May Business Mentors Act as Opportunity Brokers and Enablers Among University Students? To What Extent?[1]

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Abstract

Networks are recognized as a central component of the entrepreneurial process, in particular with regard to opportunity identification and exploitation. In this study, we more specifically analyze the role of mentors who are in business as opportunity brokers and enablers among university students with entrepreneurial intentions. Our investigation with 1022 students from 13 French-language universities in Canada, France, Belgium and Algeria indicates that mentors in business, contrary to other mentors, support opportunity identification and exploitation among university students. Although student gender, entrepreneurial experience and education have a more pronounced effect, mentoring is the only element that can be controlled through the creation of formal support programs. These results call on public authorities, and universities in particular, to implement formal mentoring programs to support students who are interested in starting their own business, and who would not otherwise have access to business mentors in their environment.

Keywords: Mentoring, Opportunity identification, Opportunity exploitation, University students

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Introduction

The concept of business opportunity is at the heart of entrepreneurship (Shane and Venkataraman 2000). The notion of opportunity relates an enterprising individual, one who intends to be his/her own boss, to unfulfilled (or insufficiently fulfilled) needs that enable the creation of a new business (Eckhardt and Shane 2003; Shane 2003). Several factors have been identified as important for opportunity recognition. Notably, the entrepreneur's knowledge (Shane 2000; Shepherd and DeTienne 2005), cognitive schemes (Baron and Ensley 2006), psychological predispositions, such as alertness to opportunities (Shepherd and DeTienne 2001; Ko and Butler 2007), social capital and networking (Dubini and Aldrich 1991; Singh 2000; Puhakka 2006; Gordon 2007).

Recently, it has been suggested (ex. Barès et al. 2004) and demonstrated that mentors are capable of helping novice entrepreneurs identify business opportunities (Gordon 2007; Ozgen and Baron 2007; St-Jean and Audet 2012). What about individuals who are likely to start a business but have not yet started? Despite de fact that mentors can help foster entrepreneurship and enhance the entrepreneur's competencies through learning, it appears that no research has focused on mentoring and its impact on the entrepreneurial process leading to the start-up. To our knowledge, only Fuentes Fuentes et al. (2010) assert that potential entrepreneurs are more likely to set up business initiatives if they maintain frequent and close relationships with other businesspeople, or if they receive support from entrepreneurial associations. This assertion has recently been demonstrated by Radu-Lefebvre and Redien-Collot (2013). They show that mentors in business can influence the business start-up and help support fundraising activities. However, their sample consists of 50 students enrolled in a business school in France that is dedicated to entrepreneurship. This can bias the outcome of their study.

Our research aims to verify whether business mentors working with university students can help them identify and exploit business opportunities. Given that mentoring helps established entrepreneurs to identify opportunities, as previously mentioned this research will contribute in defining the benefits of this practice in the upstream part of the entrepreneurial process. If mentors were to act as knowledge brokers, by helping potential entrepreneurs obtain new information to identify better opportunities, this would improve the success rate of novice entrepreneurs. Therefore, suggesting a more in-depth investigation regarding how new knowledge circulates within the entrepreneurial ecosystem, as well as knowing the main actors (beyond mentors) who play a significant role, and how this could support the emergence of new business in a region.

Furthermore, this research will contribute to a better understanding of the role of business mentors as opportunity enablers. Gaining knowledge could expedite the exploitation phase of entrepreneurs (Choi et al. 2008). Since mentors can provide knowledge to nascent entrepreneurs, we aim to demonstrate that mentors can foster opportunity exploitation among potential entrepreneurs, especially university students.

From a practical standpoint, such a contribution will confirm the effect of mentoring on potential business creators and, in particular, university students. A strong positive effect would suggest pairing mentors with university students who wish to start their own business once their studies completed. On the one hand, it would foster business creation by identifying promising opportunities, and on the other hand, by reducing the fear of investing time and resources on these opportunities.

First, a literature review on the concept of business opportunities and thei determining factors are presented, followed by a discussion on mentoring and its potential effects on the process of identifying and exploiting an opportunity. Then, the methodology, followed by the results of the analyses conducted among a large sample of university students from four

countries. And finally, the results are discussed and practical implications for public authorities are highlighted.

Literature review

Over the last few years, several groups of researchers have focused on the entrepreneurial intentions of individuals. A recent meta-analysis retrieved 98 studies where the dependent variable is entrepreneurial intent (Schlaegel and Koenig 2014). However, studies on entrepreneurial intention share an important weakness regarding the relationship between entrepreneurial intention and the actual start-ups. Theoretically, the intention to start a business, which is planned behaviour, is the closes indicator of the behaviour (i.e. start-up) and should be a direct correlation between entrepreneurial intentions and business creation. To our knowledge, only Katz (1990) shows that among all the people who have the intention to start a business, only 18 % will take action within a four-year timeframe.

The situation could simply be explained by a lack of business opportunities, where the individual is unable to translate intention into action. Indeed, business creation is based on the identification and exploitation of a business opportunity perceived by an individual operation in a given business environment (Shane and Venkataraman 2000; Shane 2003). Since it is through opportunity that entrepreneurial intention can be translated into action, which leads to business creation, this study focuses on the ability of university students to identify and exploit opportunities. Such indicators could be of greater use, since they are more concrete and rooted in action, and would therefore enable us to relate intention to creation. Opportunity exploitation is in fact closely related to the creation process, which is of greater interest, both practically and theoretically, than entrepreneurial intentions.

Mentors as opportunity brokers

Information and knowledge appear to be important dimensions of the opportunity recognition process (Franzoni 2007). Generally speaking; knowledge influences the nature, number and level of innovativeness of the opportunities that are identified (Kaish and Gilad 1991; Shane 2000; Sheperd and DeTienne 2001; Davidsson and Honig 2003; Dimov 2003; Orwa 2003; Sheperd and DeTienne 2005; Vaghely and Julien 2010). Given the importance of the use of information to identify opportunities, some authors have shown that networks, which help to circulate information, could also have a positive impact on opportunity identification (Singh et al. 1999; De Carolis and Saparito 2006; Puhakka 2006; Chabaud and Ngijol 2010). Those studies highlight the fact that entrepreneurs need social interaction to acquire knowledge. Social interactions enable entrepreneurs to determine relevant information and help develop a better understanding of future needs, which in turn helps them to identify opportunities.

Beyond the importance of the use of information to recognize opportunities, Gaglio (2004) stresses the key role of heuristics in the cognitive process of entrepreneurs engaged in an opportunity identification phase. In the same vein, Baron and Ensley (2006) shiw that over the years experienced entrepreneurs develop patterns that enable them to identify opportunities more easily and in larger numbers (Ucbasaran et al. 2009) Thus, it is not only the information itselfthat is important in the opportunity recognition process, but how it is processed by human cognition as well.

One of the main benefits of a mentoring relationship in various contexts is the learning outcomes that result from discussions with the mentor (Wanberg et al. 2003). This is alose the case with entrepreneurial mentoring relationships (Sullivan 2000), where affective and cognitive learnings outcomes prevail (Deakins et al. 1998; Cull 2006; Gravells 2006; Sarri

and Petridou 2006; St-Jean 2012; St-Jean and Audet 2012; Radu Lefebvre and Redien0Collot 2013). Mentors help generate new options for the entrepreneur's business (Gravells 2006). Entrepreneurs who restrict themselves to knowledge, based on their own experience, end up with a limited ability to recognize opportunities, but could go beyond this threshold through discussion with a mentor (Ucbasaran et al. 2009). As observed, a mentor can give tacit information to the novice entrepreneur, allowing the latter to reach beyond his/her lack of experience and identify opportunities (Smith et al. 2009). If the positive effects of mentors have been shown on novice entrepreneurs, it is reasonable to assume that such a relationship would have a similarly positive effect on potential business creators. As such, mentors from the business world can provide relevant information about markets, technology, production process, management, and so forth, to students who are working on their business opportunity. As shown by Baron and Ensley (2006), experienced entrepreneurs develop cognitive schemes differently that novices. This enables them to think about new products, or services, that are more specific and morel likely to generate sales. In other contexts, for example education, mentoring is proposed as a means for novices to develop expert cognitive schema (Livingston and Borko 2989; Westerman 1991; Stanulis and Jeffers 1995; Orland-Barak and Yinon 2005). Thus, an experiences mentor could enhance a novice's cognitive scheme that is less effective in identifying opportunities. In sum, by providing access to information and knowledge, and by helping to analyse information from different angles, a mentor is likely to increase the ability of new venture creators to recognize opportunities and, thus, to act as an opportunity broker. These considerations lead to the following hypothesis:

H1: Business mentors act as opportunity brokers and positively influence opportunity identification among potential entrepreneurs.

Mentors as opportunity enablers

Fuentes Fuentes et al. (2010) demonstrate that the strength of social network ties has positive effects on opportunity exploitation. They assert that entrepreneurs are more likely to set up business initiatives if frequent and close relationships are maintained with other businesspeople, or if supported by entrepreneurial associations. Others have shown that the entrepreneurial network facilitates access to financing (Jenssen and Kownig 2002) and more generally, to other types of resources (Hite 2005; Jones and Jayawarna 2010). Entrepreneurs can also use networks to learn and to improve their capacity to exploit business opportunities, especially when a high level of trust exists between its members (Bergh et al. 2011). By providing the potential entrepreneur with business contacts and occasions to learn (Cope 2003; Cope and Watts 2000; St-Jean 2011), the mentor can alose act as an ¨opportunity enabler¨ by facilitating access to resources that are needed to exploit the identified opportunity (Grossman et al. 2012).

Mentors with an extensive experience in the business world could also enable university students to test their business idea on the market and turn it into an opportunity. With their mentor's approval, students could develop greater confidence in their project and could move on more easily to the exploitation phase. Self-efficacy perception is another cognitive variable that influences the opportunity recognition process (Krueger and Dickson 1994; Ozgen 2003). The decision to exploit a business opportunity is always taken in unpredictable contexts where outcomes are uncertain. Thus, individuals with high self-efficiency (and optimism) are more likely to exploit opportunities because this requires them to act amid everybody else's skepticism (Shane and Venkataraman 2000; Ardichvili et al. 2003). Entrepreneurs with high self-efficacy believe that they can succeed in pursuing an opportunity regardless of the environment (Mitchell and Sheperd 2010). They also believe

that they can persist when committed to a failing course of action (Whyte et al. 1997), highlighting the importance of entrepreneurial action. Just as fear is a negative emotion that prevents the exploitation of opportunities (Welpe et al. 2012), having a strong sense of self-efficacy should trigger the exploitation phase. Self-efficacy beliefs are central in the opportunity exploitation phase. Moreover, self-efficacy perception, regardless of the context, is a well-recognized outcome of the mentoring relationship (Powers et al. 1995; Cull 2006; Hulela and Miller 2006; Rigg and O'Dwyer 2012; Gimmon et al. 2014). In supporting self-efficacy, mentoring could be what allows students to take action once they identify an opportunity. Furthermore, with the support of an experiences businessperson, students may be more inclined to invest the financial resources and times required to translate the project into reality. And, as mentioned above, mentors may suggest ways for the potential entrepreneur to access resources or get in touch with people wo can provide the needed resources. If the mentor doubts the opportunity identified by the student, he/she can then provide advice on how to enhance it feasibility. In other words, having a mentor from the business world could accelerate the opportunity identification phase and help students to move on to the exploitation phase. These observations lead to the following hypothesis:

H2: Business mentors act as opportunity enablers and positively influence opportunity exploitation among potential entrepreneurs.

Methodology

This section describes the sample used to test our hypotheses. A presentation of the measures used for the various concepts and of our analysis methods will follow.

Sample

The sample used in this study was drawn from a survey on entrepreneurial career. Students from 13 universities were contacted to answer a questionnaire: Ten Canadian universities, one Belgian university, one French school of commerce, and one Algerian university. The invitation was sent by email, posted on student Intranets or institutional journals. A total of 1,810 students agreed to take part in this first phase of the five-year annual investigation. This is, of course, a non-probabilistic sample, given that only the interested students agreed to participate.

Most respondents studied in Canada (64 %), followed by Belgium (18.5 %), France (9.5 %) and Algeria (8 %). Although they were from different university departments, except for the French students, they were mostly registered in Management Sciences (37.5 %), Pure Sciences and Engineering (25.5 %), Human and Social Sciences (9.9 %) and among other disciplines. They were mostly undergraduate students (55.4 %) and to a lesser degree, masters (39.6 %) or doctoral (5%) students. The sample mostly included Caucasian students (84,4 %), followed by students of Arabic (8 %), Black-African (4,1 %) descent and others (3,5 %). In our sample, we kept only the students who in the past had never been entrepreneurs and who did not own a business at the time of our investigation. This brings our final sample to 1540 students. We did this to ensure that no potential bias gets in the way of our analysis, since entrepreneurial experience can enhance the capacity to identify or exploit an opportunity.

Measures

Dependant variables – business opportunities

We provided the participants in this study with the following definition of a business opportunity:

> "A business opportunity can be defined as a situation in which new products, services, raw materials or production methods may be successfully introduced and which we believe can be sold for a higher price than the cost of production. In other words, it is the meeting point between current or future client needs and the available resources to meet those needs, all in a timely fashion and in a manner perceived as economically profitable"[3].

We then asked them to indicate the number of business opportunities they had identified over the previous five (5) years (*opportunity identification*) and subsequently, in how many they had invested any effort to exploit them (*opportunity exploitation*). This method of measuring opportunity identification and exploitation has been suggested and used by several authors in the past (e.g. Ardichvili et al. 2003; Shepherd and DeTienne 2005; Ucbasaran et al. 2008).

The number of business opportunities identified varies from 0 to 10 or more, with a mean of 3.34 (median 3) and a standard deviation of 2.75. The distribution is not normal, and follows a Poisson-type distribution, where the incidence of identifying few opportunities is very high, as opposed to the incidence of finding several opportunities, which is low. In this case, 33.8% of the respondents identified "0" or "1" opportunities. We withdrew outliers (+10 identified opportunities) from our sample.

The number of exploited opportunities also varies from 0 to 10 or more, with a mean of 1.74 (median 1) and a standard deviation of 1.42. Here again, the distribution is not normal and follows a Poisson-type distribution, where 60.7% of cases had exploited "0" or "1" opportunities, whereas 0.5% had exploited 10 opportunities or more.

Independent variable – mentoring

We provided the respondents with the following definition of a mentor: "A mentor is defined as a high-ranking individual who is experienced or has expertise and who teaches, advises, inspires, guides and helps another person with their personal and professional development".

We subsequently asked them to identify the number of individuals in their lives who could be considered as mentors (*number of mentors*) and, from that number, how many of them owned a business (*mentors in business*). To calculate the *number of mentors who are not in business*, we subtracted the number of mentors in business from the total number of mentors reported. Seven (7) cases had to be withdrawn, since it resulted in a negative number of mentors not in business, showing a problem of validity with these cases. We created a binary variable for: having a mentor in business (0 = Not having a mentor in business, 1 = Having a mentor in business) and another for having a mentor not in business (0 = Not having a mentor, 1 = Having a mentor not in business) and used them in the analysis.

[3] Our translation.

Control variables

Literature on opportunity recognition by entrepreneurs indicates that knowledge and information acquired through prior work experience helps improve an individual's ability to identify opportunities (Shane 2000; Shepherd and DeTienne 2005). Tacit knowledge, especially that which is acquired through experience as a manager, can also improve opportunity identification (Ardichvili et al. 2003; Davidsson and Honig 2003), as with the level of education in general (Davidsson and Honig 2003; Arenius and Clercq 2005). Clearly, having an intention to start a business is a necessary, but not sufficient condition to explain the opportunity identification and exploitation process. Self-efficacy in opportunity recognition can also help trigger the process (Krueger and Dickson 1994; Tumasjan and Braun 2012). Having parents who were entrepreneurs themselves, could obviously influence the dependant variables, as well as socio-demographic variables such as gender and age. The capacity to access resources could potentially explain the opportunity-exploitation decision (Choi and Sheperd 2004). Therefore, it was included in our analysis, as well as the other above-mentioned variables.

Concerning the measures of these variables, *work experience* refers to the number of years of full-time work experience. *Supervision experience* refers to the number of years of full-time experience as staff manager or supervisor. The *capacity to obtain resources* results from the answer to the following question: ¨In your opinion, obtaining funds to sustain the creation of a business would be¨, with a 7-point Likert scale from 1-Very difficult, to 7-Very easy. *Family in business* means that one of the respondent's parents had or currently owned a business. *Entrepreneurial intention* is the extent to which students have the intention to start a business in the future, from 1-Not at all, to 5-Very highly probable. *Self-efficacy of opportunity recognition* is based on a 4-item measure developed by McGee et al. (2009). Respondents were asked to specify to what extent they perceive themselves capable of efficiently handling different recognition tasks, from 0 % to 100 %, with 10 % steps. The Cronbach alpha for this measure is 0,830.

Analysis

Since both dependent variables were distributed according to Poisson's law, a Poisson regression analysis was used. This type of regression enables to calculate the probability that a given event will happen (dependent variable), based on a linear function of a set of predictors (independent variables) specified in the test. Students who did not complete the survey were excluded from our analysis, therefore lowering the number of respondents to 1022.

Results

Table 1 presents means, standard deviations, and correlations of variables in this study.

As illustrated in Table 2, gender is a significant predictor of opportunity identification and exploitation, with women showing a lower overall rate of identification (β = -0.184) and exploitation (β = -0.115). Age is significant for neither opportunity identification nor exploitation. Level of education has a low but significant effect on the probabilities of identifying an opportunity (β = 0.086), but not on the exploiting phase. Work or supervision experience, capacity to obtain resources, or family exposure to entrepreneurship has no impact on opportunity identification and exploitation. However, as expected, entrepreneurial intention strongly and significantly explains the probability of identifying an opportunity (β = 0.174) and exploiting it (β = 0.178). Regarding opportunity recognition, self-efficacy has a

small but significant effect on identification (β = 0.064, Exp [β] 1066) but not on exploitation. Lastly, mentors in business positively affect the probability that students will identify (β = 0.122) and exploit (β = 0.151) business opportunities, whereas mentors outside the business world will not. These results confirm H1 and H2.

Table 1
Mean, standard deviation, and correlations[a] between variables

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1-Gender	0.55	0.50	1.00									
2-Age	24.20	5.03	.059	1.00								
3-Education	1.49	0.59	-.008	.285	1.00							
4-Work experience	2.85	2.94	.071	.791	.116	1.00						
5-Supervision exp.	1.55	1.56	.019	.601	.072	.627	1.00					
6-Obtain resources	3.62	1.55	-.094	.019	-.089	.052	.057	1.00				
7-Family business	0.44	0.50	.036	-.011	-.093	-.006	.013	.082	1.00			
8-Self-efficacy-OR	6.38	2.00	-.176	.103	.031	.069	.013	.149	.035	1.00		
9-Ent. Intention	3.03	1.37	-.230	.103	.068	.097	.101	.138	.146	.421	1.00	
10-Mentor not bus.	0.55	0.50	.038	-.038	-.047	-.001	.039	.119	.390	.102	.284	1.00
11-Mentor in bus.	0.71	0.45	.064	-.008	.004	-.005	-.014	.024	-.085	-.042	-.126	-.062

[a] Correlations ≥ 0.061 = $p \leq 0.05$

Table 2

Poisson Regression of Opportunity Identification and Exploitation among University Students

	Opportunity Identification			Opportunity Exploitation		
	B		Exp(β)	β		Exp(β)
(Constant)	-0.137		0.872	-0.248		0.781
Gender[a]	-0.184	***	0.832	-0.115	*	0.891
Age	0.002		1.002	0.009		1.009
Education	0.086	*	1.090	-0.049		0.952
Work experience	0.008		1.008	0.001		1.001
Supervision experience	0.024		1.024	0.019		1.019
Capacity to obtain resources	-0.007		0.993	-0.013		0.987
Family in business[b]	-0.001		1.001	-0.056		0.945
Self-efficacy – Opportunity	0.064	***	1.066	0.010		1.010
Entrepreneurial intention	0.174	***	1.190	0.178	***	1.195
Mentors outside business[c]	-0.030		0.970	-0.014		0.986
Mentors in business[c]	0.104	*	1.110	0.115	*	1.122
n	1022			1069		

[a] Reference=Women; [b] Reference=Family in business; [c] Reference=Having a mentor
*=$p \leq 0.05$; **=$p \leq 0.01$; ***=$p \leq 0.001$

Discussion

The results of this study demonstrate that mentors who are in business have a positive effect on opportunity identification and exploitation among university students, as opposed to mentors who are not in business. This confirms what others have already claimed, such as successful opportunity identification and exploitation depends, in particular, on access to social networks, including mentors (Ardichvili et al. 2003). It has also been shown that social networks influence both the cognitive bias of entrepreneurs and the creation process of new businesses (De Carolis et al. 2009), where the latte can be seen as opportunity exploitation.

Informal networks also influence the success of a newly created business (Hormiga et al. 2011). However, our results specify that simply networking in general (e.g. Singh 2000; Arenius and Clercq 2005; Gordon 2007) does not necessarily impact opportunity identification and exploitation, since mentors who are not in business had no effect.

Furthermore, our results show that men are more likely to identify and exploit opportunities. This is perfectly consistent with studies which show that men are more likely to intend to start a business and to follow through (De Bruin et al. 2007; Bosma and Levie 2009; Gupta et al. 2009; Díaz-García and Jiménez-Moreno 2010). It thus seems logical to observe that men identify and exploit opportunities more, since they have a higher level of intention to start a business and engage in entrepreneurial careers to a greater extent (Amorós and Bosma 2014). Our results do not confirm the influence of past work experience, which could be a source of opportunity identification and exploitation (Shane 2000; Shepherd and DeTienne 2005). This is probably due to the fact that our sample is composed of university students. Even is some may have relevant experience, they might not have as much experience as a representative sample of the whole population. Contrary to what was expected, having parents who are or were entrepreneurs had no effect on opportunity identification or exploitation. However, parents in business may have been counted among the mentors in business if they matched the previously given definition of a mentor. In certain cases, parents may in fact act as mentors toward their children. Thus, the simple fact of having parents who are entrepreneurs is not enough to increase the probability of identifying or exploiting business opportunities, in particular among university students. As expected, education has an effect on opportunity identification, but not on exploitation. Truly, human capital supports the opportunity recognition process (Ucbasaran et al. 2008; Dimov 2010) and it is observed here, even if the variance be more capable of identifying opportunities than undergraduates. Their level of specialized knowledge could be an important factor to turn their business idea into an opportunity, but not for it to be exploited, it needs to be commercialized. This requires another kind of knowledge (business knowledge) (Ardichvili and Cardozo 2000). Our results demonstrate the accuracy of this argument.

Also, as expected, self-efficacy in opportunity recognition leads to better opportunity identification (Tumasjan and Braun 2012). However, contrary to what we expected, self-efficiency has no impact on opportunity exploitation. This means that the exploitation phase does not require efficacy perception to be enacted. Risk propensities would be more appropriate than self-efficacy to explain the exploitation phase (Krueger and Dickson 1994) and the timing market entry (Choi and Sheperd 2004; Choi et al. 2008).

Moreover, we observed a strong relationship between entrepreneurial intention and opportunity identification and exploitation. Previous research focused on entrepreneurial intention (e.g. Giacomin et al. 2011; Shinnar et al. 2012; St-Jean et al. 2014;) and researchers proposed measures for intention (e.g. Thompson 2009). Based on the strong relationship between intentions, opportunity recognition, the exploitation process, and the fact that identifying an opportunity may be the missing link between intention and action, we suggest using opportunity identification and exploitation measures in future researches. Focusing on opportunity identification and exploitation may reduce the time gap that exists from the time a person thinks about being an entrepreneur, and the moment they start the venture. As very few measures of opportunity identification and exploitation have been developed, researchers suggest to use triangulation (Short et al. 2010). To take the study a step further, respondents could be asked to explain the opportunity identified, in order to independently assess their value (Grégoire et al. 2010), and if times was invested to exploit it. Douglas (2013) suggest to incorporate a predisposition for growth in the entrepreneurial intention to construct. This maybe be another promising path to follow.

Finally, our results show that being supported by a mentor in business has the second-strongest effect in explaining opportunity identification and exploitation, after entrepreneurial intention. This could be the missing link between intentions and actual business creation. As a result, implementing mentoring programs could stimulate the business start-ups of university graduates, at a minimal cost. For public authorities, and universities in particular, this stresses the relevance of enhancing entrepreneurial training programs with a mentoring component. This would enable students to operationalize the knowledge acquired in the classroom by providing them with more tangible applications. Even if in other contexts informal mentoring is sometimes observed to be more effective than formal mentoring (Chao et al. 1992; Baugh and Fagenson-Eland 2007), formal programs are important for individuals who cannot easily access mentoring informally (Viator 1999; Baugh and Fagenson-Eland 2007). For students who are less networked and who are not intouch with entrepreneurs, having access to a formal mentoring program could be their stepping stone entrepreneurial culture. It could also be interesting to investigate Entrepreneurs-in-residence programs and their capacity to enhance opportunity identification and exploitation among students (George et al. 2010).

Limitations and future research avenues

Among the limitations and future research avenues, it should first be noted that this study used perceptual measures. Thus, within this study, opportunity identification and exploitation are subjective rather than objective notions, which gives us only a partial picture. It could be interesting, for example, to measure a novice's ability to identify opportunities with an external resource, such as a banker, business angel, VC, or one who often does that kind of assessment professionally. In addition, the transversal nature of our study is somewhat of a limitation, which should be improved by conduction a longitudinal study as part of our future research for the coming years. We should also mention that our sample is representative of the whole population of students as a whole and has a potential self-selection bias. Even if this situation is more problematic with causation studies, which is not the case in this research, it could potentially affect our analysis.

We now know that mentors in business have a positive effect on opportunity identification and exploitation and can thus act as opportunity brokers and enablers. However, knowing that the learning outcomes that are likely to result from mentoring are about content and processes (Politis 2005), how mentors stimulate opportunity identification and exploitation, through adding information (Ucbasaran et al. 2009) or in transforming cognitive schemes (Baron and Ensley 2006), remains to be demonstrated. These are just a few possible avenues for future research.

Conclusion

Mentoring is recognized as an effective support for novice entrepreneurs; its cognitive and affective outcomes improve business performance and entrepreneurial career retention (St-Jean and Audet 2012). Our research show that mentoring is also the relevant upstream of the entrepreneurial process, namely to nascent entrepreneurs. Opportunity is at the heart of the entrepreneurship research and is divided in two sequential steps: identification and exploitation (Corbett 2005). We showed that mentors who are in business are effective for improving opportunity identification, as well as opportunity exploitation. Therefore, mentors act as opportunity brokers and enablers. Since opportunity identification and exploitation lead to business creation, it is consequently important to understand the role of business mentors in order to foster venture creations.

This study used a sample of university students, and thus brings an important practical implication. After completing their studies, students will be facing a choice. Will they work as salaried employees, or will they invest time and resources in pursuing an entrepreneurial career? Knowing that mentors are effective in opportunity identification and exploitation, it therefore suggests pairing a business mentor with a student who has entrepreneurial intentions in order to foster business creation. Since not everyone has access to informal business mentoring, this also suggests that universities should implement formal mentoring programs for students who are interested in becoming entrepreneurs.

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