

THE ENTREPRENEURIAL MOTIVATIONS AND OBSTACLES OF STUDENTS' BELONGING TO A PRIVATE AND PUBLIC HEI: CASE ECUADOR

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ABSTRACT

The reasons that university students perceive to create an enterprise are diverse, as well as the motivations or barriers. The purpose of the research was analysis of the motivations and obstacles towards the entrepreneurial intent of university students belonging to respectively a private institution, the Catholic University of Cuenca, and a public higher education institute, the University of Cuenca, both situated in the city of Cuenca, Ecuador.

A quantitative method utilizing Partial Least Squares based Structural Equation Modeling (PLS-SEM) was applied to assess if significant differences exist in the motivation and obstacles of the entrepreneurial intention between the students of both type of higher education institution, respectively a private and public HEI. A total of 400 male and female students participated in the survey.

Results revealed that the students of both institutions show that the entrepreneurial intention is not supported by the obstacles. In addition, the motivations are significant only in the public university especially the aspect of putting the ideas into practice. Furthermore, the motivations of the students in the private university are not significantly affected by the entrepreneurial intention.

Study results were used to recommend HEIs to improve the quality of the study programs with focus on strengthening the students' intent to the creation of an enterprise, the training in tools that develop and strengthen the attitude in entrepreneurship, and the development of competences as to mitigate the difficulties of entrepreneurial initiative.

Keywords: motivations, obstacles, entrepreneurial intention, university students, private and public university

1 INTRODUCTION

The reasons and obstacles to starting a business are elements that are present in students with entrepreneurial initiative in HEI. To be an entrepreneur it is necessary to have a strong motivation [1]. The entrepreneurial process begins with the motivation to create a company, for others it only happens when an opportunity is detected [2]. Likewise, since the entrepreneur has an idea and considers that it can be carried out until it becomes a viable business, he/she might face endless obstacles [3].

With regard to higher education, a large volume of literature exists that analyzes the reasons and difficulties university students experience related to entrepreneurial intention. In this sense, some studies examine the entrepreneurial profile of motivations and obstacles in the university environment [4,5,6], while other research is focused on gender [7]. However, comparative studies of motivations and obstacles in different groups of students or different university environments are scarce [8,9], and examination of the impact of the type of higher education institution on changes in the students' individual attitudes towards entrepreneurship and entrepreneurial intention are especially important [10].

Entrepreneurial intention indicates the effort that a person will make to carry out that entrepreneurial behavior [11]. It is evident that personal and situational variables have an indirect influence on entrepreneurship through influencing key attitudes and the general motivation to act [12].

There is a general agreement about the attitudes and motives that characterize an entrepreneur: independence, desire for prestige, strong self-actualization and moderate risk-taking [13], and the university education is an important source of support for college graduates to develop necessary skills and acquire practical knowledge for becoming entrepreneurs [4].

1.1 Motivations

Entrepreneurship is the result of integrating cognitive factors (knowledge and skills) with motivational factors [14]. One of the motivations to undertake is personal independence, the economic autonomy of becoming entrepreneurs [15,16], and in most cases are the primary objectives the desire to earn more money and receive intrinsic or extrinsic rewards [4,16].

Self-efficacy and achievement motivation explain the creativity in the entrepreneur, defined as the ability to generate novel and useful ideas [5]. Other motivations for many students when considering starting up a business are to get public recognition, to be your own boss, participate in the whole decision-making process, ensure a secure future for the family, to be close to family, and the possibility to create sufficient funding for retirement [6].

1.2 Obstacles

The obstacles to entrepreneurial intention include for example lack of access to capital, lack of government support, risk and the macro-economy, and the lack of location advantages [4,15]. Other barriers that affect entrepreneurial intention are experience and training and lack of knowledge [9]. Some students were afraid that they would fail because of poor profits [4]. Other barriers are lack of entrepreneurial knowledge and skills, and expertise on how starting and running a business, something not taught or practiced in the university [17,18].

Other identified limitations hindering the starting of a new business are too much risk, too much competition, bad prospect after retirement, lack of marketing strategy and fear of failure [19]. An entrepreneurial family background has been seen as a potential constraint because of its inherent source of family friction associated to the long working hours and stress [20]. Other aspects are for example poor image or lack of personal desire influencing individuals' decisions on perceived entrepreneurial desirability [20].

Therefore, the objective of this article is to comparatively analyze the effect of perceived motivations and obstacles on the entrepreneurial intention in the students of a public and private higher education institution in Ecuador.

2 METHODOLOGY

2.1 Data collection and sample

The study is based on a survey conducted among university students in the city of Cuenca in Ecuador, the third largest city in the country. The survey was conducted in 2019 on 200 students of the University of Cuenca (public) and 200 students of Catholic University of Cuenca (private), both being the main HEIs in the city.

The student sample of the public university consisted of 53.7% women and 46.3% men who are enrolled in the first to the ninth level in the areas of Social Sciences, Engineering, Health and Wellness, Services, Arts, Education, Physical Sciences, Administration, Education, Agriculture, and Information and Communication. 70% of the population has an age between 20 and 25 years.

The student sample of the private higher education institution is composed of 45.4% women and 54.6% men, who are in the first to ninth level in the areas Health and Wellness, Engineering, Socials Sciences, Information and Communication, Education and Agriculture. 65% of the surveyed students possess an age between 20 and 27 years.

Both motivation and obstacles were measured using a 2 (0,1,2) point Likert scale and the Entrepreneurial Intention self-efficacy was measured using a 10-point Likert scale. The used instrument was composed of 28 questions (indicators) related to the constructs or variables of the model: 13 for "motivations for creating a company"; 14 for "obstacles to creating or starting a business"; and one for "entrepreneurial intention". Appendix 1 displays the characteristic list of

motivations and obstacles, and a summary of the responses of the surveyed students. In the case of the motivations, the most important motivation to start an own enterprise is the possibility of putting personal ideas into practice, whereas the major barrier towards the creation of an enterprise is the lack of capital.

2.2 Method

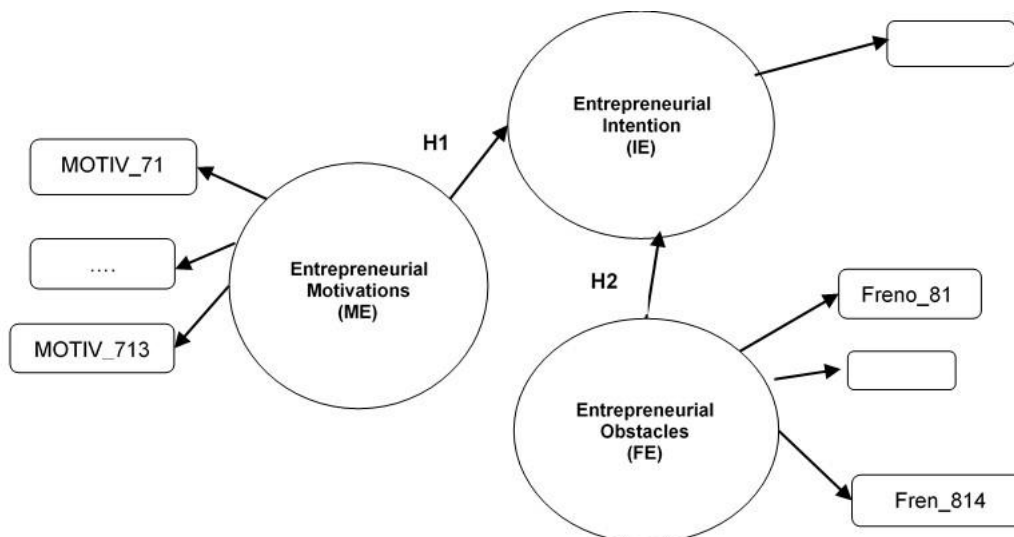
From the literature review two hypotheses surfaced (H1: Motivations-ME influences on Entrepreneurial Intentions-IE; H2: Obstacles-FE influences on EI) that led to the model shown in Figure 1; there are three constructs: “motives to undertake” (ME); “obstacles to undertake” (FE) and “entrepreneurial intention” (IE). To test the hypotheses the Partial Least Squares Based Structural Equation Modelling (PLS-SEM) technique, using SmartPLS 3.19, was applied.

The SEM structural equation model allows to explain the causal relationship between different latent variables, each characterized through one or more indicators, followed by multivariate analysis technique to test the structural model (PLS-SEM) whose main objective is causal-predictive analysis [21].

2.3 Structural model

1. ME. Entrepreneurial Motivations.
2. FE. Entrepreneurial Obstacles
3. IE. Entrepreneurial Intention.

Fig. 1. Structural Model



3 RESULTS

Figures 2 and 3 show the results of the structural model for the private and public university. Both these figures include variables such as: entrepreneurial intention, motivations and obstacles.

3.1 Measurement model

Reliability of the latent constructs was measured using Cronbach's Alpha and Composite reliability. We measure convergent validity with Average Variance Extracted and constructs loadings. The measures achieved satisfactory levels for both samples. (see Table 1). None of the charges is above 0.7, as indicated in Fig. 2. The samples are not homogeneous in their responses.

It evaluates Cronbach's alpha of the constructs and exceed the value 0.7, which gives validity to the construct. The composite reliability analysis, all constructs present values greater than 0.6,

thus confirming the internal consistency of all. The values for the AVE indicator do not exceed the recommended minimum value of 0.5. Then the constructs are unrelated.

Fig. 2. Structural model (private university)

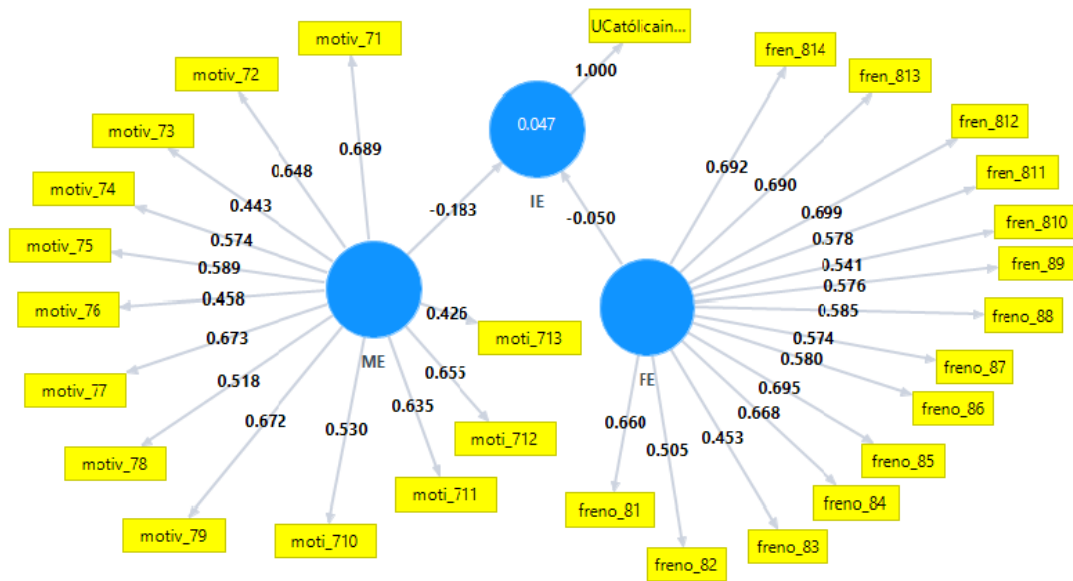


Fig. 3. Structural model (public university)

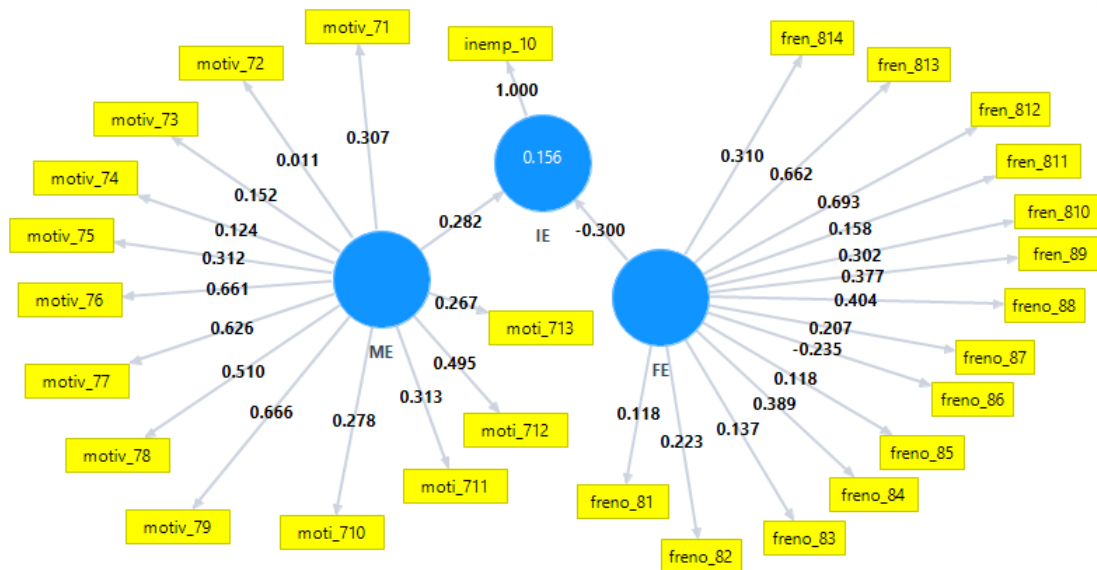


Table 1. Measurements model indicators for reflective constructs

	Cronbach's alpha		Composite Reliability		Average variance extracted (AVE)	
	Private	Public	Private	Public	Private	Public
FE	0.877	0.725	0.892	0.550	0.374	1.127
IE	1.000	1.000	1,000	1.000	1.000	1.000
ME	0.876	0.711	0.868	0.675	0.342	0.173

FE=Entrepreneurial obstacles; IE= Entrepreneurial Intention; ME= Entrepreneurial Motivations

In Discriminant Validity, the cross-load check validates first if each indicator has a correlation with its own latent variable before with others, except the Motiv_73 indicator in the private sample and in the case of the public sample. All indicators are correlated with their own latent variable rather than with others.

Based on the analysis, the model is reliable. In detail there is a lack of homogeneity in the responses of the sample, manifested in the load of indicators (see Figures 2 and 3), this implies reviewing the questions, however the Cronbach's alpha of the constructs or latent variables is higher than 0.7.

3.2 Results: structural model

Both cases, in R^2 Index, the predictive power of the model for the entrepreneurial intention variable is not greater than 0.1, therefore the model is not predictive. In the Effect f^2 the values of the impact of a latent variable on a dependent construct are far away of the permissible range (0.02, 0.15 and 0.35 are allowed); only ME on IE for public sample is closer to 0.15 (see Tables 2 and 3)

Table 2. R square of latent variables

	Private university	Public university
Entrepreneurial Intention (IE)	0.047	0.156

Table 3. f^2 of the dependent latent variables

	Private university			Public university		
	FE	IE	ME	FE	IE	ME
FE	0.002			0.106		
IE						
ME	0.022			0.094		

FE=Entrepreneurial obstacles; IE= Entrepreneurial Intention; ME= Entrepreneurial Motivations

Tables 4 and 5 display the relationships between the constructs of the model through the standardized beta paths, the standard error, the student's t value, the level of significance and the acceptance or rejection of the hypothesis; these results are consistent with the R^2 obtained in the previous calculations.

Results revealed that motivations are related to entrepreneurial intentions ($\beta = 0.282^*$) and the students belonging to the public institution showed that the obstacles are not related to the entrepreneurial intention. In the case of private, both motivations and obstacles are not related with the entrepreneurial intention.

Table 4. Indirect effect results (private university)

	β	Standard deviation	T statistics	P-values
FE -> IE	-0.050	0.110	0.457	0.648
ME -> IE	-0.183	0.195	0.939	0.348

FE=Entrepreneurial obstacles; IE= Entrepreneurial Intention; ME= Entrepreneurial Motivations

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table 5. Indirect effect results (public university)

	β	Standard deviation	T statistics	P-values
FE -> IE	-0.300	0.228	1.314	0.189
ME -> IE	0.282	0.094	3.001	0.003*

FE=Entrepreneurial obstacles; IE= Entrepreneurial Intention; ME= Entrepreneurial Motivations

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

4 CONCLUSIONS

The purpose of this study was to extend our understanding of the motivations and obstacles to entrepreneurial intention of students of a public and private university in Cuenca, Ecuador.

The study reveals that entrepreneurial motivation is a predictor of entrepreneurship intention in the student sample of the public university, but not in the private higher education institution. Additionally, entrepreneurial obstacles do not improve entrepreneurial intentions in both samples of university students. The results of the present study suggest that the students' motivations are different in their entrepreneurial intention, which can be due to the training they receive at the university, and the present study reveals that the education conditions in the public institution supports the perceived motivations and indirectly positively affects the entrepreneurial decision.

Both universities, the public and private institution, should continue to promote curricular activities that stimulate students to create an enterprise, for example through the development of workshops with the presence of entrepreneurs, conferences on knowledge for entrepreneurship, market and institutions supporting entrepreneurship, etc. to facilitate the entrepreneurial intention among their students. Additionally, universities could encourage students to start enterprises in business incubators, coworking, spin-offs, etc.

Based on this conclusion, public and private higher education institutions should pay special attention to training entrepreneurship teachers to design innovative programs that enhances students' motivation to create an enterprise.

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Appendix 1. Motivations and Obstacles: Descriptive Statistics

Dependent Variable		Private university			Public university		
		Mean	Std. Dev.		Mean	Std. Dev.	
Entrepreneurial Intention		8.21	2.060		7.32	1.472	
Independent variables							
Motivations		Imp.* (Likert scale)	Mean	SD	Imp.* (Likert scale)	Mean	SD
Motiv-7.1	Personal Independence	47.5%	1.33	0.717	52.5%	1.36	0.756
Motiv-7.2	Desire to earn more money than working with a salary	37%	1.12	0.784	31.5%	0.94	0.833
Motiv-7.3	Inability to find a suitable job	23%	0.75	0.807	14.5%	0.55	0.735
Motiv-7.4	Dissatisfaction in previous occupation	13%	0.55	0.715	8%	0.33	0.619
Motiv-7.5	Get a fair pay for my work	36.5%	0.95	0.887	23%	0.69	0.823
Motiv_7.6	Possibility of putting my own ideas into practice	49.5%	1.28	0.797	58.5%	1.39	0.800
Motiv-7.7	Economic Independence	48%	1.18	0.867	37.5%	1.05	0.841
Motiv-7.8	Lead a human group	35.5%	0.99	0.851	28.5%	0.79	0.860
Motiv-7.9	Invest a personal wealth	42.5%	1.11	0.855	32.5%	0.90	0.865
Motiv-7.10	Get a personal wealth	40%	1.04	0.876	25.5%	0.70	0.852
Motiv-7.11	Family tradition	12%	0.53	0.701	3.5%	0.14	0.433
Motiv-7.12	Status	21.5%	0.66	0.811	10.5%	0.28	0.643
Motiv-7.13	Self-efficacy and achievement motivation	48.5%	1.23	0.835	42%	1.10	0.857
Obstacles		Imp.* (Likert scale)	Mean	SD	Imp.* (Likert scale)	Mean	SD
Fren-8.1	High risk	23.5%	0.81	1.16	23%	0.76	0.804
Fren-8.2	Economic situation	40.5%	1.16	0.796	48.5%	1.32	0.742
Fren-8.3	Lack of capital	41.5%	1.18	0.788	46%	0.43	0.668
Fren-8.4	Fiscal charges	16.5%	0.55	0.762	10%	0.28	0.549
Fren-8.5	Inadequate labor force	13%	0.51	0.716	5%	0.23	0.656
Fren-8.6	Have a good job with a salary	14.5%	0.57	0.734	7%	0.33	0.594
Fren-8.7	Lack of minimum salary	15.5%	0.53	0.750	6.5%	0.51	0.672
Fren-8.8	Fear of failure	21%	0.7	0.796	10%	0.21	0.507
Fren-8.9	Negative imagine of the entrepreneur	19.5%	0.58	0.798	4.5%	0.36	0.610
Fren-8.10	Irregular income	15%	0.55	0.742	7%	0.19	0.485
Fren-8.11	Work long hours	9%	0.43	0.654	4%	0.83	0.798
Fren-8.12	Lack of knowledge and experience	22%	0.82	0.771	24.5%	0.28	0.569
Fren-8.13	Poor image and lack personal desire	13.5%	0.51	0.723	6%	0.19	0.515
Fren-8.14	Unsatisfactory retirement	13%	0.52	0.716	5.5%	7.32	1.472

Note: * Important (Likert Scale= 0 No important, 2 Important)