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# MENTOR FUNCTIONS FOR NOVICE ENTREPRENEURS

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## ABSTRACT

*In the past few years, we have witnessed the birth of new mentoring programs, which consist in twining a novice entrepreneur with an experienced entrepreneur (also known as business mentoring). The literature on mentoring in large organization (where the protégé is an employee in the hierarchy) highlights that the mentor exerts three main categories of functions: psychological, career-related, and role model. This research aims to explore and to validate mentor functions for novice entrepreneurs. At first, a qualitative analysis based on focus groups including 51 mentees and 8 mentors was carried out. The theoretical proposal was then validated by a group of three experts in business mentoring. Finally, confirmatory factor analyses using LISREL were carried out on a sample of 360 mentees taking part in the mentoring program of the Fondation de l'entrepreneurship network, an organization which has twined more than 3500 novice entrepreneurs since the year 2000. The analyses confirm four psychological functions (reflector, reassurance, motivation, and confidant), four entrepreneurial career-related functions (integration, information support, confrontation, and guide) and a role model function. These results are useful to raise the awareness of volunteer mentors about functions they may likely exert when they are twined with novice entrepreneurs.*

## INTRODUCTION

For the past few years, we 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 et Audet, *Under press*; Sullivan, 2000). For example, the American SCORE<sup>1</sup> 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. Some studies suggest that novice entrepreneurs may benefit from many types of different outcomes, including cognitive learning (new knowledge and skills, improved business vision and opportunity recognition), affective learning (reduced solitude, improved self-efficacy and self-image), new contacts, and even

changes in the SME (increased sales or improved profitability) (Bisk, 2002; Nandram, 2003; St-Jean, 2008; Wikholm *et al.*, 2005). Although outcomes for the novice entrepreneur are better known, mentor roles helping their development are practically unknown to this day.

Yet, scientific literature on mentoring in other contexts has explored mentor roles on numerous occasions, particularly in large organizations where an employee identified as having potential (protégé<sup>2</sup>) is matched with another in a hierarchical position (mentor). These mentor functions even constitute a measure of the mentoring received by the protégé. The present study will attempt to bridge this gap by documenting mentor functions in entrepreneurs within the context of the business mentoring network of the *Fondation de l'entrepreneurship*. To do so, a review of the scientific literature used to define the concept will first be presented. Since this literature has not offered enough details on the study's subject, an exploratory analysis was necessary and will then be exposed. Subsequently, the entire confirmatory study, which proves the empirical validity of mentor functions, will be presented. Finally, results will be discussed as well as avenues for future research.

## LITERATURE REVIEW

### Mentor functions in large organizations

Kram (1985) suggests that mentors play two main functions towards the protégé: a career-related function and a psychological function. The first one includes everything touching on career advancement such as sponsorship, publicising/visibility, coaching, protection, and challenge setting. The psychological function includes elements linked to the development of a sense of competency and self-confidence such as role model, acceptance/confirmation, advice giving, and friendship. Many studies have used these functions with much success (see for example Noe (1988) or Allen and Eby (2004)). They have been tested more than once and the invariance of these factors between male and female groups has been demonstrated, which confirms that the two-main-function mentor function model possesses the same significance for both sexes (Tepper *et al.*, 1996). Also based on Kram's work (1985), Scandura (1992) conducted an exploratory factorial analysis and observed that the role model item in Kram's psychological function is a distinct function from the psychological or career-related function. Other studies confirm the distinct nature of the role model function and propose three main mentor functions (see for example Scandura and Ragins (1993), Scandura and Williams (2001), Pellegrini and Scandura (2005), or Bouquillon *et al.* (2005)).

However, subsequent studies based on Kram's work are all deductive in nature. Yet, in cases where an inductive approach is used, results differ. For example, when Levesque *et al.* (2005) question protégés about functions and ask them to rank mentor behaviours according to their perceived importance, protégés consider informational support as a very important mentor behaviour, whereas Kram's functions (1985) ignore this aspect. Still using an inductive

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approach, Fowler (2002) obtains seven functions identified by the protégé which are different from Kram's functions. And when mentors are questioned, eight functions are identified. This suggests the need to reassess these functions inductively since, as suggested by the author, context may change with time.

Indisputably, functions identified in entrepreneur 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. To our knowledge, the study by Waters *et al.* (2000) is the only one where the tool used to measure entrepreneur mentor functions was tested empirically. However, the context of the study largely influences the tool's development. Beyond the fact that mentors in their study could play a larger coaching role, which act as a guide in the protégé's business plan implementation, we notice that items selected to develop the construct are based on the very program elements in which the relationships are observed, for example: giving technical and marketing assistance, or financial and legal advice. It is therefore difficult to use these results as a basis for other mentoring systems. It does suggest first using an exploratory and inductive approach before testing a function measuring tool.

The purpose of this part is to answer the following research question: What are the different entrepreneur mentor functions? To answer this question we referred to testimonies from participants in the mentoring program of the *Fondation de l'entrepreneurship*. Before presenting the method used, we will first introduce the studied program, that is, the *Fondation de l'entrepreneurship*'s mentoring network.

### **The program**

In the late 1990's, the *Fondation de l'entrepreneurship*, an organization dedicated to the development and promotion of entrepreneurial culture in the province of Québec (Canada), implemented a support program for novice entrepreneurs. Services are offered throughout the province through 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 see to the development of the program at the local or regional level, while following the mentoring support model developed by the *Fondation*. Specifically, local cell coordinators are responsible for recruiting mentors, organizing mentor training sessions, promoting the program to novice entrepreneurs, pairing participants, and supervising the ensuing relationship. Novice entrepreneurs can enjoy the benefits of mentor support at minimal cost, typically a mere few hundred dollars per year, and sometimes even for free. To guide local development, the *Fondation de l'entrepreneurship* has developed specialised workshops on the mentor-mentee relationship in order to shed light on the specific role mentors must play for the novice entrepreneurs. Based on an intervention code of ethics where

relationship confidentiality is of primary importance, the business mentoring service also implemented a model contract to govern and guide parties in choosing the terms of their relationships and setting objectives. According to the *Fondation's* own estimates, by 2008 more than 2,800 entrepreneurs had benefited from the support of one of the 1,100 program accredited mentors. The present study uses the business mentoring program as its background which is therefore an example of a formal type of mentoring.

One must also note that novice entrepreneurs are not obligated to use the service, as is sometimes the case in exchange for securing a loan. They come of their own accord and out of self-interest. All mentors in the program are volunteers. Their main goal is to help the development of new entrepreneurs, a way for them to give back what they may have received themselves, informally perhaps. Although some mentors possess certain specialised skills, they are not recruited for their technical abilities. First and foremost, they must demonstrate their ability to listen and help the mentee find their own answers. It is a system based on novice entrepreneur learning, a means to help them “make sense” of their own experience.

## METHODOLOGY

### Sample used

Mentor functions were explored in 2005 and 2007 through mentor and mentee discussion groups. First in 2005, data was collected during discussion groups organized to evaluate the *Fondation* mentoring program. A specialised firm had been given the mandate of organizing these meetings and 40 novice entrepreneurs participated. Then, two discussion groups, for a total of 11 mentees, were set up: One in Montréal, and the other in Québec City. Participants were randomly selected from a list of over 1,000 *Fondation de l'entrepreneurship* mentoring program participants. During the meeting, participants were asked to discuss, among other things, the various roles (i.e. functions) played by their mentor throughout their relationship. Also, a mentor discussion group which included five men and three women (eight participants in all), all of which had been in business before, were mobilized to avoid a bias that would occur should only the point of view of the mentees be considered.

### Analytical method

The analysis consisted in inductively determining as many distinct functions as presented, and proposing items for a subsequent measure, while ensuring that they are in accordance with the collected statements from the mentees as well as the mentors. Once this exercise completed the proposal was submitted to an academic expert for comments. Some changes were made. The modified proposal was then submitted to a group of mentoring experts made up of the assistant director of the business mentoring service at the *Fondation de l'entrepreneurship*, a retired

university professor specialised in education and entrepreneurship and mentor in the program, and finally a consultant and trainer to the *Fondation* mentors and a mentor as well in the program. None of these experts had participated in the discussion groups. The expert first received a list of mentor functions with a short definition for each, as well as the list of items used to measure them in random order. They were asked to sort items according to mentor functions and return the form. The correct theoretical proposal was then sent to them for comments regarding item definition, the addition or removal of functions, and so on. This method aims to improve content validity and is greatly based on different methods identified in works by Hinkin (1998). The possibility that experts may comment on the nature of the functions seemed an interesting opportunity since two of the three were mentors themselves and quite aware of the roles they play. Results present four psychological functions, four career-related functions and one role modelling function.

## **Psychological Functions**

### **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.

## **Career-Related Functions**

### **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 towards a solution.

## **Role model function**

### **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.

Once the proposal based on an inductive approach was elaborated, we tested it deductively.

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## DEDUCTIVE FRAMEWORK AND VALIDATION OF MENTOR FUNCTIONS

### Methodology

#### Population and sampling

The population used for this study are the mentored entrepreneurs from the business mentoring network of the *Fondation de l'entrepreneurship*, more precisely those registered on the list prepared by the *Fondation* at the end of April 2008. The *Fondation's* mentoring team was in charge of collecting an email address for each mentee on the list, which represented a total of 1,545 novice entrepreneurs. An online questionnaire was sent to each mentee currently in a mentoring relationship and those whose mentoring relationship had ended, in which case the mentoring relationship had to have lasted at least three meetings. Two reminders were sent to non-respondents. In the end, 158 entrepreneurs indicated not having received enough mentoring to be eligible, 388 email addresses proved false or abandoned and 18 indicated an error on the list. In all, out of 981 valid email addresses, 362 completed the questionnaire which represents a response rate of 36.9%, with a margin of error of 4.4%, 19 times out of 20. We tested non-respondent bias by following Armstrong and Overton's (1977) procedure and no demographic or other variables of interest were significantly different between early and late respondents which leads us to accept the sample's representativeness.

Mentee characteristics from the sample are as follows. The mentee sample contained 165 men (51.6%) and 152 women (48.4%), which represents nearly a perfect men/women split. These novice entrepreneurs were paired with 275 male mentors (81.4%) and only 63 female mentors (18.6%). This situation should be considered "normal" if one considers the higher representation of men among available mentors. Let us also note that most mentors are career entrepreneurs (47.9%) but a strong proportion have been (or still are) managers in private businesses (34.3%). A few have served as civil servants (6.8%) and some mentees did not know their mentor's career (10.9%). At the time of pairing, some mentors were still active (40.8%) while a majority were retired (57.4%). The vast majority (79.6%) of mentors were not involved in the same industry as their mentee, in accordance with guidelines suggested by the network's leaders. This avoids potential conflicts of interest and ensures the mentor remains a generalist rather than becoming a technical specialist.

Mean age of mentees is 39.81 years (standard deviation = 8.97, median=38 years old) and ranged from 23 to 70 years of age. Mentees are quite educated as 55% of them possessed at least one university degree. Nearly all mentees had an active business at the time of pairing (293 out of 314, 93.3%) and the rest were in the process of starting their business. Mentee businesses had few employees, with a mean of 4.48 (standard deviation of 9.69, median of 2). Yearly business turnover was largely under \$100,000 (62.8%), 88.9% had a yearly turnover below \$500,000, and only 8.6% generated more than \$1M a year. Gross profits, including wages and management

bonuses, are just as bleak. The vast majority (68.1%) declared yearly profits under \$25,000, 83.5% made less than \$50,000, and only 6.3% made more than \$100,000. Industrial sectors are varied with a slight concentration in professional services (23.0%), manufacturing (14.4%), and retailing (11.9%). Mentoring relationships last on average 16.06 months (standard deviation: 14.4, median: 13), meetings with the mentor lasted on average 68.52 minutes (standard deviation: 14.4, mean: 67), and meetings occurred a little under once a month with the mean being once a month.

## Method

To correctly check the tool's validity, it is essential to consider the unidimensionality of each mentor sub function. A group of items must not refer to only one construct in order to be considered valid (Hattie, 1985). To that effect, literature suggests that a confirmatory factorial analysis is a method superior to others to evaluate construct unidimensionality (Gerbing et Anderson, 1988). It is also suggested that coefficients of internal consistency by divulged during creation or use of latent variables (Shook *et al.*, 2004; Slater et Atuahene-Gima, 2004). Consequently, a confirmatory factorial analysis as well as internal consistency analyses will be conducted.

To ensure measuring instrument reliability, it is suggested to use the "test-retest" and the parallel-forms method (Drucker-Godard *et al.*, 2003). The former consists in conducting the test twice with the same sample on two different occasions. The latter consists in administering two different tests to the same sample of individuals, with the second test being different from the first but supposed to measure the same phenomenon. As opposed to the "test-retest" method, the parallel-forms method reduces the memory effect. For this study, 173 respondents completed the questionnaire's first version, where all of the 35 items representing 9 sub functions were presented in random order, as well as the second version where the 9 sub functions were defined and items sorted accordingly. It is thus not an exact application of the test-retest method since some modifications were brought to the questionnaire's presentation, but it may be considered similar. It is neither an application of the parallel-forms method since the same items were administered, even though their order was different. In sum, it represents an alternative path. Nevertheless, to help judge the tool's reliability, we will present correlations between each sub function answered initially and reused by respondents later. Let us note that the elapsed time between the administration of the initial and revised questionnaire may vary from one respondent to another. Some may have completed the revised questionnaire as early as the next day while others may have been asked more than six (6) weeks later. For software reasons<sup>3</sup>, this delay was impossible to measure.

Finally, to ensure construct validity, respondents were asked to indicate the number of persons the mentor introduced them to. The integration function, which consists in verifying the extent to which the mentor played his role by introducing the mentee to other people, should



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correlate strongly with the number of persons effectively introduced. This analysis will thus also be conducted. Moreover, it may be considered that mentors having themselves been entrepreneurs may further deploy the role model function. This verification will also be presented. For each function, a confirmatory factorial analysis was conducted with the LISREL software. Since variables used are categorised but ordered (on a seven-point Likert-type scales), it was necessary to use the PRELIS software since it makes it possible to calculate a polychoric correlation matrix. This matrix is judged superior to others to reduce estimation bias, especially since it is not sensitive to the form the marginal distribution takes (Jöreskog et Sörbom, 2002; Tabachnick et Fidell, 2007). Structural equations were built with this type of matrix. As mentioned above, non respondents to at least one item were removed from the analysis, which improved matrix quality (Jöreskog et Sörbom, 2002). In all, 159 respondents were thus used for the analysis. For other analyses, Pearson correlations were calculated.

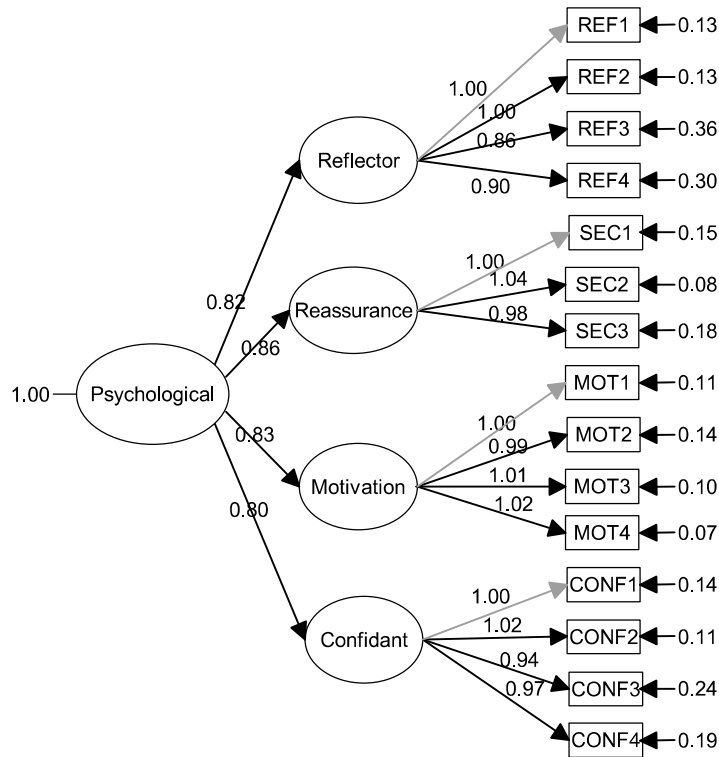
## RESULTS

### Psychological Functions

The inductive analysis conducted with the discussion groups revealed that psychological functions seemed to correspond to four sub functions: reflector (4 suggested items), reassurance (3 suggested items), motivation (4 suggested items), and confidant (4 suggested items). Table 1 presents arithmetic means, standard deviations, and correlations between the various items of the psychological functions. The model was tested so as to ensure that the psychological function be reflected in the four sub functions which in turn are reflected in the items created in the previous section (see Figure 1). All relationships between manifest and latent variables are significant with  $p \leq 0.01$ . We notice that most coefficients of error for manifest variables are low, the majority of which are not significant ( $p \leq 0.05$ ).

In the proposed model,  $\chi^2$  equals 151.71 for 86 degrees of freedom ( $p \leq 0.0000$ ), RMSEA equals 0.06954, SRMR equals 0.03978, and CFI equals 0.9919. The model is judged quite acceptable and no modifications were required. Analysis of the Cronbach's alpha ( $\alpha$ ) revealed a result of 0.889 for the reflector function, 0.916 for the reassurance function, 0.953 for the motivation function, and 0.931 for the confidant function. Results for the first questionnaire (items in random order) and second questionnaire (items sorted by sub function) were compared to measure reliability. For this analysis, scores for latent measures were first calculated and then correlated with scores from the other questionnaire (random and sorted). As illustrated in **Table 2**, correlation between the measures for constructs for both questionnaires are very high and all significant with  $p \leq 0.001$ . This confirms that measures for mentor psychological functions are reliable since, notwithstanding modifications to the questionnaire and time elapsed between both answers, constructs are still strongly correlated.

**Figure 1. Results for confirmatory factorial analysis of psychological functions**



### Career-related functions

The inductive analysis conducted with the discussion groups revealed that career-related functions can be divided into four sub functions: integration function (4 suggested items), information support function (4 suggested items), confrontation function (4 suggested items), and guide function (4 suggested items). **Table 3** presents arithmetic means, standard deviations and correlations between the various items of career-related functions. The model was tested so as to ensure that the career-related function be reflected in the four sub functions which in turn are reflected in the items created in the previous section (see *Figure 2*). All relationships between manifest and latent variables are significant ( $p \leq 0.01$ ). We also notice that most coefficients of error for manifest variables are low, the majority of which are not significant ( $p \leq 0.05$ ). Model fit indices are as follows. a  $\chi^2$  of 141.20 for 100 degrees of freedom ( $p \leq 0.0042$ ), RMSEA of 0.05107, SRMR of 0.06053, and CFI of 0.9952. As for psychological functions, the proposed model is judged quite acceptable and no modifications were required. Cronbach's alpha ( $\alpha$ ) for the integration function equals 0.948, information support obtained 0.899, confrontation obtained 0.882, and the guide function obtained 0.925. Again, it is possible to conclude that results for these measures surpass acceptable norms and

confirm construct validity for career-related functions, both for internal consistency and the factors composing it.

**Table 1. Arithmetic means, standard deviations, and correlations between items of psychological functions**

Variable	AM	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1-REF1	5.38	1.49														
2-REF2	5.39	1.49	.88													
3-REF3	5.08	1.32	.76	.74												
4-REF4	5.73	1.43	.76	.78	.67											
5-REA1	5.02	1.58	.66	.66	.57	.66										
6-REA2	5.21	1.58	.71	.69	.62	.68	.90									
7-REA3	5.57	1.45	.74	.73	.62	.77	.82	.86								
8-MOT2	5.83	1.36	.74	.70	.60	.69	.70	.79	.80							
9-MOT1	5.98	1.38	.71	.70	.64	.62	.69	.74	.72	.84						
10-MOT3	5.98	1.38	.74	.69	.56	.71	.73	.75	.78	.92	.87					
11-MOT4	6.05	1.29	.72	.68	.57	.62	.64	.70	.70	.89	.94	.91				
12-CONF2	5.23	1.70	.59	.68	.60	.63	.73	.72	.74	.67	.67	.64	.63			
13-CONF3	4.74	1.82	.54	.60	.59	.50	.64	.69	.61	.60	.64	.55	.58	.82		
14-CONF1	5.33	1.69	.60	.69	.57	.64	.73	.70	.73	.63	.71	.63	.67	.89	.77	
15-CONF4	5.09	1.80	.58	.61	.63	.57	.68	.71	.69	.63	.62	.62	.62	.83	.85	.83

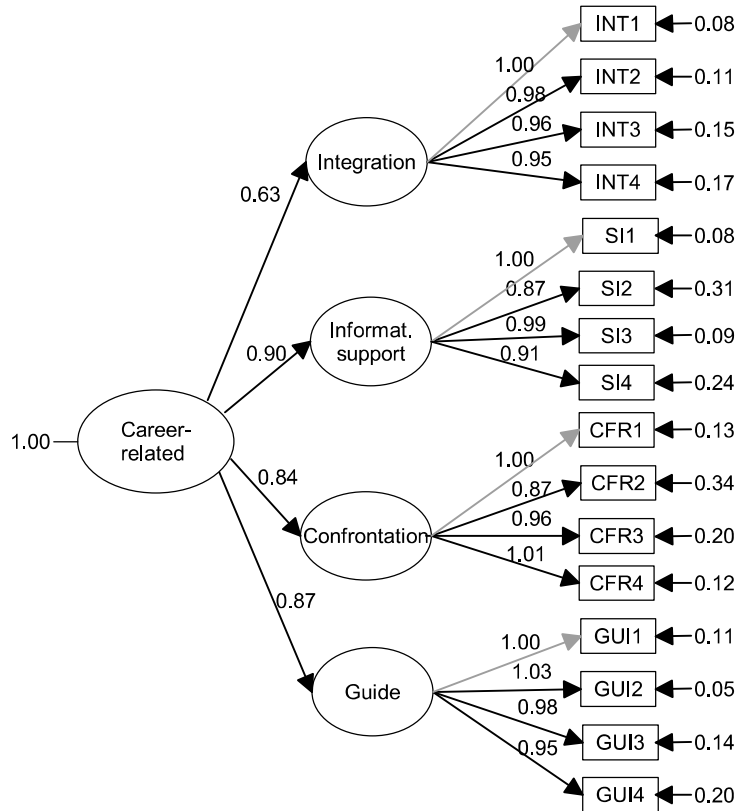
**Table 2. Correlation between psychological functions of first and second questionnaire**

Reflector Function	0.736***
Reassurance Function	0.711***
Motivation Function	0.649***
Confidant Function	0.801***
* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$	

Results from the first and improved questionnaire were compared to check for measure reliability. The same method was used as with the psychological functions. As illustrated in **Table 4**, correlations between the construct measures for both questionnaires are very high and all significant with  $p \leq 0.001$ . This confirms that measures for mentor career-related functions

are reliable since, notwithstanding modifications to the questionnaire and time elapsed between both answers, constructs are still strongly correlated.

**Figure 2. Results for confirmatory factorial analysis of career-related functions**



We may consider the hypothesis that a mentor exercising a strong integration function would introduce the mentee to a large number of people and inversely. In consequence, we may check construct validity by analysing the correlation between career-related functions and the number of persons introduced to the mentee. On average, mentees declared having been introduced to 3.44 persons by their mentor (standard deviation of 3.47). As illustrated in **Table 5**, the integration function is the function most strongly correlated to the number of persons introduced, which confirms the construct's validity.

Variable	AM	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1-INT1	4.36	1.90															
2-INT2	4.00	1.87	.92														
3-INT3	4.80	1.85	.87	.86													
4-INT4	4.68	1.83	.88	.83	.87												
5-IS4	5.43	1.57	.61	.58	.70	.59											
6-IS3	5.94	1.37	.60	.55	.71	.65	.82										
7-IS2	5.05	1.72	.51	.51	.64	.52	.81	.77									
8-IS1	5.88	1.46	.56	.55	.68	.61	.82	.92	.79								
9-CFR1	5.44	1.39	.45	.47	.58	.44	.73	.76	.64	.78							
10-CFR3	5.26	1.48	.41	.40	.49	.37	.64	.72	.59	.72	.84						
11-CFR4	5.24	1.55	.38	.38	.52	.37	.66	.75	.64	.74	.86	.85					
12-CFR2	5.50	1.53	.29	.29	.39	.28	.57	.63	.54	.68	.76	.69	.79				
13-GUI1	5.60	1.36	.52	.53	.67	.53	.74	.77	.73	.76	.75	.67	.74	.63			
14-GUI2	5.78	1.26	.47	.51	.63	.53	.73	.78	.69	.78	.79	.67	.77	.67	.93		
15-GUI4	5.61	1.34	.46	.48	.57	.47	.78	.76	.68	.78	.78	.71	.75	.63	.87	.86	
16-GUI3	5.79	1.23	.56	.54	.66	.56	.74	.79	.69	.78	.77	.71	.78	.59	.84	.92	.82

Integration Function	0.772***
Information Support Function	0.731***
Confrontation Function	0.706***
Guide Function	0.702***
* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$	

Integration Function	0.536***
Information Support Function	0.232***
Confrontation Function	0.134*
Guide Function	0.161**
* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$	

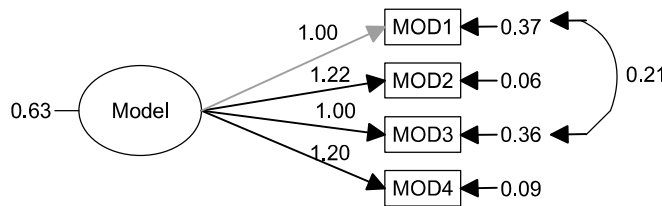
**Role model function**

The inductive part of the study suggested 4 items for the role model function. **Table 6** presents arithmetic means, standard deviations and correlations for items of this function.

Variable	AM	SD	1	2	3
1-MOD1	5.04	1.66			
2-MOD2	5.36	1.69	.77		
3-MOD3	5.41	1.69	.85	.78	
4-MOD4	5.74	1.52	.76	.93	.76

The initial model tested suggested to let correlate errors of measures between MOD1 and MOD3, which was done. Fit indices for the model indicate a  $\chi^2$  of 0.3098 for 1 degree of freedom ( $p \leq 0.5778$ ), RMSEA of 0.00, SRMR of 0.002758, and CFI of 1.000. With this modification, the model may be considered quite acceptable. Finally, let us note that Cronbach's alpha is of 0.894, which is also quite acceptable. Like in previous models, it is possible to conclude that results for these measures surpass acceptable norms and confirm construct accuracy for the role model function, regarding both its internal consistency and items that compose it.

**Figure 3. Results for the final confirmatory factorial analysis of the role model function**



Also, supposing that this model adequately measures this dimension, mentees having been paired with entrepreneur mentors should show increased results. In fact, the role model function includes the following items: 1-He is my role model, 2-He presents his successes and failures to me, 3-He is a good example of an entrepreneur, and 4-He shares his business and life experience with me. Let us note that item 3 directly concerns the mentor's career. Consequently, those having been in business should obtain a better score in their mentee's answers for this item, as opposed to those having been employed as civil servants or managers in a large enterprise. To

add validity to previous analyses, the difference between mentor function results were calculated between mentees with mentors having been in business (n=130) and those who have not (n=139). As shown below, only the role model function is significantly different for both groups of mentors (see **Table 7**). These results suggest that the role model function does indeed measure the intended dimension.

Function	Mean for “entrepreneur” mentor	Mean for “other career” mentor	Test <i>t</i> (sig. 2-tailed)
Reflector Function	5.41	5.38	0.858
Reassurance Function	5.34	5.19	0.394
Motivation Function	6.01	5.91	0.515
Confidant Function	5.13	5.05	0.677
Integration Function	4.57	4.34	0.289
Information Support Function	5.49	5.68	0.253
Confrontation Function	5.46	5.26	0.194
Guide Function	5.74	5.67	0.582
Role Model Function	<b>5.67</b>	<b>5.15</b>	<b>0.003**</b>

\*  $p \leq 0.05$  \*\*  $p \leq 0.01$  \*\*\*  $p \leq 0.001$

## DISCUSSION AND CONCLUSION

The analysis describe above has made it possible to demonstrate the soundness of the theoretical constructs proposed in the inductive part of this study, that is the fact that entrepreneur mentors exercise nine different functions. Four of these functions may be grouped together in the psychological functions category, four others compose the career-related functions category, and the last constitutes the role model function. Although it is sometimes difficult to definitely determine the validity of a new proposed tool, the results obtained lead us to believe that mentor functions possess sufficient scientific validity. Although the nature of the nine functions is based on the inductive analysis of discussion groups, the categories were inspired first by works by Kram (1985), who proposed grouping psychological functions and career-related function and his followers who empirically demonstrated that the role model function was distinct from the previous two (Pellegrini et Scandura, 2005; Scandura, 1992; Scandura et Ragins, 1993). We now know that these categories are adequate and relevant to other contexts, including that of entrepreneur mentoring.

The exploration of entrepreneur mentor functions has been conducted in the past (Waters *et al.*, 2000), but their analysis was certainly not complete. Firstly, the program studied by the above-mentioned authors resembled coaching more than mentoring and solicited specialists (the

“mentors”) who had the mandate of supervising the implementation of the novice entrepreneur’s business plan by giving advice on marketing, finance, legal, or business issues. Secondly, studies on organizational mentoring sometimes refer to three functions (for example Scandura and Williams (2001)), one of which is the role model function. Surprisingly, none of the items selected by Waters *et al.* (2000) contain this function. It is all the more surprising since even authors who recognise functions similar to Waters *et al.*, base their work on Kram (1985), who clearly describes the role model function played by mentors. This aspect is the object of a larger consensus in scientist in the field of organizational mentoring (Wanberg *et al.*, 2003). Despite the “theoretical” possibility that a mentor who is an entrepreneur acts as a role model for a young entrepreneur, the tool developed by Waters *et al.* totally ignores this important aspect of mentor functions. Results of the mentor function analysis confirm the importance of including the role model function, which in turn demonstrates the limits of the tool proposed by Waters *et al.* (2000) and the relevance of the proposed new tool. It has also been possible to show that items with the best empirical results could very well represent a discretionary model of mentor functions, which could be useful, for example, to measure the comprehensive level of the functions played by the mentor and received by the mentee. Of course, by removing many items from the initial models, each retained item is then less effective in measuring mentor functions as a whole. However, where a discretionary model would be considered useful or necessary, it can be considered as an acceptable proposal.

In regards to the possibility of generalising the tool’s use to include other mentoring programs, it is possible to believe that the proposed tool may be adapted to different contexts and not only reserved for the *Fondation de l’entrepreneurship*’s mentoring network. One must first remember that the *Fondation*’s mentoring network is decentralised in nature. Coordinators have a fair amount of freedom in choosing mentors, dyads, and so forth. If some coordinators share the *Fondation*’s belief that mentors should not give advice and not be management specialists, others pair mentees with mentors who are specialists in a management discipline where the mentee has weaknesses and wishes to improve. This decentralized structure generates wider variety in the directives given to the mentors and less restrictive practices than if all coordinators were employees of the *Fondation*. Knowing that the network represents a diversity of mentors and types of intervention, the spread and variety of mentor functions may have greater diversity. Consequently, the nature of the functions proposed is not implicitly linked to the context of the mentoring program. For example, items of the career-related function do not directly refer to a precise intervention. None of the items mention help with marketing or financial problems. It is rather presented as a guide function, which suggests new options, proposes a different point of view, gives advice concerning problems faced, and helps to clarify the problem. This function could be applied to a variety of contexts, even to managers in a large organization. It is also the case for other career-related functions, as well as psychological functions. In sum, even though the tool is based on the mentoring network of the *Fondation de l’entrepreneurship*, the



possibility of generalizing it to other existing operations remains strong, but still requires validation.

Although the analysis of the nomological network was conducted only partially, in particular by using a method similar to the test-retest method and by verifying the relationship between the integration function and the number of persons introduced to the mentee by the mentor, it is possible that the tool was influenced by other similar concepts. In fact, we noticed that the number of persons introduced also significantly correlated to other career-related functions, even though the correlation was not as strong as with the integration function. This highlights the role played by the mentor as intermediary helping the mentee's integration into the business community. This situation suggests other specific analyses to prove the nomological network of proposed concepts, which in turn open the door to future research. However, it is important to note that the concept of mentor functions has attracted much attention from scientists in the context of mentoring in large organizations and has consequently reinforced the possibility that these constructs correspond to a certain reality observed in entrepreneur mentoring. Also, one may note that the role model function is significantly different when the mentor is an entrepreneur from when he is not. These results give credit to the nomological network, although only partially, and lead us to believe that the mentor functions are quite valid. It is also important to note that even though most construct coefficients of error are not significant, some are and indicate certain weaknesses in item formulation, for example, imprecision regarding the measured concepts. Of course, these weaknesses remain minor since results for fit indices demonstrate the quality of the constructs as a whole. However, for future research, these avenues for tool adjustments may be considered and lead to the refinement of mentor function measures. In particular, new items could be proposed for a discretionary model of mentor functions. In fact, those used for the analysis were developed in a "multi-item" perspective and their formulation could certainly be improved. In spite of these limits, the analyses have furthered knowledge in this field of study. For example, the tool developed may be used to consider the role of certain mentee psychological variables in response to mentor functions, as can the impact of mentor functions on the development of certain mentee outcomes. These analyses constitute avenues for future research.

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## ENDNOTES

- <sup>1</sup> Acronym for Service Corps of Retired Executives. Information at [www.score.org](http://www.score.org).
- <sup>2</sup> The term “protégé” appears in literature pertaining to mentoring in large organizations and refers to sponsorship mentoring. Concerning entrepreneur mentoring, the term “mentee” is most commonly used. This term is preferred by entrepreneurs as it does not evoke the need for protection implied by the term “protégé”. Therefore, “mentee” will be used when referring to entrepreneur mentoring.
- <sup>3</sup> The [www.surveymonkey.com](http://www.surveymonkey.com) software does not permit links between the same respondent having been solicited for two different questionnaires. Answers were linked manually, unfortunately it was not possible to calculate dates of completion.

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