

ENTREPRENEURIAL WOMEN, EDUCATION DEGREE, AND SOCIAL ACCEPTANCE OF ENTREPRENEURS: A CROSS-NATIONAL QUANTITATIVE STUDY¹

MULHERES EMPREENDEDORAS, GRAU DE EDUCAÇÃO E ACEITAÇÃO SOCIAL DE EMPREENDEDORES: UM ESTUDO QUANTITATIVO TRANSNACIONAL

Juliana Conceição Noschang da Costa²

Marcos Ferasso³

José Roberto Frega⁴

ABSTRACT

This research aimed to verify the influence of three different variables on encouraging women to start a new business or to work on their own: a) citizens' qualification in primary, secondary, and undergraduate education, b) entrepreneurship, creation, and continuity of firms; and c) social acceptance of women as entrepreneurs. The model was elaborated from literature highlights. As method, this research is a cross-national quantitative study, and we performed multiple linear regression on a sample of 1,672 respondents from 49 different countries. Results revealed that formal education helps to elucidate the encouragement of women to be entrepreneurs, but it is the cultural issues (social acceptance of entrepreneurs) that play a more active role in the explanation of encouragement of women to start a new business or to work on their own. This research sheds lights on formal education of entrepreneurship studies and the propensity to become entrepreneur by women.

Keywords: entrepreneurship, education degree, entrepreneurial women.

¹ Recebido em 06/03/2020. Aprovado em 02/04/2020.

² Universidade Tecnológica Federal do Paraná. julianacncosta@gmail.com

³ Universidade Comunitária da Região de Chapecó. admmarcosferasso@gmail.com

⁴ Universidade Federal do Paraná. jose.frega@gmail.com



RESUMO

Esta pesquisa teve como objetivo verificar a influência de três variáveis diferentes no incentivo às mulheres para iniciar um novo negócio ou trabalhar por conta própria: a) qualificação dos cidadãos no ensino fundamental, médio e superior, b) empreendedorismo, criação e continuidade de empresas; e c) aceitação social da mulher como empreendedora. O modelo foi elaborado a partir de destaques da literatura. Como método, esta pesquisa é um estudo quantitativo transnacional e realizamos regressão linear múltipla em uma amostra de 1.672 participantes de 49 países diferentes. Os resultados revelaram que a educação formal ajuda a elucidar o encorajamento das mulheres a serem empreendedoras, mas são as questões culturais (aceitação social das empreendedoras) que desempenham um papel mais ativo na explicação do incentivo às mulheres para iniciar um novo negócio ou trabalhar por conta própria. Esta pesquisa lança luzes sobre a educação formal dos estudos de empreendedorismo e a propensão a se tornar empreendedor pelas mulheres.

Palavras-chave: empreendedorismo, grau de educação, mulheres empreendedoras.

INTRODUCTION

The study of the relationship between entrepreneurship and education in academic area is not new (Béchard & Toulouse, 1991). In several Universities and Colleges, it is possible to find curricular components or complete courses devoted to the entrepreneurship learning (Rushing, 1990; Swell & Pool, 2010). The main objective of these courses is to motivate the propensity to become an entrepreneur (Rabbior 1990). Bell and Pavitt (1993) underlined that educational policies strongly influence technologies absorption and, considering that the basis of an entrepreneur is technology, this represents a source of competitive advantage (Bailetti, 2012).

Several researches have already been conducted in the field of female entrepreneurship (Fischer, Reuber & Dyke, 1993; Stevenson, 1986), but there are still gaps to be explored (Ahl, 2006). This research seeks to fill these gaps through the contribution of the relationship among female entrepreneurship, and

170



RELISE

education, and the social acceptance of women in society from a cross-national quantitative study (Crowly et al., 1998).

Although it is known that men and women have different idiosyncrasies (DeMartino & Barbato, 2003; Gunnerud, 1997), such as how to enter the market (Birley, 1989), men are more entrepreneurial than women (Gupta et al., 2009), or even that women are popularly considered inferior in the business world (Ahl, 2006). Few studies have focused on the relationship of female entrepreneurship, social and educational determinants resulting in formation of this female entrepreneurial profile, in a cross-national quantitative study such the proposed research. Cowling and Taylor (2001) have pointed out that the difference between entrepreneurial men and women lies in the fact that women are better educated than men and that men are more likely to become self-employed.

Social acceptance of women entrepreneurs in the social context in which they live is essentially because the world of business is dominated by men (Hisrich, 1986). There are cases where women prefer not to identify themselves as female, so as not to be identified as different by male norms of entrepreneurship (Lewis, 2006).

In this way, this research has as objective to verify the influence of the preparation of citizens in the primary and secondary education, as well as undergraduate education related to entrepreneurship, creation, and continuity of firms; and social acceptance by society of women as entrepreneurs, and encouragement of women to start a new business or to work on their own.

From the above, we present the model that illustrates the relationships among independent and dependent variables.



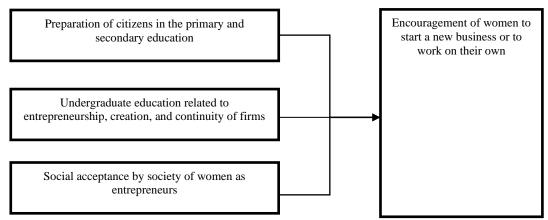


Figure 1 – Model of relationship among independent and dependent variables

This paper is divided into four sections besides this introduction. Section two presents the main concepts that were considered for model structuration, used in the regressions. The methods used in this research are described in section three, as well as the source of used data. Section four presents the results of regression analysis, followed by data discussion. Finally, conclusions and references are presented.

THEORETICAL FRAMEWORK

The theoretical framework that bases this research refers to the main concepts available in literature, which relate the keywords of variables to be measured lately.

Entrepreneurship and encouragement of women to become entrepreneurs

Women's participation as entrepreneurs has increased significantly in recent years (Buttner & Moore, 1997; Brush, 2000) and, unlike stereotypes, women are better prepared to undertake managerial roles in the current work environment (Powell, 1993).



RELISE

First, it is needed to understand the motives that lead women to undertake. Orhan and Scott (2001) identified, from an explanatory model, that women decide to become entrepreneurs in the following situations: dynastic submission, single option, entrepreneurship by opportunity, natural succession, forced entrepreneurship, informed entrepreneur, and pure entrepreneur.

In Hanson (2009), it is found that women see entrepreneurship as an alternative to change their lives and those who are close to them. Researching the entrepreneurial mindset, Bruni, Gherardi and Poggio (2004) have identified that women tend to reproduce male entrepreneurial experiences in an implicitly way.

Buttner and Moore (1997) reported that little attention has been given to the motivation of women who choose entrepreneurship as a career development. In Brush (2000), it is found that the differences between entrepreneurial men and women lies in the occupational and educational background, motivations to undertake, and goals, creation, and growth of the businesses they undertake.

Although there are countries, such as the United States, where women find a culture conducive to entrepreneurship, representing significant participation in the national economy (McKay, 2001), there are some more closed cultures such as Pakistan (Roomi, 2008) where women find barriers as sociocultural discrimination due to the values and traditions of that culture. Pakistanis are unable to express their entrepreneurial potential and pursue a career in their endeavors due to various constraints such as access to capital, information technology, and even training.

The society that has conservative and patriarchal foundations, where men figure as superior to women, does not encourage women to undertake much (Roomi, 2008). The same difficulties, especially social ones, are felt by



RELISE

entrepreneurs in countries of sub-Saharan Africa (Amine & Staub, 2009) and Ethiopia (Singh & Belwal, 2008).

The primary and secondary educations and entrepreneurship

Managing firms requires a set of skills and knowledge of their manager, which is related to issues of literacy and education (Minniti & Arenius, 2003). In all countries, employment rates are higher and gender differences are smaller if compared women with some educational experience and those who have any or few education.

Regarding the primary and secondary education levels, and based on a gender comparison, women are still behind men in countries like the Africans. Even in countries with high incomes, women still do not have full access to primary education and computer skills training, necessary to enter in new age professions (Minniti & Arenius, 2003). And, as women have on average, less than one year of education compared with men.

Among several studies that relate entrepreneurship and education levels, Robinson and Sexton (1994) found that there is a positive relationship between entrepreneurship and general education in terms of self-employment and success. However, contrary to Minniti and Arenius (2003), it is found in Cowling and Taylor (2001), that women are better educated than men. Sluis, Praag and Vijverberg (2008) concluded that the effect of education on the performance of entrepreneurs is significant, and that the return to the study of content related to entrepreneurship is higher among women compared to men.

Although the above mentioned studies prove the influence of education in entrepreneurship, Jayaweera (1997) states that there is no positive linear relationship between education and empowerment of women in economic, social, and political factors, due to constraints of the socio-economic structure and gender ideologies.



RELISE

In a research done with primary and secondary education levels in U.S., Kourilsky and Walstad (1998) found that both boys and girls had low rates of knowledge about entrepreneurship and that both sexes believe that the gaps left in primary and secondary levels will be corrected later (in undergraduate education, for example).

Undergraduate level, entrepreneurship, and creation and continuity of firms

The number of Colleges and Universities that have inserted entrepreneurship in their curricula has grown exponentially (Kuratko, 2005). The content taught at these institutions need constant revision to keep up with the current needs of future entrepreneurs (Kirby, 2004). In part, this is explained by the impossibility of predicting the effect of teaching strategies on the development of entrepreneurial skills and how these competences are transferred to the formation of new ventures (Garavan & O'Cinneide, 1994; Nabi & Holden, 2008).

Students with knowledge of entrepreneurship are more likely to take risks, master self-control; have a greater need for surpassing, and higher degrees of innovation if compared to students who have no inclination for undertake (Gürol & Atsan, 2006). These results are in line with those of Kolvereid and Moen (1997). There are no gender differences related to the interest in entrepreneurship (Shinnar, Pruett & Toney, 2010).

Minniti and Arenius (2003) argued that higher education provides better job positions and better paid jobs and that women have gained access to undergraduate education in various regions of the world.

However, Oosterbeck, Praag, and Ijsselstein (2010) examined the impact of leading entrepreneurship education programs on the motivation and skills of undergraduate students. The results revealed that the programs do not fulfill their expected effects: the effect on the entrepreneurial abilities of the



176

students is insignificant and the effect on intention to become entrepreneur has proved negative.

Entrepreneurship initiative can be restricted to attitudinal issues. Male students demonstrated to have higher scores for innovation and self-control; and students with experience from family businesses have more developed entrepreneurial attitudes (Harris & Gibson, 2008).

The effect of education, especially at the MBA level, on entrepreneurial self-efficacy has been shown to be higher in women than in men (Wilson, Kickul & Marlino, 2007).

Social acceptance by society of women as entrepreneur

Bowen and Hisrich (1986) have already pointed out that entrepreneurship studies have failed to provide a clear image of factors that encourage an individual to undertake. In a survey conducted by Langowitz and Minniti (2007), it was identified that women see themselves and perceive the entrepreneurial environment as less favorable to women.

Society is still conservative when it emphasizes that women should take care of basic and proper tasks. Women entrepreneurs who also have family responsibilities (such as caring for children and managing a business) lead to marital, parental and family conflicts due to work (Kim & Ling, 2001).

Culture shapes the development of certain personalities and motivates individuals to engage in behaviors that may not be evident in other societies. Therefore, there are cultures that support more entrepreneurial activities than others. More individualistic behavior favors individuals' self-control and innovation, which is essential to form entrepreneurial attitudes. In this way, cultures that favor more individualism tend to provide an environment more conducive to the development of entrepreneurship (Mueller & Thomas, 2001).



177

Similarly, Lee and Peterson (2000) argued that the social propensity to generate autonomous entrepreneurs, risk takers, innovators, competitively aggressive and proactive will depend on the culture of a given society.

Chitsike (2000) points out that women can be self-confident and autonomous if there is no culture that can bar them. Culture can influence inventiveness if in a given society there are social hierarchies and if in a given society it is characterized more by individualism, favoring more inventiveness (Shane, 1992). It should be noted that, according to Mueller and Thomas (2001), individualism is one of the key ingredients for entrepreneurship to emerge in a given society.

Morrison (2000) concluded that there is a significant relationship between entrepreneurship and culture. The cultural context in which people are inserted has an important role in shaping and forming entrepreneurs, and in the degree to which entrepreneurship is considered acceptable and desirable behavior. The cultural dimension is supported by society, and the role of the family is recognized as potential to contribute positively to entrepreneurial behavior.

METHODOLOGY

The present study is a quantitative analysis using multiple linear regression to determine the influence of three independent variables on a dependent variable (Hair et al., 2009). Statistical analyzes were performed with the aid of SPSS® software.

Multiple linear regression was carried out to determine the influence of independent variables as influencing or predicting the behavior of another dependent variable. The questions that the regression was designed to answer were: how much one set of variables can predict the behavior of another? Which variable of the set is better as predictive? (Hair et al., 2009).



178

We started by the following: How much of variation on encouragement of women to start a new business or to work on their own can be explained by preparation of citizens on primary and secondary education, as well as undergraduate education in relation to entrepreneurship, creation, and continuity of firms; and the social acceptance by society of women as an

The initial sample consisted of 1,852 respondents from 49 different countries⁵. These are secondary data from the Global Entrepreneurship Monitor (GEM) database of the survey conducted in 2011. The data provided is part of a survey of 140,000 people in 54 different countries. The scale used in the survey questionnaire is a 5-point Likert scale, with the lowest scores (1 and 2) indicating 1 = totally false, and 2 = partially false. The middle of the scale means 3 = neither false nor true, and the highest scores (4 and 5) indicate 4 = partially true and 5 = totally true.

Regarding data cleaning, we first performed a visual inspection of the described data to identify possible typing failures, by means of descriptive statistics of minimums and maximums. Subsequently there was the identification and exclusion of outliers (13 in total) by means of boxplots graphs obtained in the descriptive analysis. With this, there were 1,839 cases to be analyzed. The distances of Mahalanobis were analyzed. These distances were compared with the calculated critical value (9.49) (Hoffmann & Vieira, 1977), thus creating - in another variable - dummy variables so that the data were not rotated above the value found in the Mahalanobis distance. With the exclusion of these, 1,672 cases remained.

entrepreneur?

⁵ Algeria, Australia, Brazil, Colombia, Croatia, Finland, Germany, Guatemala, Ireland, South Korea, Lithuania, Nigeria, Pakistan, Russia, Singapore, Slovakia, South Africa, Sweden, Taiwan, Thailand, Turkey, Venezuela, Argentina, Bangladesh, Bosnia and Herzegovina, Chile, Czech Republic, France, Hungary, Jamaica, Latvia, Mexico, Panama, Spain, Switzerland, Trinidad Tobago, United Kingdom, Peru, Slovenia, Greece, Norway, Malaysia, Poland, Iran, United Arab Emirates, Barbados, Netherlands, Portugal, and Uruguay.



179

According to Hair et al. (2009), sample size has a direct impact on the adequacy and statistical power of multiple regression. The high number of the sample (1,000 cases or more) may change the significance tests, since they make them extremely sensitive and may indicate that a relationship is significant, whereas in fact, it is not (Hair et al., 2009). In the case of the selected sample for regression, there were 1,672 cases. To ensure that the significance tests were not "masked" by the sample size, multiple regressions were run with different percentages of the sample (20%, 30% and 40% of the sample), automatically selected by SPSS® software. The model was significant at 0.000% in all three cases. It was then decided to maintain the 1,672 cases in the analyzes.

The multicollinearity evaluation was then performed by means of the Correlation Matrix. Results are shown in the next section.

RESULTS PRESENTATION AND DISCUSSION

In this section, we present the analyzed data and discussion.

Data presentation

By means of the analysis of correlation matrix, it was verified that there is no multicollinearity among independent variables, since Pearson's correlation coefficients were not higher than 0.9 (Hair et al., 2009). In order to ensure the absence of multicollinearity, we also observed the Tolerance and Variance Inflation Factors (VIF) in the coefficient matrix (Table 3). Both values did not indicate the presence of multicollinearity according to the values proposed by Hair et al. (2009). According to the authors, the degrees of tolerance should be high, and the VIF, which is simply calculated as the inverse of tolerance value (Hair et al., 2009) must be low.

Regarding the correlation among independent variables and dependent



180

variable, it was observed that the variables related to education show a low correlation (0.273 and 0.242) with the dependent variable, but the relation is statistically significant (p = 0.000). In turn, the variable related to the social acceptance of the career of women as entrepreneurs correlates in a high way (0.601) with the dependent variable, also in a significant way (p = 0.000) (Hair et al., 2009).

Table 1 indicates the summary of the model, that is, we observe R², which shows how much of the variance of the independent variable is explained by the model. In the case of the present analysis, primary education, undergraduate education and social acceptance of women in the labor market as autonomous and entrepreneurs have the power to predict/explain 39.3% of women's encouragement to start a new business or to work on its own.

Table 1 – Summary of the model

Summary of the model^b

Model	R	R^2	Adjusted R ²	Standard error of estimation	Durbin-Watson
1	,627a	,393	,392	,875	1,842

a. Predictors: (Constant), IND In my country, starting a new business is a socially acceptable career option for women, IND In my country, Colleges and universities provide good and adequate preparation for starting up and growing new firms, IND In my country, teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation

b. Dependent variable: DEP In my country, women are encouraged to become selfemployed or start a new business

Source: SPSS®

Table 2, which shows the analysis of variance, indicates by means of the observation of the last column (Sig.), that the model is significant. It is observed that the rejection of null hypothesis (H₀) of the ANOVA test means that, at least, one of the regression variables contributed significantly to the model (Werkema & Aguiar, 1996).



181

Table 2 – Analysis of variance (ANOVA)

ANOVA^a

Model		Squares sum	df	Middle square	Z	Sig.
1	Regression	826,027	3	275,342	359,472	,000b
	Residue	1277,627	1668	,766		
	Total	2103,655	1671			

a. Dependent variable: DEP In my country, women are encouraged to become self-employed or start a new business

Source: SPSS®

We observe in table 3, from coefficients, more specifically on Beta Standard Coefficients the values that, according to Maroco (2003), allow us to conclude which independent variables contribute most to explaining the behavior of dependent variable. In this case, it is observed that primary and secondary education contributed 12.5%, the undergraduate education 8.5%, and finally the social acceptance of women 56.2%. Analyzing the column of significance (Sig.) of the table, we conclude that all variables make expressive contributions to the model, since the null hypothesis (H₀) was rejected (Werkema & Aguiar, 1996). The collinearity statistics (Tolerance and VIF) have already been discussed previously. Reinforcing, both present values that do not indicate multicollinearity of the variables.

b. Predictors: (Constant), IND In my country, starting a new business is a socially acceptable career option for women, IND In my country, Colleges and universities provide good and adequate preparation for starting up and growing new firms, IND In my country, teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation



Table 3 – Coefficients matrix

Coefficients^a

182

			emolema				
	Non-standardized coefficients		Standardize d coefficients			Collinearity statistics	
		Standard					
Model	В	error	Beta	t	Sig.	Tolerance	VIF
1 (Constant) IND In my country, teaching in primary and secondary education provides adequate attention to entrepreneursh ip and new firm creation	,441 ,164	,083 ,029		5,311 5,733	,000 ,000		1,300
IND In my country, Colleges and universities provide good and adequate preparation for starting up and growing new firms	,094	,024	,085	3,934	,000	,775	1,291
IND In my country, starting a new business is a socially acceptable career option for women	,570	,020	,562	28,767	,000,	,953	1,049

a. Dependent variable: DEP In my country, women are encouraged to become self-employed or start a new business

Source: SPSS®

Based on Table 3, the regression equation of the tested model is presented (Figure 2):



183

Y = .441 + .570wom.soc + .094ens.sup + .164ens.bas

Figure 2 – Equation of used regression

Discussion

The findings of this research indicate that the acceptance by society of women as entrepreneurs is the factor that most influences the explanation of the encouragement of women to start a new business or to work on their own. Following the primary and secondary education and having as less influential factor the issue of undergraduate education, the findings of this study corroborate with the existing theory.

According to authors like Chitsike (2000), culture influences the self-confidence and autonomy of women, which was evidenced by the findings of the present study. For Shane (1992), inventiveness can be influenced by culture if in a given society there are social hierarchies characterized by individualism. Such individualism, according to Mueller and Thomas (2001), is one of the factors that must exist for entrepreneurship can occur in a society.

Still according to the findings of the present study, Lee and Peterson (2000) argue that the social propensity to generate autonomous entrepreneurs, risk takers, innovators, competitively aggressive and proactive will depend on the culture. Further strengthening previous theory, the factor that most contributed to the explanation of women's encouragement of female entrepreneurship is in line with what Morrison (2000) concluded in his study, which states that there is a significant relationship between entrepreneurship and culture.

As existing theory states, higher levels of education have a positive influence on employment rates. The present study found a low but significant relation with regard to primary and secondary education in relation to the



184

encouragement of women to entrepreneurship. In all countries, if women with some educational experience are compared with women with no education at all, the employment rates are higher and the differences between genders are lower.

Evidencing the findings, Robinson and Sexton (1994) identified that there is a positive relationship between entrepreneurship and general education in terms of self-employment and success. In turn, Sluis, Praag and Vijverberg (2008) concluded that there is a significant effect of education on the performance of entrepreneurs. They still found in their studies evidence that the return to the study of contents related to entrepreneurship is higher among women when compared to men.

However, Jayaweera (1997) states that there is no positive linear relationship between education and empowerment of women in economic, social, and political factors due to constraints in the socio-economic structure and gender ideologies. Such finding is against the results of the present study, however, as the relationship found was low but statistically significant, it is believed that it is susceptible to further in-depth analyzes.

The factor analyzed that least influenced the encouragement of women to undertake was undergraduate education, although it was shown to be statistically significant. According to Gürol and Atsan (2006), students who are more likely to take risks and master self-control are those who have knowledge of entrepreneurship. These have greater need of surpassing and higher degrees of innovation if compared to those who have no inclination to entrepreneurship. Corroborating with the findings of this study, according to Shinnar, Pruett and Toney (2010), there is no gender difference regarding interest in entrepreneurship.

However, Oosterbeck, Praag and Ijsselstein (2010) concluded in their studies about the impact of leading entrepreneurship programs on the



185

motivation and skills of undergraduate students that such actions did not deliver the expected effects. The effect on the entrepreneurial skills of the students was insignificant and the effect on intention to become entrepreneurial was negative.

CONCLUSION

As pointed out by Bowen and Hisrich (1986), entrepreneurship studies have failed to provide a clear image of the factors that encourage an individual to undertake. The present study proposed to fill a portion of this gap by explaining the factors that encourage female entrepreneurship in different countries. The three analyzed factors contributed significantly to the proposed model, but with different contributions with emphasis on the issues of social acceptance of women, in detriment to the factors of formal education.

The findings of this research support the findings of Orhan and Scott (2001) who, from an explanatory model, identified that women decide to become entrepreneurs in the following situations: dynastic submission, single choice, opportunity entrepreneurship, natural succession, forced entrepreneurship, informed entrepreneur, and pure entrepreneur.

The subject of the social acceptance of women as entrepreneurs is a significant factor in encouraging women to entrepreneurship. It is especially important if we consider Hanson's (2009) findings that women see entrepreneurship as an alternative to changing their lives and who is close to them.

We concluded that formal education assists in elucidating the encouragement of women to entrepreneurship, but it is the cultural issues that play a more active role in explaining this variable. It is addressed to some countries where women encounter diverse barriers, such as socio-cultural discrimination due to the values and traditions of such culture (Roomi, 2008). In these nations, women cannot express their entrepreneurial potential and pursue



186

a career in their endeavors due to various constraints. The society that has conservative and patriarchal foundations, where men figure as superior to women, does not encourage women to undertake much (Roomi, 2008; Amine & Staub, 2009; Singh & Belwal, 2008).

References

Ahl, H. (2006) 'Why research on women entrepreneurs needs new directions' *Entrepreneurship theory & practice*, Vol. 30, No. 5, pp.595-621.

Amine, L.S., & Staub, K.M. (2009) 'Women entrepreneurs in sub-Saharan Africa: an institutional theory analysis from a social marketing point of view' *Entrepreneurship & regional development: an international journal*, Vol. 21, No. 2, pp.183-211.

Bailetti, T. (2012) 'Technology entrepreneurship: overview, definition, and distinctive aspects' *Technology innovation management review,* February 2012, pp.5-12.

Béchard, J.-P., & Toulouse, J.-M. (1991) 'Entrepreneurship and education: viewpoint from education' *Journal of small business & entrepreneurship*, Vol. 9, No. 1, pp.3-13.

Bell, M., & Pavitt, K. (1993) 'Technological accumulation and industrial growth: contrasts between developed and developing countries' *Industrial and corporate change*, Vol. 2, No. 1, pp.157-210.

Birley, S. (1989) 'Female entrepreneurs – are they really any different?' *Journal of small business management*, Vol. 27, No. 1, pp.32-37.

Bowen, D.D., & Hisrich, R.D. (1986) 'The female entrepreneur: a career development perspective' *Academy of management review*, Vol. 11, No. 2, pp.393-407.

Bruni, A., Gherardi, S., & Poggio, B. (2004) 'Entrepreneur-mentality, gender and the study of women entrepreneurs' *Journal of Organizational Change Management*, Vol. 17, No. 3, pp.256-268.



187

Brush, C.G. (2000) 'Research on women business owners: past trends, a new perspective and future directions' In Storey, D.J. (2000) *Small business: critical perspectives on business and management*, New York: Routledge.

Buttner, E.H., & Moore, D.P. (1997) 'Women's organizational exodus to entrepreneurship: self-reported motivations and correlates with success' *Journal of small business management*, Vol. 35, No. 1, pp.34-46.

Chitsike, C. (2000) 'Culture as a barrier to rural women's entrepreneurship: experience from Zimbabwe' *Gender & development*, Vol. 8, No. 1, pp.71-11.

Cowling, M., & Taylor, M. (2001) 'Entrepreneurial women and men: two different species?' *Small business economics*, Vol. 16, No. 3, pp.167-175.

Crowly, A.M. et al. (1998) 'Quantitative cross-national studies of economic development: a comparison of the economics and sociology literatures' *Studies in comparative international development*, Vol. 33, No. 2, pp.30-57.

DeMartino, R., & Barbato, R. (2003) 'Differences between women and men MBA entrepreneurs: exploring family flexibility and wealth creation as career motivators' *Journal of business venturing*, Vol. 18, No. 6, pp.815-832.

Fischer, E.M., Reuber, A.R., & Dyke, L.S. (1993) 'A theoretical overview and extension of research on sex, gender, and entrepreneurship' *Journal of business venturing,* Vol. 8, No. 2, pp.151-168.

Garavan, T.N., & O'Cinneide, B. (1994) 'Entrepreneurship education and training programs: a review and evaluation – part 1' *Journal of European industrial training*, Vol. 18, No. 8, pp.3-12.

Gunnerud, B.N. (1997) 'Gender, place and entrepreneurship' *Entrepreneurship regional development: an international journal*, Vol. 9, No. 3, pp.259-268.

Gupta, V.K. et al. (2009) 'The role of gender stereoptypes in perceptions of entrepreneurs and intentions to become an entrepreneur' *Entrepreneurship theory & practice*, Vol. 33, No. 2, pp.397-417.

Gürol, Y., & Atsan, N. (2006) 'Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey' *Education* + *Training*, Vol. 48, No. 1, pp.25-38.



188

Hair, J.F., et al (2009) *Análise multivariada de dados,* 6nd ed., Porto Alegre: Bookman.

Hanson, S. (2009) 'Changing places through women's entrepreneurship' *Economic geography*, Vol. 85, No. 3, pp.245-267.

Harris, M.L., & Gibson, S.G. (2008) 'Examining the entrepreneurial attitudes of US business students' *Education* + *Training*, Vol. 50, No. 7, pp.568-581.

Hisrich, R.D. (1986) 'The Woman Entrepreneur: A Comparative Analysis' *Leadership & Organization Development Journal*, Vol. 7, No. 2, pp.8-16.

Hoffmann, R. & Vieira, S. (1977) Análise de Regressão: uma introdução à econometria. São Paulo: HUCITEC.

Jayaweera, S. (1997) 'Women, education and empowerment in Asia' *Gender and education*, Vol. 9, No. 4, pp.411-424.

Kim, J.L.S., & Ling, C.S. (2001) 'Work-family conflict of women entrepreneurs in Singapore' *Women in Management Review,* Vol. 16, No. 5, pp.204-221.

Kirby, D.A. (2004) 'Entrepreneurship education: can business schools meet the challenge?' *Education + Training*, Vol. 46, No. 8/9, pp.510-519.

Kolvereid, L., & Moen, Ø. (1997) 'Entrepreneurship among business graduates: does a major in entrepreneurship make a difference?' *Journal of European Industrial Training,* Vol. 21, No. 4, pp.154-160.

Kourilsky, M., & Walstad, W.B. (1998) 'Entrepreneurship and female youth: knowledge, attitudes, gender differences, and educational practices' *Journal of business venturing*, Vol. 13, No. 1, pp.77-88.

Kuratko, D.F. (2005) 'The emergence of entrepreneurship education: development, trends, and challenges' *Entrepreneurship theory & practice,* Vol. 29, No. 5, pp.577-598.

Langowitz, N., & Minniti, M. (2007) 'The entrepreneurial propensity of women' *Entrepreneurship theory & practice*, Vol. 31, No. 3, pp.341-364.

Lewis, P. (2006) 'The quest for invisibility: female entrepreneurs and the masculine norm of entrepreneurship' *Gender, work & organization,* Vol. 13, No. 5, pp.453-469.



189

Maroco, J. (2003) *Análise estatística: com a utilização do SPSS.* 2nd. ed., Lisboa: Síbalo.

McKay, R. (2001) 'Women entrepreneurs: moving beyond family and flexibility' *International Journal of Entrepreneurial Behaviour & Research*, Vol. 7, No. 4, pp.148-165.

Minniti, M., & Arenius, P. (2003) 'Women in entrepreneurship' *Proceedings of The Entrepreneurial Advantage of the Nations: First Annual Global Entrepreneurship Symposium*, United Nations. Retrieved form: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.471.7819&rep=rep1&type=pdf

Morrison, A. (2000) 'Entrepreneurship: what triggers it?' *International Journal of Entrepreneurial Behaviour & Research*, Vol. 6, No. 2 pp.59-71.

Mueller, S.L., & Thomas, A.S. (2001) 'Culture and entrepreneurial potential: a nine country study of locus of control and innovativeness' *Journal of business venturing*, Vol. 16, No. 1, pp.51-75.

Nabi, G., & Holden, R. (2008) 'Graduate entrepreneurship: intentions, education and training' *Education* + *Training*, Vol. 50, No. 7, pp.545-551.

Oosterbeck, H., Praag, M.V., & Ijsselstein, A. (2010) 'The impact of entrepreneurship education on entrepreneurship skills and motivation' *European economic review,* Vol. 54, No. 3, pp.442-454.

Powell, G.N. (1993) *Women and men in management,* 3rd ed., Thousand Oaks: Sage Publications.

Rabbior, G. (1990) 'Elements of a successful entrepreneurship/economics/education program' (Cap. 4) In Kent, C.A. *Entrepreneurship and education: current developments, future directions.* Westport: Quorum Books.

Robinson, P.B., & Sexton, E.A. (1994) 'The effect of education and experience on self-employment success' *Journal of business venturing*, Vol. 9, No. 2, pp.141-156.



190

Roomin, M.A. (2008) 'Barriers to development and progression of women entrepreneurs in Pakistan' *Journal of entrepreneurship*, Vol. 17, No. 1, pp.59-72.

Rushing, F.W. (1990) 'Entrepreneurship and education' (Cap. 2) In Kent, C.A. *Entrepreneurship and education: current developments, future directions.* Westport: Quorum Books.

Shane, S.A. (2000) 'Why do some societies invent more than others?' *Journal of business venturing*, Vol. 7, No. 1, pp.29-46.

Shinnar, R., Pruett, M., & Toney, B. (2010) 'Entrepreneurship education: attitudes across campus' *Journal of education for business*, Vol. 84, No. 3, pp.151-159.

Singh, G., & Belwal, R. (2008) 'Entrepreneurship and SMEs in Ethiopia: Evaluating the role, prospects and problems faced by women in this emergent sector' *Gender in Management: An International Journal,* Vol. 23, No. 2, pp.120-136.

Sluis, J.V.D., Praag, M.V., & Vijverberg, W. (2008) 'Education and entrepreneurship selection and performance: a review of the empirical literature' *Journal of economic surveys*, Vol. 22, No. 5, pp.795-841.

Stevenson, L.A. (1986) 'Against all odds: the entrepreneurship of women' *Journal of small business management*, Vol. 24, Oct., pp.34-35.

Swell, P., & Pool, L.D. (2010) 'Moving from conceptual ambiguity to operational clarity: employability, enterprise and entrepreneurship in higher education' *Education* + *training*, Vol. 52, No. 1, pp.89-94.

Werkema, M.C.C., & Aguiar, S. (1996) *Análise de Regressão: como entender o relacionamento entre as variáveis de um processo,* Belo Horizonte: Fundação Christiano Ottoni, Escola de Engenharia da UFMG.

Wilson, F., Kickul, J., & Marlino, D. (2007) 'Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: implications for entrepreneurship education' *Entrepreneurship theory & practice*, Vol. 31, No. 3, pp.387-406.