The Effect of Perceived Overqualification on the Entrepreneurial Intention : Case of The Moroccan Executives - Engineers

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Abstract: The objective of this article is to study the influence of the perception of overqualification on the entrepreneurial intention among executive engineers. The results issued from hierarchical regression analyses, which were applied on a sample of 376 executive-engineers show that the intensity of the relation between the entrepreneurial attitude and perceived behavioral control, and the entrepreneurial intention varies according to perceived overqualification. The theoretical and managerial implications of this research will be presented, and avenues of research will be proposed.

Keywords: Entrepreneurial Intention, Perceived Overqualification, Theory of Planned Behaviour, Executive-Engineer.

I. INTRODUCTION

See to it that the skills acquired through the education system are in adequacy with those required by the employment is essential to fire the best of the employee. Unfortunately, several employees suffer from a problem of overqualification. The overqualification is the situation in which the employee possesses a level of qualification upper to that required by his employment [1]. Among the employees, the engineers are a category more exposed to the problem of overqualification. It has negative consequences on the well-being of the employee and on the company. Previous studies show that the perception of overqualification influences negatively the intention to leave the company [2], job satisfaction [3], and the organizational commitment [4]. However, to our knowledge, there isn't any work who studied the relation between the overqualification and the entrepreneurial intention. Indeed, several employees choose to turn to the entrepreneurial career because the employment does not allow them to exploit and to value their skills. These people do not like seeing their capacity under employees and will not hesitate to leave their employment if we let them vegetate without perspective of evolution. In Morocco, countries towards which we are interested in this study, the companies tend to look for engineers having skills and entrepreneurial qualities and allocate them to natural missions more technical than managerial or still entrepreneurial [5]. Reference [6] find that the degree of use of the skills is a source of satisfaction at the Moroccan engineers. These findings invite us to study how the perception of overqualification can bring certain employees to leave their work to create their employment.

Several researchers stipulates that each entrepreneurial behaviour is intentional, and that it rarely happens randomly [7]. The present research proposes to explain the entrepreneurial intention of the engineers, with an accent put on the degree of use of the skills. Our objective is to explain why certain employees are more attracted than other towards the entrepreneurship. We argue in this research that the engineers who are livened up by a strong perception of overqualification are more attracted by the entrepreneurship.

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 and discussion the major characteristics of this research. After that, several recommendations will be drawn up and research leads will be determined.

II. FRAMEWORK AND HYPOTHESES

A. Entrepreneurial Intention

Intention reflects the 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 [8]. 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 [9] [12]. It is particularly based on the Theory of Reasoned Action elaborated by [13]. The references [11] [12] [14] [16] suggest using 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 attitudes, beliefs, or other psychological variables [17]. Intentions are formed through time, under three main factors whose importance depends on the studied case. The three antecedents of intention are:

- The attitudes toward the behaviour: The attitude of the individual to the creation of a company rests on its values and its professional characteristics, and on its vision of the entrepreneurship.

- The subjective norms: They refer to the social pressure that pushes the individual to perform or not perform a behaviour [18]. 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 makes a reference to the degree of confidence by which the person thinks she can successfully create his own company.

Abstract: The present research...
B. Perception of Overqualification and Entrepreneurial Intention

The feeling of overqualification makes a reference to the situation in which the employee perceives that he possesses skills, knowledge, experience and capacities which are not used in his work [1]. This feeling often arises from an inadequacy between the individual and the needs for the post [1]. The measure of the overqualification can be objective or subjective. The objective measure of overqualification comes true by comparing the knowledge of an individual, its skills and its capacities, with the requirements of post [2], [19], while the subjective measure bases itself on the perception of the collaborators of their level of qualification, they can perceive themselves as overqualified [1]. Both are different constructions, and each can return us to explain the behavior of the collaborators [19]. However, the researchers who studied the problem of overqualification especially used the subjective measure, [2] suggest that the subjective measure (perceived by the employees) is more important for predicting attitudes and behavior compared with the objective measure, because it reflects the psychological state of the employee, its attitudes, its behavior and its reactions. In this study, we follow these authors, by studying the overqualification in its subjective dimension.

So, researchers indicate that the attitude most often associated with the overqualification is the dissatisfaction in the work [20]. Studies showed that the collaborators who perceive themselves overqualified are less satisfied [20] [21], and may more leave their organization [2]. The incapacity of the collaborators to make use completely of their skills and capacities, is a likely source of stress which leads to a deterioration of the psychological well-being [22]. The origin of the feeling of overqualification can be explained by the theory of adjustment person-environment. The adjustment person-environment stipulates that an inadequacy between the person and his employment, that is when its skills and its qualifications exceed the requirements of his post, causes negative effects on its satisfaction. Whereas a good adjustment between the person and his employment would have a positive effect on the satisfaction [22]. So, the collaborators livened up by a feeling of overqualification are probably people who have attitudes and entrepreneurial skills, they can be more to attract by the new business start-up in order to value and exploit their skills. The entrepreneurship can appear as a solution in the face of underemployment. On the basis of these arguments, we shall test the following hypotheses:

H1 : The relationship between attitudes and entrepreneurial intention is moderated by perceived overqualification, such that the higher perceived overqualification, the stronger the relationship between the attitudes and entrepreneurial intention

H2 : The subjective norms impact negatively the entrepreneurial intention.

H3 : The relationship between perceived behavioral control and entrepreneurial intention is moderated by perceived overqualification, such that the higher perceived overqualification, the stronger the relationship between the perceived behavioral control and entrepreneurial intention

Figure 2: Conceptual Framework
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 receive 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.

### B. 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 [23], the intention was measured by six items. Example of item: Never search for business start-up opportunities. 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, [16]).

**Subjective norm**: To measure the opinions of the people about your choice for entrepreneur's career, We used the scale of [11]. 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. Perceived capacity were measured with 4-item scale [24]. Example of item: You feel capable of bringing to successful a project of new business start-up. The results of the tests of reliability allows to validate the scale (Explained variance = 86%, α Cronbach = 0,90).

**Perception de surqualification**: To measure the perception overqualification, we used the scale proposed by [25]. Example of item: Mon niveau d'éducation dépasse les exigences de mon poste actuel The results of the tests of reliability allows to validate the scale (Explained variance = 67%, α Cronbach = 0,89).

### C. Control Variables

After 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 [26] [27]. 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 [28]. 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 [29]. We also notice the effect of the nature of the work (exclusively technical, mainly technical, not very technical, not technical at all) has on the entrepreneurial intention.

#### D. 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 [30]. 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 1,59. The VIFs are below 4, so they are well below 10: limit starting from which there is a serious problem of multicollinearity [31] [32]. Based on the correlation tests and the VIF, we can conclude that there is no problem of multicollinearity for our independent variables.

### Table 1: Correlations, Descriptive Statistics and Variance Inflation Factors (N = 376)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation (N = 376)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Derivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (male=1)</td>
<td>0.13</td>
<td>1.35</td>
<td>0.38</td>
<td>0.91</td>
</tr>
<tr>
<td>2Age</td>
<td>-0.09</td>
<td>1.09</td>
<td>0.33</td>
<td>0.86</td>
</tr>
<tr>
<td>3Work field (Private sector=1)</td>
<td>0.09</td>
<td>1.07</td>
<td>0.30</td>
<td>0.80</td>
</tr>
<tr>
<td>4Salary</td>
<td>0.28</td>
<td>0.81</td>
<td>0.61</td>
<td>1.42</td>
</tr>
<tr>
<td>5Remote work (0=full time work)</td>
<td>0.31</td>
<td>0.81</td>
<td>0.59</td>
<td>1.46</td>
</tr>
<tr>
<td>6Dependable variable</td>
<td>0.01</td>
<td>1.84</td>
<td>0.61</td>
<td>1.13</td>
</tr>
<tr>
<td>7Intention entrepreneuriale</td>
<td>0.70</td>
<td>0.87</td>
<td>0.61</td>
<td>1.13</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01, ***p<0.001, The VIF are in brackets.

### IV. RESULTS AND DISCUSSION

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 impact on the entrepreneurial intention. Men seem to be more attracted to company creation than women (β=-0,207, t=-4.917, p<0.001). This result confirms the works of several authors [26], [27], who indicate that the men are more adventurous in their career, whereas the women are forced to the family responsibilities and thus less susceptible to develop entrepreneurial intentions.

The relation between age and the entrepreneurial intention takes a downward linear shape, in other words. Our result meets several other studies that attest that the entrepreneurial intention decreases in a linear manner with age [33].

We can also see that Work field has a negative impact on the entrepreneurial intention (β=-0.130, t=-2.42, p<0.05). The
people working in the private sector seem to have more entrepreneurial intention compared with the people who work in the public and semi-public sector. This result is not surprising. In private enterprises, the employees work in a dynamic environment, they are exposed to the market (customers, suppliers). It allows to instill an entrepreneurial spirit. For example, [34] finds that the engineers who participate in marketing studies have more entrepreneurial intention. On the other hand, the public sector is characterized by an excessive bureaucracy, codified, centralized and treated on a hierarchical basis structures, which suffocate any vague desire of entrepreneurial movements.

Our results show that the size of the company has a significant impact on the entrepreneurial intention ($\beta_{-}=0,159$, $t = -2,993$, $p<0.01$). 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). Several authors [35] [37], found the link between the size of the company and its entrepreneurial dynamics (Corporate entrepreneurship). Reference [35] indicates that small and medium-sized enterprises are exhorted to be more entrepreneurial. It can explain why we found that the entrepreneurial intention is more pronounced in the companies of small sizes.

Table 2: OLS Regression Results (N = 376)

<table>
<thead>
<tr>
<th>Variable Dependant: Intention entrepreneurial</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td><strong>(3,377)</strong></td>
<td><strong>(3,377)</strong></td>
</tr>
<tr>
<td>Control</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gender (male=1)</td>
<td>-0,207* (-4,917)</td>
<td>-0,109 (-2,398)</td>
<td>-0,041* (-0,226)</td>
</tr>
<tr>
<td>Age</td>
<td>-0,206 (-2,331)</td>
<td>0,074 (0,070)</td>
<td>0,070 (0,046)</td>
</tr>
<tr>
<td>Work field</td>
<td>-1,138* (-2,42)</td>
<td>-0,01 (-0,004)</td>
<td>-0,02 (-0,007)</td>
</tr>
<tr>
<td>Salary</td>
<td>0,001 (0,000)</td>
<td>0,001 (0,000)</td>
<td>0,001 (0,000)</td>
</tr>
<tr>
<td>Firm size</td>
<td>-1,169** (-2,99)</td>
<td>-0,089* (-0,29)</td>
<td>-0,089* (-0,29)</td>
</tr>
<tr>
<td>Nature of the work</td>
<td>0,001 (0,000)</td>
<td>0,001 (0,000)</td>
<td>0,001 (0,000)</td>
</tr>
<tr>
<td>Main effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Overqualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective norm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived norm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Overqualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-variance</td>
<td>30,509***</td>
<td>34,312***</td>
<td>34,312***</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0,117</td>
<td>0,304</td>
<td>0,428</td>
</tr>
</tbody>
</table>

*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 perceived overqualification between the two constituents of the theory of planned behaviour (attitudes, perceived behavioural control) and entrepreneurial intention, we have followed the steps suggested by [38].

First of all, we should calculate the products of the two variables (independent variable x 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 x moderating variable, model 3). The moderating role is set if the coefficient of multiplicative effect is statistically significant [38].

The results of the regression in model 2 reveal that attitude has a positive influence on the entrepreneurial intention ($\beta_{-}=0,337$, $t = 6,756$, $p<0.001$), as well as the perceived behavioural control ($\beta_{-}=0,370$, $t = 7,236$, $p<0.001$). In model 3, we notice that the interactive effects of the two components (attitudes, perceived behavioural control) with perceived overqualification are significant, respectively ($\beta_{-}=0,046$, $t = 2,40$, $p<0.05$) ($\beta_{-}=-0,195$, $t = -7,312$, $p<0.001$). The first step of [38] method is fulfilled.

The second step consists in verifying that the coefficient of determination $R^2$ of the second regression should also be better than that of the first regression to show that the addition of the moderating effect improves the predictive validity of the model [38]. We notice that $R^2$ increased by model 2 to the model 3 from 34,5 % to 54,4 %. It implies that the perception of overqualification moderates the relation between both components of TBP (Attitude, Perceived control) and entrepreneurial intention. Hypotheses 1 and 3 are validated. In other words, the intensity of the relation between the attitude and perceived control, and the entrepreneurial intention varies according to perceived overqualification.

However, we have not found a significant link between the subjective norms and the entrepreneurial intention ($\beta_{-}=0,034$, $t =0,844$). Hypothesis 2 is not validated. 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.

Figure 3: Results of Full Model

CONCLUSION

A. 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 variable of perceived overqualification enables a better understanding of the entrepreneurial intention. Moreover, it should be taken into consideration that the perceived overqualification has a
moderating effect between the entrepreneurial intention and its antecedents (attitude, Perceveid control). This moderating role of perceived overqualification 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. Also, this result meets the results reached by [39] who believe that the desirability (attitude) and feasibility (Perceveid control) that were detected are the best predictors of the entrepreneurial intention according to their meta-analysis on the entrepreneurial intention.

B. Practical Implications
Validating hypothesis 1 and 3, according to which the relation between attitude and entrepreneurial intention is stronger among the employees overqualified, has confirmed the need for individualising the managerial practices [40] [41]. Lors du recrutement, il est important d’analyser les qualifications des candidats, de connaître leurs besoins et leurs attentes. Cela est important pour la motivation au travail, la satisfaction et leurs implications. 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.

C. 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 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 [42]. 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 [43].

D. Directions for Future Research
First, 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 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.

References


