

# Factors Affecting the Growth of New Firms: A Multidisciplinary Perspective

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**Abstract.** The aim of this study is to investigate how traits of entrepreneurial personality (need for achievement, extraversion and resilience), social and professional background (level of education and experience), the characteristics of the organization (financial resources during launch of the business and the number of partners) and the characteristics surrounding the business activity, affect the growth of new firms. The sample is composed of 517 entrepreneurs (people who are at the same time founders, owners and directors of SMBs in Spain-). We used a structural equation model –Partial Least Squares- to carry out a causal analysis with latent variables. The results indicate that, the most significant variables that explain growth are experience, the leader's resilience level and his or her understanding of the business environment.

**Keywords:** Entrepreneur, Growth, New Ventures, Personality

## 1. Theoretical Framework and Hypothesis

There is currently an increased interest in entrepreneurs and the establishment of new companies. Several studies have proven their importance which is above all centered on their ability to drive job creation and on the overall economic strength by means of bringing new companies into the business network [1]. Likewise, the importance of entrepreneurs and company start-ups are highlighted as key factors in generating economic growth and maintaining competitiveness of economies [2].

Traditionally, researchers have focused on identifying the personal and psychological features that distinguish entrepreneurs from other people, and that significantly affect the success of their companies [3].

Nowadays, there are very few who support the theory that the entrepreneur's behavior along with growth of their business is solely affected by the personal characteristics of the individual [4]. Taking into consideration contributions from different scientific disciplines (economics, psychology, sociology, etc.), it is possible to identify at least 3 groups of factors that may be affecting the chances of survival and growth of entrepreneurial companies. These 3 groups are: a) factors related with the entrepreneur's personality and social and professional background; b) organizational factors, or intrinsic factors of the new company; c) the environment, or factors external to the firm.

The majority of empirical studies on entrepreneurship have used profitability or rate of growth, or both, as measures of success [5]. Combs et al [6] found evidence on the convergent and discriminant validity of three performance dimensions: profitability, growth, and stock market performance. Nevertheless, we should bear in mind, that profitability and growth measure different aspects of entrepreneurial success [4] and that on occasions, particularly in the short term, growth is achieved at the cost of profitability. Therefore, it would not be appropriate to combine growth rate and profitability to create a measure of success. On the other hand, in our analysis we cannot include stock market performance because none of the companies in the sample are listed on the stock exchange and therefore it is difficult to establish the evolution of the price of their shares. When questioned, the entrepreneurs tend to declare inferior profits rather than the actual ones and they are reluctant to provide information about their companies. For this reason we decided to use growth rate as a method of measuring the entrepreneurial success and therefore, as the independent variable of our theoretical model.

The independent variables in our theoretical model are:

### 1.1. Need for achievement

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This is one of the most-studied aspects related to the personality of those who create companies. Numerous authors have proven that a high need for achievement favors business growth [7].

Based on previous studies, our 1<sup>st</sup> Hypothesis is:

H1: Need for achievement is positively related to venture growth.

## **1.2. Resilience**

There are very few studies concerning how the ability of the founder/entrepreneur to overcome adverse situations and positively learn from them affects the success of their company. Nonetheless, resilience is an unquestionable real growth strategy for entrepreneurs that will allow them to deepen the knowledge of their skills. Hayward et al [8] suggest that the ability of entrepreneurs to handle adversity determines their success. For their part, Markman and Baron [9] reached the conclusion that the characteristics of resilient entrepreneurs gave them the tools, skills and dexterity that are key to the success of their companies.

Based on previous studies, our 2<sup>nd</sup> Hypothesis is:

H2: Resilience is positively related to venture growth.

## **1.3. Extraversion**

We live in a time where entrepreneurs compete in an ever more unstable environment, where it is impossible to control and to independently face all the changes arising. In this context, the successful entrepreneur is he or she who has been able to grow a business which has the correct internal structure, but who also continues to hold close relations out with the company (partners, clients, suppliers, institutions, etc). The frequency and intensity with which the business communicates with the aforementioned, greatly depends on one characteristic of the founder's personality: extraversion. An extrovert entrepreneur, compared with an introvert one, will make more frequent contacts with the external information networks and those contacts will be closer and more intense [4].

Based on previous studies, our 3<sup>rd</sup> Hypothesis is:

H3: The extraversion of the founder is positively related to venture growth.

## **1.4. Educational level**

From a theoretical point of view, there is no doubt that the entrepreneur is the most important resource in the creation of an organization. In this respect, it would be expected, as demonstrated by Honig [10] that knowledge acquired through formal education enriches the entrepreneur's human capital and has repercussion on both the maintenance and the major growth of the venture. As the company grows, in general, business operations are more complex, and better planning and knowledge is necessary. For Peña [11], educational level is a variable proxy of the individual's general amount of knowledge. Given that the success of the business requires knowledge of a number of different areas and sufficient learning capacity, a positive relation should exist between higher education and the propensity to create and maintain the company.

Based on the previous literature, the hypothesis of our study is:

H4: Educational level is positively related to venture growth.

## **1.5. Experience**

Empirical evidence shows that previous experience related to business management and creation provides entrepreneurs with an added advantage, namely: a greater ability to foresee most problems encountered by young companies and the ability to use the most appropriate management methods to resolve such problems [12].

Based on the previous literature, the hypothesis of our study is:

H5: Experience is positively related to venture growth.

## **1.6. Financial Resources with Which to Start**

The lack of financial worries eases the process of starting-up the business plan and increases level of confidence with respect to its proper development. A significant amount of financial capital provides the

entrepreneur with greater flexibility to implement a wider range of strategies, and this will positively affect the venture growth [13].

Based on the previous literature, the hypothesis of our study is:

H6: The initial financial resources at the start of the venture are positively related to venture growth

### **1.7. Number of Partners**

When a company is set up with a group of people, the pool of intangible assets and the capacities of the organization tend to be greater and more diverse than when the company is set up by just one entrepreneur, and as a result the company will perform considerably better.

The existence of partners provides the company with a range of knowledge, abilities and distinctive skills; a product of collective learning which facilitates growth. Thus, previous studies [14] suggest that companies set up by more than one person have more possibilities of growth than those set up by a single individual.

Therefore we reach the following hypothesis:

H7: Number of partners is positively related to venture growth.

### **1.8. Environmental Conditions**

External conditions (environment) refer as much to macroeconomic variables as to the rules and regulations (tax assessment, delays in payment of social security, etc) which support the 'birth' and development of the company [11]. The entrepreneur's perception of the future evolution (positive and negative) of these variables will influence company growth.

The expected relationship between the perception of the environment and venture growth is linked to the idea that in times of recession or depression company growth reduces or is brought to halt [15]. Alternatively, when the economic environment is favorable or perceived as being so, company growth is stimulated; clients are more disposed to spend on goods and services and the entrepreneur is more predisposed towards growth.

Taking the latter into consideration, our ninth hypothesis is:

H9: The perceived importance of a favorable business environment is positively related to venture growth.

## **2. Sample**

The sample consists of 517 people that founded, own and manage well established family companies (more than 42 months old), located in Spain and whose main aim is growth. 42% of them (217 individuals) are women and 58% (300 individuals) are men. Their ages range between 22 and 45 years old ( $m=34,2$ ;  $d.t.=6,34$ ). The group demonstrate a high level of education (45% have a University Bachelor's degree or a Diploma, 20% have attained secondary education level, and the remaining 35% have completed primary education). Average experience in the sector or management was 6 years ( $d.t.=1.1$ ). All of them are small companies (around 20 or less employees). The average number of employees per company is 8 ( $d.t.=1,78$ ).

## **3. Measurement instruments**

The growth rate was measured based on two items: sales growth rate and profit growth rate in the last 4 years. In order to facilitate the response process and thus avoid any objections to providing data, the growth rates were categorized in six intervals ranging from (1) less than 5% to (6) more than 100%.

The founder/entrepreneur's personality features were measured with the help of multiple items, for each of them a Likert scale was used in which 1 represents strongly disagree and 7 strongly agree.

The need for achievement was measured, based on the EPPS manual [16] (e.g. "despite people telling me –it cannot be done- I will keep trying it"), using four items, resilience using 10 items adapted from the Connor-Davidson scale [17] (e.g. "when things seem to be beyond hope, I will not give up"), and extraversion with twelve items from the Eysenck, Eysenck and Barret scale [18] (e.g. "I enjoy meeting new people"). Similarly to what we did with the sales and profit growth rate, the financial resources with which to

start the business activity were grouped in 6 intervals ranging from 1 “less than 20,000 Euros”, to 6 “more than 2 million Euros”

A “focus group” is used to help us in determining the environmental factors that may affect the entrepreneurs/founders’ motivation to make their companies grow. At the end, we created 10 items that measure the environmental conditions that favor the development of the business (e.g. “Government policies that support new companies”). A 7 point Likert scale was used to check the importance of each of them where 1 means “not at all important” and 7 “extremely important”.

To finish, we asked the survey respondents to indicate their level of education (from non-formal education to postgraduate courses), years of work experience (including previous experience before founding the company) and the number of partners.

#### 4. Model Estimation

The statistics technique used to articulate the empirical nature of the relationship between the proposed hypothesis and the model depicted in figure 1 is the Variance or Component-Based Structural Equations Analysis-Partial Least Squares –PLS- [19]. PLS is similar to LISREL but has two advantages compared to the latter: a) It does not require the data to come from normal probability distributions; b) it is appropriate for the analysis of low number samples.

Although PLS estimates the measured and structural parameters at the same time, a PLS model shall be analyzed and interpreted in two stages: 1) Assessment of the validity and liability of the model for measuring, and 2) Assessment of the structural model. This sequence ensures valid and liable measurements before trying to derive conclusions related to the existing relations between the constructs.

#### 5. Results

The estimation of the individual reliability of the items, as well as the compound reliability and both the convergent and divergent validity of the constructs used to evaluate our model show highly acceptable values. Thus, we can remain highly confident of the conclusions derived from the study concerning the existing relations between the constructs.

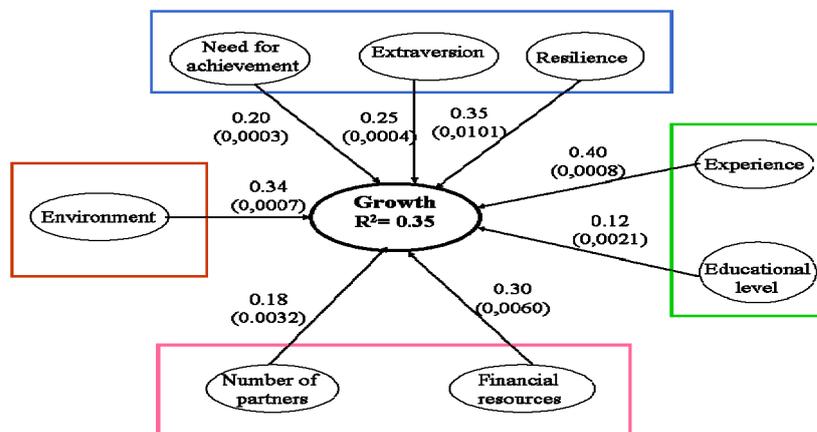


Figure 1. Structural model results

Our data does not allow rejection of any hypothesis made during the investigation, which were proposed in view of previous studies.

As can be observed in figure 1, the entrepreneur's experience is the variable which has the greatest impact on the explanation of venture growth. This suggests the importance of developing training programs, through which it would be possible to obtain experience in all aspects of company management (technical, commercial, strategic, ...); for example, through obligatory work-experience in companies or the obligation that in the majority of subjects these skills can be developed through learning-by-doing. In this way, the entrepreneur could acquire his/her first experiences during his academic training. On the other hand, it could

be important to encourage support policies for entrepreneurs who include as one of the basic requirements, that entrepreneurs should have previous experience, whether positive or negative.

Another variable which significantly impacts upon venture growth is the perception of a favorable environment for business growth. If the importance of creating entrepreneurial companies within the business network stems from their ability to create jobs and their contribution to economic activity, in view of this result, it is indisputable that any government worried about the sustained and sustainable economic growth of their country, autonomous community, city, etc. shall drive forward plans and actions that bring about a positive perception of the environment for those who are willing (entrepreneur/founders) to create new companies.

The three variables considered which concern personality (need for achievement, extraversion and resilience), have proven to be have a positive impact on venture growth.

Our findings support the idea that the study of successful entrepreneurs should be addressed from a multidisciplinary point of view considering both the leader's personality and also the characteristics of the company, without neglecting the environment within which the company is established and grows.

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