

**THE INFLUENCE OF THE AGE ON THE ENTREPRENEURIAL INTENTION :
A Case of the Moroccan Executives-Engineers****Taoufik YATRIBI***PhD Student**Department of Management & Audit**The National School of Management, Tangier, Morocco*t.yatribi@gmail.com**Said BALHADJ***Research Professor**Department of Management & Audit**The National School of Management, Tangier, Morocco*sbalhadj@yahoo.fr**ABSTRACT**

The objective of this article is to study the influence of the age on the entrepreneurial intention of the Moroccan executives-engineers. The results stemming from analyses of hierarchical regressions realized on a sample of 376 executives-engineers show that the entrepreneurial intention decreases with the increase of the age. The results also show the moderating role of the age between the entrepreneurial intention and its antecedents (Attitude to the behavior and the perceived control). Indeed, it emerges from our study that the entrepreneurial intention is more guided by the "attitude toward behavior" for the young employees than at the seniors, whereas the entrepreneurial intention is more guided by the "perceived control" for the seniors than at the young employees. The theoretical and managerial implications of this research will be presented, and avenues of research will be proposed.

Keywords : *Entrepreneurial intention, age, theory of planned behaviour, executive-engineer.*

INTRODUCTION

Although Morocco is considered a more entrepreneurial country nowadays, than it was in the 80s' and 90s', this situation remains insubstantial in regards to today's global economy. According to the previous Global Entrepreneurship Summit (2014), creating innovative firms seems to be a primordial way to reinforce innovation and growth.

Empirical studies suggest that the creation and survival of firms should be seen as an important issue, particularly concerning growth and employment (Van Stel et al., 2005), productivity growth (Wennekers et al., 2010), and a decrease in social inequalities (Fairlie, 2004).

What about companies that are created by employees?

Several observations draw our attention to the phenomenon of companies that are created by employees. The first observation is related to the arrival of generation Y on the job market. This generation is considered more entrepreneurial than its predecessors (Degeorge & Fayolle, 2011). Indeed young people nowadays are more attracted to freelancing; they demand more freedom, more dignity, and yearn for more personal development. The second observation is related to the demographic change. In fact, in Morocco retired people will represent the main segment of the population because of the ageing population. According to The High Commission for Planning, 97000 people will reach retirement between 2012 and 2018 which is a yearly average of 13858 in contrast to only a yearly average of 7400 people between 2004 and 2011. These new tendencies question not only academic research, but also field experts on issues related to promoting and coaching employees that are potential entrepreneurs. They are often isolated, neglected and even excluded from analytical frameworks. Nonetheless, their entrepreneurial commitment can be considered a real opportunity in terms of economic and social upswing of the states. Paradoxically, the young employees' interest in creating firms raises a real problem: retaining "high profile" employees in a context of "War of talents".

This article is an attempt to examine, through an empirical study, the mechanisms that push certain employees to resign in order to create their own company. The objective being to highlight the approaches needed to develop

employees' entrepreneurial potential; and paradoxically to question some retention practices. We are taking into consideration the researchers agreement which stipulates that each entrepreneurial behaviour is intentional, and that it rarely happens randomly (A. Fayolle et al., 2012; Schjoedt & Shaver, 2007). This study sits upstream from the process of organisational emergence. More precisely, it tries to explain the Moroccan executive engineers' intention to create a company. In the light of this logic, this research uses the theoretical framework of The Theory of Planned Behaviour (TPB) (Ajzen, 1991) to clarify the entrepreneurial intention among the Moroccan executive engineers. We are suggesting an analysis of the entrepreneurial intention (EI), by taking into consideration the age factor's role in building the TPB. Amongst the study populations of this research are: Young, and senior employees. These two categories seem to be particularly relevant in regards to the youth's interest in entrepreneurship, and the increased number of retirees in the coming years.

The implications of this study are theoretical and managerial. In fact, the literature that tackles the field of entrepreneurship in Morocco does not answer our questions. We have not come across any study that directly tackles this topic. Internationally, there is a number of works on entrepreneurship (Alain Fayolle & Liñán, 2014); however, they mainly target students (Emin, 2004). This virtually exclusive interest in this population is pretty surprising since the new entrepreneurs are rarely students or young graduates (Minniti & Lévesque, 2010). Our main managerial input has as objective to conclude by drawing the light on the necessity to work on the levers of the entrepreneurial intention in order to encourage the senior project holders. Simultaneously, we are going to analyze the perspectives of retention; namely, the entrepreneurial coaching of young employees.

Our article is divided into four parts. After presenting the theoretical framework of our study, we will tackle the method chosen for this research. The third part will be dedicated to results. We will then discuss the major characteristics of this research. After that, several recommendations will be drawn up and research leads will be determined.

1. THEORETICAL BACKGROUND AND HYPOTHESES

1.1. What is an EI?

Intention stands for a person's readiness to adopt a specific behaviour. Intention assumes taking into consideration the different motivational factors that impact behaviour. It shows that the individual is willing to perform an action (Kolvereid, 1996). Intention reflects our urge to act as well as the belief according to which we are going to act. It should be the nearest antecedent to an action or to a conduct attempt (van Gelderen et al., 2008). « Intentions are a cognitive structure including both goals (ends) and plans (means), though goals typically crystallize in subjects' minds before the plans to reach the goals. » (Ajzen, 1987). (Bird & Jelinek, 1988), p. 21) define the concept of intentionality as: « A state of mind, directing attention, experience, and action toward a specific object (goal) or pathway to its achievement (means). », « The Entrepreneurs intentions tend to be directed toward goals, which are desired end-states, rather than toward means of conduct, although both ends and means can be intentional. » (Bird, 1988), p. 447).

Intention and attitudes depend on the perception we have of ourselves and of our environment (Krueger & Carsrud, 1993), as well as our experiences (Scheiner, 2009; Weick & Karl, 2015). Intention is a perception that makes it possible to see company creation as a career. Intention is not an action. It is rather an idea; a considered and preferable future; however it is still uncertain.

1.2. The theory of planned behaviour

The Theory of Planned Behaviour is among the most commonly used social psychology theories used to explain and predict the human behaviour, including the entrepreneurial intention (for example , (Carr & Sequeira, 2007; Kautonen et al., 2015; Kolvereid, 1996; Tkachev & Kolvereid, 1999). It is particularly based on The Theory of Reasoned Action elaborated by (Ajzen & Fishbein, 1969)1.

Many authors (Autio et al., 2014; Davidsson, 1995; Kolvereid, 1996; Krueger et al., 2000; Tkachev & Kolvereid, 1999) suggest using I. AJZEN's Theory of Planned Behaviour to predict and explain the entrepreneurial behaviour. The TPB's objective is to explain the entrepreneurial intention, and then the action. The main variable of this model is intention. Company creation is a planned behaviour; consequently, it is intentional. Amongst the former's conditions, intention seems to be the best predictor of behaviour; better than

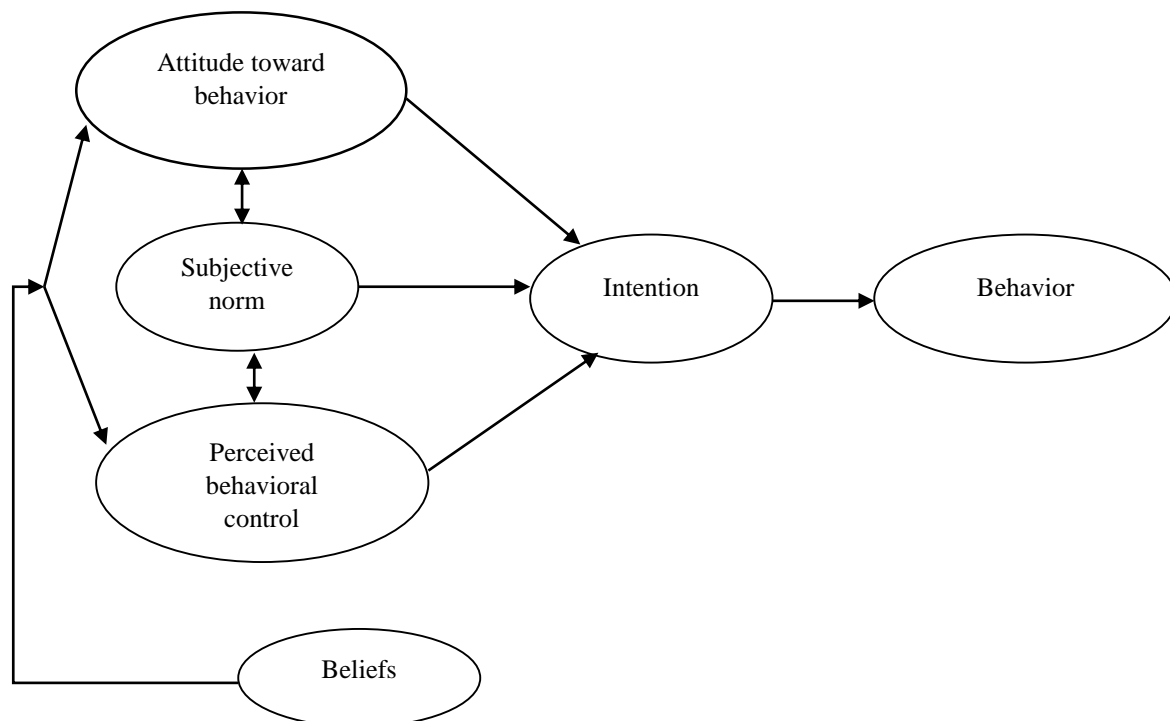
¹ The theory reasoned action predicts behaviour through variables: the attitudes towards behavior and the subjective norms I. AJZEN adds a third predictive variable "the perceived behavioural control" ("... In fact, the theory of planned behavior differs from the theory of reasoned action in its addition of perceived behavioral control ". I. AJZEN, 1991, op.cit, p. 183).

attitudes, beliefs, or other psychological variables (Krueger & Carsrud, 1993). Intentions are formed through time, under three main factors whose importance depends on the studied case. Two of these antecedents are linked to the attitude towards the behaviour and the subjective norm, and the third one (perceived behavioural control) is linked to the individual's perceptions which are under one's control.

Let's see these three antecedents more in details:

- The attitudes toward the behaviour: They depend on the beliefs relative to the behaviour's outcomes and to the value given to these outcomes. It is subjective assessment of behaviour.
- The subjective norms : They refer to the social pressure that pushes the individual to perform or not perform a behaviour (Ajzen, 1991). It is determined by all the normative beliefs related to the expectations of key social influences (spouse, family, friends, etc).
- The perceived behavioural control: It is determined, on the one hand, by the perception of opportunities and resources that are needed in order to perform the behaviour; and on the other hand, by the belief that these resources could be used. It can be defined as a perceived ability to execute a target behaviour. The following figure outlines the articulations between these different concepts.

Figure 1 : The theory of planned behaviour



Source : Adapted, Ajzen (1991, p.182)

1.3. The age factor and entrepreneurial intention

TPB has represented a theoretical framework for several researches. However, these researches have come with diverging results (Ogden, 2003). In fact some of them showed that The subjective norms had no existing role, others confirmed the predictive role of the perceived behavioural control, and others have pointed out the inexistent role of the attitudes. (Ajzen & Fishbein, 2004) explain that the relative importance of the attitudes, the subjective norms, and the perceived behavioural control in predicting intention varies from a behaviour to another, and from a population to another. Additionally, they think that from the three theoretical antecedents, often, only one or two are enough to explain the entrepreneurial intention. Nonetheless, TBP does not specify which factor has a greater impact on entrepreneurial intention, how, in which population, and which context. In addition to that TPB limits the determining factors of intention to attitudes, subjective norms, and perceived behavioural control, while there are other factors that influence behaviours, such as personality, culture, and demography.

Not including these key factors might be the cause behind the weak variances noted by the previous researches that used TPB.

Moreover, the majority of studies that used TPB have focused on student population. It would be legitimate to think that these results can not be applied on an employee population, since the latter can represent a different operational mode. Indeed, it has been acknowledged that the entrepreneurial intention is closely linked to the individual's socialisation process and networks be them professional or personal (Minniti & Lévesque, 2010). These authors have shown that the process is even stronger when the individual is old. Ageing brings other changes to the individual's behaviour. For example: When a person gets old, they tend to become more conservative (Hambrick & Mason, 1984). In this context, some researchers have demonstrated that age had a negative impact on entrepreneurial intention (Rotefoss & Kolvereid, 2005). However, this theory of linear relationship between age and intention is contested by other theories that claim that age plays a conversely proportionate role in the creation of entrepreneurial intention (Alba-Ramirez, 1994; Bates, 1995).

These conflicting results invite us to study how age should be modelled in an employee population. They also invite us to think that age may play a role in building the entrepreneurial intention. We are presenting as hypothesis in this study that age acts as a moderator between the three constituents of TPB: Attitudes toward the behaviour, Subjective norms, and Perceived behavioural control.

Concerning the first constituent of TPB (Attitudes toward the behaviour), our argument is that its influence would be stronger among the young rather than the seniors. In fact it has been pointed out that generation "Y" would be more entrepreneurial than the previous generations (A. Fayolle et al., 2012). These generation based researches also highlight the particularity of generation "Y" as far as its characteristics and expectations from companies are concerned. This generation is characterised by many attitudes, such as: the search for a meaning for work, the need for accomplishment, the need for feedbacks, opportunism, team spirit, and a decreasing loyalty (Bourhis & Chenevert, 2010; Brillet et al., 2013; Pichault & Nizet, 2000). Young employees look for career opportunities; consequently, they do not hesitate to quit the company as soon as they feel bored or they have opportunities outside (Dejoux & Wechtler, 2011). Contrary to what it used to be for the previous generations, the young generation has a more rational vision of the company than an affectionate one. According to (SCOUARNEC et al., 2005), generation « Y »'s conception of career has changed. It is one where the individual would become master of its own evolution. All these factors largely explain why the young are more and more attracted by entrepreneurship. The seniors seem to be different than the young. They would be more loyal to the company and to hierarchy. We can think that they are less attracted to entrepreneurship since they were not made aware of it during their studies (Alain Fayolle & Gailly, 2015).

On the basis of these arguments, we suggest the hypothesis according to which the entrepreneurial intention is more guided by the Attitudes toward the behaviour in the young than in the seniors. This is the First hypothesis:

H1. Age moderates the relationship between the attitude towards the behaviour and the entrepreneurial intention (i.e. the relationship between the attitude towards the behaviour and the entrepreneurial intention is stronger among the young than the seniors).

In addition to that we assume that the effect of the perceived behavioural control on the entrepreneurial intention would be stronger among the seniors than the young. In this sense, it is possible to think that the seniors of the future would be more attracted to entrepreneurship than the other age ranges of the population. Several reasons are behind this specific situation of the seniors. They have reached an age where financial constraints are to their minimum, the loans are paid out, the children have grown up and are able to sustain themselves (Safrdou et al., 2012). They have gathered some know-how and an experience that would enable them to see the creation of a company more feasible than the young employees. In addition to that, the contacts and relations built with professionals during their career will undoubtedly have a positive impact on the entrepreneurial decision.

Consequently, we came up with the hypothesis according to which the decision of creating a company among the seniors would be dictated by their perception of their capacity to do so.

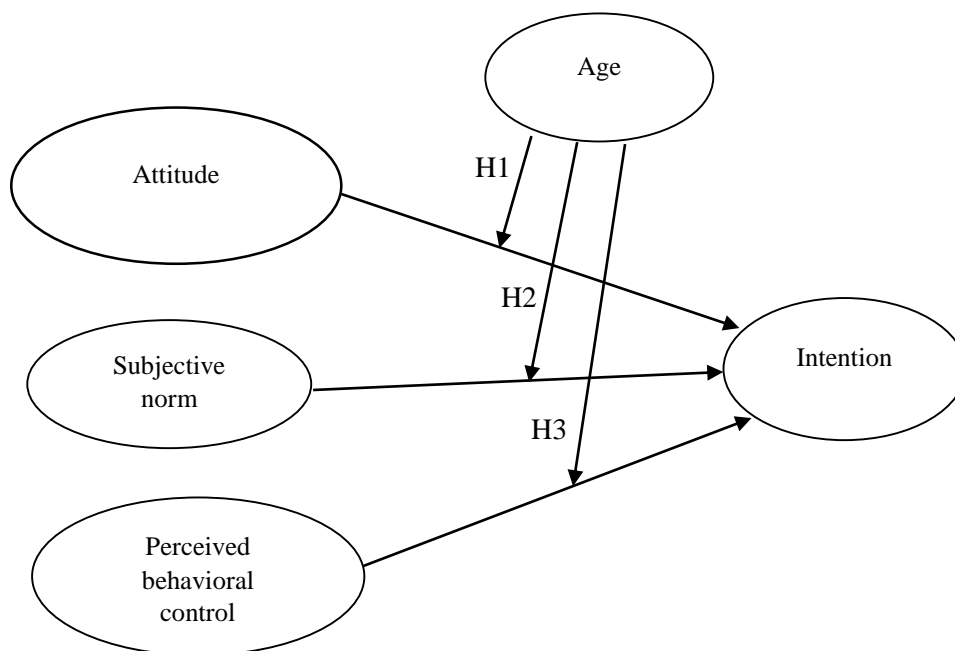
H2. Age moderates the relationship between the perceived behavioural control and the entrepreneurial intention (i.e. the intensity of the relationship between the feasibility of the perceived behavioural control and the entrepreneurial intention is stronger among the seniors than the young).

Finally, we argue, in this research, that the impact of the subjective norms on the entrepreneurial intention decreases according to age. In fact the Moroccan culture is characterised by an education and ways of thinking that can hardly be reconciled with the spirit of capitalism in the Weberian sense of the term (Ben Haddou, 1997). The young employees are often attached to their families; they tend to seek advice among the principal

family members, especially the parents, concerning their projects. The latter are rarely in favour of entrepreneurship, since they think it represents a major risk factor which could harm their children's career. On the basis of these arguments, we suggest the following hypothesis:

H3. Age moderates the relationship between the subjective norms and the entrepreneurial intention (i.e. the entrepreneurial intention is guided by subjective norms more among the young than the seniors).

Figure 2 : Conceptual framework



2. METHODS

1.1. Data source

We collected our data in Morocco. For practical reasons, it is hard to survey the Moroccan engineers' population in its totality. Thus, we chose a convenience sample.

Since then, we resorted to directories of former graduates of several engineering schools. In order to avoid a bias related to the convenience sample, we tried to study individuals that operate in different fields. We have conducted a sampling on the basis of a rational choice. This technique, which turned out to be particularly suitable to the data we have gathered, enables us to choose precisely the elements of a sample engineer population whose characteristics are well known to us (Thietart, 2014).

As a preliminary testing, the questionnaire has been administered to a sample of 133 engineers. Thanks to the principal components analyses (PCA) and to the internal reliability test, we were able to test and purify the measurement scales.

The changes made after this primary investigation were in fact marginalised.

Furthermore, the questionnaire was applied on 5000 engineers by electronic means. If 376 useable answers have been received, it is difficult to calculate a response rate since many respondents did not received the questionnaire because they do not check their email boxes anymore.

Our sampling is made of 64,6% men and 35,4% women. 68% of the respondents work in the private sector against 32% the public sector. Concerning the work field, we have recorded 25% computer engineers, 11,15% industrial engineers, 8,11% agronomists, 6,42% mechanical engineers, 4,39% public works engineers, 3,72% electrical engineers and 2,36% electronic engineers.

1.2. Measures

All the constructs used a 7-point Likert scale response that ranged from strongly disagree (1) to strongly agree (7).

Intention entrepreneuriale

According to the proposed measure by (Thompson, 2009), the intention was measured by six items : (1) Never search for business start-up opportunities ® (2) Are saving money to start a business (3) Don't read books on how to set up a firm ® (4) Have no plans to launch your own business ® (5) Spend time learning about starting a firm (6) Have you Intend to set up a company in the future? The results of the tests of reliability allows to validate the scale (Explained variance = 66,2%. α Cronbach = 0,90).

Attitude

For more clarity in the Moroccan context, we shall call him in our study "attraction for the entrepreneurship". The attraction was measured by means of a single item: the idea to create your company seems to you, on a scale going of "not at all attractive" to "completely attractive" (see, (Krueger et al., 2000)).

Subjective norm

To measure the opinions of the people about your choice for entrepreneur's career, We used the scale of (Kolvereid & Isaksen, 2006). The respondents had to specify, for four groups of individuals belonging to their social environment (family, friends, professors, other people important for them), the opinion that every group and its importance concerning their commitment in a new business start-up. A scale going of "extremely unfavorable" to "extremely favorable", and a going scale of "Not at all important" to "extremely important" was proposed to them. The results of the tests of reliability allows to validate the scale (Explained variance = 70%, α Cronbach = 0,80).

Perceived behavioral control

We prefer to hold the term of "perceived capacity" rather than that of "perceived behavioral control", because of the biggest clarity of the concept in the Moroccan context. Thus the received entrepreneurial capacity makes reference to the degree with which an engineer thinks of be able to create a company.

Perceived capacity were measured with 4-item scale ((Emin, 2004) : (1) You feel capable of bringing to successful a project of new business start-up (2) You think of mastering personally the process of creation of a company (3) It seems to you possible to take up a project of creation and assure his success (4) Vous faites confiance à votre capacité de réussite pour créer une entreprise. The results of the tests of reliability allows to validate the scale (Explained variance = 86%, α Cronbach = 0,90).

1.3. Control variables

Thanks to an analysis of the literature, five control variables have been picked: age, gender, work field, salary, firm size and nature of the work. The entrepreneurial intention has been associated to gender beforehand (Maes et al., 2014; Wilson et al., 2007). Indeed, it seems that men are more adventurous in their careers. The age variable was chosen due to its influence on career choice. The relation between age and the probability of creating a company would be shaped as an inverted U (Tornikoski et al., 2012). As one gets older, one has more experience and the probability of creating a company increases. However, as one gets older, one's opportunity cost increases with one's salary; which decreases the probability of self-employment. We keep in mind that the salary is supposed to be negatively correlated with the entrepreneurial intention (Long, 1978). We also notice the effect that the work type (exclusively technical, mainly technical, not very technical, not technical at all) has on the entrepreneurial intention.

1.4. Absence of multicollinearity check

To check the absence of multicollinearity in our data, we have calculated the Pearson correlation coefficients among the explanatory variables, presented in the following table. From table 1, we can notice that all the correlation coefficients are below 0,8 : a limit starting from which we can face a serious problem of multicollinearity (Kennedy, 2003).

We have also calculated the variance inflation factors (VIF) that test the presence of a correlation among the explanatory variables. The highest VFI is equal to 1,58. The VIFs are below 4, so they are well below 10: limit starting from which there is a serious problem of multicollinearity (d'Arcimoles & Trébucq, 2005; Myers, 1990). Based on the correlation tests and the VIF, we can conclude that there is no problem of multicollinearity for our independent variables.

Tableau 1 : Correlations and descriptive statistics (N = 376)

	1	2	3	4	5	6	7	8	9	10
Control variables										
1. Gender (male=1)	1	-,19**	,029	-,18**	,006	,185**	-,22**	-,101	-,006	-,21**
2. Age	-,196**	1	,136**	,306**	-,014	,109*	-,10*	-,030	,020	,167**
3. Work field	,029	,136**	1	-,074	,200**	,101	-,15**	-,080	-,100	-,11*
4. Salary	-,187**	,306**	-,074	1	,091	-,003	-,084	-,006	,096	,086
5. Firm size	,006	-,014	,200**	,091	1	,082	-,21**	-,051	-,063	-,12*
6. Nature of the work	,185**	,109*	,101	-,003	,082	1	-,12*	-,081	-,039	-,090
Dependent variable										
7. Entrepreneurial Intention	-,222**	-,10*	-,15**	-,084	-,21**	-,12*	1	,602**	,243**	,564**
Independent variables										
8. Attitude	-,101	-,030	-,070	-,006	-,051	-,081	,602**	1	,316**	,542**
9. Subjective norm	-,006	,020	-,100	,096	-,063	-,039	,243**	,316**	1	,269**
10. Perceived control	-,215**	,167**	-,11*	,086	-,61*	-,090	,564**	,542**	,269**	1
Mean	1,35	1,35	1,35	1,35	1,35	1,35	1,35	1,35	1,35	1,35
Std. deviation	,479	,479	,479	,479	,479	,479	,479	,479	,479	,479

*p<0,05, **p<0,01, ***p<0,001.

3. RESULTATS

We have built several statistical models in order to test our hypotheses. The figure 3 sums up all the obtained regression results.

Model 1 (see Table 3) is a basic model that shows the effects of control variables on the entrepreneurial intention.

We have noticed that gender has a negative and important impact on the entrepreneurial intention. Men seem to be more attracted to company creation than women ($\beta = -0,258$, $t = -4,917$, $p < 0,001$).

We can also see that age has a negative impact on the entrepreneurial intention. In other words the entrepreneurial intention decreases with age ($\beta = -0,105$, $t = -1,918$, $p < 0,05$).

On the other hand, the regression results show that the salary has a negative impact on the entrepreneurial intention ($\beta = -0,088$, $t = -2,150$, $p < 0,05$). The intention of creating a company decreases with the increase in salary.

Our results show that the size of the company has a significant impact on the entrepreneurial intention ($\beta = -0,214$, $t = -4,167$, $p < 0,001$). In fact the respondents who work in small companies (less than 10 employees) claim that they are more entitled to create a company in contrast to their peers who work in medium sized companies (between 10 and 200 employees) or in big companies (more than 200 employees).

On the other hand, model 2 presents the influence that the main independent variables (attitudes, subjective norms, perceived control) on the entrepreneurial intention. Attitude influences the entrepreneurial intention in a positive way ($\beta = 0,384$, $t = 8,262$, $p < 0,001$). In the same way that the perceived behavioural control influences it

($\beta = 0,317$, $t = 6,675$, $p < 0.001$). However, we have not found a significant link between the subjective norms and the entrepreneurial intention ($\beta = 0,034$, $t = 0,844$).

Tableau 2 : OLS regression results (N = 376)

	Variable dépendante : Intention entrepreneuriale		
	Modèle 1	Modèle 2	Modèle 3
Constant	-	*** (5,257)	*** (3,516)
Control			
Gender (male=1)	-,258*** (-4,917)	-,156*** (-3,845)	-0,153*** (-3,762)
Age	-0,105* (-1,918)	-,138*** (-3,267)	-0,251 (n.s) (-1,622)
Work field	-,096 (n.s) (-1,856)	-,035 (n.s) (-,873)	-0,035 (n.s) (-,890)
Salary	-,083 (n.s) (-1,546)	-0,088* (-2,150)	-0,094* (-2,301)
Firm size	-,214*** (-4,167)	-,152*** (-3,882)	-0,150*** (-3,792)
Nature of the work	-,058 (n.s) (-1,116)	,000 (n.s) (,005)	-,002 (n.s) -,043)
Main effects			
Attitude		,384*** (8,262)	,340* (1,97)
Perceived control		,317*** (6,675)	,381* (2,042)
Subjective norm		,034 (n.s) (,844)	-,165 (n.s) (-1,262)
Interactive effects			
Attitude X age			0,070 (n.s) (,286)
Perceived control X age			-0,095 (n.s) (-,364)
Subjective norm X age			0,244 (n.s) (1,607)
F-statistic	10,209***	40,327***	30,470 (n.s)
Adjusted R-square	0,137	0,504	0,504
ΔR^2	,152***	,365***	,004 (n.s)

* $p < 0,05$, ** $p < 0,01$, *** $p < 0,001$. N.s : Not significant, t-statistic In brackets

In order to test the research hypotheses, that are the potential moderating effect of age between the three constituents of the theory of planned behaviour (attitudes, subjective norms, perceived behavioural control) and entrepreneurial intention, we have followed the steps suggested by Aiken and West (1991).

First of all, we should calculate the products of the two variables (independent variable * moderating variable) thanks to two regressions. The first is a test of the main effects (independent variables and moderating variables) on the dependent variable (model 2). The second regression is done after introducing the multiplicative term (independent variable * moderating variable, model 3). The moderating role is set if the coefficient of multiplicative effect is statistically significant (Aiken & West, 1991).

The results of the regression in model 2 reveal that attitude has a positive influence on the entrepreneurial intention ($\beta = 0,384$, $t = 8,262$, $p < 0.001$), as well as the perceived behavioural control ($\beta = 0,317$, $t = 6,675$, $p < 0.001$). However, we did not find any important relation between the subjective norms and the entrepreneurial intention ($\beta = 0,034$, $t = 0,844$). In model 3, we notice that the interactive effects of the three components (attitudes, subjective norms, perceived behavioural control) with age are not significant. The first step of (Aiken & West, 1991) method is not fulfilled. Nonetheless, this does not mean that there is no moderating effect of age. According to (Brambor et al., 2006)'s guidelines, the conventional results of the regressions present a limited information to correctly interpret the interactions. When the interaction variable is steady, it is necessary to calculate the marginal effects of the three entrepreneurial intention antecedents for each age. It seems that the subjective norm's effect is relatively independent of age, while the two other variables' effects (attitudes and perceived control) obviously vary according to age (see figures 4 and 5). Hypotheses 1 and 2 are validated but hypothesis 3 is rejected.

Figure 3 : Marginal effect of the age on the entrepreneurial intention (Confidence interval : 95 %)

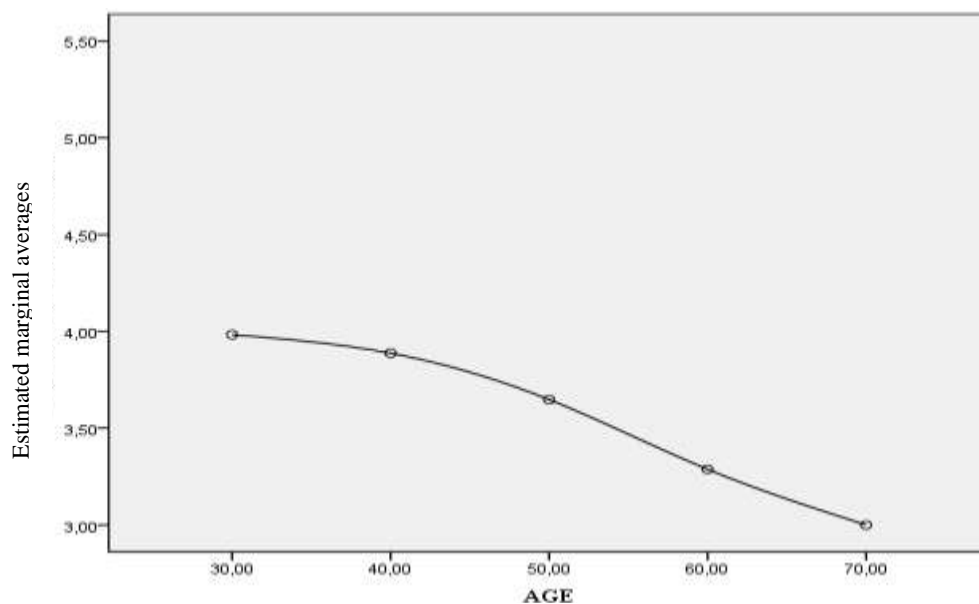


Figure 4 : Marginal effect of the attitude on the entrepreneurial intention at each age (confidence interval : 95 %)

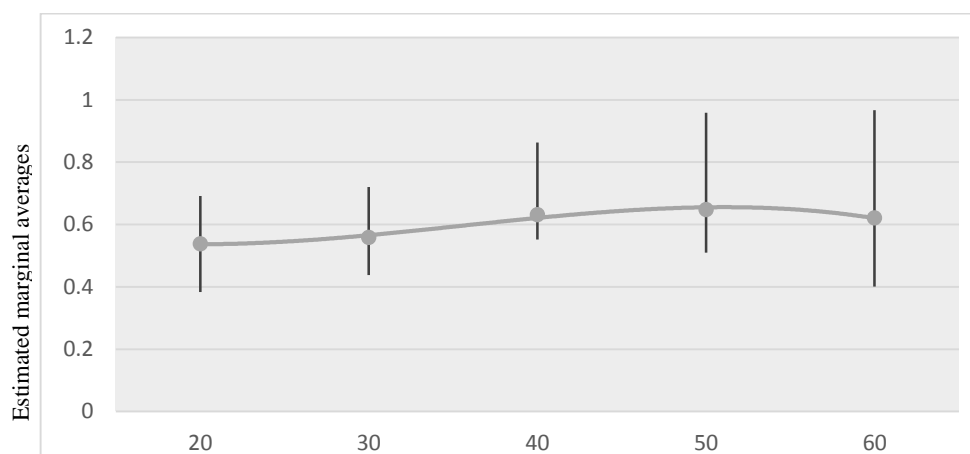
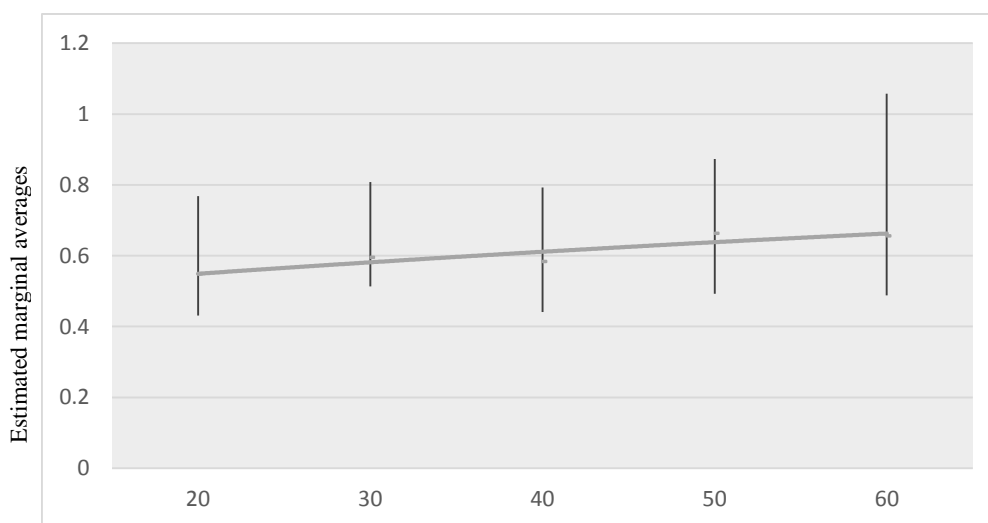


Figure 5 : Marginal effect of the perceived control on the entrepreneurial intention at each age (confidence interval : 95 %)



4. DISCUSSION

Our results disclose interesting correlations concerning our moderating variable which is age. First, the relation between age and the entrepreneurial intention takes a downward linear shape, in other words, the entrepreneurial intention decreases with age. This result is confirmed thanks to the regression results (table 2) and to the computing of the marginal effect of age on the entrepreneurial intention (figure3). Our result meets several other studies that attest that the entrepreneurial intention decreases in a linear manner with age (Rotefoss & Kolvereid, 2005).

The regression's results show that the entrepreneurial intention is influenced by the attitude and the perceived control. We did not find an important relation between the subjective norms and the entrepreneurial intention (table 2). This result meets the results reached by (Schlaegel & Koenig, 2014) who believe that the desirability and feasibility that were detected are the best predictors of the entrepreneurial intention according to their meta-analysis on the entrepreneurial intention.

However, we have found that the intensity of the relation between the attitude and the entrepreneurial intention varies according to age. In other words, the entrepreneurial intention is more guided by attitude among the young than it is among their older peers. This result matches several studies, namely (Carr & Sequeira, 2007)'s study according to which the desire to start a business is relatively intense among the people who are 35 years old. This age range is also relative to generation Y which is as entrepreneurial as generation X and the Baby-boomers (A. Fayolle et al., 2012).

As far as the perceived behavioural control is concerned, we have found that the intensity of the relation between the perceived control and the entrepreneurial intention becomes stronger with age (figure5). In other words the entrepreneurial intention is less guided by the perceived behavioural control among the young than it is among the seniors. Many reasons explain this tendency. The seniors have achieved an age where financial constraints are reduced, loans are paid off, and the children have grown up and are financially independent. They tend to go towards familial contingencies disengagements (Maâlaoui et al., 2012). In addition to that, the possession of resources and sufficient qualifications is integrated in a dynamic network. It is legitimate to think that tomorrow's seniors could have a more important perception of entrepreneurial feasibility than the young.

(Hambrick & Mason, 1984) point out that when people get old, they tend to adopt a more conservative behaviour. This supports both our hypotheses (H1 and H2) which that the seniors are more guided by perceived control than by the attitudes toward the entrepreneurial behaviour.

Finally, we did not find any significant relation between subjective norms and the entrepreneurial intention. This can be due to specificity of the study population. As a matter of fact all the individuals that were interviewed are employees, there should be a number of household heads. It would be relevant to think that these people are able to take their decisions without their entourage's influence.

5. CONCLUSION

The objective behind this article was to study the influence of age on the entrepreneurial intention among executive engineers. The results issued from hierarchical regression analyses, which were applied on a sample of 376 executive engineers, have confirmed that age influences the entrepreneurial intention. Our results show the moderating role that age plays between the two components of the theory of planned behaviour: attitudes towards behaviour, and perceived behavioural control, and the entrepreneurial attitude. In fact the entrepreneurial intention is more guided by the attitude towards the behaviour among the young than the seniors, while the latter's entrepreneurial intention is more guided by perceived behavioural control.

1.5. Implications for research

First of all, it should be noted that our research is among the rare works on entrepreneurial intention that were made on employees. In Morocco, and to our knowledge, there is no research on the topic.

The results of our research suggest that the demographic variable of age enables a better understanding of the entrepreneurial intention. Moreover, it should be taken into consideration that age has a moderating effect between the creation of the entrepreneurial intention and its antecedents. This moderating role of age allows us to demonstrate the intensity that exists between the entrepreneurial intention and its antecedents. Simple links are no longer sufficient to reach a detailed explanation of the entrepreneurial intention.

1.6. Implications for practice

Validating hypothesis 1, according to which the relation between attitude and entrepreneurial intention is stronger among the young than the seniors, has confirmed the need for individualising the managerial practices (Bal & Dorenbosch, 2014; Cerdin et al., 2005). It would be important, for example, to offer a work environment that uses HR practices based on entrepreneurship and that would attract and retain the young employees who would be interested in creating start ups (as autonomy at work, solicitation of ideas, participation in decision taking, a performance-based reward system, etc.). Paradoxically, the appeal for company creation may be a good indicator for recruiters to show that these people are not adequate with their company's culture, especially if it has to do with bureaucratic management. In addition to that, it could also be an indicator for companies that want to establish a staff reduction policy through licensing or outsourcing activities, because this will make it possible to select the candidates that are driven by an entrepreneurial spirit. Entrepreneurship becomes a socially responsible HR management practice. Furthermore, it can be a good point to attract the best profiles on the job market.

On the other hand, validating hypothesis 2, according to which the relation between perceived control and entrepreneurial intention is stronger among the seniors than the young, suggests that business leaders, local authorities and the economic development actors that would like to promote entrepreneurship among seniors, should work more on the levers of perception of entrepreneurial feasibility. For example, they could put in the service of senior project holders, a mentor who would support, comfort, give advice and correct the approaches taken for a too risky project.

In this way, seeing the increasing number of retired employees in the coming years, it would be important to work on the appeal that company creation has on seniors. It seems necessary to foster mentoring and to create a network made of project holders and entrepreneurs in order to encourage an interpersonal relation of moral support and learning exchange.

1.7. Study limitations

If this study brings a meaningful contribution to the understanding the developmental mechanisms of the entrepreneurial behaviour among engineers, it has limitations. The punctual nature, which is in cross section with the data collection, limits the generalizability of the results.

The collected data are based on intention and self-perception declarations, and not on the observation of actual behaviours, which might lead to a bias of social desirability (Amabile et al., 1995). Finally, this bias is clear when the same questionnaire measures the dependent and independent variables. We have tried to restrict the impact of this limit by guarantying the respondents' anonymity, by using strong measuring scales, then by organizing the items' order so that the dependent and independent variables can easily be distinguished (Podsakoff et al., 2003).

1.8. Perspectives for the future researches

The future researches could complete our study by answering the limits of our study.

It would be interesting to proceed to a longitudinal study to allow us to know so actually the engineers having declared to intend to create a company really passed in the entrepreneurial act.

The future researches could take considering other theories other than the TCP to understand better the entrepreneurial intention at the employees. So, to test the effects of the other variables on the entrepreneurial intention (i.e. the mode of organization (Organic Vs Mechanics, the organizational justice, the conflict work/family). The study of the entrepreneurial intention at the employees also invite to use mediators as the job satisfaction (Lee et al., 2011), As the motivation in the work (Fini et al., 2012; Shane et al., 2003), or the organizational commitment (Kickul & Zaper, 2000).

Finally, to widen our understanding of the interactive effects, the future researches can envisage for example other individual variables such as : the propensity to take-risk, the need of achievement, the proactivity, the perception of the entrepreneurial identity. Beyond the individual variables, Davidsson and Wiklund (2001) suggest that the study of the entrepreneurial intention in an organizational context requires multilevel data, what the literature has difficulty in offering to this day.

BIBLIOGRAPHIE

1. Aiken, L., & West, S. G. (1991). Multiple regression : testing and interpreting interactions. Newbury park: sage.

2. Ajzen, i. (1987). Attitudes, traits, and actions : dispositional prediction of behavior in personality and social psychology. In leonard berkowitz (éd.), *advances in experimental social psychology* (Volume 20, p. 163).
3. Ajzen, i. (1991). The theory of planned behavior. *Theories of cognitive self-regulation*, 50(2), 179-211.
4. Ajzen, i., & Fishbein, m. (1969). The prediction of behavioral intentions in a choice situation. *Journal of Experimental Social Psychology*, 5(4), 400-416.
5. Ajzen, i., & Fishbein, m. (2004). Questions raised by a reasoned action approach: comment on ogden (2003). *Health Psychology*, 23(4), 431-434.
6. Alba-ramirez, a. (1994). Self-employment in themidst of unemployment: the case of spain and the united states. *Applied economics*, 26, 189-204.
7. Amabile, t. M., Hil, k. G., Hennessey, b. A., & tighe, e. M. (1995). « the work preference inventory : assessing intrinsic and extrinsic motivational orientations »: correction. *Journal of Personality and Social Psychology*, 68(4), 580-580.
8. Autio, e., Kenney, m., Mustar, p., Siegel, d., & Wright, m. (2014). Entrepreneurial innovation: the importance of context. *Research Policy*, 43, 1097-1108.
9. Bal, m., & Dorenbosch, l. W. (2014). Age-related differences in the relations between individualized hrm and organizational performance. *Academy of Management Proceedings*, 2014(1), 10214.
10. Bates, t. (1995). Self-employment entry across industry groups. *Journal of Business Venturing*, 10(2), 143.
11. Ben haddou, a. (1997). Maroc : les elites du royaume, essai sur l'organisation du pouvoir au maroc (l'harmattan.).
12. Bird, b. (1988). Implementing entrepreneurial ideas: the case for intention. *The Academy of Management Review*, (3), 442.
13. Bird, b., & Jelinek, m. (1988). The operation of entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 13(2), 21.
14. Bourhis, a., & Chenevert, d. (2010). Attraction et rétention des salariés du commerce de l'alimentation : étude des salariés de la génération y peu scolarisés. Présenté a xxième congrès de l'agrh, saint malo.
15. Brambor, t., Clark, w. R., & Golder, m. (2006). Understanding interaction models: improving empirical analyses. *Political analysis*, (1), 63.
16. Brillet, f., Coutelle, p., & Hulin, a. (2013). Prospective du management des ressources humaines face au comportement des jeunes salariés très qualifiés. *Management and Avenir*, 63(5), 57-80.
17. Carr, j. C., & Sequeira, j. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: a theory of planned behavior approach. *Journal of Business Research*, 60, 1090-1098.
18. Cerdin, j.-l., Colle, r., & Peretti, j. M. (2005). La fidélisation des salariés par l'entreprise a la carte. *Revue de gestion des ressources humaines*, 55, 2-21.
19. D'arcimoles, c.-h., & Trébucq, s. (2005). Méthodes de régression et traitement des données financières et sociétales : questionnements et applications. *Management des ressources humaines: méthodes de recherche en sciences humaines et sociales, méthodes & recherche* (p. 207-244). Bruxelles: de boeck supérieur.
20. Davidsson, p. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship and Regional Development*, 7(1), 41.
21. Davidsson, p., & Wiklund, j. (2001). Levels of analysis in entrepreneurship research: current research practice and suggestions for the future. *Entrepreneurship Theory and Practice*, 25(4), 81-100.
22. Degeorge, j.-m., & Fayolle, a. (2011). Les etudiants français ont-ils la fibre entrepreneuriale? *Entreprendre and Innover*, 9-10(1-2), 21-28. Doi:10.3917/entin.009.0021
23. Dejoux, c., & Wechtler, h. (2011). Diversité générationnelle : implications, principes et outils de management. *Management and Avenir*, 43(3), 227-238.
24. Emin, s. (2004). Les facteurs déterminant la création d'entreprise par les chercheurs publics: application des modèles d'intention. *Revue de l'entrepreneuriat*, 3(1), 1-20.
25. Fairlie, r. W.* (2004). Does business ownership provide a source of upward mobility for blacks and hispanics? *Entrepreneurship and public policy*, ed., doug holtz-eakin, cambridge: mit press.
26. Fayolle, a., Degeorge, j. M., & Filion, l. J. (2012). Dynamique entrepreneuriale : le comportement de l'entrepreneur. *Petites entreprises & entrepreneuriat*. De boeck supérieur. Consulté a l'adresse <https://books.google.co.ma/books?id=qgk2uwaacaaj>
27. Fayolle, a., & Gailly, b. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention : hysteresis and persistence. *Journal of Small Business management*, 53(1), 75-93.
28. Fayolle, a., & Liñán, f. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666.

29. Fini, r., Grimaldi, r., Marzocchi, g. L., & sobrero, m. (2012). The determinants of corporate entrepreneurial intention within small and newly established firms. *Entrepreneurship Theory and Practice*, 36(2), 387-414.
30. Hambrick, d. C., & Mason, p. A. (1984). Upper echelons: the organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193.
31. Kautonen, t., Hatak, i., Kibler, e., & Wainwright, t. (2015). Emergence of entrepreneurial behaviour: the role of age-based self-image. *Journal of Economic Psychology*, 50, 41 - 51.
32. Kickul, j., & Zaper, j. A. (2000). Untying the knot: do personal and organizational determinants influence entrepreneurial intentions? *Journal of Small Business and Entrepreneurship*, 15(3), 57-77.
33. Kolvereid, l. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21(1), 47.
34. Krueger, n. F., & Carsrud, a. L. (1993). Entrepreneurial intentions: applying the theory of planned behaviour. *Entrepreneurship and Regional Development*, 5(4), 315.
35. Krueger, n. F., Reilly, m. D., & Carsrud, a. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
36. Lee, l., Wong, p. K., Foo, m. D., & Leung, a. (2011). Entrepreneurial intentions: the influence of organizational and individual factors. *Journal of Business Venturing*, 26(1), 124-136.
37. Long, r. J. (1978). Employee ownership and attitudes toward the union: an empirical study. *Relations industrielles/industrial relations*, 237-254.
38. Maâlaoui, a., Fayolle, a., Castellano, s., rossi, m., & safraou, i. (2012). L'entrepreneuriat des seniors. *Revue française de gestion*, 227(8), 69-80.
39. Maes, j., Leroy, h., & Sels, l. (2014). Gender differences in entrepreneurial intentions: a tpb multi-group analysis at factor and indicator level. *European Management Journal*, 32(5), 784-794.
40. Minniti, m., & Lévesque, m. (2010). Entrepreneurial types and economic growth. *Journal of Business Venturing*, 25, 305-314.
41. Myers, r. H. (1990). *Classical and modern regression with applications* (2^e ed.). Usa: duxbury/thompson learning.
42. Ogden, j. (2003). Some problems with social cognition models: a pragmatic and conceptual analysis (english). *Health psychol. (hillsdale, n.j.)*, 22(4), 424-428.
43. Pichault, f., & Nizet, j. (2000). *Les pratiques de gestion des ressources humaines. Approches contingente et politique*,. Paris: édition du seuil.
44. Podsakoff, p. M., Mackenzie, s. B., lee, j. Y., & podsakoff, n. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
45. Rotefoss, b., & Kolvereid, l. (2005). Aspiring, nascent and fledgling entrepreneurs: an investigation of the business start-up process. *Entrepreneurship and Regional Development*, 17(2), 109.
46. Safraou, i., Castellano, s., Maalaoui, a., & Menvielle, l. (2012). Singularité du processus entrepreneurial chez les seniors. *Un entrepreneuriat social et solidaire*, 255-256(3-4), 59- 66.
47. Scheiner, c. (2009). Fundamental determinants of entrepreneurial behaviour. *Fundamental determinants of entrepreneurial behaviour* (p. 544). Gabler. Consulté à l'adresse http://dx.doi.org/10.1007/978-3-8349-8327-5_2
48. Schjoedt, l., & Shaver, k. (2007). Deciding on an entrepreneurial career: a test of the pull and push hypotheses using the panel study of entrepreneurial dynamics data. *Entrepreneurship Theory and Practice*, 733-752.
49. Schlaegel, c., & Koenig, m. (2014). Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, 38(2), 291.
50. Scouarnec, a., Yanat, z. (2005). *La prospective métier : un instrument au service d'une grh innovante* (french). Consulté a l'adresse : <http://search.ebscohost.com/login.aspx?direct=true&db=fcs&an=18243201&lang=fr&site=eds-live>
51. Shane, S., Locke, e. A., & Collins, c. J. (2003). Entrepreneurial motivation. *Human resource Management Review*, 13(2), 257-279.
52. Thietart, r.-a. (2014). *Méthodes de recherche en management* (4^{ème} ed.). Dunod.
53. Thompson, e. R. (2009). Individual entrepreneurial intent: construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694.
54. Tkachev, a., & Kolvereid, l. (1999). Self-employment intentions among russian students. *Entrepreneurship and Regional Development*, 11(3), 269.
55. Tornikoski, e. T., Kautonen, t., & Le loarne, s. (2012). Le rôle de l'âge dans l'intention entrepreneuriale. *Quelles leçons sur les seniors?*, 227(8), 95-109.

56. Van gelderen, m., Brand, m., Van praag, m., Bodewes, w., Poutsma, e., & Van gils, a. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538-559.
57. Van stel, a., Carree, m., & Thurik, r. (2005). The effect of entrepreneurial activity on national economic growth. *Small Business Economics*, 24(3), 311.
58. Weick, k. E., & Karl, e. W. (2015). The social psychology of organizing, Second edition. *M@n@gement*, (2), 189.
59. Wennekers, s., Van stel, a., Carree, m., & Thurik, r. (2010). The relationship between entrepreneurship and economic development: is it u-shaped? *Foundations & trends in entrepreneurship*, 6(3), 167.
60. Wilson, f., Kickul, j., & Marlino, d. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387.