

Levels of Entrepreneurial Traits of University Students in Puerto Rico

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Introduction

Entrepreneurship is a dominant force that plays a critical role in contemporary world economies. It generates ongoing innovation and improvement of our goods, services, and institutions. It makes them more efficient, affordable, and, thus, effective. Also, is considered to be a driving force of both economic growth and increase job creation. As a consequence it enhances the quality of our collective and individual lives (Brooks et al., 2007). Given this importance, it is necessary to understand the factors that foster entrepreneurship. However, it is a challenge to find consensus for a definition among academic researchers. By assessing several definitions of entrepreneurship, a set of common psychological traits, characteristics, attitudes and values explain entrepreneurial behavior.

Studies have found a close relationship between entrepreneurial orientation and personality traits and why some people choose to become an entrepreneur and why others do not (Mueller, 2004). The question of what separates those who choose to pursue entrepreneurial quests from those who opt not to be, is an intriguing issue. Investigating the role of individual differences in entrepreneurial behavior is a growing field of research. Entrepreneurship begins when an individual decides to undertake a new venture. In order to foster more entrepreneurship, it is therefore necessary to understand how people make that decision (Ahmad, Xavier, & Bakar, 2014).

A potential entrepreneur is an individual within a given population or society that possess a particular set of personal traits, skills, aptitudes, and desires believed to motivate entrepreneurial behavior or at least increase its likelihood (Mueller, 2004). Entrepreneurship should be analyzed from the perspective of what an entrepreneur does and not what he is, and that creation of an organization is a complex process and the outcome of many influences (Okhomina, 2010). Entrepreneurs differ substantially from the population because they are less risk and ambiguity averse, more tolerance of greed and are less aware of opportunity costs (Bengtsson, Sanandaji, & Johannesson, 2012). This research aims to investigate the level of entrepreneurial traits in a higher education institution in Puerto Rico and contrast them to traits level of university students in South Africa, United States and the Netherlands.

Entrepreneurial Traits

Beginning in the early 1980's, a number of empirical studies were undertaken in an attempt to relate certain psychological traits to entrepreneurial intention, entrepreneurial action, and success (Mueller, 2004). The trait approach to entrepreneurship has been pursued by many researchers in an attempt to separate entrepreneurs from non-entrepreneurs and to identify a list of traits specific to the entrepreneur. The main psychological characteristics associated with entrepreneurship in the literature are: internal locus of control; propensity to take risk; self-confidence; need for achievement; need of autonomy; self-efficacy; tolerance of ambiguity; and innovativeness (Ayub & Othman, 2013; Dinis, Paço, Ferreira, Raposo, & Rodrigues, 2013; Okhomina, 2010; Sivarajah & Achchuthan, 2013).

There is no agreement however on the number of traits, specific to the entrepreneur, or their validity (Sivarajah & Achchuthan, 2013). Our literature review identified the following 16 entrepreneurial traits categories: goal setting and perseverance, human relations ability, communications ability, commitment, dealing with failure, self-confidence, risk taking, taking initiative and seeking personal responsibility, drive and energy levels, tolerance for ambiguity, thinking ability, use of outside resource persons, knowledge seeking, number sense, money sense, and business knowledge.

Any entrepreneurial task or activity may require *perseverance*. The list of potential setbacks and obstacles is endless, and their occurrence may make it difficult to keep up initial levels of motivation (Gelderen, 2012). *Goal setting* further suggests that a person highly motivated to achieve a goal is more likely to persist in achieving that goal compared with one who is not very motivated. Nascent entrepreneurs with high levels of self-efficacy for the entrepreneurial process are strongly motivated to exert high levels of effort when setting up their company (De Clercq, Menzies, Diochon, & Gasse, 2009). Resilience is particularly important; besides its immediate and direct positive effect of entrepreneurial intentions, resilience interacts with self-efficacy to impact entrepreneurial intentions (Bullough, Renko, & Myatt, 2014).

Human relations relates focuses on the ways that personal networks, professional networks and network structures improve access to information, resources and sponsorship as explanations of career or entrepreneurial success (Sorensen & Chang, 2006). Previous research found social environment is one of the sources of information in opportunity recognition. Social learning takes place through observing one another or through personal interaction. Social Network theory suggests resources obtained from the individual's social network heavily interact with the decision to embark on an entrepreneurial process. Social networks allow entrepreneurs to enlarge their knowledge of opportunities and to gain. The size of an entrepreneur's social network is significantly related with the identification of a number of new venture ideas (Ozgen & Minsky, 2013).

The concept of *communication ability* refers to the competence in communication that is essential for the entrepreneur in the interaction with different stakeholders. Communication is important in every step of a business development, especially in the early entrepreneurial phases (Ulvenblad, Berggren, & Winborg, 2013). *Commitment* may be influenced by personal and environmental factors that reflect the feasibility and desirability of attaining the goal of establishing a business (De Clercq et al., 2009). Internal factors, personal value attributed to the career choice of entrepreneur, have stronger effects on the level of commitment than external factors, perhaps because prospective entrepreneurs experience their personal preferences as more immediate factors (De Clercq et al., 2009). Researchers have found that commitment is the main component of influencing entrepreneurial performance, and that passion, values and personality play significant roles in shaping this trait (Tasnim, Yahya, & Zainuddin, 2014).

Entrepreneurs who have the capability to transform the environment can achieve performance by always looking for an opportunity and seizing it; doing so even in adversity in the business environment. *Dealing with failure* implicates persistence, which means that they can bounce

back from adversity; regenerate, and enjoy sustainable performance through multiple temporary advantages (Kemepade Moruku, 2013). Too little persistence in dealing with adversity can mean that initiatives will be pre-emptively aborted. However, just as one can persevere too little, one can also persevere too much. Unlimited perseverance can be suboptimal because, enterprising behavior is commonly associated not only with perseverance, but also with flexibility, adaptability, and pro-activeness (Gelderen, 2012).

The level of *self-confidence* that is generally defined as believing in oneself may influence one's perception as well. Self-confidence is widely accepted as a valuable individual asset and a key to personal success (Turker & Selcuk, 2009). The locus of control represents the degree to which individuals believe that their achievements are dependent on their own behavior. This trait consider that the accomplishment of goals or objectives depends more on their own ability and actions, rather than luck or other people's efforts (Dinis et al., 2013). Successful entrepreneurs are usually convinced that they can bring every activity to a successful end. Also, they feel that they can control their own success, which does not depend on others. Successful entrepreneurs have a high degree of endurance. It involves the ability to continue willfully, in spite of setbacks or objections (Oosterbeek, van Praag, & Ijsselstein, 2010)

The concept of *risk taking o risk propensity* has been related to entrepreneurship in numerous studies. Entrepreneurial activity by definition involves some kind of risk-taking. Risk taking refers to the subject's willingness to commit to sources of opportunities with a possibility of failure and the willingness of risking to take a loss (Martínez, Fuensanta, & Rodríguez, 2013; Oosterbeek et al., 2010; Sánchez, 2011).

Entrepreneurs as leaders who were proactive and committed to others, enjoyed *taking initiative and seeking personal responsibility* for their decisions, prefer moderate risks, enjoy feedback on their performance, and dislike routine and repetitive tasks (Santos, Caetano, & Curral, 2013; Sorensen & Chang, 2006). The entrepreneurship process is deeply linked to an individual's characteristics given that he/she is the main agent in the process of deciding to implement entrepreneurial initiatives, and to assume responsibility for the consequences (Santos et al., 2013).

The attractiveness of entrepreneurship as a career choice related to the personal preferences or normative pressures from the environment; influences nascent entrepreneurs' willingness to invest energy in setting up their business. Entrepreneur's *drive and energy levels* they are willing to devote to their start-up during the gestation phase will be influenced by their perceptions about their own capabilities and their personal preferences (De Clercq et al., 2009). *Tolerance for ambiguity and uncertainty* has predicted entrepreneurial intention (Pillis & Dewitt, 2008). Low uncertainty avoidance is associated with risk taking and pioneering achievement, whereas high uncertainty avoidance is more relevant to a higher fear of failure, lower levels of ambition, and less willingness to take risks (Bae, Qian, Miao, & Fiet, 2014).

Thinking ability relates is potentially most useful way of overcoming barriers to acquiring resources and in terms of deriving alternative and lower cost solutions to solving problems (Fillis & Rentschler, 2010). Innovative solutions occur when there is a need for a creative solution to a particular problem driven by external motivation. Intuitive thinking is one of the most important

aspects to support a person to become an entrepreneur. It results in formulating several ideas of the business, to understand how to make money and profit and select a career path with self-confidence and risk taking and high tolerance (S., M., & Ramalu, 2014).

The *use of outside resource persons* or networking and new venture creation is positively and significantly correlated. Networking helps access information and other required assets to start business. The higher the rate of networking, the greater will be the chance of new venture creation because they acquire whatever is necessary to start new business. (Sivarajah & Achchuthan, 2013). Potential entrepreneurs recognize more opportunities by enlarging the total body of knowledge as they increase the size of their social network connections (Ozgen & Minsky, 2013).

Existing empirical research suggests that the *knowledge seeking* of the market and the entrepreneur's prior practical and managerial experience will influence the new venture's chances of survival and its future growth (Paunescu, 2013). Creating viable and profitable ventures depends not only on the habits, heuristics, and routines that nascent entrepreneurs have acquired from family, schools, and work careers prior to the startup stage, but also on what they can learn by doing, borrowing, and experimenting during the startup process (Aldrich & Yang, 2014).

Entrepreneurs with higher *number sense* or financial literacy further exhibited better improvements in business performance and sales. Those who use of financial tools have better new venture success. Also, entrepreneurs who produced financial statements more frequently had a higher probability of loan repayment, a lower probability to close their venture involuntarily and a positive impact on business outcomes (Wise, 2013). Other research found that the most important entrepreneurial ability is the capacity to manage ambiguity, but in order to make sense of ambiguity and make correct decisions about resource allocation the entrepreneur needs a high level of financial literacy (Moberg, 2013). In order to make easy economic and financial sustainability, persons need to the cognitive ability to understand financial information in the context of these surroundings. The intellectual construct inferred from this encompassing and complex process is *money sense* (Mouna, 2013).

Entrepreneurs also need to possess the *business knowledge* that enables their management competencies to manage a business. Across the entrepreneurial process, individuals must have the specific skills they need to manage a venture. The management competencies are defined by the basic and specific competencies in business management and mostly they refer to the individual's ability to manage the entrepreneur himself/herself, business strategy, business resources, and human resources (Santos et al., 2013). Entrepreneurs are known for opportunity recognition. However, once a commercial entity is formed to take advantage of an opportunity, the leadership priority shifts from entrepreneurial to strategic. A strategic perspective leverages limited resources to position a business for future success relative to rivals in a competitive environment (Brockmann & Lacho, 2010).

Entrepreneurial Education

Practitioners seek to increase the supply of entrepreneurs in local economies associated with declining traditional industries. They try to encourage more students to become entrepreneurs after graduating in order to create new businesses that can generate positive local externalities as wealth creation, job generation and increased social cohesion in depressed communities (Giacomin et al., 2011). Growing evidence regarding the relationship between entrepreneurs' education, their businesses, and prospects of success is indicative of the importance of university-based training for both graduate and undergraduate students (Al-Habib, 2012). One's attitude towards entrepreneurship can be influenced by educators or practitioners. However, finding a specific attitude towards entrepreneurship requires further investigation and modeling (Astuti & Martdianty, 2012). Growing evidence regarding the relationship between entrepreneurs' education, their businesses, and prospects of success is indicative of the importance of university-based training for both graduate and undergraduate students (Al-Habib, 2012). Studies indicate that individuals who participated in an entrepreneurship education program had higher perceived entrepreneurial motivation that promote positive attitudes toward entrepreneurship than students who did not participate in an entrepreneurship programs (Marina Z. Solesvik, 2008).

By entrepreneurship education, we are referring to education for entrepreneurial attitudes and skills. Entrepreneurial intentions are desires to own or start a business. Entrepreneurship education was related more positively to a participant's entrepreneurial intentions than was business education (Bae et al., 2014).

Research Objectives

The primary aim of this research is to determine the level of entrepreneurial traits in a higher education institution in Puerto Rico and identify the differences between countries. Our objectives are:

- Assess the levels of entrepreneurial traits of university students in Puerto Rico.
- Compare levels of entrepreneurial traits between university students of South Africa, United States and the Netherlands.

Research Design and Methodology:

In an effort to assess the entrepreneurial traits of university students, a non-exploratory research design was adopted. A private university with 7,108 enrolled students in the metropolitan area of Puerto Rico was identified for this research. With a 95% confidence level and a 5% of error, a sample of 365 students was calculated (Raosoft, 2015). To ensure the representativeness of the sample, a proportionate stratified random sampling in two stages was employed to determine the adequate sample proportions. In the first stage our sample was divided in 9 schools units, and in the second stage by the academic degrees the students were enrolled.

An existing measuring instrument was employed to gather traits data. This instrument was used in a comparative entrepreneurial trait research between university students of South Africa,

United States and the Netherlands (Eeden, Louw, & Venter, 2005). The measuring instrument consisted of two sections. Section A was composed of demographic questions. Section B, was composed of 104 items divided into 16 categories representing an entrepreneurial trait. The items were phrased as statements with a possible response range linked to a Likert five point scale (1 = strongly disagree to 5 = strongly agree).

Data Analysis:

Data Analysis for the following results was conducted in 3 stages: internal reliability, descriptive statistics and factor analysis. Cronbach alpha coefficients were calculated to measure the internal reliability of the measuring instrument. Reliability coefficients of less than 0.50 were considered to be unacceptable, those between 0.50 and 0.60 were considered as sufficient and those above 0.70 as acceptable (Sekaran & Bougie, 2010). Descriptive statistics such as the mean, standard deviation and frequency distributions were calculated to summarize the sample data distribution. To facilitate the descriptive analysis and discussion a categorization of the Likert scale was developed by dividing the scale into three equal parts: low (less than or equal to 2.6), average (between 2.6 and 3.4) and high (above 3.4). Traits categories that scored low were considered underdeveloped, those that scored average as developed, and those that scored high were considered well developed. An exploratory factor analysis will be developed to explore the interrelationships among the entrepreneurial traits categories for the local data (Sekaran & Bougie, 2010).

The instrument was completed by 329 students. Our respondents were composed of 56.4% females, 52.4% (Table 1). 57.3% was enrolled in a bachelor degree and 14.9% in graduate studies. The dominant age was between <20 and 20 to 25 years representing the 57.6% of the sample. This sample will be compared to a sample of students of 758 in South Africa, 379 in USA and 391 in the Netherlands.

TABLE 1: COMPOSITION OF THE SUB-SAMPLES

PUERTO RICO	n	%	SOUTH AFRICA	n	%	USA	n	%	NED	n	%
Total	329	100%	Total	758	100.0%	Total	379	100.0%	Total	391	100.0%
Male	143	43.5%	Male	319	42.1%	Male	182	48.0%	Male	247	63.2%
Female	185	56.2%	Female	439	57.9%	Female	197	52.0%	Female	144	36.8%
<20	86	26.1%	<20	299	39.5%	<20	8	2.1%	<20	109	27.9%
20-25	104	31.5%	20-25	419	55.3%	20-25	363	95.8%	20-25	273	69.8%
>25	138	42.0%	>25	40	5.3%	>25	8	2.1%	>25	9	2.3%

Empirical Findings

The statistical analysis of the data included an assessment of the internal reliability of the measuring instrument. Cronbach Alpha coefficients were calculated to explore the internal consistency within the sets of 16 entrepreneurial traits. These coefficients measure the degree to which the same set of respondents replies in a consistent manner to similar items (Ursachi,

Horodnic, & Zait, 2015). Table 2, presents the Cronbach Alphas for each entrepreneurial trait. *Risk taking (G)*, *tolerance for ambiguity and uncertainty (J)* and *money sense (O)*; scored low on Cronbach Alpha Coefficients. These categories were excluded from further analysis to enhance the reliability of the scores. All other entrepreneurial traits coefficients scored above .50; suggesting an acceptable reliability for the measures.

TABLE 2: RELIABILITY OF CATEGORY SCORES (CRONBACH ALPHA COEFFICIENTS)

Category	PR	SA	USA	NED
A Planning and perseverance	0.79	0.78	0.77	0.64
B Persuasion and networking	0.82	0.67	0.68	0.64
C Communication ability	0.76	0.70	0.70	0.55
D Commitment	0.60	0.64	0.70	0.70
E Overcoming failure	0.64	0.58	0.60	0.56
F Self-confidence and locus of control	0.65	0.56	0.50	0.52
G Risk-taking ability	0.39	0.52	0.39	0.43
H Initiative and responsibility	0.78	0.79	0.78	0.69
I High energy level	0.67	0.61	0.64	0.54
J Tolerance for ambiguity and uncertainty	0.50	0.39	0.25	0.17
K Creativity and flexibility	0.77	0.72	0.70	0.58
L Knowledge-seeking	0.67	0.62	0.68	0.58
M Continuous learning	0.64	0.73	0.77	0.78
N Financial proficiency	0.71	0.72	0.76	0.64
O Money Sense	0.27	0.32	0.42	0.45
P Business knowledge	0.79	0.71	0.72	0.64

Levels of Entrepreneurial Traits

The measurement instrument was composed of 104 items associated to 16 entrepreneurial traits identified in the academic literature. Each respondent had to assess themselves in a Likert scale in terms of each trait. Table 3 presents a summary of the descriptive statistics for the entrepreneurial traits categories for students in Puerto Rico. The four most developed traits in Puerto Rico are *self-confidence (F)*, *goal setting and perseverance (A)*, *drive and energy level (I)* and *thinking ability (K)*. The four least developed entrepreneurial traits are *business knowledge (P)*, *the use of outside resource persons (L)*, *taking initiative and seeking personal responsibility (H)* and *number sense (N)*.

TABLE 3: DESCRIPTIVE STATISTICS OF ENTREPRENEURIAL TRAITS: PUERTO RICO

Puerto Rico				Frequency Distributions					
Category	n	Mean	SD	Low		Average		High	
A	329	3.99	0.73	6	1.8%	69	21.0%	254	77.2%
B	329	3.79	0.72	8	2.4%	98	29.8%	223	67.8%
C	329	3.81	0.69	8	2.4%	92	28.0%	229	69.6%
D	329	3.94	0.76	8	2.4%	81	24.6%	240	72.9%
E	329	3.84	0.73	10	3.0%	84	25.5%	235	71.4%
F	329	4.03	0.67	6	1.8%	51	15.5%	272	82.7%
H	329	3.46	0.71	23	7.0%	151	45.9%	155	47.1%
I	329	3.96	0.71	4	1.2%	76	23.1%	249	75.7%
K	329	3.95	0.73	6	1.8%	80	24.3%	243	73.9%
L	329	3.41	0.74	29	8.8%	158	48.0%	142	43.2%
M	329	3.52	0.84	33	10.0%	132	40.1%	164	49.8%
N	329	3.48	0.91	45	13.7%	124	37.7%	160	48.6%
P	329	3.40	0.94	55	16.7%	116	35.3%	158	48.0%

In Table 4 we can observe that the top entrepreneurial traits for Puerto Rico, South Africa, USA and the Netherlands are *self-confidence (F)*, *commitment (D)* and *number sense (N)*. *Commitment (D)* was weighted as top for both South Africa and USA. The highest mean scored was 4.32 for commitment (D) in the USA. We can also observe that entrepreneurial trait level for *drive and energy levels (I)* are the only common trait between the four countries. *Dealing with failure (E)*, was a common trait between South Africa, USA and Netherlands. The Netherlands and the USA present human relations traits as common. *Number sense (N)* was a unique trait in the Netherlands, *goal setting and perseverance (A)* in South Africa as *self-confidence (F)* and *thinking ability (K)* in Puerto Rico.

TABLE 4: SUMMARY OF THE FOUR MOST DEVELOPED ENTREPRENEURIAL TRAITS

PUERTO RICO		Mean	SOUTH AFRICA		Mean	USA		Mean	THE NETHERLANDS		Mean
F	Self confidence	4.03	D	Commitment	4.05	D	Commitment	4.32	N	Number sense	3.68
A	Goal setting and perseverance	3.99	E	Dealing with failure	3.93	I	Drive and energy levels	4.06	E	Dealing with failure	3.65
I	Drive and energy levels	3.96	I	Drive and energy levels	3.91	B	Human relations	3.98	I	Drive and energy levels	3.64
K	Thinking ability	3.95	A	Goal Setting and perseverance	3.82	E	Dealing with Failure	3.96	B	Human relations	3.61

Table 5 presents the four least developed entrepreneurial traits between the countries. We can observe that business knowledge (P), knowledge seeking (M), and the use of outside persons (L) were the lowest scored traits between the four countries. *Taking initiative and seeking personal responsibility (H)* and the *use of outside persons (L)* was a common least developed entrepreneurial trait in the four countries. *Knowledge seeking (M)* and communication ability (C) was a common trait between South Africa, USA and the Netherlands. *Business knowledge (P)* and *number sense (N)* entrepreneurial traits were not common in the other three countries.

2.74 was the lowest mean score in the Netherlands for the use of outside person's entrepreneurial trait.

TABLE 5: SUMMARY OF THE FOUR LEAST DEVELOPED ENTREPRENEURIAL TRAITS

PUERTO RICO		Mean	SOUTH AFRICA		Mean	USA		Mean	THE NETHERLANDS		Mean
P	Business Knowledge	3.40	M	Knowledge seeking	3.14	M	Knowledge seeking	2.95	L	Use of outside resource persons	2.74
L	Use of outside resource persons	3.41	L	Use of outside resource persons	3.18	L	Use of outside resource persons	3.19	M	Knowledge seeking	2.96
H	Taking initiative and seeking personal responsibility	3.46	H	Taking initiative and seeking personal responsibility	3.32	H	Taking initiative and seeking personal responsibility	3.49	H	Taking initiative and seeking personal responsibility	3.08
N	Number sense	3.48	C	Communication ability	3.42	C	Communication ability	3.54	C	Communication ability	3.22

An exploratory factor analysis was developed to assess the interrelationships among the entrepreneurial traits categories. To maximize factor loading an oblique rotation (Tabachnick, B. G., & Fidell, 2001) was selected to correlate the entrepreneurial traits. 13 of the 16 entrepreneurial traits were subject to principal component analysis (PCA) using SPSS version 22. It is important to remember that three of them were left out because of low reliability coefficients. The Kaiser-Meyer-Olkin value was .931, exceeding the suggested value of .6 and Barlett's test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. Principal component analysis revealed the presence of two components with eigenvalues exceeding 1, explaining 53.1% and 8.9% of the variance respectively. The Component Correlation Matrix for the Direct Oblimin rotation revealed a strong correlation of .653. As suggested by the Trait Pattern matrix (Table 6), component XXX grouped *goal setting and perseverance (A)*, *drive and energy levels (I)*, *commitment (D)*, *self-confidence (F)*, *dealing with failure (E)*, *thinking Ability (K)*, *human relations (B)* and *communication ability (C)*. The second suggested component is built by *business knowledge (P)*, *use of outside resource persons (L)*, *number sense (N)*, *knowledge seeking (M)*, *taking initiative and seeking personal responsibility (H)*.

TABLE 6: Entrepreneurial Traits Pattern Matrix^a: Puerto Rico

	Component	
	1	2
Goal setting and perseverance (A)	.875	
Drive and energy levels (I)	.815	
Commitment (D)	.803	
Self-confidence (F)	.768	
Dealing with failure (E)	.745	
Thinking Ability (K)	.701	
Human relations (B)	.694	
Communication ability (C)	.673	
Business knowledge (P)		.892
Use of outside resource persons (L)		.831
Number Sense (N)		.756
Knowledge seeking (M)		.660
Taking initiative and seeking personal responsibility (H)		.613
Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.		
a. Rotation converged in 5 iterations.		

Discussion:

This is a working research paper. This section will be submitted approximately two weeks after call for paper date.

References:

- Ahmad, S. Z., Xavier, S. R., & Bakar, A. R. A. (2014). Examining entrepreneurial intention through cognitive approach using Malaysia GEM data. *Journal of Organizational Change Management*, 27(3), 449–464. <http://doi.org/10.1108/JOCM-03-2013-0035>
- Al-Habib, M. (2012). Identifying The Traits Of Entrepreneurs In A University Setting: An Empirical Examination Of Saudi Arabian University Students. *The International Business & Economics Research Journal (Online)*, 11(9), 1019. Retrieved from <http://search.proquest.com/docview/1418718834?accountid=14744>
[http://fama.us.es/search*sp/i?SEARCH=\nhttp://pibserver.us.es/gtb/usuario_acceso.php?centro=\\$USEG¢ro=\\$USEG&d=1](http://fama.us.es/search*sp/i?SEARCH=\nhttp://pibserver.us.es/gtb/usuario_acceso.php?centro=$USEG¢ro=$USEG&d=1)
- Aldrich, H. E., & Yang, T. (2014). How do entrepreneurs know what to do? learning and organizing in new ventures. *Journal of Evolutionary Economics*, 24(1), 59–82. <http://doi.org/10.1007/s00191-013-0320-x>
- Astuti, R. D., & Martdianty, F. (2012). Students' Entrepreneurial Intentions By Using Theory of Planned Behavior. The Case in Indonesia. *The South East Asian Journal Management*, 6(2), 100–112.
- Ayub, D., & Othman, N. (2013). Entrepreneurship Management Practices in Creating Effective Schools. *Asian Social Science*, 9(12), 69–78. <http://doi.org/10.5539/ass.v9n12p69>
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship: Theory & Practice*, 38, 217–254. <http://doi.org/10.1111/etap.12095>
- Bengtsson, O., Sanandaji, T., & Johannesson, M. (2012). The Psychology of the Entrepreneur and the Gender Gap in Entrepreneurship. *Research Institute of Industrial Economics (IFN)*, (944).
- Brockmann, E. N., & Lacho, K. J. (2010). Strategic planning: A practical primer for the entrepreneur. *Entrepreneurial Executive*, 15(1998), 25–32. Retrieved from <http://proxy.cityu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=55233136&site=ehost-live&scope=site>
- Brooks, R., Green, W. S., Hubbard, R. G., Jain, D. C., Katehi, L., McLendon, G., ... Newton, R. (2007). Entrepreneurship in American Higher Education. *SSRN Electronic Journal*. <http://doi.org/10.2139/ssrn.1291290>
- Bullough, A., Renko, M., & Myatt, T. (2014). Danger Zone Entrepreneurs: The Importance of Resilience and Self-Efficacy for Entrepreneurial Intentions. *Entrepreneurship: Theory & Practice*, 38(3), 473–499. <http://doi.org/10.1111/etap.12006>
- De Clercq, D., Menzies, T. V., Diochon, M., & Gasse, Y. (2009). Explaining nascent entrepreneurs' goal commitment: an exploratory study, 2(2), 123–140. <http://doi.org/10.1080/08276331.2009.10593446>

- Dinis, a, Paço, A., Ferreira, J., Raposo, M., & Rodrigues, R. G. (2013). Psychological Characteristics and Entrepreneurial Intentions Among Secondary Students. *Education + Training*, 55(8/9), 1–23. <http://doi.org/10.1108/ET-06-2013-0085>
- Eeden, S. Van, Louw, L., & Venter, D. (2005). Entrepreneurial traits of undergraduate Commerce students: A three-country comparison. *Management Dynamics*, 14, 26–43. Retrieved from http://search.proquest.com/docview/200189418?accountid=14472&url=http://qs7qk6ub8p.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rft_id=info:sid/ProQ:abiglobal&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.jtitl
- Fillis, I., & Rentschler, R. (2010). The Role of Creativity in Entrepreneurship. *Journal of Enterprising Culture*, 18(01), 49–81. <http://doi.org/10.1142/S0218495810000501>
- Gelderen, M. Van. (2012). Perseverance strategies of enterprising individuals. *International Journal of Entrepreneurial Behaviour & Research*, 18(November 2009), 630–648. <http://doi.org/10.1108/13552551211268102>
- Giacomin, O., Janssen, F., Pruett, M., Shinnar, R. S., Llopis, F., & Toney, B. (2011). Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students. *International Entrepreneurship and Management Journal*, 7, 219–238. <http://doi.org/10.1007/s11365-010-0155-y>
- Kemepade Moruku, R. (2013). Does entrepreneurial orientation predict entrepreneurial behaviour? *International Journal of Entrepreneurship*, 17, 41–60.
- Marina Z. Solesvik. (2008). Entrepreneurial Motivations and Intentions: Investigating the Role of Education Major. *Education+Training*, 55(3), 253–271.
- Martínez, M.-S. C., Fuensanta, M. J. R., & Rodríguez, I. M. (2013). THE INFLUENCE OF SOCIOECONOMIC FACTORS ON ENTREPRENEURSHIP AND INNOVATION. *Journal of Small Business Strategy*, 23(2), 15–27. Retrieved from http://librarylogin.suagm.edu:85/*?url=http://search.proquest.com/docview/1623535832?accountid=130249
- Moberg, K. (2013). *An Entrepreneurial Self-Efficacy Scale with Neutral Wording. Conceptual Richness and Methodological Diversity in Entrepreneurship Research: Entrepreneurship Research in Europe.*
- Mouna, A. (2013). Financial Literacy and Decision Making : an Overview From Tunisia. *International Journal of Information, Business and Management*, 5(4), 62–73.
- Mueller, S. L. (2004). Gender Gaps in Potential for Entrepreneurship Across Countries and Cultures. *Journal of Developmental Entrepreneurship*, 9(3), 199–220. Retrieved from <http://ezproxy.umuc.edu/login?url=http://search.proquest.com/docview/208440340?accountid=14580>

- Okhomina, D. (2010). Entrepreneurial orientation and psychological traits : the moderating influence of supportive environment. *Journal of Behavioral Studies in Business*, 3, 1–16. Retrieved from <http://www.aabri.com/manuscripts/10450.pdf>
- Oosterbeek, H., van Praag, M., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. *European Economic Review*, 54(3), 442–454. <http://doi.org/10.1016/j.euroecorev.2009.08.002>
- Ozgen, E., & Minsky, B. D. (2013). Why Some College Students Engage in Entrepreneurial Activities While Others Do Not. *Journal of Entrepreneurship Education*, 16, 45–58. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=87744091&lang=de&site=ehost-live>
- Paunescu, C. (2013). Challenges of Entering the Business Market: the Pre-Entry Knowledge and Experience. *Management & Marketing*, 8(1), 63–78. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=18420206&AN=90506908&h=YXDmvNlbrOSp8ZwLmN8JKJ0EgkvvdtenbEwUt2ou4fq6jUxhXw3HwnbFYT+m3B8TWdLYfb1cJvHmk1hzFklpig==&crl=c>
- Pillis, E. De, & Dewitt, T. (2008). Not worth it , not for me ? Predictors of entrepreneurial intention in men and women. *Journal of Asia Entrepreneurship and Sustainability*, IV(3), 1–14.
- Raosoft. (2015). Sample Size Calculator. Retrieved September 10, 2015, from <http://www.raosoft.com/samplesize.html>
- S., M. A., M., D. K., & Ramalu, S. S. (2014). Categorizing and Fixing Variables on Entrepreneurial Intention through Qualitative Research. *Asian Social Science*, 10(19), 45–59. <http://doi.org/10.5539/ass.v10n19p45>
- Sánchez, J. C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. *International Entrepreneurship and Management Journal*, 7(2), 239–254. <http://doi.org/10.1007/s11365-010-0156-x>
- Santos, S. C., Caetano, A., & Curral, L. (2013). Psychosocial aspects of entrepreneurial potential. *Journal of Small Business & Entrepreneurship*, 26(6), 661–685. <http://doi.org/10.1080/08276331.2014.892313>
- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business - A Skill-Building Approach*. Chichester: Wiley.
- Sivarajah, K., & Achchuthan, S. (2013). Entrepreneurial Intention among Undergraduates: Review of Literature. *European Journal of Business and ...*, 5(5), 172–186. Retrieved from <http://www.iiste.org/Journals/index.php/EJBM/article/view/4566>
- Sorensen, J., & Chang, P. (2006). Determinants of Successful Entrepreneurship: A Review of the Recent Literature. *SSRN Electronic Journal*. <http://doi.org/10.2139/ssrn.1244663>

- Tabachnick, B. G., & Fidell, L. S. (. (2001). *Using multivariate statistics*. (N. Y. HarperCollins, Ed.) (4th ed.).
- Tasnim, R., Yahya, S. and, & Zainuddin, M. (2014). "I'm Loving It!" What Makes the Successful Entrepreneur Affectively Committed to Entrepreneurial Performance? *The Journal of Applied Management and Entrepreneurship*, 19(2), 27–52.
- Turker, D., & Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, 33(2), 142–159.
<http://doi.org/10.1108/03090590910939049>
- Ulvenblad, P., Berggren, E., & Winborg, J. (2013). The role of entrepreneurship education and start-up experience for handling communication and liability of newness. *International Journal of Entrepreneurial Behaviour & Research*, 19(2), 187–209.
<http://doi.org/10.1108/13552551311310374>
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How Reliable are Measurement Scales? External Factors with Indirect Influence on Reliability Estimators. *Procedia Economics and Finance*, 20(15), 679–686. [http://doi.org/10.1016/S2212-5671\(15\)00123-9](http://doi.org/10.1016/S2212-5671(15)00123-9)
- Wise, S. (2013). The Impact of Financial Literacy on New Venture Survival. *International Journal of Business and Management*, 8(23), 30–39. <http://doi.org/10.5539/ijbm.v8n23p30>