

Mobilizing Volitional Capacities to Enhance Entrepreneurial Process

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Abstract

Volition is a psychological disposition required in the process of transforming entrepreneurial intentions into actions (Hikkerova et al., 2016). To contribute to the understanding of the role volition plays in this process, the present study tests a hypothesis currently prevailing in the literature, and which stipulates that the order of mobilization of volitional capacities is determined by the stage individuals have reached in the process of business creation and innovation. The causal track modeling (Noel, 2015) carried out in an entropic context with data collected from 103 students, 319 potential entrepreneurs and 467 active entrepreneurs eliminated the methodological constraints of a longitudinal study which is necessary in such circumstances. Our results fully support the initial hypothesis and confirm the hierarchical organization of volitional capacities throughout the entrepreneurial process; starting with self-determination, self-motivation and resistance to uncertainty at the entrepreneurial-intent initiation stage, paving the way to concentration, direction and control of action at the beginning of the implementation of the project. These factors are then relayed by personal initiative and proactivity at the time when the project is being piloted and realized.

Keywords: volition, intention, action, entrepreneurs, entrepreneurship, students

1. Introduction

Although they are intended primarily for predefined targets, entrepreneurial and innovative strategies are observed and analyzed by actors who, *at first glance*, are not directly concerned: competitors, public authorities, financial analysts, etc. Indeed, the transformation of an idea into a productive entity contributes to the economic growth and helps in the fight against unemployment. Nyock Ilouga et al. (2014) have revealed that entrepreneurship is an alternative to counteract youth unemployment, particularly in entropic contexts where opportunities for wage employment are becoming increasingly scarce. However, the mobilization of the psychic energy that structures the choices then gives rise to achievements that transform an individual and its environment reveals an overlap between the use of volitional capacities and the implementation of phases of the Gollwitzer (1996) action model. Consequently, Hikkerova et al. (2016) affirm, a hierarchical conception of the stages of the entrepreneurial process (formulation of the intention, action planning and project implementation). Volitional capacities also provide an account of the intrinsic differences found in people at different stages of this process. It appears that the rooting in primitive frustration which results from the limiting deficiencies of the environment and is part of the symbolic universe (Jameson, 1977) of the volitional capacities responsible for the genesis of entrepreneurial intention reflects the dynamics of the compulsive creator that resists uncertainty, multiplies actions, accumulates failures and finally achieves the expected success. On the other hand, instrumental frustrations, which aimed at exploiting opportunities and personal enrichment, do not provide the necessary sense of freedom to face with conviction the obstacles that guarded resistance to the achieving of the entrepreneurial project. They often lead to renunciation as soon as the first failure occurs (Hikkerova, Nyock Ilouga, & Sahut, 2016). The Cameroonian social context is reputed to be entropic because it flourishes the informal economy as well as the traffic of goods, services and principles and offers a perfect illustration of the entrepreneurial process, with the staging of the differentiated dynamics relative to environment and work (Nyock Ilouga et al., 2014).

Over the past ten years, a number of entrepreneurial projects, followed and financed by the specialized structures in Cameroon, have not been transformed into businesses. According to the apparatus for generating current statistics on employment (DPSCE, 2012), procrastination occurs particularly at the second stage, that of action planning and concerns projects funded by the integrated support project for participants in the informal sector (PIASSI), the Rural Development Support Programme (PADER), the rural and urban youth support program (PAJER-U). For example, in 2003, 1450 Small Business development projects were funded and followed up by the

integrated support project for participants in the informal sector (PIASSI). At the end of the third month after the financing, 1182 projects matured, and were actually transformed into businesses, while 268 did not succeed. The Director of PIAASI ordered an investigation to determine the causes of this entrepreneurial procrastination. The results revealed that the project leaders travelled to an unknown destination. Between 2005 and 2011, 9911 projects were financed by the programme and after evaluation, 1479 projects could not be turned into real businesses. In 2008, 27624 projects for the creation of very small businesses were funded and followed up by the Rural Development Support Programme (PADER) and there were just over 18% of entrepreneurial procrastination cases. In 2011, the support program for rural and urban youth (PAJER-U) funded and followed up a total of 12750 projects for the creation of very small enterprises (VSEs) with a drop-out rate of 31.10% (DPSCE, 2014). In 2016, the Centre for analysis and research on Cameroon's social policy (CamerCap) pointed out that 72.24% of the businesses created since 2010 are non-existent. In the same vein, 72 small and medium-sized enterprises withdrew their membership from the Cameroon Employers' Organization (GICAM) between 2014 and 2016. The results from the investigations revealed that these businesses stopped operating (GICAM's report, June 2017).

Examples of withdrawal of memberships or failures in the implementation of the entrepreneurial professional project, such as those just mentioned, are numerous in Cameroon. After the financing, some project carriers succeed in transforming their projects into companies whose products or services occupy a share of the Cameroonian economic market, while others fail and give up. To reduce these failures, the Government of Cameroon has taken a number of measures, which revolve around the professional project, the economic context and business opportunities. With regard to the project, incubation centers have been set up in the regional headquarters, as well as structures specialized in supporting, monitoring and evaluating projects (PIASSI, PAJER-U, PADER, and PIFMAS). With regard to market demand the State has assigned experts in business plan development to these structures. In addition, the technological evolution offers the possibility to connect to specialized sites dedicated to the market investigation. To improve the economic context, the State has created a bank mandate. Placed under the authority of the small- and medium-sized enterprises (SME) regulatory institution, its mission is to fund business creation projects.

The aforementioned indicates that the measures and actions developed to stimulate and support entrepreneurship are too often oriented towards the economic context, market opportunities and the project. These actions are only very incidentally concerned with project developers themselves, their ambitions, motivations, perceptions and real aptitudes. That is certainly why justifies the fact that the multiplication and reinforcement of actions in favor of entrepreneurship is paradoxically accompanied by an increase in the failure rate in the implementation of certain professional integration projects. Actions that focus mainly on the economic context, market opportunities and the project are too often thwarted by the uncertainty, difficulties and risks associated with the choice of entrepreneurship as a solution for professional integration (Gelderden van, Kautonen, & Fink, 2015). Uncertainty at first because the destructuring of the economic environment does not provide the reading clues likely to offer visibility in the short, medium or long term (Mueller, Melwani, & Goncalo, 2012). Secondly, the difficulties in obtaining financing are insurmountable for the vast majority of project developers who cannot produce any guarantee of reimbursement and who often present themselves as free and elusive electrons in a chaotic environment (Battistelli & Nyock Ilouga, 2008; Nyock Ilouga, Moussa Mouloungui & Sahut, 2014). Finally, risks arise because the activity does not benefit from any protection and the competition does not undergo any regulation mechanism. (Lerch, Thi Thanh Thai, Puhakka, and Burger-Helmchen, 2015).

2. Theoretical Framework

The definition of business creation rules, their understanding, their perception and their respect depend on their interpretations, which are shaped by the beliefs and motivations of the entrepreneurial project carrier. It means, for example, that the granting of the business start-up license seventy-two hours after applying, as is currently the case in the various CFCEs, attests that at the administrative level the company is created but this does not presume the actual implementation of the project carried by the holder of this license. The difficulties inherent in the project implementation depend neither on the structure in charge of granting the license, nor on the business climate, but on the project carrier who, depending on whether s/he is action-oriented or oriented state, develops strategies to reduce or even eliminate these difficulties, in order to implement its entrepreneurial project. In sum, the actions to promote entrepreneurship implemented by the Cameroonian government are drowning in social entropy and reaching their goals only at random. In such a context, only the intrinsic abilities of the entrepreneur can guarantee the possibility of success (the transformation of a "virtual").

Existing literature offers some evidence to understand the various reactions of candidates for business creation towards the obstacles that stand in their way. Very recently, theorists of the hierarchical model of volition have mentioned that very often, some project carriers, although motivated, remain unable to identify and carry out

actions related to their entrepreneurial project (Hikkerova, Nyock Ilouga & Sahut, 2016). However, the approach based on the analysis of volitional capacities brings a significant added value for the understanding of the cognitive process of transformation of action intentions. Research shows that the introduction of this volition results in successive phases including the phases of action and the stages related to the entrepreneurial process (Gollwitzer, 1996):

The pre-decision phase: In the process of choosing a type of action, deciding to perform a behavior is a momentary "mental action" that resolves itself in the formation of an intention to perform that behavior according to the importance of its desirability and feasibility (Mele, 2000), and then transforms it into an objective-purpose. The intention-goal brings the individual to engage in the implementation of specific actions to achieve the goal pursued: it is the pre-action phase. This phase shows three types of so-called self-regulation volitional capacities (self-determination, self-motivation and resistance to the uncertainty of the future). These skills refer to the psychological functions that the individual uses to maintain the intention-goal at a higher level in the hierarchy of objectives to be achieved (Forstmeier & Rüdell, 2008). The pre-emptive phase has the specificity of activating the volitional control processes, which are decisive for the execution of the goal. These processes aim at protecting the intention-goal of the "distractors" through self-defensive mechanisms and activate the cognitive means to undertake. The volitional capacities responsible for the initiation of actions are the following: orientation, concentration and control of the action.

The third phase is the so-called action-oriented phase, in which the person achieves his objective in a concrete and conscious way. Action development skills (personal initiative and proactivity) are involved in this phase. Finally, there is the post-action phase, which consists in assessing the degree of achievement and the need to pursue the objective. In that case, two possibilities may arise: make adjustments or abandon the objective.

A consensus seems to be emerging on the importance of volitional capacities. It appears that the difficulty in achieving the objective despite an acceptable level of motivation and favorable environmental conditions implies deficiencies in the project developer's volitional skills (Gollwitzer & Heckhausen, 1987; Hikkerova et al., 2016; Oettingen, Hönig, & Gollwitzer, 2000).

Hypothesis

The authors of the volition hierarchy model have set two conditions to validate the hypothesis of the successive mobilization of volitional capacities:

- 1- In accordance with the hypothesis of the hierarchical mobilization of volitional capacities, when a volitional capacity is retained at any stage of the entrepreneurial process, the evaluation done at this stage is better than the evaluations recorded on this same capacity with other stages. In this perspective, we postulate that: (a) the scores recorded by students in self-motivation, self-determination and resistance to uncertainty assessment are higher than those recorded on these same volitional capacities by potential entrepreneurs and active entrepreneurs (H1); (b) the scores recorded by potential entrepreneurs on the orientation, concentration and control of the action are higher than those obtained by students and active entrepreneurs on these same capacities (H2); (c) the scores obtained by active entrepreneurs on personal initiative and proactivity are higher than those obtained on these same capacities by students and potential entrepreneurs (H3).
- 2- To be selected as a characteristic of one of the three stages of the entrepreneurial process, a volitional capacity must score better at this stage than all other volitional capacities. Thus, we postulate that: (a) the scores recorded by students in self-motivation, self-determination, and resistance to uncertainty assessment are equivalent and superior to those recorded by the same students in all other volitional capacities (orientation, concentration and control of action, personal initiative and proactivity) (H4); (b) the scores recorded by potential entrepreneurs on the orientation, concentration and control of the action are equivalent to and superior to those obtained by them on all other volitional capacities (self-motivation, self-determination, resistance to uncertainty, personal initiative and proactivity) (H5); (c) the scores obtained by active entrepreneurs on personal initiative and proactivity are equivalent to and superior to those obtained by them on all other capacities of volition (self-motivation, self-determination, resistance to uncertainty, orientation, concentration and control of action) (H6).

It should be admitted that scientific literature is not particularly abundant on this issue of successive mobilization of volitional capacities throughout the entrepreneurial process. Pending a consensus emerges on this issue, some works provide partial support for the initial hypothesis. In the field of career guidance, DeQuijano (1997) and Boutinet (1999) concluded that self-determination helps the individual to build a career goal taking into account the level of difficulty of the latter. Some important studies have highlighted the mediating effect of action

orientation in the relationship between job characteristics and personal initiative (Frese, Garst, & Fay, 2007). Others have shown that personal initiative is essential to the entrepreneur because it involves the use of cognitive strategies to overcome the obstacles and barriers that may hinder the continuation of the actions initiated as well as the development of new activities within the business; an existing organization (Frese, Kring, Soose, & Zempel, 1996, Kuhl & Fuhrmann, 1998).

3. Methodology

Measurement of Variables

This study is conducted using questionnaires composed of items adapted from *the vocational component questionnaire* (VCQ-3) and evaluated using 4-point Likert scales. The scale of volition used here is an adaptation of the instrument developed by Kuhl and Fuhrmann (1998), revised in 2004 by the same authors and recently used in the European context by Hikkerova, Nyock Ilouga & Sahut (2016). In this study, VCQ-3 was translated into French by an expert (scientific translator). Then, this French version was presented to a second expert who did not know the original version, for an inverse translation (Vellerand & Hess, 2000, Courtois et al., 2015). Once this translation was done, a scientific committee composed of entrepreneurship experts and researchers in entrepreneurial psychology judged the clarity and applicability of the scale thus translated. Eventually, our questionnaire has four sections. The first section deals with the volitional capacities of the formulation of entrepreneurial intentions. It measures self-motivation with the help of 03 items (i.e. *I know how to motivate myself when my enthusiasm decreases*), self-determination using 02 items (i.e. *I always achieve the goals I prescribed myself*), resistance to uncertainty through 03 items (i.e. *I know exactly how to reduce my anxiety*). The second section deals with the volitional capacities of the initiation of actions. It evaluates action control, which refers to the individual's ability to control his thoughts with discipline and rigor, in order to protect the elaborate intention of external distractors (i.e. *before starting an activity, I am first of all thinking of the details*); the concentration on the action that relates to the individual's ability to ignore disruptive thoughts, negative emotions and impulses in order to focus on the objective (i.e. *when I start an activity, I finish it before moving on to something else*); action orientation, which refers to the ability of an individual to achieve without hesitation and energetically his goals or ambitions (i.e. *I have already established an action plan for the realization of my entrepreneurial project*). The third section focuses on the volitional capacities in identifying and carrying out entrepreneurial actions. It evaluates personal initiative. That is, the propensity to act or the ability to showcase autonomy and persistence in the face of adversity (i.e. *I exploit all opportunities to achieve my career goals*) and proactivity refers to the propensity to act without hesitation (i.e. *I usually do more than what is required*). The fourth section has to do with personal information (age, sex, level of education, number of dependent children, family status, parents' profession, etc.).

The questionnaire was administered to a sample of future entrepreneurs, active entrepreneurs and students. The data collection lasted three months (February to April 2018) and we were assisted by data collectors who were trained for 20 hours on questionnaire survey techniques. These data collectors were Master's students in Psychology. Synthesis meetings were organized every evening over the duration of the survey to share experiences and difficulties encountered on the field. Interviews were done individually and the questionnaire was anonymous. After obtaining the informed consent of the participant, the data collector invited him / her to answer the questionnaire in about 8 minutes.

Sample

The study was conducted among a heterogeneous population of 889 participants: 103 students, 319 potential entrepreneurs and 467 active entrepreneurs. To participate in the survey, students were asked to rank two business line selection proposals using the codes developed for the purposes of the survey (1 = this proposal is very close to my current wish and 2 = this proposal is very far from my current wish). The selected proposals were inspired by the literature on career guidance and related to the attraction for entrepreneurship (I want to become an entrepreneur) (Banks et al, 1992, Lemoine, 1997, Moussa Mouloungui, 2012). The age of students ranged from 17 to 32 years with an average of 24.23 years and a standard deviation of 5.46 years. The group of students are composed of 56.92% boys and 44.07% girls. With respect to cultural traditions, 36.84% were Bantu Grassfields; 18.09% Sudano-Sahelians; 24.01% Bantu from the coastal plain and 21.05% Bantu from the forest. 26.05% stated intentions to undertake in the engineering sector, 31.23% in the commercial sector, 31.43% in the digital economy and 11.29% in the agriculture sector. In terms of training, we had 24% of engineering students, 55% enrolled in classical courses (humanities, arts, life sciences) and 21% in management.

Sex	Men	Women
	56.72%	44.07%
Mean age (standard deviation)		24.23 (5.46)
Ethnic Groups		Percentage (%)
Bantus Grassfields		36.84
Sudano-Sahelian		18.09
Bantus of the plain		24.01
Bantus of the forest		21.05
Field of activity		
agricultural		11.29
Digital Economy		31.43
Commerce		31.23
Engineering		26.05
Schooling		
Engineering students		24
classical courses (Human sciences, arts, life sciences)		55
Business School		21

The 319 future entrepreneurs were selected for convenience in the business start-up incubation centers: Technipôle (39.68%), Learning to Undertake Center (22.01%), the Incubation Center in the Littoral Region (31.52%) and in the West Region of Cameroon (6.9%). The age of potential entrepreneurs ranged from 22 to 65 years with an average of 43.65 years and standard deviation of 9.89 years. This group consisted of 76.56% boys and 33.43% girls. With respect to cultural traditions, 42.25% were Bantu Grassfields; 21.65% Sudano-Sahelians; 19.33% Bantu from the coastal plain and 16.77% Bantu from the forest. They plan the creation of their businesses in the agricultural (39.25%), digital economy (24.65%), commerce (21.33%) and engineering (14.77%) sectors. Concerning the level of study, 22.56% of them were BEPC / CAP holder, 35.64% had the Baccalaur éat level, 26.36% had the Bachelor's Degree level and 15.44% Master Degree.

Sex	Men	Women
	76.56%	33.43%
Mean age (standard deviation)		43.65 (9.89)
Ethnic Groups		Percentage (%)
Bantus Grassfields		42.25
Sudano-Sahelian		21.65
Bantus of the plain		19.33
Bantus of the forest		16.77
Field of activity		
agricultural		39.25
Digital Economy		24.65
Trading		21.23
Engineering		14.77
Schooling		
BEPC/CAP		22.56
Baccalaureate		35.64
Bachelor's Degree		26.36
Master's degree		15.44

The 467 active entrepreneurs were people who have created a business, with or without employees and whose products or services are part of the Cameroonian economic market. They were all registered on the business registers. They all paid taxes and did not take up wage employment. They were contacted either by direct contact during the International Fair of Crafts and Culture, or by telephone or e-mail from the entrepreneurs' database which is available at the Cameroon Employers' Organization (Gicam-Douala). This group included 80.78% men and 19.23% women. Their ages varied between 20 to 67 years with an average of 42.41 years and a standard deviation of 8.05 years. With respect to cultural origin, 44.5% are Bantu Grassfields; 24.95% Sudano-Sahelians; 14.73% Bantu from the coastal plain and 15.82% Bantu from the forest. Seniority in the entrepreneurial profession varied between 3 years and 7 years respectively (28% and 13%). They created in various domains such as: agriculture (41.05%), digital economy (27.85%), trade (22.31%) and engineering (08.79%). The majority of them, that is 33.64%, had a Baccalaur éat level; 28.36% had a Bachelor's degree, 20.56% a BEPC / CAP, and 17.01% were simply CEPE holders.

Sex	Men	Women
	80,78%	19,23%
Mean age (standard deviation)		42.41 (8.05)
Ethnic Groups		Percentage (%)
Bantus Grassfields		44.5
Sudano-Sahelian		24.95
Bantus of the plain		14.73
Bantus of the forest		15.82
Field of activity		
agricultural		41.05
Digital Economy		27.85
Trading		22.31
Engineering		08.79
Schooling		
CEPE (equivalent to First School leaving Certificate)		17.01
BEPC/CAP		20.56
Baccalaureate		33.64
Bachelor's degree		28.36

Data Analysis Strategy

The statistical treatment consisted in comparing the scores obtained in the evaluation of the volitional capacities between our three groups of subjects (students, potential entrepreneurs and active entrepreneurs). For this purpose, modeling on the causal path favored the analysis of variances-covariance. Planned comparisons were made whenever the overall effect of group membership was identified. For this purpose, the Tuckey test was favored.

4. Results

Stage 1 of the Entrepreneurial Process: Project Formulation

Our analytic strategy holds three volitional capacities at the intention formulation stage (self-determination, self-motivation, and resistance to uncertainty). Let's look at the results of the assessments made on these three dimensions for the three groups of individuals that make up our sample.

Self-determination

We hypothesized that self-determination is more prevalent among students than it is among project developers and active entrepreneurs. According to this hypothesis, the average scores recorded on self-determination among students should be higher than those obtained on this same capacity by potential entrepreneurs and active entrepreneurs. After analysis, the results of the graph in Figure 1 show that the average score of self-determination among students (Avg \cong 3.01) largely exceeds those obtained by potential entrepreneurs (Avg \approx 2.79) and active entrepreneurs (Avg \approx 2.82) with whom they are comparable. This gap seems statistically significant (F (2, 886) = 7.758, p. = .00046).

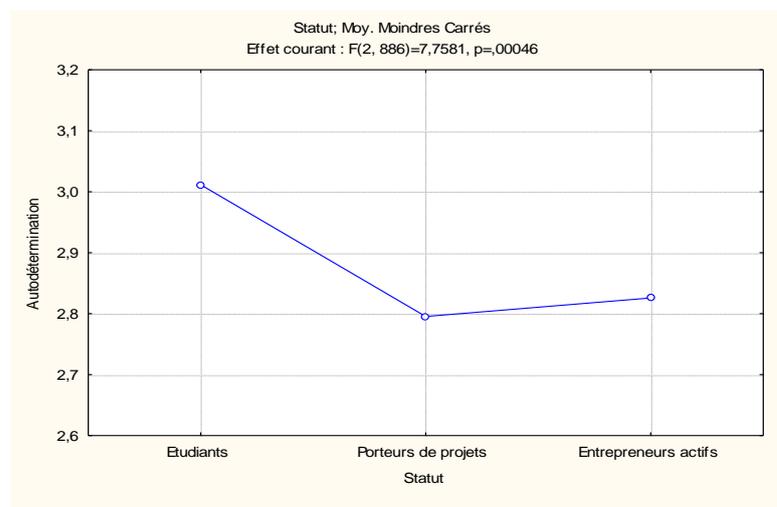


Figure 1. Variability of self-determination by status

The differences highlighted here are also observed when pairwise comparisons are made. Differences of

self-determination appear between the students, on the one hand, and the project developers ($Z = 2.348, p = .019$) and active entrepreneurs ($Z = 3.915, p = .000$) on the other hand. All this information is in line with our hypothesis and is part of the idea that self-determination is better for students than for project carriers and active entrepreneurs.

Self-motivation

We hypothesized that self-determination is more prevalent among students than project carriers and active entrepreneurs. This claim was also verified. The results of the graph in Figure 1 show that the average score of self-determination among students ($Avg \approx 3,00$) largely dominates that obtained by potential entrepreneurs ($Avg \approx 2,68$) which in turn remains slightly lower than that recorded by active entrepreneurs ($Avg \approx 2,80$). The superiority of the students' score seems statistically significant compared to both the score of potential and active entrepreneurs ($F_{(2, 886)} = 23,263, p = 0000$).

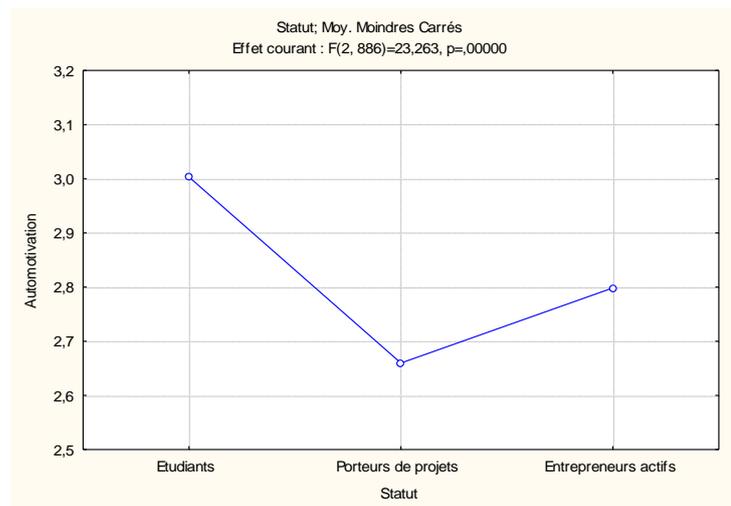


Figure 2. Variability of self-determination by status

These self-motivation differences are also observed when making pairwise comparisons. Indeed, with a $Z = 5.422, p = .0000$, the Turkey test reveals significant differences in self-motivation between project carriers and students, on the one hand, and between students and active entrepreneurs, on the other hand ($Z = 6.310, p = .0000$). These results support the idea that students know more about finding motivational resources to implement an entrepreneurial project. This ability, once prevalent among project carriers and active entrepreneurs, seems to have lost its mobilizing force in favor of other capacities, more appropriate to the specific problems encountered at these stages.

Resistance to the uncertainty of the future

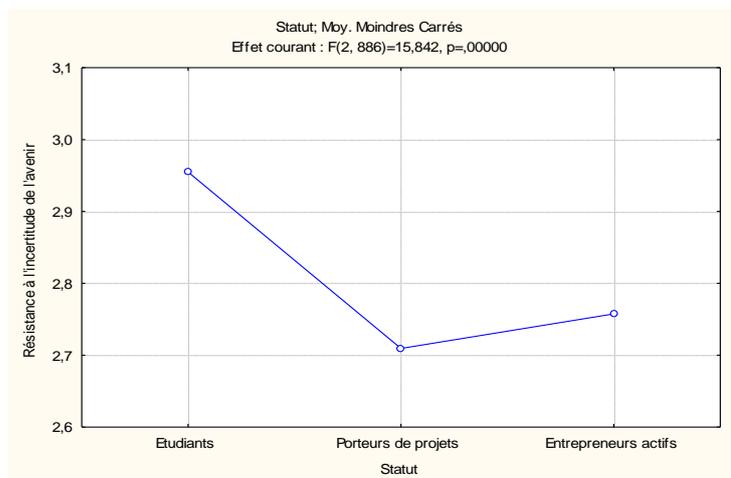


Figure 3. Variability of Resistance to future uncertainty by Status

Figure 3 shows the distribution of resistance scores to the uncertainty of the future according to the status of the participants. The results show that the average score of resistance to uncertainty among students (Avg $\cong 3,00$) largely dominates that obtained by potential entrepreneurs (Avg $\approx 2,71$) which remains roughly equal to that recorded by active entrepreneurs (Avg ≈ 2.76). The superiority of the students' score seems statistically significant compared to both potential and active entrepreneurs ($F_{(2, 886)} = 23,263$, $p = 0000$). When pairwise comparisons were made, differences in resistance to uncertainty of the future were observed only between students and potential entrepreneurs ($Z = 3.598$, $p = .000$). These results prove that students who are attracted to entrepreneurship must show a great ability to withstand future uncertainty in order to preserve their creative project and keep it at a high level of desirability despite obstacles.

Overall, it can be noted that the volitional capacities of intention formulation (self-determination, self-motivation and resistance to uncertainty) are more present among students than potential entrepreneurs and active entrepreneurs. These capacities seem to have a decisive role when making the decision to embark on an entrepreneurial adventure. According to the initial hypothesis formulated by Moussa Mouloungui (2012), these results confirm the first principle of the model of the hierarchical mobilization of volitional capacities and validate the hypothesis (H1). Indeed, the average scores of volitional capacities related to the birth of intentions obtained by the students (Avg $\cong 3$) are not only higher than those they recorded on volitional capacities concerned with action preparation (Avg ≈ 2.82 for control of the action, 2.80 for concentration on the action and 2.59 for orientation towards the action), but also to those always recorded on volitional capacities that deal with identification and achievement of actions (Avg ≈ 2.57 for personal initiative and 2.85 for proactivity). These results confirm the second principle of the hierarchical model of volition and validate hypothesis H4

Stage 2 of the entrepreneurial process: Formulation of objectives and action planning

At this point, three volitional capacities, all action-oriented, have been retained to support the first steps of the potential entrepreneur (control, focus and action orientation). In the initial model (Moussa Mouloungui, 2012), these three dimensions were dispersed between the stages of the action planning and that of the identification and execution of the action. Let's examine the scores obtained on these dimensions by the three groups of subjects that made up our sample.

Control of the Action

In accordance with the first principle of the hierarchical mobilization of volitional capacities model, we have made the hypothesis that potential entrepreneurs have a higher level of control than both students and active entrepreneurs. The results of the graph in Figure 4 show that the average score with regard to the control of action among potential entrepreneurs (Avg $\cong 3.01$) largely dominates those obtained by potential entrepreneurs (Avg ≈ 2.79) and active entrepreneurs (Avg ≈ 2.82) to which they are comparable. This dominance seems statistically significant ($F_{(2, 886)} = 14.157$, $p = 0000$).

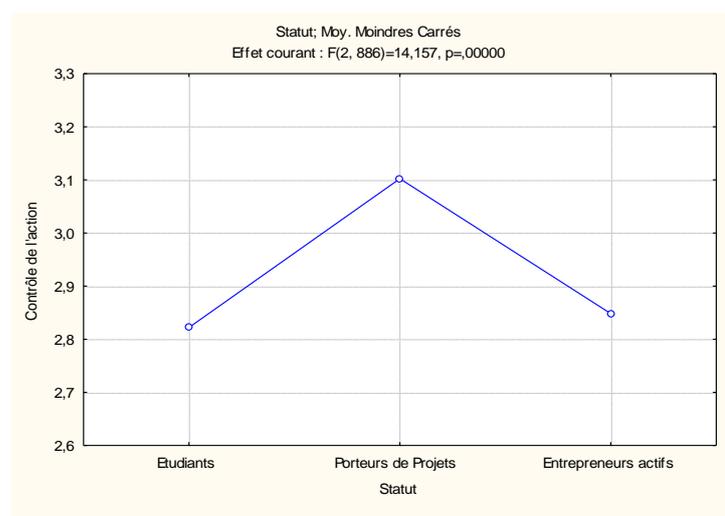


Figure 4. Variability of action control level by status

These differences are also observed when performing refined and planned analyzes from post hoc tests. Thus, with a $Z = 2.977$, $p = .0029$, we observe that the level of volitional control differs significantly between the entrepreneurs currently undergoing training and the students. In addition, with a $Z = 5.310$, $p = .0000$, the

volitional control level of potential entrepreneurs is higher than that of active entrepreneurs. These results provide evidence that entrepreneurs currently undergoing training are more active in controlling the action than others (students and entrepreneurs in activities).

Concentration on the Action

We hypothesized that the level of concentration on the action of potential entrepreneurs is higher than that of active entrepreneurs as well as that of students. The main results relating to the distribution of the concentration level on the action are shown in the graph represented below.

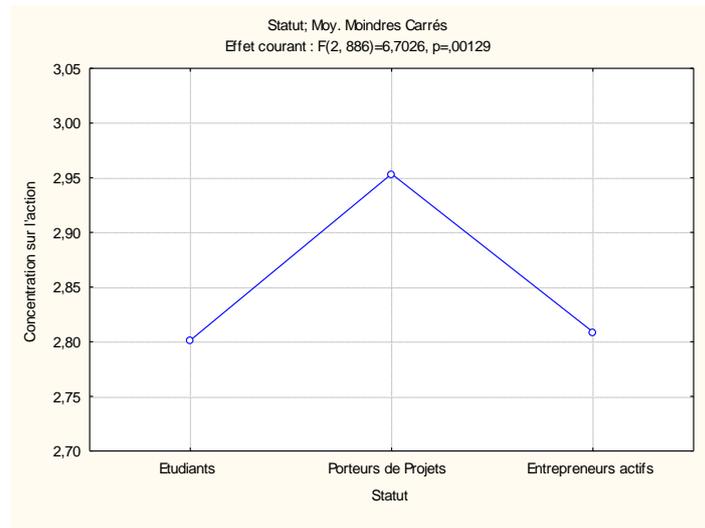


Figure 5. Variability of the concentration level on action according to the status

It appears that the average score of the concentration on action among potential entrepreneurs ($Avg \approx 2.95$) largely dominates those obtained by students ($Avg \approx 2.80$) and active entrepreneurs ($Avg \approx 2.81$) to whom they are comparable. This dominance seems statistically significant ($F_{(2, 886)} = 6.702, p = .0012$). Post hoc tests confirm significant differences in focus when comparing potential entrepreneurs to students and active entrepreneurs ($Z = 2.977, p = .0029$). These results support the idea that potential entrepreneurs have a greater propensity to focus on action than others (students and entrepreneurs in activities).

Action orientation

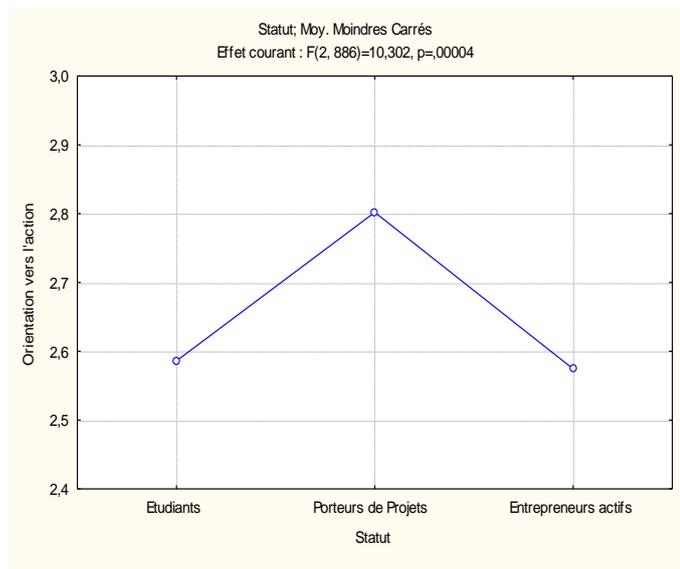


Figure 6. Variability of the level of action orientation by status

Figure 6 shows, with a value of $F_{(2, 886)} = 10.302, p = .0000$, that potential entrepreneurs ($Avg \approx 2.80$) are different from students ($Avg \approx 2.59$) and active entrepreneurs ($Avg \approx 2.58$) with regard to the ability to project themselves onto the action. This distinction is confirmed when comparisons are made in pairs. With a $Z = 2.040$,

$p = .0416$, the post hoc test shows a gap between project developers and students concerning the ability to focus on action. This gap is also observed between entrepreneurs in the process of being created and active entrepreneurs ($Z = 4.530$, $p = .0000$).

In view of the above, it can be noted that the volitional capacities for implementing entrepreneurial actions are more present among potential entrepreneurs than among active entrepreneurs and students.

These abilities seem to have a decisive role at the moment when the action is being initiated. In doing so, they combine with the volitional capacities of the previous stage. However, their mobilizing capacity is stronger at this stage than at the previous one. In accordance with the hypothesis of the initial model, these results confirm the first principle forward by the model of the hierarchical mobilization of volitional capacities and validate the hypothesis (H1). Indeed, the average scores of the volitional capacities regarding the initiation of action obtained by the potential entrepreneurs ($\text{Avg} \cong 2.95$) are not only superior to those they recorded on volitional capacities of the birth of the intention ($\text{Avg} \approx 2.8$ for self-determination, 2.66 for self-motivation and, 2.71 for resistance to uncertainty), but also to those they always had with volitional capacities about identification and execution of actions ($\text{Avg} \approx 2.63$ for personal initiative and 2.84 for the proactivity). These results confirm the second principle of the hierarchical model of volition and validate hypothesis H5

Stage 3 of the entrepreneurial process: Identification and execution of entrepreneurial actions

Two volitional capacities, both entrepreneur-centered, have been retained at this stage. It's about personal initiative and proactivity. In the initial model (Moussa Mouloungui, 2012), these two dimensions proved to be powerful predictors of the identification and execution of actions. Let's examine the results obtained on these volitional capacities by the three groups of subjects composing our sample.

Personal Initiative

In this section, we test the hypothesis that personal initiative is more present among active entrepreneurs than among students and potential entrepreneurs (H3). The graph in Figure 7 summarizes the average scores obtained by these three categories of subjects.

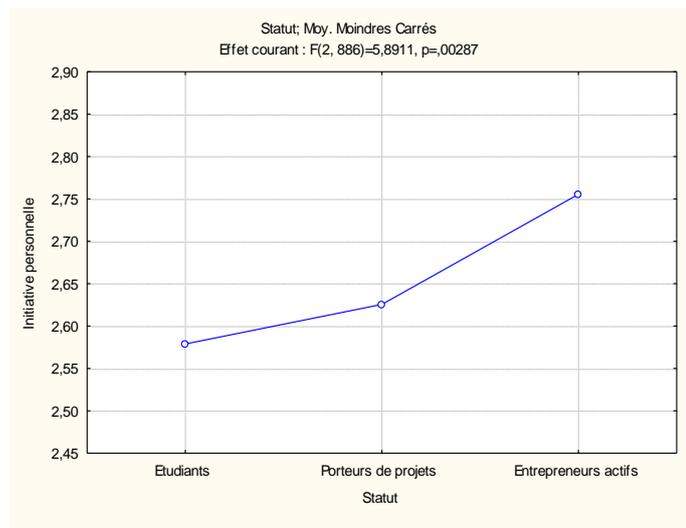


Figure 7. Variability of personal initiative level by status

It appears that the average score of personal initiative recorded among active entrepreneurs ($\text{Avg} \cong 2.75$) is significantly above those obtained by students ($\text{Avg} \approx 2.57$) and potential entrepreneurs ($\text{Avg} \approx 2.65$) who are comparable. This dominance seems statistically significant ($F_{(2, 886)} = 5.89$, $p = .0028$). These differences are also observed when conducting post hoc testing. In fact, pairwise comparisons show significant differences at the level of personal initiative, not only between potential entrepreneurs and active entrepreneurs ($Z = 2.37$, $p = 0.01$), but also between active entrepreneurs and students ($Z = 3.33$, $p = .0008$).

Proactivity

The hypothesis that is tested here, postulates that proactivity is more present in active entrepreneurs than in entrepreneurs currently creating and students. The main results obtained by the three categories of subjects are contained in the graph in Figure 8. We note that the average score of proactivity recorded among active entrepreneurs ($\text{Avg} \cong 3.15$) largely dominates those obtained on this same dimension by students ($\text{Avg} \approx 2.82$)

and potential entrepreneurs (Avg ≈ 2.85) who are comparable. This dominance seems statistically significant ($F_{(2, 886)} = 18.229$, $p = .0000$). Pairwise comparisons indicate significant differences in the level of proactivity only when comparing potential entrepreneurs with active entrepreneurs ($Z = 3.24$, $p = .0012$).

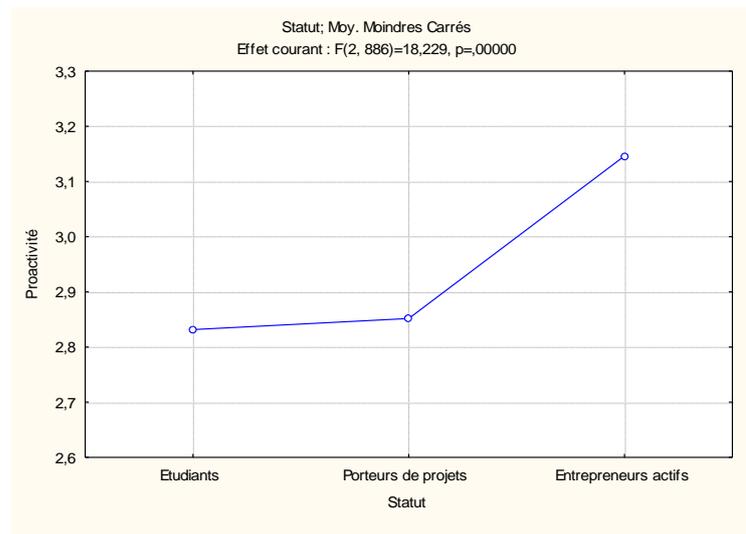


Figure 8. Variability of Proactivity Level by Status

Our results reveal that volitional capacities concerning the identification and execution of entrepreneurial actions are more present in active entrepreneurs than in potential entrepreneurs and students.

These abilities appear to play an important role in making the action lasting. In doing so, they combine with the volitional capacities of the previous stages. However, their mobilizing capacity is stronger at this stage than at the previous one. In accordance with the hypothesis of the initial model, these results confirm the first principle of the model of the hierarchical mobilization of volitional capacities and validate the hypothesis (H3). Indeed, the average scores for the volitional capacities about the identification and execution of the action obtained by active entrepreneurs (Avg ≈ 2.95) are not only superior to those they recorded on volitional capacities at the start of the intention (Avg ≈ 2.82 for self-determination, 2.80 for self-motivation and 2.76 for resistance to uncertainty), but also and especially to those they always recorded on volitional capacities concerned with actions planning (Avg $\approx 2,85$ for control of the action, 2.81 for concentration on the action and 2,58 for orientation towards the action). These results support the second principle of the hierarchical model of volition and validate hypothesis H6.

5. Discussion

The purpose of this paper was to test the hypothesis of mobilization following a hierarchical order of volitional capacities during the process of transforming entrepreneurial intentions into actions. The authors of this model (Moussa Mouloungui 2012, Hikkerova, Nyock Ilouga & Sahut, 2016) had stated two postulates in support of this model. Due to the mixed results of the first works that could validate only one of the two axioms of the model, we wanted to contribute to the internal validation of the model in an entropic context, marked by the informal activity. Our results provide full support for the initial model. The findings reveal that more than potential and active entrepreneurs, students mobilize self-determination, self-motivation and resistance to the uncertainty of the future. Potential entrepreneurs mobilize better than active students and entrepreneurs regarding the control, focus on action and action orientation. Active entrepreneurs develop personal initiative and proactivity more than others. These results support the idea that some of the volitional skills that are present in everyone, at a given moment, become more vigorous in some people and help them to take a step in the entrepreneurial process to progress on the path of creation to the higher stage. They then lose their exclusive power of mobilization by combining with the dominant capacities of the previous stage and new ones which, at this stage, take over to help the individual cope with the difficulties of the moment (Moussa Mouloungui, 2012).

Previous research has shown that self-determination, self-motivation and resistance to the uncertainty of the future are essential to the construction of the entrepreneurial project (Moussa Mouloungui, 2012, Nyock Ilouga, Moussa Mouloungui & Sahut, 2014). To engage in the entrepreneurial career, the individual must first assess his ability to persevere and remobilize until the completion of his project. Since entrepreneurship is generally considered to be an activity whose outcome is uncertain (Mueller, Melwani, & Goncalo, 2012), the student who

commits to it must also demonstrate the ability to regulate the effects of conflicting demands. In the light of Gollwitzer's theory of the phases of action (1996), students can be placed in the deliberation phase, during which the individual chooses one of several options and decides to pursue a difficult and uncertain goal taking into account obstacles.

When intention comes to maturity, action control, focus on action and action orientation take over and allow the project developer to identify and carry out activities related to the entrepreneurial project. These activities include writing the business plan, developing investor relations, identifying the site where the project is to be implemented, etc. In other words, concentration on action, control of action and orientation to action allow the project carrier to gather information about his project and to make inferences about possible results. Once action is initiated, personal initiative and proactivity also take over and allow the active entrepreneur to develop activities to ensure the sustainability of the movement initiated.

The volitional capacity structure developed in this study has some slight differences from the original model. For example, in our results, self-determination and resistance to uncertainty are expressed more at the intention formulation stage than at the planning stage. In the same vein, personal initiative is presented in our study as a volitional capacity for the identification and execution of actions, while other authors place it at the stage of action planning. We consider that the introduction of undecided students and those who opted for a wage employment in the model of analysis carried out by Moussa Mouloungui (2012) could lead to a structuring different from what obtains in this research, limiting the spectrum of comparison to students interested in the entrepreneurial career, potential entrepreneurs and active entrepreneurs. However, our observations do not challenge the basic assumptions of the model. An organization different from these volitional capacities is possible in another context. But, their mobilization will almost always follow a hierarchical order. The peculiarity of the Cameroonian context is that the job market lacks structure and wage employment is scarce and unattractive. Entrepreneurial opportunities are more abundant than other professional alternatives. The rules that govern the creation of a business can be ignored without consequences. The production standards of goods and services are left to the discretion of their promoter and competition has no limit. The client finds himself being the sole judge. Indeed, the survival of the created business depends on their ability to retain customers. In such a context, the reasons for entrepreneurial success are to be found neither in the context nor at the level of the project or its funding. They are more the contractor's provisions and especially his volitional capacities. The scope of an entrepreneurial ambition goes beyond the search for a professional activity (salaried work). It aims at expressing personal values and at the same time bringing solutions to social issues. The individual from whom the intention to create emerges, expresses the values correlated with entrepreneurial action (identifying and carrying out activities to achieve goals). These values have been successively on creativity, innovation, risk acceptance, self-realization, universalism, self-transcendence, benevolence, tolerance of ambiguity, responsibility and autonomy (Nyock Ilouga, Moussa Mouloungui & Sahut, 2014). Religious beliefs, very vivid in this context, also structure the thinking and behavior of entrepreneurs, who have the freedom to think their activity and develop a business morality.

6. Conclusion

Our results are a support that can help the structures that accompany young Cameroonians in the construction of their business creation projects. These structures feature prominently the ministerial departments in charge of small enterprises, the social and family economy, employment and vocational training, as well as the Cameroon Employers' organization (GICAM). They invite to take into account representations of young people who are elaborating an entrepreneurial project, their motivations, real and perceived abilities to work as entrepreneurs. Incentive measures that focus on the project, the economic context and existing business opportunities are necessary, but it is important to refine and enrich them to make them effective. In other words, for them to enable incubators achieve the expected objectives, they must be understood and accepted by project developers. This can only be possible in case these measures correlate with the individual's motivations, values and professional aspirations. Indeed, the awarding of prizes for innovative projects during the scientific days organized by the Mineresi does not presume that these young people really intend to create. Persuasive actions (awareness raising) should be implemented and articulated around opinions on entrepreneurs and entrepreneurship, the role of the will (volition), optimism about the act of undertaking and mobilizing self-assessment questionnaires (professional career intention scale, entrepreneurial motivation scale, volition scale, etc.). It would be useful to explain to young people that the scope of an entrepreneurial ambition is not only about seeking a professional activity, but also and above all about developing personal values such as self-realization, benevolence and power surpassing oneself.

With regard to the design and implementation of these persuasion measures, it seems to us that the experts

involved must have some legitimacy with the recipients to facilitate communication about messages of encouragement to self-employment. Thus, it may be counterproductive to entrust persuasive actions to business plan development experts, youth and animation counselors or employment counselors. Indeed, this is contradictory, as the specialist in developing business plans is supposed to accompany the young person who wishes to undertake to elaborate the business plan. The employment counselor should use the tools mobilized to guide the young person towards self-employment or wage employment. In addition, it may be interesting to use the expertise of psychosociologists, occupational psychologists and organizations and entrepreneurship psychologists when it comes to persuading young people about the need to create business to reverse the unemployment curve.

Awareness-raising should aim to get young people to consider the entrepreneur as a benefactor, an opportunist or as a person who makes many sacrifices to contribute to the development of the community. It should also help young people to understand that the scope of an entrepreneurial ambition affects personal development more than the search for a professional activity. The personal development evoked here refers to the acquisition of values such as universalism, benevolence and self-realization. Notwithstanding the relevance of our results, we must remain cautious because they were obtained from the transverse approach. It would be interesting to check the hierarchy of volitional capacities from the longitudinal method.

References

- Battistelli, A., & Nyock Ilouga, S. (2008). La validation expérimentale du modèle de la congruence objective des valeurs sur le choix du métier d'entrepreneur. Dans N. Pettersen, J. B. Boudrias, & A. Savoie, *Entre tradition et innovation, comment transformons-nous l'univers du travail?* Quebec: Presse de l'Université de Quebec.
- Boutinet, J. P. (1999). *Anthropologie du projet*. Paris: Presses Universitaires de France.
- CAMERCAP-PARC. (2016). Fermeture des activités du portefeuille privé: comment sauver les entreprises de la faillite au Cameroun? Six (06) mesures de politique économique à adopter. Note rapide de politique économique, disponible sur <http://www.camericap-parc.org/>.
- Courtois, R., Adrien, J. L., Courtois, A., Dionne, C., Pennequin, V., & Roulin, J. (2015). *Réussir son mémoire en psycho : Travail d'étude et de recherche en sciences humaines et sociales*. Bruxelles: De boeck.
- De Quijano, G. (1997). Un projet peut en cacher un autre. *Carrierologie*, 6(3/4), 95-103.
- Forstneier, S., & Rüdell, H. (2008). Measuring volitional competences: Psychometric properties of a short form of the volitional components questionnaire (QCV) in a clinical sample. *The Open Psychology Journal*, 1(1), 66-77. <https://doi.org/10.2174/1874350100801010066>
- Frese, M., Garst, H., & Fay, D. (2007). Making things happen: reciprocal relationships between work characteristics and personal initiative in a four-wave longitudinal structural equation model. *Journal of Applied Psychology*, 92(4), 1084-1102. <https://doi.org/10.1037/0021-9010.92.4.1084>
- Frese, M., Kring, W., Soose, A. & Zempel, J. (1996). Personal initiative at work: differences between East and West Germany. *Academy of Management Journal*, 39, 37-63
- Gelderen van, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30(5), 655-673. <https://doi.org/10.1016/j.jbusvent.2015.01.003>
- Gollwitzer, P. M. (1996). The volitional benefits of planning. In P. M. Gollwitzer et J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior*, (287-312). New York: Guilford.
- Gollwitzer, P. M., & Heckhausen, H. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, 11(2), 101-120. <https://doi.org/10.1007/BF00992338>
- Hikkerova, L., Nyock Ilouga, S., & Sahut, J. M. (2016). The entrepreneurship process and the model of volition. *Journal of Business Research*, 69, 1868-1873. <https://doi.org/10.1016/j.jbusres.2015.10.071>
- Jameson, F. (1977). Imaginary and symbolic in Lacan: Marxism, psychoanalytic criticism, and the problem of the subject. *Yale French Studies*, 338-395. <https://doi.org/10.2307/2930443>
- Kuhl, J., & Fuhrmann, A. (1998). Decomposing self-regulation and self-control: The volitional components checklist. In J. Heckhausen et C. Dweck (Eds.), *Life span perspectives on motivation and control* (15-49). Mahwah, NJ: Erlbaum.
- Lerch, C., Thi Thanh Thai, M., Puhakka, V., & Burger-Helmchen, T. (2015). La réactivité entrepreneuriale: le

- sens pratique pour concrétiser les idées originales. *Innovations*, 3(48), 5-11.
- Mele, A. R. (2000). Deciding to act. *Philosophical studies*, 100(1), 81-108.
<https://doi.org/10.1023/A:1018639622382>
- Moussa Mouloungui, A. C. (2012). *Processus de Transformation des intentions en actions entrepreneuriales*. Université de Lille 3, Lille.
- Mueller, J., Melwani, S., & Goncalo, J. (2012). The Bias against creativity: Why People Desire but Reject Creative Ideas, *Psychological Science*, 23, 13-17. <https://doi.org/10.1177/0956797611421018>
- Noel, C. (2015). *Une stratégie de modélisation multi-échelles pour une prédiction de certains effets des vibrations sur le réseau vasculaire digital. Première étape : validation d'un modèle éléments finis à l'échelle macroscopique d'une phalange précontrainte vibrée*. [Rapport de recherche] Notes scientifique et techniques NS 339, Institut National de Recherche et de Sécurité (INRS).
- Nyock Ilouga, S., Moussa Mouloungui, A. C., & Sahut, J. M. (2014). Entrepreneurial intention and career choices: the role of volition. *Small Business Economics*, 42(4), 717-728.
<https://doi.org/10.1007/s11187-013-9524-6>
- Oettingen, G., Hönig, G., & Gollwitzer, P. M. (2000). Effective self-regulation of goal attainment. *International Journal of Educational Research*, 33, 705-732. [https://doi.org/10.1016/S0883-0355\(00\)00046-X](https://doi.org/10.1016/S0883-0355(00)00046-X)
- Vallerand, R. J., & Hess, U. (2000). *Méthode de recherche en psychologie*. Gaetan Morin.

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