

**Identifying entrepreneurial opportunities by nascent entrepreneurs
in Sfax Region**

Mariem BORCHANI,
borcheni.mariem@hotmail.fr

Wassim ALOULOU,
awacim@yahoo.fr,

Younès BOUJELBENE,
younes.boujelbene@yahoo.fr

ISAAS, Route de l'Aéroport, km 4, BP. 1013, Sfax 3018, TUNISIA.

Abstract

The purpose of this paper is to identify variables influencing the identification of entrepreneurial opportunity by nascent entrepreneurs in Sfax region. These variables included the personality of entrepreneur, social network and prior knowledge. Theoretically, we have a conceptual framework privileged in recent entrepreneurship research (Shane & Venkataraman, 2000). Empirically, our research is based on an exploratory study, while adopting a deductive approach type. We used the questionnaire as a tool for data collection. The survey sample consisted of 80 nascent entrepreneurs in Sfax region. Our results showed that two variables among three that significantly predict the identification of entrepreneurial opportunity. These variables are social network and prior knowledge.

Keywords: Identification; entrepreneurial opportunity; nascent entrepreneur; personality; personal/social network; prior knowledge; Tunisia.

1. Introduction

In recent years, very small businesses have acquired a double legitimacy: first social one linked to factors of self-realization and social integration, second economic one, linked to the fact that very small business and small and medium enterprises (SME) have been the spearhead of innovations, of new services development and job creation. This type of business has many advantages: flexibility, adaptability and responsiveness to customer needs. So American diction for small business seems to find its right to quote: “*small is beautiful but also powerful*”.

Like many other countries, Tunisia included the business creation at the top of main priorities for government action. In this country, the field of entrepreneurship occupies a prominent place during the recent years. This fits into the willingness visionary of the Tunisian government to reduce the problem of unemployment especially among young graduates of higher education on the one hand, and to establish an entrepreneurial culture that incarnated in the development of entrepreneurial action, on the other hand. Therefore, it is important to take interest to entrepreneurship as a research subject and try to deepen the understanding of this complex phenomenon.

The field of entrepreneurship research has known a huge development in recent decades. Kuratko (2005) qualified this growth as of “*the most eminent economic force that world has known in recent years*”.

The paradigm of entrepreneurship research has done and continues to do the subject of controversial debate between different schools of thought for this reason that researchers in entrepreneurship perpetually wonder about the theoretical and paradigmatic foundations of their discipline. Since that entrepreneurship is a complex phenomenon, then it cannot be reduced to such a paradigm in order to identify its different facets (Verstraete, 1999; Messeghem, 2006).

Certainly, the paradigm of business opportunity is a central paradigm, but other paradigms such as innovation, new value creation and new organization creation are essential to circumvent the field of entrepreneurship (Verstraete and Fayolle, 2005).

Different pioneers contribute for this paradigm. In fact, Schumpeter (1974) defines entrepreneurial opportunities as “*new combinations that manifested in introducing of new*

product, new method of production, new market exploitation, conquest of new supply source and finally, new form of industrial organization". According to him, if an entrepreneur obtains a beneficial evolution of these production factors, thanks to the new combination, he (she) has identified new opportunity. Also, Casson (1982) defines entrepreneurial opportunities as *"opportunities to produce new goods, services, raw materials and organizational methods that allow outputs to be sold at prices that are above production costs"*. De Bono (1980) considers the opportunity as *"a means of action among others, but represents the best solution to follow"*.

Our work fits into the paradigm of opportunity. Works on opportunity are old. This question has aroused great importance on the part of economists and managers since the opportunity concept is both too general and it exists in different disciplines, but in each one it has different characteristics because the context in which integrates, identifies and develops is different.

The paradigm of business opportunity takes its origins in marketing to respond unmet needs in the market (Kirzner, 1973; 1979). Something that has generated a real renewed of interest of this paradigm in entrepreneurship field (Chelly,2006). This paradigm is anchored in the founding work of Venkataraman (1997) and Shane & Venkataraman (2000). From their perspective, the field of entrepreneurship is defined as *"the scholarly examination of how, by whom and with what effects opportunities it create future goods services are discovered, evaluated and exploited"* (Venkataraman, 1997). In these conditions, the processes of discovering, evaluating and exploiting opportunities are objects of essential research study. This perspective concerns the emergence of new economic activity, which is not necessarily related to the emergence of new organization.

The aim of this research is to study variables influencing the identification of entrepreneurial opportunities by nascent entrepreneurs in Sfax region. The structure of this paper is as follows: First, we present a literature review what includes the identification of opportunity and the variables that may influence it. Second, this allows us to advance the theoretical framework adopted in this research. Third, we explain research methodology, present and discuss main results. Finally, we presented research limitations and some recommendations for the future researches.

2. The identification of entrepreneurial opportunity: literature review

2.1. Differences between idea and opportunity

The idea is personal and can occur in different life circumstances. One idea is necessary but not sufficient to start a business. Each idea must solve and respond to a problem, or a failure. The idea does not assure the property of the company if there are not enough people who feel this need, that prove this inadequacy. Most new entrepreneurs start first by determining and defining clearly entrepreneurial occasion and then try to formulate a clear idea after recognizing the existence of occasion. While opportunity is related to an environment in a market. It is somehow an accepted idea.

Timmons et al., (1986) make this acceptance of nuance between idea and opportunity. For them, the majority of ideas are the result of entrepreneur's creative perspicacity is the lot of inventors who seek new ways of doing things. Regarding the opportunity it is the anchor of the idea in the needs market, favorable conditions and competitive advantages. It is the lot of entrepreneurs.

The differentiation between idea and opportunity is very clear, seen that idea about product or service is not sufficient to start a business, besides we must see the operating potential for drawing profit. Kirzner (1979) argues that the transition from idea to opportunity is due to the simple recognition of the idea's commercial value.

2.2. The identification of entrepreneurial opportunity

The "opportunity" term has known a multiplicity of definitions. Several researches have been conducted to elucidate the process of identification/construction of entrepreneurial opportunities.

The identification of entrepreneurial opportunity is a crucial step for all business creation since we cannot talk about entrepreneurship without talking about opportunity identification, which also requires special attention from the potential entrepreneur.

Kirzner (1979) admits that opportunity identification is the central element of entrepreneurship. Also Gartner (1990) and Gibb (1997) have also presented the detection of an opportunity as a starting point without which it becomes impossible to talk about entrepreneurship. Despite that, we note that the identification of entrepreneurial opportunity has begun considered as a research topic only from 1997. This recent enthusiasm has led to interesting debates from a few studies on opportunity definition. Among the most recent and powerful research in entrepreneurship that advanced by (Venkataraman, 1997; Shane & Venkataraman, 2000) who defined entrepreneurship as an academic field is gaining importance, as researchers try to understand why some people succeed to discover opportunities while others do not, and how these discovered opportunities are evaluated and exploited. New opportunities may involve introducing new goods and services, exploring new markets, developing new production processes and/or combining raw materials in new ways.

More recently, Ardichivli and Al. (2003) are even gone further, for them, not only identifying opportunities is one of the first steps of entrepreneurial process, but also, it is the most important skill. This definition is the starting point of a new integrative entrepreneurship field that we qualify like Eckhardt and Shane (2003) as "opportunity-based".

2.3. Theories mobilized in favor of entrepreneurial opportunity recognition

❖ The neoclassical equilibrium theory

This theory suggests that opportunities are independent of entrepreneur (Shane, 2000) and therefore are available and accessible to everyone. The imbalance in the opportunities exploitation is due to the difference between those who recognize these opportunities. Thus, the neoclassical equilibrium theory brings together a series of individual psychometric studies of entrepreneur's characteristics (Chiasson & Saunders, 2005).

These studies include the hopes of personal gain, the features and tasks related to motivation (Bull & Willard, 1993) the take in charge of equivocal income (Gartner et al., 1992), most personality traits (Shane, 2000) and cognitive properties (Shane & Venkataraman, 2000).

The neoclassical equilibrium theory considers that opportunity recognition and its reconstitution are more important than its construction since the exogenous character of both the context (structure) and the opportunity. In fact, the neoclassical equilibrium theories focus on the preexisting contextual opportunities (structural) and which are recognized by a specific entrepreneur.

The two major limits of this theory (Chiasson & Saunders, 2005) are considered: First, studies of general personal characteristics (traits) have proven their inability to determine individuals who can regularly identify successful opportunities. So it took considering the context for better comprehension of opportunities identification. Second, the general pattern known of education and experience is based on imitation and replication of a task to learn it. Thus, the fact of studying the entrepreneur personality traits can reduce the opportunity to the simple imitation necessarily involving limitation of the forecast results: several imitators, on a single market.

❖ The coevolutionary lock-in

The opportunity is part of the coevolutionary lock-in (Burgelman, 2002) is in a broader perspective than the theory of population ecology (Low & MacMillan, 1988).

The coevolutionary lock-in explores the relationship between entrepreneur and structure and its changes over time, focusing primarily on the relative freedom of entrepreneur through the competitive advantage provided and on the adequate strategy adapted that leads to initial success. In addition, success will create resistance to change that will enclose the organization (the lock-in) and hinder adaptation to market changes. All this leads to the organization failure also it reduces their ability to adapt to new competitors.

The coevolutionary lock-in examines the organization's adaptation to the specific niche markets that providing them relative freedom (resulting from the success and gaining competitive advantage) but this freedom is eclipsed under the effect of organizational inertia face the market conditions changes .

The two limits of this approach are considered: First, entrepreneur, here, undergoes the market and the changes determine its success all depends on its adaptation. In practice, the actions of entrepreneur (agents) can influence both the markets and the products demand. Second, entrepreneur can avoid lock-in through the reflexive monitoring that can long- term ensures product adaptation (Chiasson & Saunders, 2005).

❖ The triggers of structural changes

This approach was based on the interaction between social and technological changes in highly institutional frameworks (Barely, 1986; Barely and Tolbert, 1997).

Technology (Barely, 1986, 1990) and information technology (Orlikowski, 1991) have a role in the opportunity triggering that born structural and organizational changes and/or the institutional properties changes (Chiasson & Saunders, 2005).

The triggers of structural changes show that technology has a direct and important impact in the opportunities triggering.

- Lack of deliberate changes consideration (not imposed by technology or (embedded) in these characteristics).
- And ignorance of reflexive monitoring.

These opportunity approaches provide many views about the opportunity nature, the entrepreneur (the agent) and structure (context: social, technological, economic...) which are certainly, differently but complementary (Chiasson & Saunders, 2005).

This is the two main limitations of this approach because it reduces or ignores the role of the entrepreneur (Chiasson & Saunders, 2005).

Indeed, the context is in continuous evolution. It is impossible to consider one approach seen the spatio-temporal variability of this context. Since the fact to take into consideration, only one approach has adverse effects on both the entrepreneur and the economy. So, the theory of structure came legitimize this logic observation. Since the opportunity identification is the crucial step of any creation of business, it is therefore essential to identify the variables that may influence it.

3. Variables influencing entrepreneurial opportunity identification

3.1. Personality of entrepreneur

Some cognitive studies have focused on personality traits of entrepreneurs and their contribution to the success of entrepreneurial ventures. However, Shaver & Scott (1991) showed in their research that psychometric tests searching for distinctive entrepreneurial traits have been unable to find differences in most personality traits between entrepreneurs and other groups (managers or the general public) .Three personality traits have, however, been shown to be related to successful opportunity recognition.

The first personality trait is vigilance or entrepreneurial alertness. More than others, this skill is developed at the highest point in entrepreneur and enables him to find relevant information to opportunities discover. The main theoretical contributions integrating the concept of opportunity focused on the process of opportunities identification and exploitation. Entrepreneurial alertness corresponds to an attitude of receptivity to available opportunities, but not yet updated. This process is primarily based on entrepreneurial alertness.

Above all, this process is based on the “entrepreneurial alertness” Kirzner (1973) was the pioneer who uses the term “vigilance” to explain opportunity recognition. Embedded in this line of thought is the notion that higher alertness increases the likelihood of an opportunity being recognized. There are, however, reports of studies that testify to the contrary. Buzentiz (1996) conducted an empirical test of Kaish and Gilad’s (1991) proposition that entrepreneurs are more alert to new opportunities and use information differently from manage. Buzentiz found little empirical support for the Kaish & Gilad’s theoretical framework, but indicated that the measures of entrepreneurial alertness need further development. Also, Ray & Cardozo (1996) argue that any recognition of opportunity by a prospective entrepreneur is preceded by a state of heightened alertness to information.

The second personality trait is creativity. Creative abilities are likely to generate a different information organization in order to draw new ideas. Schumpeter (1934) was the

first who introduce the notion that successful entrepreneur discover opportunities that others do not see. Moreover, Schumpeter (1935) is the pioneer that integrated the creativity notion in the entrepreneurship study in speaking of “creative destruction”. He thought that opportunities result by definition of the “creative destruction ” to the emergence of something new. Hills et al., (1997) have found that 90% of those surveyed by them find creativity very important for opportunity identification. However, solo entrepreneurs found significantly more important than did the networked entrepreneurs. They also viewed themselves as being more creative, and more likely to set aside time specifically to be creative: Hills et al. (1997) conclude that entrepreneurs who are networked to opportunity sources may not need to be creative as those who are not networked.

The third trait is that of self-efficacy. Self -efficacy is our sense of competence, that is to say the belief that we can do specific and difficult goals (Bandura, 2001). Some researchers in their work occupy to self-efficacy a prominent place in the study of entrepreneurship. Among the results of this work, we cite:

- Perception of self-efficacy is an antecedent consequent of perceived opportunity Krueger and Dickson (1994);
- Individuals with a high sense of self-efficacy see situations as achievable opportunities (Bandura, 2001).

H1: Personality of entrepreneur (vigilance, creativity and self-efficacy) has a significant impact on the entrepreneurial opportunity identification.
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3.2. Social networks

Personal/social networks are an important source of information for potential entrepreneurs. This is justified by Hills et al. (1997) who indicate that entrepreneur’s networks are important to opportunity recognition. In addition, they claim that “*entrepreneurs who have an extended networks identify significantly more opportunities*” than solo entrepreneurs. The role of network relationship (weak/strong ties) is very important to give the entrepreneur information needed on the problems, which they encounter with a product or service (Chelly, 2006). Indeed, Koller (1988) shows that half of eighty-two entrepreneurs interviewed indicated that their creative ideas were suggested by someone else. This empirical result is confirmed by Hills et al (1997) for which half of entrepreneurs in his sample of 171 persons may be qualified as networked entrepreneurs.

Recently, researchers have argued that it is important to have the right “mix” of strong and weak ties, that is contingent on a number of aspects, such are industrial, technological, and environmental conditions surrounding an industry (Rowely et al., 2000; Elfring & Hulsin, 2003). These authors argue that it is important to know the conditions under which different network elements lead to specific benefits. Also, the quality of network contacts can affect other characteristics, such as alertness and creativity. Social networks are composed of weak / strong ties and structural holes.

In his article “*Strength of weak ties*”, Granovetter (1973) argues that weak ties (including casual acquaintances) are “bridges” to information sources not necessarily contained within an individual’s strong tie network (including friends and family). He argues also that casual acquaintance is more likely to provide unique information than are close friends, because most people have more weak ties than strong.

The inner circle of entrepreneur (primary relational network) corresponds to its network of strong ties, generally consists of close, family and friends. In Tunisia context, strong ties are very important. This is justified by the specificity of Tunisian culture giving prominence to the family and friends who are publishers of information with high benefit helping entrepreneur to identify opportunity.

Structural holes are defined as the disconnection between the partners of a firm or society (Burt, 1992). To identify the benefits contained in a non-redundant network; Burt uses the term of “structural hole” to capture the existence of gaps in people’s social structures. Firms that have many structural holes will enjoy advantages with regard to efficiency and brokerage based on their ability to facilitate the exchange of non-redundant information.

A network with many structural holes will have access to more sources of new information, which will increase the likelihood of receiving information that can be put to use. In addition, it is important for the timing of information to be right, in the sense that entrepreneurs have access to new opportunities before others do. Since entrepreneurs cannot possibly be everywhere, their contacts can make sure that they are at the right place at the right time. For Burt (1992), entrepreneur has more interest to have structural holes in its network to receive non-redundant information, which used for identifying opportunity.

H2: Entrepreneur’s social network has a significant impact on entrepreneurial opportunity identification.

3.3. Prior knowledge

To understand why some people find business opportunities while others do not arrive, it should be interested to information that this different people possess (Venkataraman, 1997). According to Shane (2000), “prior information to identify an opportunity is within three dimensions: markets, products and consumer issues”. Entrepreneurs are more inclined to explore business opportunities in that prior knowledge constitute a genius “knowledge corridor” allowing them to recognize the value of any new information. Shane (2003) indicates that “*three major dimensions of prior knowledge are important to the process of entrepreneurial discovery: prior knowledge of markets, prior knowledge of ways to serve markets, and prior knowledge of customer problems markets*”.

For prior knowledge of market, simultaneous information on markets, consumers, technology etc., may be the cause of a greater number of opportunities. Christensen & Peterson (1990) examined in their studies the sources of new creative ideas. They concluded that deep knowledge of market and technological knowledge are prerequisites to identify creative ideas. However, Park (2005) asserts that “it is necessary to move on the market needs to identify business opportunities”.

For prior knowledge of consumer issues, direct contact with customers allows the entrepreneur to negotiate the potential problems faced by them due to the use of a technology or product commercialized by the firm where he worked or a service that was not satisfy. So, knowledge of consumers issues is the origin of entrepreneurial opportunity identification. Shepherd & De Tienne (2001) found that knowledge of problems lived by consumers favored the identification of many opportunities.

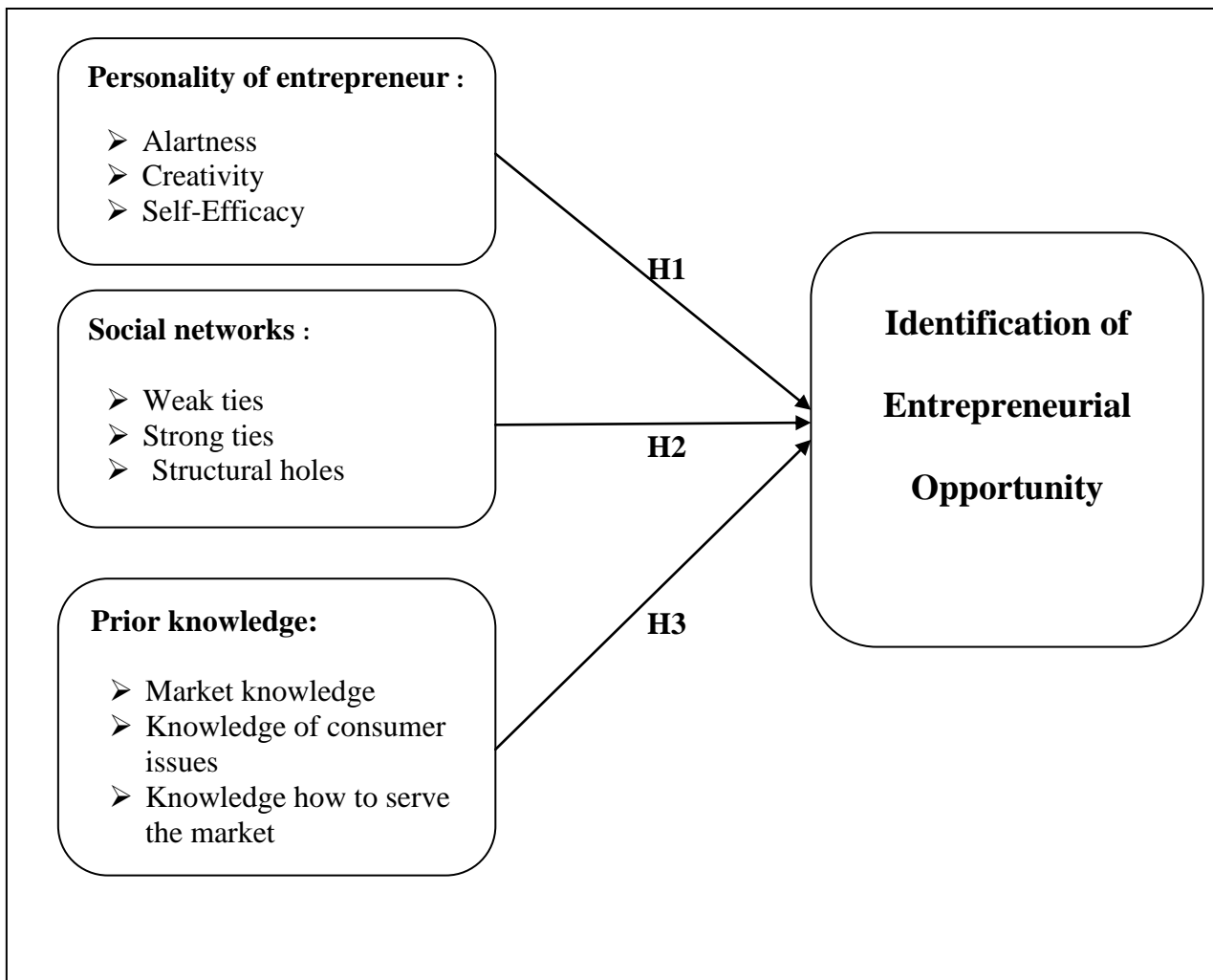
For prior knowledge of ways to serve the market, with the advent of the internet, this new technology has allowed some entrepreneur to identify entrepreneurial

opportunities and create new businesses that offer services to domestic and some international customers. According to Shane (2003), “new information on a given technology could be additional to information on ways to serve the markets, leading to the opportunities identification to solicit previous information on these processes”.

H3: Prior knowledge has a significant impact on entrepreneurial opportunity identification.

Our conceptual model is summarized as follow:

Figure 1: Conceptual model of variables that might influence the identification of entrepreneurial opportunity.



4. Research methodology

Decisively, the method is influencing the research not only because it determines the processes of research, but also because it implies an attitude of mind towards the research object (Zghal, 1992). We adopted a logical funnel from the general to arrive at the specific in order to develop our research. Thus, we start by studying theory and practice of entrepreneurial opportunity in the world after we tried to study at the national level (Tunisian context) because this context is different from others contexts. We chose a

specific sample that is “nascent entrepreneur” of Sfax region to verify the validity and the significantly of these variables.

The purpose of this exploratory quantitative research is to test the impact of the identified variables (personality of entrepreneur, social network and prior knowledge) on the identification of entrepreneurial opportunity by nascent entrepreneurs in Sfax region. In adopting a deductive approach type, this approach is to develop some assumptions and face reality in order to judge the appropriateness of initial assumptions.

We used the questionnaire as a tool for data collection. The survey sample consisted of 80 nascent entrepreneurs in the Sfax region in Tunisia.

The choice of this region as a ground of empirical validation is not randomly. In fact, this choice is justified by the prominence, which occupies this region in the Tunisian economic activity also by its prosperity and by its economic dynamism. The city of Sfax has an ideal environment conducive to the establishment of innovative companies. In addition specific benefits accorded by the Government for this region under the regional development. Similarly, we found that this region is a very favorable environment to promote entrepreneurship and it is full of financing and support structures needed for nascent entrepreneurs.

4.1. The study sample

The survey sample consists of 80 nascent entrepreneurs, who occupy the various sectors: commercial, artisanal, industrial and services. Nascent entrepreneurs are people, who are engaged in creating new businesses. The two pioneering studies by Van Stel & al., by Uhlaner & Thurik (2004), are the only empirical investigations looking at cross-country differences in the share of nascent entrepreneurs “defined as the share of people who are owner-managers of a business less than 42 months old”.

This type of entrepreneurs includes entrepreneurs what create their businesses using their own resources and networks and for social and economic reasons such as independence, prestige... or increase in wealth. These entrepreneurs have innovative ideas thanks to their specialties; their ambitions to do specific things compared to others and to appreciate their knowledge and skills. The main reason justifying nascent entrepreneur choice is to ensure the reliability of information, since opportunity identification is an advanced stage compared to the phase of starting a business. So, there is a high probability that an entrepreneur who is not nascent risks to give us false or impertinent information.

4.2. Data collection

The data collection tool that we used in this research is the questionnaire. There is a tool for collecting primary data which is well suited for quantitative research and it allows to treat a large sample size and to establish statistical relationships. The questionnaire seems to be the best tool that is suited to our research topic because we need a representative sample to test assumptions initially made and draw conclusions then generalize the results.

The questionnaire consists of seventeen items divided into five parts. The first part corresponding to a card of identification, which aims to collect general information on all nascent entrepreneurs across five items. The second part contains three items related to the dependent variable that is “identification of entrepreneurial opportunity”.

The third part consists of three items dealing with the first independent “personality of entrepreneurs”. The fourth part consists of three items related to the second independent variable “social network”. The fifth part contains three items dealing with the third independent variable “prior knowledge”.

Above all, we conducted a questionnaire pretest. This step is crucial before conducting the questionnaire, to determine the degree of simplicity and intelligibility of questions asked to respondents. We distributed the questionnaire among 12 nascent entrepreneurs in Sfax region. Following this pretest, many adjustments were made in order to formulate the final version of the questionnaire.

4.3. Operationalization of variables

We opted for a Likert scale. The scale contains typically 5 or 7 levels. The selected variables were measured on Likert scales with five positions ranging from “not at all agree” to “strongly agree” and operationalized through several items. The internal consistency of the scales is considered satisfactory since Cronbach's alpha varies between 0.7653 and 0.7770 for the different variables.

4.4. Processing and data analysis

The data collected by the questionnaire are analyzed by using various statistical tests whose operationalization is assured by computer software SPSS version 11. As part of this research, we first used the technique of descriptive analysis, then, the Principal Component Analysis (PCA), and finally, the multiple linear regression.

According to the Evrard et al. (2003), the choice of the suitable explanatory method for statistical treatment of data depends on how the dependent variable and the independent variables were measured. Based on the table below, we choose the linear regression analysis as an explanation method.

		Variable to explain	
		Quantitative	Qualitative
Explanatory Variable	Quantitative	Regression	Discriminant analysis
	Qualitative	Variance Analysis	Conjoint analysis

Source: Evrard et al. (2003)

In our study, we executed a multiple linear regression, which consists of the dependent variable (opportunity identification) and three independent variables (personality of entrepreneur, social network and prior knowledge). The objective of regression analysis is to determine the parameters β_i Value to identify the relationship between the dependent and independent variable.

Before proceeding to test the various assumptions, we used the Bartlett test, which allows us to verify the measurement scale unidimensionality (KMO index).

Cronbach's alpha is an indicator that allows us to measure the internal consistency of a scale constructed from a set of items.

5. Results and interpretations

5.1. Profile of Respondents

Among 80 respondents, 80% are man and 20% are women. This dominance of the male gender is not surprising. Thus, we note that much of our sample is (84.3%) are graduates of higher education. All entrepreneurs interviewed are young whose age between 18 and 30. In terms of experience, 78.6% of respondents had professional experience, whereas, 21.4% did not. About the internships, we find that all respondents have made an internships and more than 40% of them made more than three internships.

5.2. Presentation and interpretation of PCA results

Index de KMO and Bartlett test

	Identification of opportunity	Personality of entrepreneur	Social networks	Prior knowledge
Kaiser-Meyer-Olkin (KMO)	,701	,727	,704	,765
Bartlett signification	,000	,000	,000	,000

Identification of opportunity: The KMO index of the dependent variable “identification of opportunity” is equal to 0.701. So, the PCA of three items confirmed the existence of a single factor that explains 68.721% of the total variance of original data. In addition, we emphasize that factor contribution of each item is greater than 0.5, which justified also the unidimensionality of this variable.

Personality of entrepreneur: The KMO index of the independent variable “personality of entrepreneur” is equal to 0.727. So, the PCA of three items confirmed the existence of a single factor that explains 58.761% of the total variance of original data. Similarly, we find that factor contribution of each item is greater than 0.5. This also allows us to confirm the unidimensionality of the variable.

Social network: The KMO index of the independent variable “social network” is equal to 0.704. So the PCA of three items confirmed the existence of a single factor that explains 69.603% of the total variance of original data. In addition, we note that factor contribution of each item is greater than 0.5. Which allow us to identify the unidimensionality of the variable.

Prior knowledge: The KMO index of the independent variable “prior knowledge” is equal to 0.765. So, the PCA of three items confirmed the existence of a single factor that explains 59.911% of the total variance of original data. Similarly, we find that factor contribution of each item is greater than 0.5. This allows us to confirm the unidimensionality of the variable.

5.3. Presentation and interpretation of results from multiple linear regression

To test our conceptual model, we made use the multiple linear regression. The results that we obtained showed that only two variables in the model which are social networks and prior knowledge that significantly predict the identification of entrepreneurial opportunity. But, we emphasize that the variable personality of entrepreneur does not significantly predict the identification of entrepreneurial opportunity.

Table 1: Key results of multiple linear regression

model	Standardized coefficient	t	Signification
	Bêta		
1 (constant)	,250	-	,000
Personality of entrepreneur	,006	,353	,725
social networks	,944	27,156	,000
Prior knowledge	,561	11,003	,037

a. dependent variable: identification of opportunity

We emphasize that only two research assumptions among three that we initially made were confirmed.

Our results showed that in the Tunisian context “social networks” is the most important variable in our research (sig = 0,000). This is explained by the fact that personal/social networks are a significant and considerable source of information through which entrepreneurs can identify creative ideas. And more social network is rich and extended more the entrepreneur identifies easily business opportunity. This result is confirmed with the research work of Aldrich & Zimmer (1986) and Hills & al., (1997). In fact, according to Aldrich & Zimmer (1986), “the various social ties or links with a large variety of people should encourage the information access that will facilitate the opportunity discovery”. Similarly, Hills and Al (1997) claim that “entrepreneurs who have an extended network identify significantly more opportunities than solo entrepreneurs”.

In addition we note that prior knowledge constitutes a source of preliminary information through which the entrepreneur can easily identify the entrepreneurial opportunity which justified the importance of this variable in our study (sig = 0,037). This result is confirmed with the research works of Venkataraman (1997) and Shane (2000). In fact, Venkataraman (1997) shows that to understand why some people find business opportunities while others do not arrive it should be interested in information that this different people possess. In addition, Shane (2000) indicates that “prior information to the opportunity identification statement of three dimensions: markets, products and consumer issues”.

On the contrary, we observe that the personality of entrepreneur is the only variable that does not significantly influence the identification of entrepreneurial opportunity in our study (sig = 0,725). This can be justified by the fact that most interviewed entrepreneurs indicated that their creative ideas were suggested by someone else and not by themselves that have identified their business ideas. This result is in contradiction with the research works of Schumpeter (1935); Kirzner (1979, 1997); Krueger and Dickson (1994); Bandura (2001) what show in their research that the entrepreneur’s personality promotes the opportunity identification.

6. The research limitations, recommendations and future research

6.1. The limits of research

"The search for improvement excludes perfection" ⁽¹⁾. There is never a perfectionist work because each researcher has his own way of thinking and seeing things. Similarly, entrepreneurship research is multi-variate since what the phenomenon is complex and in continuous evolution. As part of this work, we tried through an exploratory quantitative study to collect information about our research theme and even avoid limit of generalization problem.

Our research is hampered by certain limitations, which do not affect the value of the study. But they can behind new research studies. Different types of limitations (theoretical, methodological and empirical) can be described as follow. For the theoretical limits, there are not many databases regarding entrepreneurship in national libraries. There is also a lack of new information and absence of published and ciphered assessments because of the novelty of entrepreneurial practice in Tunisia. For the methodological limits, the use of questionnaire imposes certain limits, particularly regarding the type of closed questions, which can lose a lot of information. Then, some entrepreneurs are refused to respond to our questionnaire since they have not time. For the empirical limit, we have limited the research to the study of variables that may influence the opportunities identification among nascent entrepreneurs of Sfax region. Consequently, our results cannot be generalized to all nascent entrepreneurs. Indeed, it would as useful for future research, of interest to broaden the sample of the study to other regions in Tunisia. This is both to generalize the results and at the same time to make comparisons between different regions.

6.2. Recommendations

Entrepreneurship is a fundamental phenomenon because it is the best solution to reduce the problem of unemployment especially among young graduates of higher education thus it is important to integrate business culture within the entire education system in order to establish an entrepreneurial culture. Also it is both necessary to mobilize the media for entrepreneurship to educate all the society by the importance of this new phenomenon and to create a National Council that includes qualified people such as representatives from the business world, public authorities and education world that incarnated in the development of entrepreneurial action.

6.3. Future research

Our research is hampered by certain limitations, which do not affect the value of the study. But they can behind new research studies. This work is interesting insofar it determines for all potential entrepreneurs variables that facilitate the identification of entrepreneurial opportunity. The Survey of 80 entrepreneurs has partial remedy for the limited generalization of results given a number of entrepreneurs and their heterogeneity. However, representativeness cannot be verified given the absence of exhaustive lists of entrepreneurs. We limited to the study of variables influencing the entrepreneurial opportunities identification among nascent entrepreneurs from Sfax region, consequently, our results cannot be generalized to all nascent entrepreneurs.

¹ Paul Valery citation (1871-1945), French writer and poet

Indeed, it would be useful for future research of interest to broaden the sample of study to other regions in Tunisia. This allows us both to generalize the results and at the same time to make comparisons between different regions. The entrepreneurship is a fertile field of research framework so it has several new ideas which can be the origin of new research studies among these ideas we quote:

Strategy and technological entrepreneurship. Climate change, energy resources rarefaction: opportunities for innovation and undertaken in renewable energy. Organizational emergence: the case of new technology company. Perception of risk in the decision of starting a business. SME and technology innovation for a more natural relationship. The governance of young innovative enterprises: case of biotechnology companies. It also has many other ideas which can be the origin of very interesting research.

Conclusion

The aim of this research is to study the variables that significantly predict the identification of entrepreneurial opportunity from the nascent entrepreneurs in Sfax region. We chose to adopt the questionnaire as a tool for data collection. This questionnaire is distributed to a sample that includes 80 emerging entrepreneurs in Sfax region. Then we tried to analyze and interpret the obtained results while using three methods, which are descriptive analysis, the principal component analysis (PCA) and multiple linear regression. According to the results obtained we found that only two variables which are prior knowledge and social networks in the Tunisian context that significantly influence the identification of entrepreneurial opportunity.

This is explained by the fact that prior knowledge constitutes a significant and fundamental source of information and through which the entrepreneur can identify a multitude of creative ideas. Similarly, the entrepreneur's social network plays an important role in our study. This is due to the specificity of the Tunisian context that places a high priority on family and friends who are promoters of high-value information that helps opportunity identification. Thus, the more the relational network of the entrepreneur is rich and extended, the more it has a chance to have relevant information on problems they encounter. Members of their social network with a product or service, by which the entrepreneurs can easily identify the entrepreneurial opportunity. Entrepreneurs in our sample are qualified as, Hills says, as networked entrepreneurs because for them, opportunity is provided by their personal social network and not by entrepreneurs themselves who identify their creative ideas. So obviously, we found that the variable "personality of entrepreneur" does not significantly influence the identification of the opportunity in our study.

References

- Aldrich H. E., Zimmer C. (1986) "Entrepreneurship through Social Network". In: D.L.Sexton. and R.W. Smilor, eds. *The Art and Science of Entrepreneurship*, p.3-23, Cambridge, Belinger.
- Ardichivili A., Cardozo N.R., Rays. (2003) "A Theory of Entrepreneurial Opportunity Identification and Development". *Journal of Business Venturing* 18 (4):105-123.

Barely S.R. (1990) "the Alignment of Technology and Structure through Roles and Networks". *Administrative Science Quarterly* 35(1):61-103.

Barely S.R. (1986) "Technology as an Occasion for Structuring: Evidence from Observations of CT Scanners and the Social Order of Radiology Departments". *Administrative Science Quarterly* 31(1):78-108.

Barely S.T., Tolbert P.S. (1997) "Institutionalisation and Structuration: Studying the Links between Action and Structure". *Organization Studies* 18:93-117.

Bandura A. (2001) "Social Cognitive Theory: An Agentic Perspective". *Annual Review of Psychology* 52: 1- 26.

Bull I., Willard G. (1993) "Towards a Theory of Entrepreneurship". *Journal of Business Venturing* 8 (3):183-195.

Burgelman R.A. (2002) "Strategy as Vector and the Inertia of Revolutionary Lock-In". *Administrative Science Quarterly* 47: 325-357.

Burt R. (1992) "Structural Holes: The Social Structure of Competition". Cambridge, MA: Harvard University Press.

Buzentiz L. (1996) "Research on Entrepreneurial Alertness". *Journal of small business* 34 (4):35-44.

Casson M. (1982) "the Entrepreneur". Towata, NJ: Bernes and Noble Books.

Chelly A. (2006) "le Processus de Génération d'Opportunités Entrepreneuriales : Une Etude Exploratoire auprès d'Entrepreneurs Tunisiens". *Thèse de doctorat es sciences de gestion*, Université de SUD Toulon-Var.

Chiasson M., Saunders C. (2005) "Reconciling diverse Approaches to Opportunity Research using the Structuration Theory". *Journal of Business Venturing* 20: 747-767.

Christensen P.J., Peterson R. (1990) "Opportunity Identification: Mapping the Source of New Venture Ideas". *Frontiers of Entrepreneurship Research*, p.567-581.

De Bono E. (1980) "Opportunities". NewYork, Penguin Books.

Eckhardt J.T., Shane S.A. (2003) "Opportunities and Entrepreneurship". *Journal of Management* 29(3).

Elfring T., Hulsink. W. (2003) "Networks in Entrepreneurship: The Case of High-Technology Firms". *Small Business Economics* 21: 409-422.

Evrard Y., Pras B., Roux E. (2003) "Market : Etudes et Recherches en Marketing". 3^{ème} eds.Paris: Dunod.

Gartner W.B. (1990) "What are talking about when we talk about Entrepreneurship?". *Journal of Business Venturing* 5 (1): 15-28.

Gartner W.B., Bird B.J., Starr J.A. (1992) "Acting is if: Differentiating Entrepreneurial from Organizational Behaviour". *Entrepreneurship Theory and Practice*, p.13-31, Spring.

Gibb A.A. (1997) "Small firm's Training and Competitiveness: Building upon the Small business as a Learning Organization". *International Small Business Journal* 15 (3):13-29.

Granovetter M.S. (1973) "the Strength of Weak Ties". *American journal of sociology* 78 (6):1360-1368.

Hills G. E., Lumpkin T., Singh R. P. (1997) "Opportunity Recognition: Perceptions and Behaviors of Entrepreneurs". *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.

Kaish, S., Gilad B. (1991) "Characteristics of Opportunities Search of Entrepreneurs versus Executives: Sources, Interests, General Alertness". *Journal of Business Venturing* 6 (1): 45-61.

Kurakto.D.F. (2005) "the Emergence of Entrepreneurship Education: Development, Trends, and Challenges". *Entrepreneurship: Theory and Practice* 29 (5):577-597.

Kirzner, I. (1997) "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach". *Journal of Economic Literature* 35 (1): 60-85.

Kirzner I.M. (1979) "Perception, Opportunity and Profit". Chicago: University of Chicago Press.

Kirzner I.M. (1973) "Competition and Entrepreneurship". Chicago: University of Chicago Press.

Koller R.H. (1988) "On the Source of Entrepreneurial Ideas". *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.

Krueger.J.N., Dickson P.R. (1994) "How Believing in Ourselves Increases Risk Taking: Perceived Self-Efficacy and Opportunity Recognition". 25:385-400.

Low M., McMillan I.C. (1988) "Entrepreneurship: Past Research and Future Challenges". *Journal of Management* 14 (2): 139-161.

Messeghem K. (2006) "l'entrepreneuriat en Quête de Paradigme : Apport de l'école Autrichienne". Actes du Collège International sur "L'internationalisation des PME et Conséquences sur les Stratégies Entrepreneuriales ". Haute école de gestion (HEG), Fribourg, Suisse Octobre 25-27.

Orlikowski W. (1991) "Integrated Information Environment or Matrix of Control? the Contradictory Implications of Information Technology". *Accounting Management and Information Technology* 1(1):9-42.

- Park J.S. (2005) "Opportunity Recognition and Product Innovation in Entrepreneurial Hi-Tech Start Ups: a New Perspective and Supporting Case Study". *Technovation* 25 (7):739-752.
- Ray S., Cardozo R. (1996) "Sensitivity and Creativity in Entrepreneurial Opportunity Recognition: a Framework for Empirical Investigation". Paper presented at the *Sixth Global Entrepreneurship Research Conference*, Imperial College, London
- Rowley T., Dean B., David K. (2000) "Redundant Governance Structures: An Analysis of Structural and Relation Embeddedness in the Steel and Semiconductor Industry". *Strategic Management Journal* 21:369-386.
- Schumpeter J.A. (1935) "Theory of Economic Development", eds. Dalloz.
- Shane S. (2000) "Prior Knowledge and the Discovery of Entrepreneurial Opportunities". *Organisation Science* 4:448-469.
- Shane S. (2003) "a General Theory for Entrepreneurship: the Individual-Opportunity Nexus". Edited by Edward. Elgar, 327p.
- Shane S., Venkataraman S. (2000) "the Promise of Entrepreneurship as a Field of Research". *Academy of Management Review* 25 (1):217-226.
- Shepherd D.A., De Tienne D.R. (2001) "Discovery of Opportunities: Anomalities, Accumulation and Alertness". *Frontiers of Entrepreneurship Research*, p.138-148.
- Timmons J.A, Smollen L.E., Dingee A.L. (1986) "New Venture Creation". Homewood III: Richard D, Irwin.
- Uhlener L., Thurik A.R. (2004) "Post-Materialism: a Cultural Factor Influencing Total Entrepreneurial Activity Across Nations". mimeo, Erasmus University Rotterdam, February.
- Van Stel., André W. Ennekers., Paul Reynolds., and Gerrit de Wit. (2003) "Explaining Nascent Entrepreneurship Across Countries". SCALES-paper N200301, *EIM Business and Policy Research*. May.
- Venkataraman S. (1997) "the Distinctive Domain of Entrepreneurship Research". In: *Advances in Entrepreneurship, Firm Emergence and Growth* 3. Edited by J.Katz and R. Brockhaus, Greenwich: JAI Press, p.119-138.
- Verstraete T. (1999) "Entrepreneuriat : Connaître l'Entrepreneur, Comprendre ses Actes" L'Harmattan, Collection Economie et Innovation.
- Verstraete T., Fayolle A. (2005) "Paradigmes et Entrepreneuriat". *Revue de l'Entrepreneuriat*4(1) :33-52.
- Zghal R. (1992) " Méthodologie de la recherche en Sciences Sociales". eds, C.L.E.

Appendices

Table 1: Factor structure of dependent variable, the identification of opportunity: " IO "

Items	Variable	" identification of opportunity"	
		Contributing factor	Quality of representation
I vote the possibility of creating a new company as a potential opportunity.		,830	,688
If I'm not creating my own business it may be that I rat a great opportunity.		,826	,683
I see the opportunity to create a new business as a positive thing		,831	,690
The own value %variance explained Cronbach's alpha		2,062 68,721% ,7673	

Table 2: Factor structure of independent variable "Personality of the entrepreneur"

Items	Variable	"Personality of entrepreneur"	
		Contributing factor	Quality of representation
Creativity		,785	,617
Alertness		,748	,560
Self-efficacy		,814	,662
The own value %variance explained Cronbach's alpha		2,350 58,761% ,7653	

Table 3: Factor structure of independent variable "social network"

Items	Variable	"social networks"	
		Contributing factor	Quality of representation
Structural holes		,831	,691
Weak ties		,843	,710
Strong ties		,829	,687
The own value %variance explained Cronbach's alpha		2,088 69,603% ,7770	

Table 4: Factor structure of independent variable "prior knowledge"

Variable Items	"prior knowledge"	
	Contributing factor	Quality of representation
Market knowledge	,817	,668
Knowledge of consumer issues	781	,610
Knowledge of how to supply markets	,679	,460
The own value	2,396	
%variance explained	59,911	
Cronbach's alpha	,7712	