepted to continuing projects instead of proposing or getting sponsorship for their own designs. Learning inertia, which is basically described learning from the same source, occurs naturally because there is no need to learn and explore new concepts while working on planned-in-advance projects. This situation will both undermine the innovative thinking and entrepreneurial behavior and in the long run, be a drawback for overall economic indicators due to lack of intellectual property and not sufficient creation of fresh innovative ideas.

Organizations are comprised of individuals and to become a successful competitor in relentless environments they need to be more innovative. However, as Sharifirad (2010) indicate that it is not the organization that is innovative: instead it is the sum of people who act and think uniquely and let the organization to be innovative. Therefore, adverse impacts of learning inertia on individuals and organizations cannot be separated. Inertia disserves the organizations which are operated and functioned by individuals. As Fang et al. (2011) point out that frequent use of existing knowledge which is derived from the same source may hinder the experimentation and the risk taking activities as it slows down the interaction with the external environment, dialogue and participating decision making process. Hence, learning capability of the organization will suffer and lack of adaption to novel ideas and behavior may lead to the organizations’ trade secrets or strategies to unveil eventually.

Entrepreneurial behaviors and innovative way of thinking are obviously inhibited by inertial activities but for the resolution, knowledge sharing platforms and implementations could be held by the universities, R&D institutions through the national and international conferences in all related fields. From reports and conference proceedings, all the layers of society from individual to organizational level benefit and information dissemination becomes more accessible and knowledge sharing in education system will become wider that will result in an improvement of entrepreneurial behavior.

4. Conclusion

This study aims to assess the impact of knowledge inertia through entrepreneurial behaviors of university students while using two dimensions of knowledge inertia; experience and learning inertia. The findings of the research indicates that the first dimension of knowledge inertia i.e. learning inertia, has a negative impact on entrepreneurial behaviors of senior university students whereas the second dimension of knowledge inertia i.e. experience inertia and knowledge inertia do not adequately explain the variance in our dependent variable; entrepreneurial behaviors. Consistent with above, learning inertia has an obvious adverse effect on entrepreneurial behaviors while experience inertia has no meaningful impact on entrepreneurial behaviors. Therefore, findings of the study advocate that, trying to acquire knowledge firmly on the same source could result in a set of information which could
lead to a propensity of inertial and foreseeable behavior for competitors and outsiders that may cause of failure and loss in today’s knowledge-based economies. Thus, potential entrepreneurs and forthcoming occupants of high-level management positions; senior university students should be aware of the fact for the success in competitive business environments. On the other hand, using the existing methodology and past experiences insistently when facing with the problems do not have an impact apparently on entrepreneurial behaviors. Yet, further explorations might be conducted to identify the relationship among experience inertia and entrepreneurial behaviors with different samples. The contribution of this study is to exhibit the connection of inertial attitudes and entrepreneurial behaviors to cultivate the range of knowledge in management and organizational studies.

References


