

**Mentoring as professional development for novice entrepreneurs:  
How can we maximize learning?<sup>1</sup>**

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**Abstract**

Knowing that mentoring can be seen as a relevant mean, if not essential, in the continuous professional development of entrepreneurs, we seek to understand how to make the most of the learning in this context. To achieve this, we considered various elements raised in the literature as being useful for the success of mentoring and tested a comprehensive model with the main parts of the process of such a relationship. Using a structural equation model on a sample of 360 Canadian mentored entrepreneurs, the study demonstrates that mentor’s career-related functions are most effective in the development of learning, followed by psychological functions and role-model function. In order to foster these functions, trust and perceived similarity are needed to build a strong and higher-quality relationship and mentee self-disclosure is part of the explanation. These results are of interest since they highlight many different elements that influence learning through mentoring and the mediating role of trust, perceived similarity, and mentor’s functions between mentee’s self-disclosure and learning.

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## **Introduction**

It is well established that, in most cases, starting a business is a path fraught with pitfalls. Entrepreneurs must face many problems and challenges to foster growth and reach profitability. Limited resources often prevent entrepreneurs from hiring employees or outsourcing the many tasks they must accomplish: marketing, product or service development, accounting, human resource management, etc. Novice entrepreneurs must also rapidly develop management skills, a lack of which is often designated as one of the main reasons for a business' failure (Gartner, Starr, & Bhat, 1999; Johnson, Baldwin, & Hinchley, 1997). Non-formal and informal learning plays an especially important role in the competence development of entrepreneurs, relying on a network outside of the business (Lans, Wesselink, Biemans, & Mulder, 2004). In a context where time is in short supply, professional skills are learned "on the job" using a "trial-and-error" process (Cope & Watts, 2000; Willem & Van den Broeck, 2009). Entrepreneurs are often left to hope that they will not make too many fatal mistakes.

Previous studies have shown that experienced entrepreneurs possess cognitive schemes that are more complex than those of novice entrepreneurs, in particular, their ability to identify opportunities (R.A. Baron, 2009; Robert A. Baron & Ensley, 2006; Ucbasaran, Westhead, & Wright, 2009). Studies have also determined that mentoring novice entrepreneurs helps them develop cognitive and affective learning, including the ability to identify opportunities and develop a coherent vision of their business project (St-Jean & Audet, 2012). In the perspective of the entrepreneur's professional development, mentoring may be an adapted solution to enhance their competences and increase their business's success (Bisk, 2002; Deakins, Graham, Sullivan, & Whittam, 1998; Miettinen, 2003; Wikholm, Henningson, & Hultman, 2005). However, studies on mentoring for novice entrepreneurs do not usually enter into the relationship's "black box", often being content with identifying the various outcomes for the entrepreneur. This gives the impression that mentoring is a panacea to the professional development of a novice entrepreneur, that which is certainly not the case for everyone. Considering that entrepreneurs are often left to themselves when it comes to developing

professional skills, mentoring becomes a promising avenue to fill this gap (Barrett, 2006; Cope & Watts, 2000; Willem & Van den Broeck, 2009). Consequently, exploring the elements that make up an entrepreneur mentoring relationship which fosters learning outcomes is quite relevant. Such knowledge is also fundamental for mentoring structures, which could use it to better guide their mentors and maximize novice learning.

This article thus aims to fill the knowledge gap on the dimensions of the entrepreneur mentoring relationship that are important in maximizing mentee learning. To do so, we will first present studies relevant to this question as well as a conceptual framework. We will then test the framework on a sample of novice entrepreneurs having engaged in a mentoring relationship. Lastly, results will be presented, discussed, and we will conclude with the various contributions of this study.

## **Literature review**

### ***Entrepreneur mentoring***

In the past years, there has been a multiplication of support and coaching programs in the world, specifically those using a mentoring structure. For example, the SCORE program in the United-States ([www.score.org](http://www.score.org)), created in the 1970s and financed by the *Small Business Administration* (SBA), has supported more than 8 million small business owners through a network of over 13,000 volunteer mentors. In Europe, other similar initiatives exist such as programs by the *Business Link* in England, the *Mentor Eget Företag* in Sweden, or *France Initiative* in France, with nearly 5,000 volunteer mentors, to name but a few. Some schemes are specially designed for women entrepreneurs, like the Moroccan Women Mentoring & Networking. In nearly all instances, the proposed formula is to pair a novice entrepreneur with an experienced one, who will offer advice and avenues for reflection to help the novice entrepreneur avoid costly, and possibly fatal, mistakes.

Although mentoring has recently gained in popularity, especially when it comes to novice entrepreneurs, the phenomenon is not new. Indeed, the word “mentor” comes from

Homer's *Odyssey*, where the hero Odysseus entrusts his son Telemachus to his friend Mentor while he is away. 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, therefore, 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<sup>2</sup> may benefit from the mentor's support and advice.

In order to recognise that we are in the presence of a mentoring relationship, as proposed by Haggard *et al.* (2011), three dimensions must be present: The relationship must be reciprocal, possess development benefits for the accompanied person, in particular, for their career, as well as regular and substantial interactions with a long-term perspective. As suggested by Paul (2004), mentoring is distinct from coaching, tutoring or a buddy system since it is more focused on a quest for meaning than skill building. While firmly anchored in action, as opposed to counselling, advice, or mediation, it distinguishes itself from pairing by being slightly less action oriented than this type of support. The underlying idea in mentoring would be education, where the mentor is more like a "guide" or "driver". It differs from coaching, which is more based on training, or counseling which focuses on psychological help (Deschamps, Fatien, & Geindre, 2010). Obviously, one must note that various types of support tend to overlap in practice, and that 13 distinct types have been identified (D'abate, Eddy, & Tannenbaum, 2003). This is one of the many reasons why it is so difficult to have a clear conceptual and practical definition of mentoring. It should be also noted that mentors must place the mentee's interests in absolute priority and not as part of a group of priorities (Gibson, 2005). In the case of entrepreneurial mentoring, at least within the scheme studied for this research, mentors are volunteers. They are not paired with a particular mentee because of a specific competency, or

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<sup>2</sup> The use of "he" in reference for the mentee or mentor does not preclude female mentors or mentees and has no other purpose than that to lighten the text. As part of this research, male mentors are predominant but mentees, in turn, are mainly women.

to solve a particular problem. They are generalist businessmen/businesswomen who mainly want to give back to society by supporting novice entrepreneurs in their personal and professional development (Fortin & Simard, 2007; St-Jean & El Agy, 2011).

### ***Continuous professional development for entrepreneurs***

As noted by Saks, Tamkin, & Lewis (2011, p. 180), entrepreneurs may be considered has managers in several ways but the form and content of their training and development may be different from those of other managers. For example, it is proven that the smaller the company, the greater the need for basic training and the more acute the problem of designing suitable training courses (Mangham & Silver, 1986). First, small firms are so diverse that it is difficult to make training relevant (Coetzer, Battisti, Jurado, & Massey, 2011; Gibb, 1997). Moreover, because of their lack of resources, they cannot afford the cost of some trainings without a clear effect on a subsequent performance, something that is difficult to measure (Westhead & Storey, 1996). Furthermore, entrepreneurs have so many different backgrounds, needs and ambitions (Fuller-Love, 2006; Hessels, Van Gelderen, & Thurik, 2008; Smith & Miner, 1983), which make the “one size fits all” training design unpractical in terms of cost and time invested. Business mentoring typically occurs at the worksite, the owner-manager determines the learning agenda, and owner-manager learning is 'just-in-time', focussed on organisational problems or opportunities, and context specific (Coetzer et al., 2011). Giving the above argument, this kind of support may overcome the traditional barriers of managerial training for SMEs.

### ***Learning in a mentoring relationship***

There are numerous theories, which conceptualises how people learn, and it is not the intention of this research to contribute to the debate. However, we do know that learning occurs within different mentoring contexts, being considered as the main proximal outcome of this relationship (Daloz, 1999; Dutton, 2003; Wanberg, Welsh, & Hezlett, 2003). One must also note that studies on entrepreneur development programs suggest that mentoring may well be one of the most privileged ways for entrepreneurs to learn (O'Dwyer & Ryan, 2000; Raffo,

Lovatt, Banks, & O'Connor, 2000), which highlights its importance to novices of the business world.

In the specific setting of entrepreneurial mentoring, there are different elements to consider. Learning from other people's experience is important in various workplaces, for example, to better understand job task or to gain experience from other people's mistakes (Collin, 2004). However, being "the boss" of the company makes the entrepreneur without peers from whom to learn. Previous studies have shown that the contact of a novice entrepreneur with a mentor increases the novice's learning outcomes (Barrett, 2006; Florén, 2003; St-Jean & Audet, 2012). By interviewing entrepreneurs, Choueke and Armstrong (1998) note that although entrepreneurs state that experience is their main source for learning (95 %), mentoring remains the fourth most important learning source (43 %), even surpassing higher education. Mentoring may give to the entrepreneur greater flexibility in a context where they do not have the time for formal training, and delivers "training" in a manner that he is in control of the way he learns, an important element of his own learning (Fisher, Wasserman, & Orvis, 2010). It is important to note that mentoring helps make sense of critical events experienced by the entrepreneur in the business (Cope & Watts, 2000). Mentoring may therefore emphasize learning through experience, by making it possible to develop second-level learning thanks to the reflectivity triggered by the mentoring relationship (Cope, 2003). Critical reflection and reflexivity are seen as the foundation of learning and extremely important for the professional development of owner-managers (Anderson & Thorpe, 2004). In order to accomplish learning and transformation, owner-managers must invest in the broadening of their relationships – both inside and outside the firm – that help to engender critical reflexivity (Jones, Macpherson, & Thorpe, 2010). To that extent, mentoring may be a way of integrating any management development into the entrepreneur's activities, within the limit imposed by the skills and the experience of the mentor (Fuller-Love, 2006).

There are two main viewpoints to understand workplace learning which are individual and situated learning perspectives (Illeris, 2003). This research is clearly anchored in the situated learning framework (Lave & Wenger, 1991). In an entrepreneurial mentoring

relationship, the mentor is not a content expert, nor a specialist, and is paired in order to listen what is lived by the mentee and share experiences. Consequently, discussions will revolve around events lived by the mentee, within the job setting, to learn from their experiences (Cope, 2003; Cope & Watts, 2000). This form of learning can be considered as action learning. For the purpose of this study, the definition of action learning is a continuous process of learning and reflection that happens with the support of a group or 'set' of colleagues, working on real issues, with the intention of getting things done (McGill & Brockbank, 2004, p. 11). A mentor plays the role of a colleague with a similar hierarchical ranking since the entrepreneur is alone at the top of his business.

Deakins *et al.* (1998) identifies certain transformations mentioned by novice entrepreneurs having been paired with a mentor, most of which include learning outcomes. Other than the transformations to the business *per se*, novice entrepreneurs mention reaching objectives, learning skills, problem-solving skills, management skills, and the ability to react to change. During interviews with these entrepreneurs, they mentioned that time spent with the mentor helped them reflect on critical incidents and learn from them, which improved their decision-making skills. In a study exploring entrepreneur learning through critical incidents in their business' development, Cope and Watts (2000) highlight the importance of mentoring programs for small business entrepreneurs. They mention that the interest is twofold. On one hand, mentor support helps the entrepreneur enter into a reflective learning process about these critical incidents in the business. On the other hand, mentor support puts these experiences into context and helps the entrepreneur diminish and even avoid future critical periods. They mention that mentoring helps entrepreneurs analyze the business in a more detached manner, while remaining firmly rooted in action and reflection. In other words, learning achieved through a mentoring relationship allows the novice entrepreneur to transform by developing both personally and as a business manager, which confirms mentoring's usefulness in the professional development of entrepreneurs.

Although it has been established that the novice entrepreneur learns from the relationship with a mentor, the relationship's attributes that make it possible to maximize

learning still remains unknown in this context. However, numerous studies have been conducted in large organisations, where an employee (referred to as *protégé*) is paired with a mentor higher up in the hierarchy but with no authority over the employee. In an exhaustive review of literature on mentoring in organisations, Wanberg, Welsh, and Hezlett (2003) present various dimensions that may influence learning. They consider these as proximal outcomes for the *protégé*. First, both the protégé and the mentor contribute to the success of the mentoring relationship which possesses certain determining characteristics. The established dynamic allows the mentor to exercise functions, which will help the mentee generate outcomes. The conceptual framework developed in this context provides sufficient explanations about the main components of a mentoring relationship and the links between them. However, the explicit content of each component should be revisited in the context of entrepreneurial mentoring in order to gain relevance and validity. The next section presents the main components and the suggested content within this context.

***Mentee characteristics.*** Mentees must actively participate and open up to their mentor (Clutterbuck, 2004; Gravells, 2006; Shea, 1994). They must also be open to change (Audet & Couteret, 2005). In large organisations, the protégé must therefore play an active role in the relationship in order for it to be satisfactory and generate positive outcomes. To achieve this, mentee's self-disclosure is a necessity. Self-disclosure is considered both as an indicator of the relationship's depth and part of the process that helps the relationship evolve (Keller, 2005). However, others consider it as an individual disposition that influences relationships developed with others (Miller, Berg, & Archer, 1983). Self-disclosure to another individual contributes to self-realisation by improving self-understanding, or, minimally, by building new narratives more adapted to current circumstances (Hinde, 1997). Recently, researchers have noticed that high levels of self-disclosure in *protégés* increase mentoring received, develop mentoring outcomes, and improve relationship satisfaction towards the mentor (Wanberg, Welsh, & Kammeyer-Mueller, 2007). This variable may be particularly relevant in an entrepreneurial context. In fact, entrepreneurs tend to keep difficulties to themselves in order to preserve the



positive image of themselves and of their business they project towards stakeholders (i. e. bankers, clients, suppliers, etc.). However, when paired with a mentor, such a reflex would inhibit the relationship's potential and the ensuing learning.

***Mentor characteristics.*** Among the factors pertaining to mentors in the literature, we note that their availability seems to positively influence the relationship's success (Deakins et al., 1998). This aspect has a direct impact on the frequency of meetings since an unavailable mentor cannot be present at the mentee's desired intervals. The mentor's mentoring experience also influences the quality of the mentoring. For example, a more experienced mentor will offer more career-related support than one who is mentoring for the first time (Allen & Eby, 2004; Fagenson-Eland, Marks, & Amendola, 1997). Furthermore, older mentors and mentors who perceive the *protégé* as more competent will offer more psychological and career-related support (Mullen, 1998). Finally, mentors must focus on mentee learning and development, as well as promote reflectivity based on openness and dialogue. (Gravells, 2006).

***Relationship characteristics.*** Let us first note that the time invested in the relationship is important, this fact implies a certain frequency and a long-term relationship (Nandram, 2003; Smallbone, Baldock, & Bridge, 1998). Dyad members must share a certain positive "chemistry" (Couteret, St-Jean, & Audet, 2006; Cull, 2006). This idea of "chemistry" could refer to the mentee's perceived similarities with the mentor, an essential element in insuring the relationship's success (Allen & Eby, 2003; Ensher & Murphy, 1997; Wanberg, Kammeyer-Mueller, & Marchese, 2006). In fact, mentoring relationships give better results when dyad members perceive a similarity in values, personality or interests. This also implies reciprocal trust that enables an effective and high-quality relationship (Kram, 1985; Ragins, 1997). Trust is a *sine qua non* condition to make evolving the relationship in time in an entrepreneurial context (Cull, 2006). However, the level of trust in the mentor usually does not change much during the relationship and must remain high, implying that the trust be developed quickly between members of the dyad (Bouquillon, Sosik, & Lee, 2005). To achieve this, a high level of self-disclosure is required by the mentee (Wheless & Grotz, 1977).

***Mentor functions.*** In mentoring within large organizations, mentor functions refer to the various roles played by the mentor in the mentoring relationship (Kram, 1985). It is the mentoring functions that make it possible for the mentee to develop relationship outcomes (Wanberg et al., 2003), learning outcomes in particular (Allen & Eby, 2003). That is why they are considered as measures for mentoring received or given. Mentor functions studied in large organisations are usually separated into three categories: Psychological functions, career-related functions and role-model functions (Bouquillon et al., 2005; Pellegrini & Scandura, 2005; Scandura & Williams, 2001; Tepper, Shaffer, & Tepper, 1996).

Indisputably, functions identified in entrepreneurial mentoring are distinct from those identified in large organizations, since mentees manage their own business (as opposed to being employees) and that mentors have no hierarchical position above them. Moreover, the entrepreneur's role as a business leader and manager significantly changes stakes involved and pushes the mentor to exercise particular functions. Very few authors have studied this topic. For example, Waters, McCabe, Kiellerup, & Kiellerup (2002) proposed psychological and career-related functions, but the context of the study largely influenced the tool's creation. We noticed that the items selected to develop the constructs are based on program elements in which the relationships are observed, for example: giving technical and marketing assistance, or financial and legal advice. Therefore, it is difficult to use these results as a basis for other mentoring systems. St-Jean (2011) developed an instrument which measures the mentor's functions grouped within three categories: psychological, career-related, and role model functions. The psychological functions include four dimensions: reflector, reassurance, motivation, and confidant (see Table 1). The career-related component includes the dimensions of: integration, information support, confrontation, and guide. And, as noted, the last category is role-model function. Contrary to Waters, McCabe, Kiellerup, & Kiellerup (2002), this measurement tool is less context specific and can be adapted to almost any mentoring programmes.

*Table 1: Mentor's function proposed by St-Jean (2011)*

Reflector	The mentor gives the mentee feedback on who he is and his business project. The mentor reflects the image the mentee projects to others, somewhat like a mirror does. This function provides the mentee with a kind of personal progress report where strengths to be bank on and weaknesses to be worked on are identified.
Reassurance	The mentor reassures the mentee during difficult times. He acts as a pressure valve enabling the mentee to evacuate accumulated stress and put problems into perspective.
Motivation	The mentor motivates and encourages the mentee. The mentor helps the mentee build self-confidence and gives him incentives to persevere.
Confidant	With time, the mentee may confide in the mentor just as he would in a friend. The mentoring relationship may also transform into friendship.
Integration	The mentor facilitates the integration of the mentee in the business community by presenting him to business contacts who may be of need in the future.
Information support	The mentor gives the mentee information. He transfers various types of personal knowledge including on business management, laws to be aware of, useful information on the industry, and so on.
Confrontation	The mentor confronts the mentee's ideas to help further his reflection. This confrontation appears in a problem-solving context where the mentee's beliefs, attitudes or habits prevent him from reaching his goals and makes him part of the problem rather than the solution.
Guide	When problem solving, the mentor helps the mentee improve problem comprehension, widen problem vision and context. When necessary, the mentor also makes suggestions and gives advice toward a solution.
Model	The role model function focuses on the mentor as a person. During meetings, the mentor presents excerpts from his life and the mentee takes what applies to him and learns the lessons that need to be learned according to his particular situation. The mentor may also be a source of inspiration, or at least, of comparison.

### ***Conceptual framework***

As we have seen based on studies by Wanberg, Welsh, and Hezlett (2003), we know that the development of mentee learning is affected by various dimensions such as dyad member characteristics, relationship characteristics, as well as mentor functions. For the mentee, we have chosen self-disclosure (e.g. Wanberg et al., 2007), which seems to be a basic psychological disposition in establishing an effective relationship. For the relationship, we have chosen the model of perceived similarity (e.g. Turban, Dougherty, & Lee, 2002), as well and trust in the mentor (e.g. Bouquillon et al., 2005). These elements help the mentor exercise

functions in a broader manner, which in turn develop mentee learning. Figure 1 presents the variables of interest as well as the expected relationships that link them together.

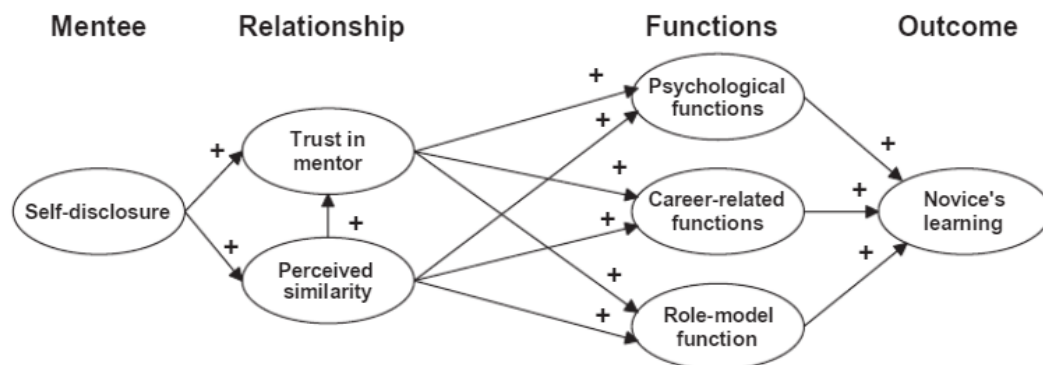


Figure 1: Conceptual framework to be tested.

Links between the concepts have been proposed by Wanberg, Welsh, and Hezlett (2003) in a general manner, without specifying the scope of the specific variables possible. Let us mention, however, that many of the selected links between variables have been demonstrated in previous studies, such as the relationship between self-disclosure and trust (e.g. Wheelless & Grotz, 1977), and perceived similarity (e.g. Brockner & Swap, 1976), the influence of trust (e.g. Bouquillon et al., 2005) and perceived similarity (e.g. Ensher & Murphy, 1997) on mentor functions, as well as the link between mentor functions and learning (e.g. Lankau & Scandura, 2002). Nevertheless, no study seems to have tested the link between these concepts, or even using these specific variables, concomitantly, and most importantly with novice entrepreneurs. Such a process may empirically validate Wanberg, Welsh, and Hezlett's proposal (2003) and extend its application in order to investigate the conditions that maximize novice entrepreneur learning in a mentoring relationship.

## Methodology

### *The studied program*

The *Réseau M* (a business mentoring network), which serves as a backdrop to the present study, was created in the year 2000 by the *Fondation de l'entrepreneurship*, an

organisation dedicated to economic development in the province of Québec (Canada). The service is offered to novice entrepreneurs through some 70 mentoring cells scattered 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 situations, the fee is waived. In order to supervise local development correctly, the *Fondation* provides training workshops on the mentor-mentee relationship to give to dyad members a clear idea of the mentor's role. Based on an 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.

### ***Sample used for the study***

The population studied included all the mentored entrepreneurs currently taking part in the *Fondation de l'entrepreneurship's Réseau M.*, The participants include those of whom attended at least three (3) meetings with their mentor, and/or those who have an ongoing relationship with a mentor, and whose email address was still valid, which represents a total of 981 individuals<sup>3</sup>. Mentees were contacted by email to participate in the study, with two follow-ups with non-respondents, for a result of 360 respondents, which represents a response rate of

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<sup>3</sup> The total population is 1541 but some did not have a valid email. Some mentees have had less than 3 meetings with their mentor and were also excluded from the study, giving the impossibility to develop any substantial learning with less timeframe.

39.9%. Since a population profile was not initially available, a comparison of early (first email) and late (after follow-ups) respondents was conducted, as suggested by Armstrong and Overton (1977). There is no significant difference between the demographic variables, business-related variables, and variables measured in this study, which suggests that the sample is a good reflection of the population studied.

The sample included 162 male mentees (51.6%) and 152 female mentees (48.4%)<sup>4</sup>. They were paired with 275 male mentors (81.4%) and only 63 female mentors (18.6%). This preponderance of male mentors can be explained by the higher number of men among available mentors, undoubtedly due to a historical reality: fewer women were in business over the past 40 years than today. As a result, the potential female mentor pool is much smaller than for males. Mentees were fairly educated: 55% had at least one university diploma. Age ranged from 23 to 70 for an average of 39.8. At start-up, 24% had no prior experience in their business sector, and 61.6% had fewer than five years of experience. With regard to business experience at start-up, most (51.1%) had no experience and 82.9% had fewer than five years. Almost all mentees were running an active business when the pairing was carried out (93.3%), while the others were in the process of starting up. Businesses typically had few employees (average of 4.48 employees) and annual turnover figures were mostly under \$100,000 CDN (62.8%). With regard to gross profits, including profits and bonuses for the main manager, the situation is hardly more glowing. The great majority (68.1%) declared profits of under \$25,000 annually, 83.5% make less than \$50,000 and only 6.3% make more than \$100,000. Business sectors varied, with a slight concentration on professional services (23.0%), manufacturing (14.4%) and retail (11.9%). Average length of mentoring relationships was 16.07 months (standard deviation of 14.4, median of 13). Meetings with the mentor lasted an average of 68.52 minutes and meeting frequency was less than one per month. Most respondents were still involved in a mentoring relationship when they completed our questionnaire.

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<sup>4</sup> The sum of men/women does not equal 360 (the total sample) because of missing data on this question.

### ***Questionnaire and measures***

The questionnaire was done online through a professional web-based survey provider. It was administered in French and we translated all of the measures that were previously developed in English. Translation was done by two bilingual researchers separately and then compared each other. No major differences were founded. The online questionnaire was pretested and no changes were necessary.

***Self-disclosure.*** The measure was developed by Miller *et al.* (1983) and possesses 10 items. Respondents indicate how likely it would be for them to discuss certain personal subjects with a same-sex stranger, on a Likert scale ranging from “1-Would never discuss” to “7-Would discuss completely and fully”. Items include things they have done and of which they are ashamed, intimate feelings, what is important for them in life, etc. The tool possesses a very acceptable internal consistency with a Cronbach’s alpha of 0.899.

***Perceived similarity.*** This four-item measure is inspired by the one proposed by Allen and Eby (2003), which checks for similarity in values (1), interests (2), and personality (3), with an added item proposed by Ensher and Murphy (1997) relative to similar points of views (4). Using a Likert scale ranging from “1-Strongly disagree” to “7-Strongly agree”, respondents indicate how true statements about similarities between them and their mentor are. The internal consistency analysis indicated a Cronbach’s alpha of 0.897.

***Trust in the mentor.*** The mentor trust measure was especially created for this study and is based on the three components of the trust in others measure proposed by Rempel and Holmes (1986). It includes 1-reliability, 2-predictability, and 3-trust (3 items). Mentees indicate the extent to which their mentor corresponds to the dimensions of trust. Cronbach’s alpha is 0.741.

***Mentor functions.*** Mentor functions were developed by St-Jean (2011) and include 3 sub-scales: Psychological functions (4 items), career functions (4 items), and role-model

functions (4 items). Respondents must indicate on a Likert scale ranging from “1-Strongly disagree” to “7-Strongly agree” the extent to which the mentor employed the psychological function (e.g. he makes it possible for me to construct a precise image of myself and my business), the career function (e...: he puts me into contact with people he knows), and the role-model functions (e.g.: he presents to me his successes and failures). Cronbach’s alpha for these measures are respectively 0.823, 0.711, and 0.882.

### ***Method used***

The model was tested with the LISREL software using a second-level structural equation. The first level focuses on the links between manifest variables (i.e. items) and latent variables, while the second level focuses on the links between various latent variables. Since the manifest variables used are nominal but ordered<sup>5</sup>, it was appropriate to use the PRELIS software since it allows us to calculate a polychoric correlation matrix. This matrix is better in reducing estimation biases, especially since it is not sensitive to the shape of the marginal distribution (Jöreskog & Sörbom, 2002; Tabachnick & Fidell, 2007). Structural equations were built using this type of matrix. As mentioned previously, non-respondents to at least one item were removed from the analysis, which helps improve the quality of the matrix (Jöreskog & Sörbom, 2002). In all, 256 respondents (out of a sample of 360) were therefore used for the analysis. Furthermore, correlations between six measure errors that came from the same constructs were permitted to improve the quality of the adjustment. This was justified since the constructs use the same methods to measure the variables (i.e. Likert scales).

### **Results**

Table 2 presents the means, standard-deviations, and correlations between the used variables. An analysis of the structural equations reveals that each item is significant ( $p \leq 0.05$ ) in explaining the latent variables (meaning the first-level links<sup>6</sup>). As we can see in Figure 2,

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<sup>5</sup> These are seven-point Likert-type variables.

<sup>6</sup> These links have been removed from the figure to maintain clarity and simplify presentation.



each structural relationship between latent variables is significant ( $p \leq 0.05$ ) and positive, except for the link between self-disclosure and trust in the mentor (n.s.). The global model gives satisfactory results  $\chi^2$  at 826.93 (d.l.=509), RMSEA at 0.049, and CFI at 0.987. Our results illustrate that the mentor's career function is the most important when it comes to developing learning ( $\beta$  Std.=0.44), followed by the psychological function ( $\beta$  Std.=0.39), and the role-model function ( $\beta$  Std.=0.17). Also, trust is very important in order for the mentor to employ the psychological function ( $\beta$  Std.=0.54) and the career function ( $\beta$  Std.=0.49), but to a lesser degree the role-model function ( $\beta$  Std.=0.24). However, perceived similarity is more important for the role-model function ( $\beta$  Std.=0.51) than for the psychological ( $\beta$  Std.=0.41) and role-model functions ( $\beta$  Std.=0.36). We can observe that perceived similarity helps develop trust ( $\beta$  Std.=0.74). However, self-disclosure has but little effect on the stimulation of perceived similarity ( $\beta$  Std.=0.23) because the effect is non-significant towards trust.

Table 2: Means, standard deviations and correlations between variables

	Mean	Std.	1	2	3	4	5	6	7
1. Self-disclosure	4.90	1.24	1.00*						
2. Perceived similarity	4.83	1.36	0.17	1.00					
3. Trust in mentor	5.87	1.09	0.04	0.62	1.00				
4. Psychological functions	5.66	1.07	0.29	0.57	0.55	1.00			
5. Career functions	5.46	1.05	0.15	0.49	0.54	0.73	1.00		
6. Role-model function	5.55	1.33	0.22	0.51	0.37	0.64	0.68	1.00	
7. Mentee learning	5.29	1.31	0.17	0.68	0.65	0.67	0.67	0.62	1.00

\* Correlations  $\geq 0.15$  are nonsignificant with  $p \leq 0.05$ .

<sup>5</sup> These are seven-point Likert-type variables.

<sup>6</sup> These links have been removed from the figure to maintain clarity and simplify presentation.

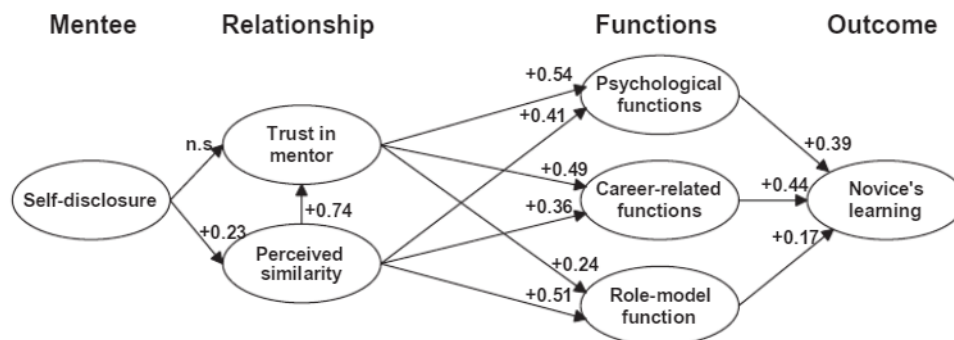


Figure 2: Results of the structural model.

## **Discussion**

The results obtained through this study are interesting on many levels. To begin with, they confirm the relevance of the model developed by Wanberg, Welsh, and Hezlett (2003) to study mentoring relationships with novice entrepreneurs, although it was developed based on empirical results obtained in an organisational context. The categories proposed by these authors are truly useful in explaining the development of mentee outcomes. We should add that this is one of the few studies that has tested so many parts simultaneously about the mentoring process as proposed by Wanberg, Welsh, and Hezlett (2003). For example, Allen & Eby (2003) found that perceived similarity is linked with mentee's learning in large organization setting but without considering the mediating role of the mentor's functions. With our result, we know that this framework is not only useful for studying mentoring within large organizations, but can be adapted in different contexts.

Furthermore, results demonstrate that the mentoring received, thanks to mentor functions, stimulates novice learning. Although all were significant, the career function is more important than the others to stimulate learning, matching the results obtained in a study in a large organisation (Lankau & Scandura, 2002). Since the mentee could initiate a mentoring relationship first and foremost to develop management skills, it is not surprising that the career function be the one with the strongest links to mentee's learning outcomes. Knowing that career function includes integration, information support, confrontation of ideas and being a guide (St-Jean, 2011), several conclusions can be drawn from our findings. First, mentors facilitate the integration of the mentee within the business community. One method in achieving this integration is by the introduction to the mentee to business contacts who may be of need in the future. This function supports the development of new relationships, beyond the mentor itself, which are recognized as a way to enable and improve the critical reflexivity of the entrepreneur through discussion with peers (Jones et al., 2010). This may create a unique "strategic space" in which entrepreneur can reflect about the development of his business. Second, the information support function brings idiosyncratic learning through peer exchanges about

different thematic in which the mentor is an expert. Even if this kind of knowledge transfer cannot be fully structured and giving that mentors are not chosen on the basis of their expertise, this may however play a role to support learning. For example, it is recognized that new information, especially the one that comes from mentors, can enhance the opportunity identification for novice entrepreneurs (Ozgen & Baron, 2007). Thirdly, the mentor confronts the mentee's ideas to help further his reflection. This confrontation appears in a problem-solving context where the mentee's beliefs, attitudes, or habits prevent him from reaching his goals. (St-Jean, 2011). When using a problem-solving approach, the mentor helps the mentee to improve their problem comprehension skills, widen their possible vision and contextual solutions available. When necessary, a mentor may also give suggestions and advice about possible solutions. With a problem-solving focus, going from confronting the ideas to guiding and suggesting solutions, mentor is supporting a learning that is 'just-in-time', focussed on organisational problems or opportunities, and context specific for the entrepreneur.

The psychological function is also an important factor in the entrepreneur's learning. Through these functions, the mentor is a reflector, reassuring, supporting motivation and being a confidant (St-Jean, 2011). The mentor gives the mentee feedback on who the latter is and about his business project. The mentor reflects the image the mentee projects to others, somewhat like a mirror does. This function provides the mentee with a kind of personal progress report where strengths and weaknesses are identified. Through the motivation function, the mentor motivates and encourages the mentee in helping the latter building self confidence and giving him incentives to persevere. Psychological functions can be considered as a form of social persuasion, which is recognized as a determining factor of self-efficacy (Bandura, 1997). Self-efficacy, one of the affects that may be enhanced with mentoring (St-Jean & Audet, 2012), makes the entrepreneur more confident in handling entrepreneurial tasks like the recognition of opportunities. Self-efficacy fosters the entrepreneur's action-taking, which is more likely to lead him to success, instead of being filled with doubts and not moving forward (Hmieleski & Corbett, 2008). So it seems that affective learning outcomes, which are important to novice entrepreneurs, may be developed through psychological functions. In an entrepreneurial

context, we know that affective learning may be more important than cognitive learning because it enhances the entrepreneurs effectiveness to successfully identify and acting upon opportunities in the market (Bergh & Jacobsson, 2011). Finally, even if role model function is lower than psychological and career-related functions in increasing learning, it is still significant and positive in the model. This support also previous research that demonstrated the importance of a role model for entrepreneurial career (Scherer, Adams, Carley, & Wiebe, 1989; Van Auken, Stephens, Fry, & Silva, 2006).

Trust in the mentor is more important in stimulating psychological and career functions than role-model functions. This situation is quite logical since, in both cases, trust must be established before the mentee tackles strategic aspects of the business (for the career functions) and personal issues (for the psychological functions), two elements that make the mentee more vulnerable towards the mentor should confidentiality be breached. Furthermore, the results confirm the importance of trust in the establishment of an efficient mentoring relationship (Bouquillon et al., 2005; Stead, 2005). The influence of perceived similarity on the role-model function is also logical, since in cases of high perceived similarity, the mentee identifies more freely with the mentor, who will in turn serve as a better role-model of a successful entrepreneur. Moreover, perceived similarity develops trust, which confirms previous results obtained in other contexts (Lankau, Riordan, & Thomas, 2005).

Mentee self-disclosure stimulates the development of perceived similarity but not trust in the mentor. These results are interesting since they clarify the relationship between these variables. Mentees with a greater disposition towards self-disclosure will certainly talk about themselves to initiate the relationship, encouraging their mentor to speak about themselves, helping mentees identify with their mentor and maximizing the role-model function. However, self-disclosure in itself is not a key to the development of trust: It is only through a relationship where mentees judge themselves similar enough to their mentor, that mentees will bestow their trust for dimensions where they are the most vulnerable, such as their business and its management (career function) and personal feelings (psychological functions). In order to maximize the benefits of a mentor mentee relationship, the latter must have certain competences

such as: appropriate social skills, the ability to engage with others, and a willingness to participate in critical reflection (Anderson & Thorpe, 2007). The results demonstrate the effect of self-disclosure on the mentee's learning through the optimization of the components that form the mentoring process.

These results are also important because they show important factors to maximize mentoring outcomes in a scheme where mentee's needs in terms of learning are the focal point. In some other programs, it is shown that mentors need to be trained in order to serve particular learning needs of mentees (Van Zolingen, Streumer, De Jong, & Van der Klink, 2000). With the general measure of learning that was used in this study, it is still difficult to say if the training of mentors is needed to increase the mentee's learning. Also, it should be pointed out that, even if self-disclosure is an important component in the establishment of a fruitful mentoring relationship, the mentee's capacity to integrate the learning developed within the relationship in his professional development is crucial. As it was pointed out in an apprenticeship setting, individual abilities to integrate and synthesize contradictory messages are key elements in building on-job competences (Harris, Simons, Willis, & Carden, 2003). This is one of the few dimensions to explore in the future to better understand how mentoring can be optimized for the mentee's professional development, particularly in an entrepreneurial context.

### ***Limits***

It is understood that such a model is quite restrictive on many points. Firstly, mentor characteristics are not considered, other than the perception of functions experienced by the mentee. It would have been important to introduce certain of these characteristics susceptible of influencing relationship variables, such as the ability to open others (Miller et al., 1983). Moreover, the chosen variables are but a few among a much wider group of possibilities. For example, the level of learning-goal orientation of the mentee is reputed to influence relationship outcomes (e.g. Godshalk & Sosik, 2003; Kim, 2007), but was not taken into account in this study. Obviously, it is not possible to consider all the possible variables that might influence the relationship, the functions or the learning outcomes. The proposed model, for want of thoroughness, has the merit of being efficient.

Another limit stems from the fact that only the mentee filled out the questionnaire. The study lacks the mentor's perspective, for example to validate the functions the mentor thinks were used with the mentee. This situation is particularly susceptible of introducing a common method bias. Also, data used was cross-sectional rather than longitudinal, whereas we know that mentoring relationships evolve with time. Relationship or function variables, as well as outcomes evolve according to the phases they go through (e.g. Bouquillon et al., 2005), an element a cross-sectional study cannot explore. It is an important limit that will have to be removed through a future longitudinal study.

### **Conclusion**

The study demonstrates that mentoring received influences the mentee's learning outcomes. It also furthers the understanding of links between mentor characteristics, the developing relationship, functions used by the mentor, as well as the learning outcomes. Although mentee self-disclosure is not useful in developing trust, this psychological disposition is important to the development of perceived similarity, which in turn is the basis for the development of trust. For organisations in charge of managing mentoring programs, such knowledge is useful since it identifies an individual characteristic susceptible to conditioning the success of the mentoring relationship, at least when it comes to learning outcomes. Of course, other outcomes are possible, and self-disclosure may be marginal for these. Nevertheless, it remains a useful piece of information for these organisations and furthers the understanding of the mentoring relationship's "black box" when dealing with novice entrepreneurs.

It is difficult to say if our findings can be generalized to foreign mentoring programs than those found within of Canada, because in some way or another, cultural factors may influence the results. However, because mentoring is recognized as a learning tool for entrepreneurs in different scheme studied around the world, mostly in industrialized countries (e.g. Coetzer et al., 2011; Cull, 2006; Deakins et al., 1998; Miettinen, 2003; Waters et al., 2002), when in similar situations and context, we believe that the model tested will apply to other foreign mentoring programs.

In conclusion, in order to maximize learning in a mentoring scheme for novice entrepreneurs, different elements need to be taken into consideration. First, programme coordinators must recruit entrepreneurs who are willing to disclose to their mentor. Second, beyond mentee's self-disclosure, the mentoring programme must have a context that is supportive to build trust and perceived similarity. For example, you may consider having an ethical guide, insisting on confidentiality with mentors, enabling mentees to choose their mentor, so forth. Third, knowing that the three functions (career-related, psychological and role-model) support learning differently and not with the same impact, this information shall be provided to mentors so that they will be more attentive to the means available to them in order to maximize learning for the mentee within their intervention. Further studies remain necessary to validate these results with other programs and, most importantly, using a longitudinal perspective and also considering the mentor's perspective. These are interesting avenues for future research.

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