



## THE MODERATING EFFECT OF GENDER ON ENTREPRENEURIAL INTENTION AMONG COLLEGE STUDENTS

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**Abstract:** *The main objective of this research is to determine whether the gender of college students influences entrepreneurial intention, with the purpose of providing the institutions with information on whether this socioeconomic variable can influence university entrepreneurship. Such information can be useful for institutions to take effective measures to promote gender equality policies in the field of education.*

*The first part of the article describes the research methodology and definition of the variables measured therein and the hypotheses. The second section contains the descriptive analysis of the results and the independence tests for the measurement variables. The final sections include the contrast of hypotheses and the conclusions obtained.*

*The study uses descriptive statistics that allows for the analysis of convenient data and identifies patterns of behavior of the variables analyzed. Data were analyzed using frequency analysis, contingency tables and independence tests. The data collection instrument was by a questionnaire conducted with first and fourth year students, obtaining a total of 630 surveys. The variables used in this survey were structured according to gender and the intention to create a company, having first extensively analyzed the references on the relationship between these variables.*

*Finally, after statistical analysis and hypothesis testing, it can be concluded that the gender variable does not influence the entrepreneurial intention of college students, so there is no need to implement extra policies on gender equality to foster university entrepreneurship.*

**Key words:** *entrepreneurship, entrepreneurial profile, university, gender equality, business creation, entrepreneurial intention*

### 1. INTRODUCTION

This article examines entrepreneurial intention among university students according to gender and is organized into three parts.

### 2. EMPIRICAL STUDY

#### 2.1 Methodology

The main objective of this research is to determine whether the gender of college students influences their entrepreneurial intention, with the purpose of providing institutions with information



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on whether this socioeconomic variable can influence university entrepreneurship. This information can be used by educational institutions to take effective measures and aid decision-making in the allocation of resources for gender equality policies in the field of education.

For this purpose, we propose the following global hypothesis: the gender of university students is closely related to entrepreneurial intention, i.e., there are significant differences between men and women students in their propensity to start a business.

In order to contrast this hypothesis, we carried out an extensive literature review in order to construct the measuring instrument. We then proceeded to formulate the questionnaire and to consult experts on its adequacy and applicability. Following various alterations after feedback we went on to conduct the questionnaire, as described below.

We identified the target population, conducted the questionnaire and collected data based on a sample of 630 students from 6 different undergraduate degrees at the Alcoi Campus of the Polytechnic University of Valencia.

The statistical data analysis was performed using the IBM® SPSS® Statistics 20 program. Therefore, the data were analyzed using frequency analysis, contingency tables and independence tests.

### 2.2 Measurement variables

**Gender:** In previous studies that examine the age of entrepreneurs, people who make the decision to become an entrepreneur are usually between 25 and 40 years of age [1], while, in terms of gender, data indicate that 44.4% of men have the initiative to create a company as opposed to 30.9% of women [2]. Recent research framed within the analysis of entrepreneurial profile and the motivations that lead people to start a new business conclude that there is no dependent relation either between gender and the intention to create a company, or with the motivations for starting a business [3, 4]. Other studies focus on the university level, examining the attitude of students by gender toward entrepreneurship and the intention to create a business. Studies conducted in Spanish and Latin American universities conclude that there is no significant difference between these variables [5, 6].

**Intention to create a business:** this classifying item is based on two factors; the first is a dichotomous variable establishing whether or not an individual is an entrepreneur, while the second reflects the intention to create a new firm.

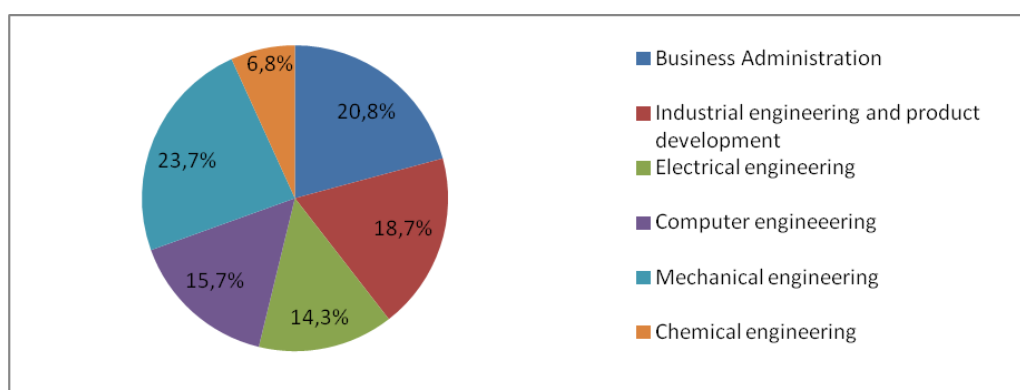
*Table 1: Measurement variables*

Items	Relevant questionnaire	Measurement scale
EDUCATION AND GENDER	B3P1.- Name of degree course	Categorical variable: 6 Subcategories of 6 degree courses include din the study
	B3P2.- Gender	Dichotomous variable. Male/ Female
INTENTION TO START A BUSINESS VENTURE	B2P1. - Do you consider yourself an entrepreneur?	Dichotomous variable. Yes/ No
	B3P19. - Have you seriously considered creating your own business?	Likert scale 1 to 5, 1 no, never to 5 yes, I firmly intend to create my own business.

### 3. RESULTS

#### 3.1. Results analysis

We undertook a process to identify the subjects taken by the largest number of students by degree course and year (first and fourth year), coinciding with core or compulsory subjects. The survey was conducted in person after authorization from the relevant professor, with a total of 630 students, representing 72.83% of the total enrolment in these subjects (865 students enrolled).



*Fig. 1: Percentage of students by degree course*

The final sample obtained indicates that, in terms of the overall characteristics of the population, 73.2% are male. With regard to the intention to create a business, 69.2% considered themselves entrepreneurs and 80.5% had a firm intention to create their own business.

From the global hypothesis H, and by using contingency tables, we generate two possible scenarios that match each variable related to the intention to create a business venture with the gender variable. Scenario HA analyzes the relationship between those that consider themselves to be entrepreneurial (B2P1) and gender, and the second scenario HB examines the relation between those that wish to create their own business and gender.

The study also addresses the question of gender among university students who answer both items affirmatively (B2P1 vs B3P19), obtaining 384 affirmative responses for both items, which represents 61.0% of the conducted surveys.

As a partial conclusion drawn from the data obtained from this analysis of the contingency tables, we can again establish characteristics according to the gender variable, obtaining percentages that are similar to those obtained from the frequency study (73.8% are male), and therefore, no statistically significant differences can be observed between the two sexes.

#### 3.2. Independence tests of the variables

The data shown in Table 2 were obtained following the Chi-Square analysis questions B2P1 and B3P19 referring to gender.

*Table 2: Dependency of the items included in the hypotheses*

SUB-HYPOTHESES	Chi-squared value	Type of dependency
1A. vs Gender	0.684	Independent
1B. vs Gender	0.327	Independent
1A&B. vs Gender	0.443	Independent



#### 4. CONCLUSIONS

With regard to the comparison of sample data against the reference questions related to entrepreneurial nature and future intention to start a business among students, we can state that this section of the university population is male-dominated according to the study frequency.

In order to confirm this statement, we proceeded to analyze the hypothesis by observing the dependency test between variables. These results coincide with data from the GEM study [7], which indicates in its analysis of entrepreneurial profiles that 54.6% of entrepreneurs are male. The GEM study also indicates that 35.9% of these cases possess higher education qualifications.

As a final conclusion, we can infer that there is no need for institutions to implement further policies on gender equality in terms of fostering university entrepreneurship.

#### REFERENCES

- [1] J.M. Veciana, M. Aponte, D. Urbano, *University students' attitudes towards entrepreneurship: A two countries comparison. The International Entrepreneurship and Management Journal*, 1(2), 2005, pp.165-182.
- [2] I. Arribas, J.Vila, *La actitud emprendedora del universitario valenciano. El emprendedor innovador y la creación de empresas de I+ D+ I*. Valencia: PUV, 2004. p. 201-212.
- [3] F.J.F García, S.M.S Cañizares, *Análisis del perfil emprendedor: una perspectiva de género. Estudios de economía aplicada*, 28(3), 2010, p. 696.
- [4] M. López-Fernández, P.M. Romero-Fernández, R. Díaz Carrión, *Motivaciones para emprender: un análisis de diferencias entre hombres y mujeres*, 2012, p. 82.
- [5] S.M.S Cañizares, F.F.García, *Mujer y emprendimiento: Un análisis en el contexto universitario español*. Revista de Ciencias Sociales, 19(1), 2013, p. 146.
- [6] M. Noguera, C Alvarez, D. Urbano. *Socio-cultural factors and female entrepreneurship. International Entrepreneurship and Management Journal*. 2013 Jun 1;9 (2):183-97.
- [7] Red Española de Equipos Regionales, GEM. Informe GEM España 2013. 2014. [Online]. Available: <http://www.gemconsortium.org/country-profile/109>. P. 60-62.