

An Entrepreneurial Well-being Model based on GEM Data for Spain

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Abstract — The Economics of Happiness is one of the research areas of greatest growth in recent years. Throughout this work, a venture based model in which satisfaction of Spanish entrepreneurs with their professional life is performed. We analyze the responses of 9,989 entrepreneurs using data from the Global Entrepreneurship Monitor (GEM), and six hypothesis are discussed. The results show that, for the Spanish case, there is a strong consistency in the results the opportunity entrepreneurs present greater satisfaction than necessity entrepreneurs.

Keywords — Well-being, education, entrepreneurship, happiness.

I. INTRODUCTION

THE economics of happiness is the theoretical and quantitative study of the effects on well-being, or other subjective measures of life satisfaction of different circumstances or events which have a determined impact on the life's conditions of individuals. It relates subjective measures of satisfaction with objectives "states of the world"; the purpose being to extract conclusions about the influence that the later could have on the perceived level of satisfaction of those affected.

As shown by Ferrer-i-Carbonell [11] happiness or relative subjectivity can be constituted as a proxy measure of utility to better understand the preferences of individuals in relation to issues as diverse as revenue received in connection with the reference group, working conditions, unemployment, health and socioeconomic inequality. Thus, for instance, with regard to subjective well-being, women are happier than men and their happiness varies with age according to an "U" shape: between 25 and 40 years happiness decreases until reaching a point between 40 and 50 years when happiness starts growing, as stated by Guardiola [13]. This female behavior is generally linked to strong family ties. As the *World Values Survey* and the *Gallup Survey* show, appropriate wage remuneration for work done and good relationships with family and friends are the most influential variables to increase the relative well-being or happiness.

On a different track, after having tested more than 20,000 participants, MacKerron & Mourato [16] show that people is significantly and substantially happier outdoors in all green or

natural habitat types than if they live in urban environments, same conclusion reached by Deschacht [9]. This fact allows Cuñado & Pérez de Gracia [7] to compute the monetary value of air quality and climate, deriving the average marginal rate of substitution between income, air quality and climate for the Spanish regions. In fact, Ferrer-i-Carbonell and Gowdy [12] associate unhappiness with environmental degradation, which encouraged the government's implementation of policies focused on improving the environment.

Finally, happiness is also affected by experiential and material purchases. While experiential purchases serve the purpose of acquiring a life experience, material purchases are focused on acquiring an object. Thomas & Millar [21] show that experiential purchases are associated with more happiness than material purchases.

However, the consideration given to entrepreneurship as a determinant of well-being or happiness, has received much less attention in the literature, the fact notwithstanding that there are various arguments to speak for the self-stem, appreciation and sense of fulfillment that those involved obtain from the very act of developing a new project or creating a new firm from scratch.

There is thus, a basis to consider entrepreneurship as a key factor to increase social wealth, by way of increasing the happiness or well-being of the people concerned. The goal of this paper is to study the relationship among entrepreneurship and well-being using GEM data for Spain. To cope with this objective, we shall begin characterizing the relation between entrepreneurship and happiness to lay the foundations of a model relating both variables.

II. ENTREPRENEURSHIP AND HAPPINESS

In a very early study, Clark, Colombier & Nasclet [4] analyze whether self-employed entrepreneurs are more satisfied than salaried workers, and using French and English data find that first-generation self-employed (those whose parents were not self-employed) are more satisfied overall than are the second-generation self-employed.

The act of entrepreneurship typically confers a trade-off between distinctiveness and the risk of diminishing psychological well-being, as in Shepherd & Haynie [18]. To be different from other professionals, entrepreneurs take commercial and financial risks. Those risks have to be

measured carefully making the necessary provisions for a proper functioning of the company. Failure to do so will augment the risk of failure, leading to dissatisfaction and a sense of personal failure reinforced if other entrepreneurs achieve success in their business.

After having analyzed data from 156 entrepreneurs, Uy, Foo & Song [22] indicate that successfully implementing new ideas is linked with more happiness when starting-up a company. This feeling is more intense in opportunity rather than necessity entrepreneurs. As a result, when new ideas are successfully being put into action, more new ideas are being generated and a virtuous circle results.

When crisis is deep, the apparent financial irrationality of entrepreneurship is typically explained in terms of non-pecuniary compensation factors, such as autonomy and satisfaction, as shown by Carter [3]. In fact, a large percentage of entrepreneurs create businesses after years of having been employed. As a result, they have the training, experience and desire to be entrepreneurs, so they have the strength to overcome any obstacles they may face in their path to success. The greater the number of obstacles to overcome on the road to success, the greater the feeling of happiness once entrepreneurial success is achieved.

Binder & Coad [2] find that individuals who move from regular employment into self-employment experience an increase in life satisfaction up to two years later, while individuals moving from unemployment to self-employment are not more satisfied than their counterparts moving from unemployment to regular employment. Unemployment is an undesirable situation by reducing the individual's self-esteem, well-being and happiness. Therefore, both the probability of entering unemployment in Origoa & Paganib [17], and temporary contracts, as shown by Kaiser [14] are negatively correlated with job satisfaction. As a result, entrepreneurial rewards are not only determined by business experience, formation and rationality, but are influenced by changing needs over time in Carter [3] which, when satisfied by the entrepreneur, increases his/her self-esteem and sense of accomplishment.

In a very different latitude, Cortés, García & Moro-Egido [6] study the relationship between labor status and individual satisfaction in Latin America. To clarify the effect of self-employment on satisfaction, they use the *Latinobarómetro Survey 2007* for eighteen Latin American and Caribbean countries, considering the category self-employment as a heterogeneous category. Contrary to existing evidence, they find that not all self-employed individuals are more satisfied than generally employed people. However, controlling for the distinction between necessity and opportunity self-employment, they obtain positive associations between self-employed entrepreneurs and their subjective well-being, although the relation does not extend across all categories of self-employed workers.

The international scientific community had achieved a certain consensus about the limited role of economic growth

on the generation of happiness in the long-term as stated by Easterlin [10], and on the acceptance of the so-called Easterlin Paradox (Substantial increments in income are not accompanied by increases in the levels of reported happiness). However, Stevenson & Wolfers [20] reopened the debate to find a small positive relationship between the two variables in the United States and in some European countries. This relationship between the desire to undertake and the feeling of happiness must be particularly intense in entrepreneurs, which makes them into internal drivers for change in organizations.

Lofstrom [15] finds that, although the returns of low-skilled self-employment among men is higher than among women, wage/salary employment is a more financially rewarding option for most low-skilled workers. Despite this fact, low-skilled workers do not fare well in today's skill intensive economy and their working opportunities continue to diminish.

The entrepreneur judged their quality of life in relative terms to compare their achievements with a group of people nearby, whether family, friends or neighbors. Therefore, as shown by Ferrer-i-Carbonell [11] economic growth distributed equally has little impact on the reported happiness. Therefore, according to Van Praag [23], to measure the degree of happiness the existence of a reference group (set-point theory) must be taken into account, so it can serve as a basis for measuring subjective feelings about perceived inequality by individuals, being a temporary feeling with continuous fluctuations in happiness (hedonic treadmill). In extreme comparing situations, individual suicide risk rises with others' income, as demonstrated by Daly, Wilson & Johnson [8]. But in these cases, psychological and psychiatric factors, frequently too complex, affect more than purely economic ones.

Entrepreneurs can be classified by a number of psychological characteristics defined by what we call the entrepreneurial spirit (see Figure 1). Ambition leads to outstanding performance, and the latter derives largely from participation in prolonged, intense, and highly-focused efforts to improve current performance, defined by deliberate practice, as shown in Baron & Henry [1].

III. MODEL AND RESEARCH HYPOTHESES

Given the above mentioned premises, we ask the following general research question: Does entrepreneurship make a difference in the satisfaction with their professional life of adult Spaniards?

We start by questioning the ability of different people to acquire their own skills by themselves, thus valuing them as achievements that make them capable to reach levels of achievement that they could not attain otherwise. Even though this level of effort could mean an increased level of personal tension and even stress, it also allows higher levels of income. These, by themselves, increase the perceived level of satisfaction of the entrepreneurs involved and translate also into a general perception of well-being that extends beyond the pure salary conditions to a feeling of overall satisfaction.

Within this framework, we tested the following hypothesis:

H1: The segment of the population involved in entrepreneurial activities is more capable of developing their own skills than the segment of the population not involved.

H2: The segment of the population involved in entrepreneurial activities is more prone to believe the work they do is meaningful than the segment of the population not involved.

H3: The segment of the population involved in entrepreneurial activities is more exposed to excessive stress than the segment of the population not involved.

Considering the results obtained by Clark, Colombier & Nasclat [4], we tested the previous hypotheses for different segmentations of the population based in the length of their experience in the entrepreneurial environment:

H4: The segment of the population involved in entrepreneurial activities is overall more professionally satisfied than the segment of the population not involved.

H5: The segment of the population involved in entrepreneurial activities is overall more satisfied with their current work income than the segment of the population not involved.

Finally, we tested the following complementary hypothesis to see if the results defended by Uy, Foo & Song [22] about the influence of necessity and opportunity entrepreneurship could be reproduced for Spain or, on the contrary, the situation is closer to the results obtained by Cortés, García & Moro-Egido [6]:

H6: Early stage entrepreneurs by necessity are less happy or satisfied with their professional life than opportunity early stage entrepreneurs

IV. METHODOLOGY AND EMPIRICAL VALIDATION

As explained in the introduction, this research is focused on Spain. The data to answer the general research question and test the associated hypotheses were provided by the GEM adult population survey data base for Spain 2012. This data base includes observations of 9,989 individuals who acted as respondents of key items on entrepreneurial attitudes, aspirations and activity along with some items on professional well-being. The dependent variables included in the Spanish GEM data base were those showed in Table 1.

TABLE 1

KEY ITEMS ON WELL-BEING INCLUDED IN THE GEM SPANISH SURVEY FOR THE YEAR 2012

- 1 I can decide on my own how I go about doing my work
- 2 The work I do is meaningful to me
- 3 At my work, I am not exposed to excessive stress

Scale: Likert, 5 points from 1 = strongly disagree to 5 = strongly agree

- 4 Overall, how satisfied are you with your current work?
- 5 Overall, how satisfied are you with your current work income?

Scale: Likert, 5 points from 1 = very dissatisfied to 5 = very satisfied

In accordance with our model, we selected as dependent variables various indicators of the “well-being/satisfaction with professional life” and as independent variable “the entrepreneurial status of an individual”. In other words, we made the general hypothesis that the well-being/satisfaction with professional life varies depending on some indicators of the degree of advance in the way of an entrepreneurial status.

All these variables were qualitative and ordinal, condition that determined the selection of a proper analysis method. In this case, a nonparametric test for multiple independent samples was used to test whether or not the values of a particular variable differed between two or more groups of individuals when the assumptions of ANOVA are not met, which is the current situation.

As is well known, although one-way analysis of variance (ANOVA) is the method of choice when testing for differences between multiple groups, it assumes that the mean is a valid estimate of center and that the distribution of the test variable is reasonably Normal and similar in all groups. However, in our case the behavior of the dependent variables ratifies that the ANOVA conditions are not met (see results in Table 2), since none of them is normally distributed.

TABLE 2

NORMALITY TESTS ON KEY ITEMS ON WELL-BEING INCLUDED IN THE GEM SPANISH SURVEY FOR THE YEAR 2012

Criteria: the variable is Normal when Significance is greater than 0.025	Kolmogorov-Smirnov tests:			
Items:	Mean	Std. Dv.	Z K-S	Sig. (Bilateral)
I can decide on my own how I go about doing my work	3.7457	1.287	29.088	0.000
The work I do is meaningful to me	4.4786	0.857	35.582	0.000
At my work, I am not exposed to excessive stress	2.7336	1.452	22.520	0.000
Overall, how satisfied are you with your current work?	4.0120	0.891	33.120	0.000
Overall, how satisfied are you with your current work income?	3.1469	1.144	27.772	0.000

When the assumptions behind the standard ANOVA are invalid, one should consider using the nonparametric procedures designed to test for the significance of the difference between multiple groups. They are called nonparametric because they make no assumptions about the parameters of the distribution, nor do they assume that any particular distribution is being used, as shows Conover [5]. For our analysis we selected the Median Test.

The median method tests the null hypothesis that two or more independent samples have the same median, as in Siegel & Castellan [19]. In our case we tested that people involved and not involved in entrepreneurial activities have the same

median value for the five key items measuring professional satisfaction/well-being. This test assumes nothing about the distribution of the test variables, making it a good choice when one suspects that the distribution varies by group.

To apply these tests, our first need was to establish the entrepreneurial status of the individuals, that is, the independent variable. For this purpose, we classified the respondents of the GEM survey in two groups as follows: [1] Persons involved in entrepreneurial activities, and [2] Persons not involved in entrepreneurial activities.

However, to define the entrepreneurial status of an individual is not as easy as it seems because it is possible to consider different ways of grouping. Thus, within the GEM Project, a person can be: [1] A potential entrepreneur: person that indicates entrepreneurial intention; [2] A nascent entrepreneur: person involved in a startup of no more than 3 months in the market; [3] A new entrepreneur: person involved in consolidating a new business with no more than 3.5 years in the market; [4] An established entrepreneur: owner-manager of a consolidated business operating more than 3.5 years in the market, and [5] An exited entrepreneur: person that abandoned-exited an activity within the 12 months period previous to the survey.

Thus, one possibility was to create a dichotomous variable including all these cases in the group of involved people and the rest in the category of not involved. Another was to discard the exited entrepreneurs because one can suspect that their sense of happiness could be different from those that are active entrepreneurs. Another was to discard the exited entrepreneurs and also the potential entrepreneurs, as it can be expected that they have not yet experienced the same feelings as active entrepreneurs. And, finally, another possibility was to include only early-stage entrepreneurs in the category of involved, that is, nascent and new entrepreneurs, and put the rest on the category of not involved.

It was tempting to explore what could be the results for each grouping and we yielded building four models of dependent variable to test all possibilities. The wide sample provided by the data base gave support to develop this exercise as there were enough cases (more than 400 per subsample) for the four grouping models. The decision taken resulted in building the set of dichotomous, independent variables described in Table 3.

Summarizing, we applied Median Tests to draw conclusions on the following hypotheses, now expressed in statistical language:

H1: median agreement on the statement “I can decide on my own how I go about doing my work” is equal between population involved and not involved in entrepreneurial activities.

H2: median agreement on the statement “the work I do is meaningful to me” is equal between population involved and not involved in entrepreneurial activities.

H3: median agreement on the statement “at my work, I am not exposed to excessive stress” is equal between population involved and not involved in entrepreneurial activities.

H4: median satisfaction with current work is equal between population involved and not involved in entrepreneurial activities.

H5: median satisfaction with current work income is equal between population involved and not involved in entrepreneurial activities.

H6: the median scores of all the professional well-being items are significantly higher for opportunity early stage entrepreneurs compared with the scores of necessity early stage entrepreneurs.

TABLE 3
VARIABLES USED TO ESTABLISH THE CONTRAST GROUPS

1. Entrepreneurial status of individuals in the sample (Wide group):		Values
Involved	Potential, nascent, new, established and exited entrepreneurs	1
Not involved	Employees part or full time, students, home makers, unemployed, retired	0
2. Entrepreneurial status of individuals in the sample (Less wide):		Values
Involved	Potential, nascent, new, and established entrepreneurs	1
Not involved	Employees part or full time, students, home makers, unemployed, exited entrepreneurs, retired	0
3. Entrepreneurial status of individuals in the sample (Only active):		Values
Involved	Nascent, new, and established entrepreneurs	1
Not involved	Potential entrepreneurs, employees part or full time, students, home makers, unemployed, exited entrepreneurs, retired	0
4. Entrepreneurial status of individuals in the sample (Only early stage)		Values
Involved	Nascent and new entrepreneurs	1
Not involved	Potential entrepreneurs, established businesses owner-managers, employees part or full time, students, home makers, unemployed, exited entrepreneurs, retired	0
5. Main motive for starting up a business (Only early stage)		Values
Opportunity	Early stage entrepreneurs that started up pursuing an opportunity	1
Necessity	Early stage entrepreneurs that started up under the lack of better work options	0

The results for these tests are presented in the next section.

V. RESULTS

Entrepreneurial status including potential, nascent, new, established and exited entrepreneurs

In this case, we considered that people involved in entrepreneurial activities were either, potential, nascent, new, established or exited entrepreneurs and people not involved the rest of the labor categories. The results obtained for the median test are summarized and showed in the following tables.

Across all subjects, the medians are scores of 4, 5, 2, 4 and 4 points. The null hypothesis for the median test is that these particular values are good approximations of center for each of the two groups for each independent variable. The table 6 shows the results of these tests for each independent variable.

TABLE 4
MEDIAN TEST, DESCRIPTIVE RESULTS

Dependent variables	n	Quartiles		
		Q1 (25%)	Q2 (50%)	Q3 (75%)
I can decide on my own how I go about doing my work	9712	3(Neither agree nor disagree)	4(somewhat agree)	5 (strongly agree)
The work I do is meaningful to me	9718	4(somewhat agree)	5(strongly agree)	5 (strongly agree)
At my work, I am not exposed to excessive stress	9712	1(strongly disagree)	2(somewhat disagree)	4(somewhat agree)
Overall, how satisfied are you with your current work?	9731	4(satisfied)	4(satisfied)	5(very satisfied)
Overall, how satisfied are you with your current work income?	9698	2(unsatisfied)	4(satisfied)	4(satisfied)
Independent variable:	Involved or not in entrepreneurial activities (1 = potential, nascent, new, established, exited; 0 = rest)			

TABLE 5
MEDIAN TEST, DISTRIBUTIONS
(PERCENTAGES OF CASES BELOW/EQUAL THE MEDIAN OR OVER THE MEDIAN)

Independent variable: involved or not in entrepreneurship		NO	YES
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	>Median ≤Median	28.9% 71.1%	50.4% 49.6%
The work I do is meaningful to me (the median was 5 points: strongly agree)	>Median ≤Median	0.0% 100.0%	0.0% 100.0%
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	>Median ≤Median	46.5% 53.5%	46.4% 53.6%
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	>Median ≤Median	27.0% 73.0%	30.6% 69.4%
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	>Median ≤Median	7.2% 92.8%	7.9% 92.1%

TABLE 6
CONTRAST STATISTICS

Dependent variables:	Chi Sq.	As. Sig.	Hypothesis
I can decide on my own how I go about doing my work (The median was 4 points: somewhat agree)	342.3	0.000	Rejected
The work I do is meaningful to me (The median was 5 points: strongly agree and all values were under or equal the median)	Not calculable	Not calculable	Accepted

At my work, I am not exposed to excessive stress (The median was 2: somewhat disagree)	0.000	0.985	Accepted
Overall, how satisfied are you with your current work? (The median was 4: satisfied)	10.4	0.001	Rejected
Overall, how satisfied are you with your current work income? (The median was 4: satisfied)	1.39	0.238	Accepted

Entrepreneurial status including potential, nascent, new and established entrepreneurs

In this case, we considered that people involved in entrepreneurial activities were either, potential, nascent, new and established entrepreneurs and people not involved the rest of labor categories including now exited entrepreneurs.

The results obtained for the median test are summarized and showed in the following tables.

Across all subjects, the medians are scores of 4, 5, 2, 4 and 4 points. The null hypothesis for the median test is that these particular values are good approximations of center for each of the two groups for each independent variable. The table 7 shows the results of these tests for each independent variable.

TABLE 7
MEDIAN TEST, DESCRIPTIVE RESULTS

Dependent variables	n	Quartiles		
		Q1 (25%)	Q2 (50%)	Q3 (75%)
I can decide on my own how I go about doing my work	9712	3(Neither agree nor disagree)	4(somewhat agree)	5(strongly agree)
The work I do is meaningful to me	9718	4(somewhat agree)	5(strongly agree)	5(strongly agree)
At my work, I am not exposed to excessive stress	9712	1(strongly disagree)	2(somewhat disagree)	4(somewhat agree)
Overall, how satisfied are you with your current work?	9731	4(satisfied)	4(satisfied)	5(very satisfied)
Overall, how satisfied are you with your current work income?	9698	2(unsatisfied)	4(satisfied)	4(satisfied)
Independent variable:	Involved or not in entrepreneurial activities (1 = potential, nascent, new, established; 0 = rest)			

TABLE 8
MEDIAN TEST, DISTRIBUTIONS
(PERCENTAGES OF CASES BELOW/EQUAL THE MEDIAN OR OVER THE MEDIAN)

Independent variable: involved or not in e-ship--→		NO	YES
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	>Median ≤Median	29.0% 71.0%	51.2% 48.8%
The work I do is meaningful to me (the median was 5 points: strongly agree)	>Median ≤Median	0.0% 100.0%	0.0% 100.0%

At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	>Median ≤Median	46.6% 53.4%	46.0% 54.0%
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	>Median ≤Median	36.9% 73.1%	31.0% 69.0%
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	>Median ≤Median	7.2% 92.8%	7.8% 92.2%

TABLE 9
CONTRAST STATISTICS

Dependent variables:	Chi Sq.	As. Sig.	Hypothesis
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	351.5	0.000	Rejected
The work I do is meaningful to me (the median was 5 points: strongly agree and all values were under or equal the median)	Not calculable	Not calculable	Accepted
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	0.148	0.700	Accepted
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	12.9	0.000	Rejected
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	1.39	0.804	Accepted

Entrepreneurial status including nascent, new and established entrepreneurs

In this case, we considered that people involved in entrepreneurial activities were either, nascent, new and established entrepreneurs and people not involved the rest of labor categories including now exited entrepreneurs and potential entrepreneurs.

The results obtained for the median test are summarized and showed in the following tables.

Across all subjects, the medians are scores of 4, 5, 2, 4 and 4 points. The null hypothesis for the median test is that these particular values are good approximations of center for each of the two groups for each independent variable. The table 10 shows the results of these tests for each independent variable.

TABLE 10
MEDIAN TEST, DESCRIPTIVE RESULTS

Dependent variables	n	Quartiles		
		Q1 (25%)	Q2 (50%)	Q3 (75%)
I can decide on my own how I go about doing my work	9712	3(Neither agree nor disagree)	4(somewhat agree)	5 (strongly agree)
The work I do is	9718	4(somewhat	5(strongly	5 (strongly

meaningful to me		agree)	agree)	agree)
At my work, I am not exposed to excessive stress	9712	1(strongly disagree)	2(somewhat disagree)	4(somewhat agree)
Overall, how satisfied are you with your current work?	9731	4(satisfied)	4(satisfied)	5(very satisfied)
Overall, how satisfied are you with your current work income?	9698	2(unsatisfied)	4(satisfied)	4(satisfied)
Independent variable:	Involved or not in entrepreneurial activities (1 = nascent, new, established; 0 = rest)			

TABLE 11
MEDIAN TEST, DISTRIBUTIONS
(PERCENTAGES OF CASES BELOW/EQUAL THE MEDIAN OR OVER THE MEDIAN)

Independent variable: involved or not in e-ship--→		NO	YES
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	>Median ≤Median	32.0% 68.0%	43.2% 56.8%
The work I do is meaningful to me (the median was 5 points: strongly agree)	>Median ≤Median	0.0% 100.0%	0.0% 100.0%
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	>Median ≤Median	46.5% 53.5%	46.0% 54.0%
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	>Median ≤Median	27.5% 72.5%	29.5% 70.5%
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	>Median ≤Median	7.2% 92.8%	8.6% 91.4%

TABLE 12
CONTRAST STATISTICS

Dependent variables:	Chi Sq.	As. Sig.	Hypothesis
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	64.6	0.000	Rejected
The work I do is meaningful to me (the median was 5 points: strongly agree and all values were under or equal the median)	Not calculable	Not calculable	Accepted
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	0.097	0.756	Accepted
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	2.4	0.121	Accepted
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	3.5	0.061	Accepted at 95% Rejected at 90%

Entrepreneurial status including nascent and new entrepreneurs (people involved in early stage entrepreneurial activities)

In this case, we considered that people involved in entrepreneurial activities were only nascent and new entrepreneurs and people not involved the rest of labor categories including now exited entrepreneurs, potential and established entrepreneurs.

The results obtained for the median test are summarized and showed in the following tables.

Across all subjects, the medians are scores of 4, 5, 2, 4 and 4 points. The null hypothesis for the median test is that these particular values are good approximations of center for each of the two groups for each independent variable. The table 13 shows the results of these tests for each independent variable.

TABLE 13
MEDIAN TEST, DESCRIPTIVE RESULTS

Dependent variables	n	Quartiles		
		Q1 (25%)	Q2 (50%)	Q3 (75%)
I can decide on my own how I go about doing my work	9712	3(neither agree nor disagree)	4(somewhat agree)	5 (strongly agree)
The work I do is meaningful to me	9718	4(somewhat agree)	5(strongly agree)	5 (strongly agree)
At my work, I am not exposed to excessive stress	9712	1(strongly disagree)	2(somewhat disagree)	4(somewhat agree)
Overall, how satisfied are you with your current work?	9731	4(satisfied)	4(satisfied)	5(very satisfied)
Overall, how satisfied are you with your current work income?	9698	2(unsatisfied)	4(satisfied)	4(satisfied)
Independent variable:	Involved or not in entrepreneurial activities (1 = nascent, new; 0 = rest)			

TABLE 14
MEDIAN TEST, DISTRIBUTIONS
(PERCENTAGES OF CASES BELOW/EQUAL THE MEDIAN OR OVER THE MEDIAN)

Independent variable: involved or not in entrepreneurship		NO	YES
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	>Median ≤Median	33.2% 66.8%	37.2% 62.8%
The work I do is meaningful to me (the median was 5 points: strongly agree)	>Median ≤Median	0.0% 100.0%	0.0% 100.0%
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	>Median ≤Median	46.5% 53.5%	46.0% 54.0%
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	>Median ≤Median	27.9% 72.1%	26.3% 73.7%
Overall, how satisfied are you with	>Median	7.1%	9.2%

your current work income? (the median was 4: satisfied)	≤Median	92.9%	90.8%
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TABLE 15
CONTRAST STATISTICS

Dependent variables:	Chi Sq.	As. Sig.	Hypothesis
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	6.3	0.012	Rejected
The work I do is meaningful to me (the median was 5 points: strongly agree and all values were under or equal the median)	Not calculable	Not calculable	Accepted
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	0.094	0.759	Accepted
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	1.143	0.285	Accepted
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	4.9	0.026	Rejected

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TABLE 16
MEDIAN TEST, DESCRIPTIVE RESULTS

Dependent variables	n	Quartiles		
		Q1 (25%)	Q2 (50%)	Q3 (75%)
I can decide on my own how I go about doing my work	712	4(somewhat agree)	5(strongly agree)	5 (strongly agree)
The work I do is meaningful to me	710	5(strongly agree)	5(strongly agree)	5 (strongly agree)
At my work, I am not exposed to excessive stress	710	1(strongly disagree)	2(somewhat disagree)	4(somewhat agree)
Overall, how satisfied are you with your current work?	712	4(satisfied)	4(satisfied)	5(very satisfied)
Overall, how satisfied are you with your current work income?	702	2(unsatisfied)	3(neither agree nor disagree)	4(satisfied)
Independent variable:	Motive (1 = opportunity; 0 = necessity)			

TABLE 17
CONTRAST STATISTICS

Dependent variables:	Chi Sq.	As. Sig.	Hypothesis
I can decide on my own how I go about doing my work (the median was 4 points: somewhat agree)	Not calculable	Not calculable	Accepted
The work I do is meaningful to me (the median was 5 points: strongly agree and all	Not calculable	Not calculable	Accepted

values were under or equal the median)			
At my work, I am not exposed to excessive stress (the median was 2: somewhat disagree)	0.898	0.343	Accepted
Overall, how satisfied are you with your current work? (the median was 4: satisfied)	1.396	0.237	Accepted
Overall, how satisfied are you with your current work income? (the median was 4: satisfied)	16.4	0.000	Rejected

VI. CONCLUSIONS

Analysis considering entrepreneurial status including potential, nascent, new, established and exited entrepreneurs

As result of the first analysis two hypotheses were rejected and three accepted. Thus, when the entrepreneurial condition includes potential, nascent, new, established and exited entrepreneurs: [1] the median agreement on the statement “I can decide on my own how I go about doing my work” is significantly different between population involved and not involved in entrepreneurial activities. In this case, the mean is greater for the involved population; [2] the median agreement on the statement “the work I do is meaningful to me” is equal between population involved and not involved in entrepreneurial activities. In this case, the entrepreneurial status makes no difference, at least in Spain; [3] the median agreement on the statement “at my work, I am not exposed to excessive stress” is equal between population involved and not involved in entrepreneurial activities. So, in this case the entrepreneurial status makes no difference in Spain; [4] the median satisfaction with current work is different between population involved and not involved in entrepreneurial activities. In this case people involved in entrepreneurial activities are more satisfied than people not involved, and [5] the median satisfaction with current work income is equal between population involved and not involved in entrepreneurial activities. In Spain, despite the crisis, entrepreneurs are more prone to decide on their own how they go about doing their work and derive from it a higher degree of satisfaction with their work. Accordingly to the literature, this independent behavior could result in a greater feeling of professional happiness. Thus, entrepreneurship makes some difference at least in these aspects. The measurement was done just in the middle of the crisis so all the population seems to be affected by a profound stress that probably overcomes any possible effect due to the different nature of the occupation of the two population groups. The same conclusion could be drawn regarding the satisfaction with work income. Finally, Spaniards point out that they are generally happy with their jobs and they are very meaningful for more than one half of

the population, no matter whether they are entrepreneurs or not.

Analysis considering entrepreneurial status formed by potential, nascent, new, and established entrepreneurs

The results are very similar to those obtained in the previous analysis. There is a difference in that the strength of the diagnoses of acceptance/ rejection of hypothesis in this analysis is more extreme. The conclusions drawn before remain the same and removing exited entrepreneurs from the group of those involved in entrepreneurial activities makes no relevant difference.

Analysis considering entrepreneurial status formed by nascent, new, and established entrepreneurs

The results are similar to those obtained in the previous analyses for three dependent variables and different for two of them. Thus, the hypothesis about the item “Overall, how satisfied are you with your current work?” is now accepted while it was rejected before. This means that entrepreneurship is understood as a status including nascent, new and established entrepreneurs makes no difference in Spain (in the middle of a crude economic crisis) in relation from the satisfaction derived from the current job. On the contrary, now the hypothesis on the item “Overall, how satisfied are you with your current work income?” tends to be rejected while it was accepted in the previous considerations on the entrepreneurial status. This means that nascent, new and established entrepreneurs as a group tend to be slightly more satisfied than the rest of the population about their current work income (see Table 11).

Finally it can be also noticed a difference in the strength of the diagnoses of acceptance and rejection of hypotheses, which is more extreme.

Analysis considering entrepreneurial status formed by nascent and new entrepreneurs

The results are similar to the previous ones except by two facts. One is that the hypothesis about the item “Overall, how satisfied are you with your current work income?” is now more clearly rejected than before, and second, that the hypothesis on the item “I can decide on my own how I go about doing my work” is now less clearly rejected. This provides more strong evidence supporting that early stage entrepreneurs are more satisfied than the rest of the categories with their work income, but less strong evidence supporting that this group is more prone to consider that they can decide on their own how they go about doing their work.

The obtained results give some support to the idea that entrepreneurs tend to be more satisfied or happy with their professional lives and tend to ratify Carter’s [3] theories. However, it is apparent that the differences between the groups involved and not involved in entrepreneurial activities are far from being extreme in Spain. The aspects which appear as differential are the capability of controlling how people goes about doing their work, the satisfaction with it (depending on

the categories included in the entrepreneurial status), and the satisfaction with the income derived depending on the categories included in the entrepreneurial status.

Analysis for opportunity and necessity early stage entrepreneurs

The previous results induce the consideration of other variables involved in the determination of the degree of happiness or satisfaction derived by individuals from their professional life. Among them, the distinction between opportunity and necessity entrepreneurship takes pride of place. Nevertheless, the results for Spanish early stage entrepreneurs only give support to the idea that satisfaction with current work income is higher among opportunity entrepreneurs. The rest of items reach similar median scores, and there are no significant differences between opportunity and necessity early stage entrepreneurs.

This points out that in these regards, the entrepreneurial collective in Spain is more similar to Latin-America, as described by Cortés, García & Moro-Egido [6], and it does not show the characteristics defended by Uy, Foo & Song [22].

Policy implications, final remarks and next research lines

Other tests made over the GEM Spanish sample have given no significant results regarding gender differences, fear of failure or having or not completed specific training to startup businesses and other relevant variables.

This overall result can be interpreted as some exceptional because it is not aligned with the main conclusions derived from specialized literature. The economic crisis can be an explanatory factor of the major homogeneity of adult Spaniards with respect to professional well-being but, at the same time, it is important to point out that we, as researchers, are confronting a structural change in developed societies.

If the impulse of micro and SMEs progressively substitutes the economy based in big companies, the social panorama will change dramatically and the professional well-being parameters can also change substantially. As some authors pointed out, the measurement of well-being depends on a good determination of a reference point, and it seems that it is in the middle of significant structural changes.

In Spain and in other countries, the policy makers must take all of this into consideration as the policies' design will confront (is confronting now) important challenges to overcome unemployment rates, youth unemployment, and the dissatisfaction of a big part of the population that considers is quickly losing their quality of life. In such scenario, entrepreneurship can become more a professional than a vocational option and, due to this, it is possible that it is losing some of its associated "fresh" characteristics.

Entrepreneurial education is progressing and it is time to reflect on what kind of model the university must convey to students to keep the most important values of entrepreneurship. Future lines of research should focus on comparing the Spanish well-being indicators in the

entrepreneurial and non-entrepreneurial population of the next years with the current results, in order to determine if the background is changing and in what degree.

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