
OPPORTUNITY RECOGNITION FOR NOVICE ENTREPRENEURS: THE BENEFITS OF LEARNING WITH A MENTOR

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ABSTRACT

In the past, it has been demonstrated that mentors can help novice entrepreneurs in the identification of business opportunities (Ozgen & Baron, 2007). However, the process by which mentoring enable a mentee in identifying new opportunities is not well understood. To better understand this process, we surveyed novice entrepreneurs that were supported by a mentor in the mentoring scheme developed by Fondation de l'entrepreneurship. Of these novice entrepreneurs, 360 mentees responded. We then proceeded with a hierarchical linear regression using the novice's perception in his capacity to identity new opportunities as a dependent variable. We found that age is having a negative influence on dependent variable whereas management experience is having a positive effect. The learning goal orientation variable (LGO) is having a positive influence on the dependent variable. Finally, we found that the more a mentee learn with his/her mentor, the more they trust their abilities in identifying opportunities. Our results showed that mentoring may be a good way to support novice entrepreneurs in the start-up process and also in the development of their SMEs

INTRODUCTION

Public organisms have implemented programs to support novice entrepreneurs in the years following the starting of their business. One of the processes proposed involves pairing up a novice entrepreneur with an experienced entrepreneur, who provides advice and ways of thinking to help the novice avoid costly and even fatal mistakes (St-Jean & Audet, *Under press*; Sullivan, 2000). For example, the American SCORE program, founded in the seventies and funded by Small Business Administration (SBA), supported more than eight million small business managers through its network of over 12,000 volunteer mentors. In Europe, other similar initiatives exist such as that supported by the Business Link in England, the *Mentor Eget Företag* program in Sweden or France Initiative (in France), with nearly 5,000 volunteer mentors, to name just a few of these programs.

Research has demonstrated that mentors can help novice entrepreneurs in the identification of business opportunities (Ozgen & Baron, 2007). However, the process by which mentoring enable a mentee in identifying new opportunities is not well understood. Literature on mentoring highlights the fact that the main outcome of a mentoring relationship is what the mentee learns as a result of that relationship (Barrett, 2006; Hezlett, 2005; Wanberg, Welsh, & Hezlett, 2003). It has also been demonstrated that a mentee's learning goal orientation, a psychological disposition proposed by Dweck (1986), influences mentoring relationships by increasing mentee outcomes (Egan, 2005; Godshalk & Sosik, 2003).

The main goal of this research was to verify whether a novice entrepreneur's learning, achieved as the result of a mentoring relationship, can help him develop his ability to identify business opportunities. At the theoretical level, this question is of great interest, since it allows for a better understanding of the development of cognitive styles through learning with a mentor, and to confirm its effect as it relates to opportunity recognition. From a practical standpoint, this could validate the effect of mentoring programs to improve opportunity recognition among entrepreneurs, in particular. To achieve this, we will present the literature pertaining to entrepreneurial opportunity recognition, learning that results from a mentoring relationship as well as learning goal orientation. A presentation of the methodology, as well as the mentoring program where this study was conducted, will follow. Lastly, results will be presented as well as a discussion of these results.

LITERATURE REVIEW

The mentoring phenomenon is not new. The word "mentor" comes from Homer's *Odyssey*, where the hero Odysseus entrusts his son Telemachus to his friend Mentor while he is away at war. Mentor is put in charge of Telemachus' education as well as the development of his identity as he enters the adult world. When Mentor addresses Telemachus, the goddess Athena speaks through him. Mentor thus has access to divine qualities and becomes the incarnation of wisdom. In contemporary times, inspired by Greek mythology, a mentor is generally a person which possesses certain qualities or is in a position of authority, and who kindly watches over a younger individual so that he may benefit from the mentor's support and advice. In an entrepreneurial context, although other definitions are possible, mentoring is a support relationship between a novice entrepreneur (named mentee) and an experienced entrepreneur (named mentor), where the latter helps the former develop as a person.

One of the major benefits of a mentoring relationship is the learning which ensues from discussions with the mentor (Wanberg et al., 2003). This is also true of mentoring relationships with novice entrepreneurs (Sullivan, 2000), where cognitive and affective learning prevail (St-Jean & Audet, *Under press*). Although learning is clearly illustrated in some studies, such as with Deakins *et al.* (1998) or Wikholm *et al.* (2005), it remains implicit in other studies. For example, when Gravells (2006) discusses mentor contributions to marketing, financial planning

or access to information, this help implies mentee learning as the mentor's advice and suggestions are implemented, although it is not explicitly mentioned by the author. Others have underlined that learning or the development of competencies could act as "moderators" between the mentoring relationship and growth or increase in profits (Priyanto & Sandjojo, 2005). Therefore, the knowledge which is acquired through a mentoring relationship could stimulate the novice entrepreneur's ability to recognize new opportunities.

MENTORING AND OPPORTUNITY RECOGNITION

Several studies have sought to understand what enables individuals to identify business opportunities. Information and knowledge appear to be a major dimension of the process. In general, knowledge influences the nature, number and degree of innovation of the identified opportunities (Shane, 2000; Shepherd & DeTienne, 2001; Shepherd & DeTienne, 2005). Tacit knowledge, in particular business experience, specifically influences opportunity recognition (Davidsson & Honig, 2003; Orwa, 2003). Other studies, such as the one conducted by Ardichvili and Cardozo (2000), support these ideas. In light of their results, it can be concluded, in particular, that business knowledge has a greater impact than technical knowledge. More specifically, some authors have shown that knowledge about clients and their problems favour the recognition of entrepreneurial opportunities (Orwa, 2003; Shepherd & DeTienne, 2001; Shepherd & DeTienne, 2005). Baron and Ensley (2006) as well as Ucbasaran *et al.* (2009) compared a number of opportunity-recognition components among entrepreneurs with those of experienced entrepreneurs. The results reported by Baron and Ensley (2006) show that experienced entrepreneurs eventually develop patterns that enable them to identify opportunities more easily and in higher numbers (Ucbasaran *et al.*, 2009).

Given the importance of information in opportunity recognition, some authors suggested that networks, which help disseminate this information, could also have a positive impact on opportunity recognition (Singh, Hills, Hybels, & Lumpkin, 1999). Networks appear to have a positive influence on creative abilities and alertness, as well as opportunity recognition (Ardichvili & Cardozo, 2000). A study by Puhakka (2006) also supports the importance of social capital on the opportunity recognition process. Social interaction allows entrepreneurs to collect relevant information and to develop a better understanding of future needs, which helps them identify opportunities. Novice entrepreneurs could also obtain tacit information from a mentor, bypassing their lack of experience, which can help them identify opportunities (Smith, Matthews, & Schenkel, 2009). Although the results reported by Ozgen and Baron (2007) show that obtaining information, in particular through a mentor or participation in professional forums, could help entrepreneurs identify opportunities, little research has been dedicated to exploring its impact on opportunity recognition by novice entrepreneurs. It could be suggested, however, in light of the influential factors mentioned above, that a mentoring relationship can be of benefit to a novice entrepreneur. By providing access to information and knowledge and helping analyzing

information from different angles, mentors are likely to increase the ability of novice entrepreneurs to recognize opportunities.

Thus, mentors help generate new options for the novice entrepreneur's business (Gravells, 2006). Entrepreneurs who restrict themselves to knowledge based on personal experience end up with a limited ability to recognize opportunities, but they can bypass that threshold through discussions with mentors (Ucbasaran et al., 2009). As shown by Baron and Ensley (2006), experienced entrepreneurs develop different cognitive styles than novices, which allows them to suggest new products or services that are more specific and better suited to generate sales. These observations suggest the following hypothesis:

H1 Learning with a mentor increases the novice entrepreneur's ability to recognize new opportunities

Learning goal orientation, mentoring and opportunity recognition

Learning goal orientation (LGO) is a fairly stable psychological disposition that individuals bring to their relationship with others. LGO stimulates behaviour and influences the interpretation of, and reaction to, certain outcomes (Dweck, 1986). Individuals with high learning goal orientation (LGO) wish to learn new things and improve their skills in certain activities (Button, Mathieu, & Zajac, 1996). It seems to influence mentoring relationship outcomes (Egan, 2005; Godshalk & Sosik, 2003). Mentee with high LGO would take better advantage of the learning opportunities made available through the mentoring relationship which, in turn, would stimulate the mentor to get more involved in his or her role. Moreover, individuals with high LGO will be more inclined to consider their skills as changeable and thus take on tasks with the intent to develop their skills. Likewise, individuals who believe their intelligence is constant or fixed will have lower LGO than those who believe it to be changeable (Kanfer, 1990). These considerations bring us to the following hypotheses:

H2 LGO positively influences the novice's ability to recognize new opportunities.

Some aptitudes are likely to influence novice entrepreneurs' ability to recognize opportunities. Among the most documented variables, we find prior knowledge and information which are often associated with work experience (Shane, 2000; Dean Shepherd & DeTienne, 2005). In order to perceive new opportunities, individuals must possess a minimum amount of knowledge, thereby enabling them to decipher new information at hand and consequently affording them the capacity to recognize these new opportunities. Tacit knowledge, more specifically business and management experience, would specifically impact the identification of opportunities (Ardichvili, Cardozo, & Ray, 2003; Davidsson & Honig, 2003). In other respects, individuals with a higher level of education would be more likely to recognize new opportunities

(Arenius & Clercq, 2005; Davidsson & Honig, 2003). These findings suggest the following assumptions:

H3, H4, H5 and H6: Work experience, management experience, level of education and age impact positively the novice's ability to recognize new opportunities.

METHODOLOGY

We collected data through the business mentoring program created in 2000 by the *Fondation de l'entrepreneurship*, an organization dedicated to economic development in the Province of Québec (Canada). It is offered to novice entrepreneurs through a network of 70 mentoring cells spread out across the province. These cells are generally supported by various economic development organizations such as *Centres locaux de développement* (CLD), *Sociétés d'aide au développement des collectivités* (SADC), and local chambers of commerce. These organizations ensure the local or regional development of the program, while subscribing to the business mentoring model developed by the *Fondation*. More precisely, local organizations employ a cell coordinator in charge of recruiting mentors, organizing training sessions for them, promoting the program to novice entrepreneurs, pairing participants, and supervising the ensuing mentoring relationship. The novice entrepreneurs may benefit from mentor support for a minimal price, a few hundred dollars annually, and in some cases freely. In order to supervise local development correctly, the *Fondation* provides development workshops on the mentor-mentee relationship to give novice entrepreneurs a clear idea of the mentor's role. Based on a intervention code of ethics where relationship confidentiality is of capital importance, the business mentoring service has also created a standard contract to guide the parties in determining the terms and conditions of their relationship and the desired objectives. This program thus falls under the category of formal mentoring.

Sampling procedure

The studied population is the group of mentored entrepreneurs of the business mentoring program who have had at least three meetings with their mentor, or who still maintain a relationship, and who had a valid e-mail address (981 individuals). Mentees were contacted by e-mail to participate in the study, and there were two follow-ups with non-respondents. In total, 362 participants agreed to cooperate, which gave us a response rate of 36.9%. Since a portrait of the population was not available beforehand, a comparison with the early respondents (who replied after the first contact) and later respondents (after follow-ups) was conducted as suggested by Armstrong and Overton (1977). No significant differences were found between

demographic variables, business-related variables, or those measured in this study, which suggest that the sample does represent the studied population.

The sample contains 162 men (51.6%) and 152 women (48.4%). They were paired with 275 male mentors (81.4%) and 63 female mentors (18.6%). This situation is normal considering the large representation of men among available mentors, probably due to historical factors: There were fewer in business twenty to forty years ago as there are today. Consequently, the pool of potential female mentors is more limited than that of men. Mentees are quite educated since 173 (55%) of them have university degrees. The average age is 39.8 (standard deviation of 8.97) and age varies between 23 and 70. When starting their business, 24% had no experience in their business' industry, 33.2% had less than a year, 46.2% had less than three years, and 61.6% had less than five years. As for business experience, the majority (51.1%) had no experience, 63.4% had less than a year, 73.6% had less than three years, and 82.9% had less than five years experience. Almost all mentees had an active business at the onset of pairing (293 out of 314, 93.3%) and the others were in the process of starting their business. Businesses had few employees, an average of 4.48 (standard deviation of 9.69, median of 2). Business turnover is mainly under \$100,000CAD annually (62.8%), 88.9% have an annual turnover of less than \$500,000, and only 8.6% exceed \$1 million. As for gross profit, including salary and bonuses for heading the business, the situation is just a grim. The vast majority (68.1%) declares annual profits under \$25,000, 83.5% make less than \$50,000 and only 6.3% make more than \$100,000. Industry sectors are varied, with a slight concentration in professional services (62, for 23.0%), in manufacturing (39, for 14.4%) and in retail (32, for 11.9%). Mentoring relationships lasted 16.07 months on average (standard deviation of 14.4, median of 13). Meetings with the mentor lasted 68.52 minutes on average (standard deviation of 14.4, median of 67), and there were a little under one meeting a month (0.807), median being one meeting a month. The majority of respondents were still in their mentoring relationship at the time they participated in the study (58.6%).

Measures

The measure used for opportunity recognition, our dependent variable, is the one developed by Anna *et al.* (2000) which includes 3 items on a Likert scale of 7: 1-I can spot unmet needs on the market, 2-I can recognize products that will succeed, 3-I can recognize opportunities. This kind of measure was chosen in line with the argumentation of Dimov (2010). According to him, because of the elusive nature of opportunity, he suggests that interest should be focused on opportunity "ideas" identified by aspiring entrepreneurs. The exploratory factor analysis revealed unidimensionality (81.07% of explained variance) and a Cronbach's alpha of 0.882. Since the construct is empirically adequate, we have created a measure using the mean of all items.

The measure used for learning goal orientation is the one developed by Button *et al.* (1996) which includes 8 items, which are recorded on a Likert scale of 7, from 1 “Strongly disagree” to 7 “Strongly agree”. Items measure the mentee’s disposition toward learning situations, for example: Having the opportunity to accomplish a task that allows me to take on a challenge is important to me, or when I am unable to accomplish a difficult task, I am pushed to work even harder the next time. Other studies have used this measure with good results of unidimensionality and internal consistency (Godshalk & Sosik, 2003). The confirmatory analysis using LISREL, a software specialized in this type of analysis, indicates that all items are significant in explaining the latent variable. Indices of fit for the confirmatory model are excellent, with a χ^2 of 23.0012 for 17 degrees of freedom ($p = 0.1492$), RMSEA of 0.03721, SRMR of 0.03492, CFI of 0.9979, and NFI of 0.9921. Cronbach’s alpha is 0.927. This measure is thus acceptable for the subsequent analysis. Since the construct is empirically adequate, we have created a measure using the mean of all items.

Learning with a mentor was measured with the scale developed by Allen and Eby (2003) which includes 5 items, which are recorded on a 7 point Likert scale. These were: 1-I learned a lot from my mentor, 2-My mentor brought a different perspective to many things, 3-My mentor and I have learned together, in collaboration, 4-Reciprocal learning took place between my mentor and I, and 5-My mentor shared a lot of information with me which helped me in my professional development. The measure is unidimensional (73.75% of explained variance) and has a Cronbach’s alpha of 0.91. A variable using the mean of all items was created for the subsequent analysis.

Control variables

As stated above, knowledge and information acquired through previous work experience improves the ability to identify opportunities (Shane, 2000; Dean Shepherd & DeTienne, 2005). Tacit knowledge, particularly when acquired through management experiences, may also improve opportunity recognition (Ardichvili *et al.*, 2003; Davidsson & Honig, 2003). General levels of education also have this effect (Arenius & Clercq, 2005; Davidsson & Honig, 2003).

RESULTS

Table 1 presents means, standard deviations and variable correlation for this study. The matrix does not possess overly strong correlations between variables, which indicate the variables’ empirical quality for subsequent regressions.

To test our hypotheses, we used a multi-level analysis with linear regression using opportunity recognition as the dependant variable. In the first model, control variables were introduced. We integrated mentee learning goal orientation in the second model, and learning with a mentor in the third. As indicated in Table 2, age has a significant and negative effect on

the ability to recognize new opportunities (Std. β = -0.276) (H6 confirmed). Management experience has a positive influence (Std. β = 0.144) (H4 confirmed), as opposed to work experience and education, which of them has no effect (H3 and H5 rejected). In the second model, we find that learning goal orientation has a significant and positive effect (Std. β = 0.229) (H2 confirmed) on the ability to recognize opportunities and that the addition of this component substantially improves the model (R^2 increased significantly of 0.05). Lastly, learning through a mentor impacts the novice entrepreneur's ability to recognize opportunities (Std. β = 0.156) (H1 confirmed) and is also a significant addition to the model (R^2 increased significantly of 0.021).

Table 1. Mean, std. deviation and correlations of variables

Variable	Mean	S.D.	1	2	3	4	5	6	7
1-Sex ^a	0.48	0.50							
2-Age	39.80	8.97	-.01						
3-Education	2.53	0.94	.12*	.08					
4-Ind. exp.	3.35	1.62	-.01	.05	-.10				
5-Manag. exp.	2.29	1.56	-.13*	.25***	-.09	.19***			
6-LGO	6.24	0.88	.12*	-.05	-.02	-.03	.04		
7-Learning	5.09	1.43	.02	-.11*	.00	.03	-.09	.00	
8-Oppt. Recog.	5.75	1.00	-.04	-.24***	-.04	.05	.08	.23***	.17**

*** = $p \leq 0.001$ ** = $p \leq 0.01$ * = $p \leq 0.05$
^a Male = 0, Female = 1

Table 2. Hierarchical linear regression model of entrepreneur's opportunity recognition ability

	Model 1	Model 2	Model 3
	Std. β	Std. β	Std. β
Age	-0.276***	-0.261***	-0.245***
Education	-0.009	0.003	-0.002
Experience in managing	0.144*	0.129*	0.140*
Experience in industry	0.034	0.044	0.037
Learning Goal Orientation		0.229***	0.225***
Learning with mentor			0.156**
Sig.	0.000	0.000	0.000
Adj. R^2	0.067	0.117	0.138
Sig. F change		0.000	0.000

* = $p < 0.05$ ** = $p < 0.01$ *** = $p < 0.001$

DISCUSSION AND CONCLUSION

Results from this study confirm what previous studies have identified: that mentors play an important role in business opportunity recognition (Gordon, 2007; Ozgen & Baron, 2007). Entrepreneurial learning can be split into two dimensions: content and process (Politis, 2005). Within the content dimension, learning with a mentor may help novice entrepreneurs collect new information helping them bypass their lack of experience, as suggested by Ucbasaran *et al.* (2009). Process-wise, the mentor's cognitive framework, which is more complex than that of the novice entrepreneur (ex. Baron, 2006), is shared with the latter through discussions, which may provide the opportunity for the novice to sharpen his own cognitive framework leading to better opportunity recognition. As suggested by Minniti and Bygrave (2001), entrepreneurs could improve their decisional algorithm and improve decision-making, which in this case means identifying more opportunities. Also, the various combination of learning styles between novice and more experienced entrepreneurs (mentors) may help the former to move beyond their main style and subsequently improve certain facets of the opportunity they wish to pursue (Corbett, 2008). This confirms the importance of an entrepreneur's learning experience in which he is given the opportunity to develop his opportunity-recognition skills (Cope, 2005).

Learning goal orientation in novice entrepreneurs is positively related to the ability to identify business opportunities. Entrepreneurs with a stronger learning goal orientation may benefit from a wider variety of learning situations, which in turn provide more opportunity for development. These results are interesting on many levels. Although we cannot prove it here, it is probable that this disposition is useful to entrepreneurs, when we consider that learning is a fundamental dimension of entrepreneurs (ex. Gibb, 1997; Minniti & Bygrave, 2001). These facts lead us to suggest that a high LGO may be an important aspect of the personality of individuals who choose an entrepreneurial career, and that this may influence their performance because of its effect on opportunity recognition.

Other studies have to be conducted in order to complete this analysis. One must nevertheless keep in mind that perceptual measures have been used in this study. Therefore, as previously stated, the ability to identify opportunities is not objective but rather based on self-efficacy. Learning with a mentor is also based on the mentee's perception of learning. It is important to note that no mentors, nor anyone else for that matter, were interviewed, which only gives us a partial picture of reality. These are but a few of the many possible avenues for further research to complete the findings and pursue additional investigations into these many dimensions.

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