December 2014 Vol.1 No.1 12-25

# Personal and social factors that influence female entrepreneurship in Mexico

ELIZUNDIA-María †

Universidad Nacional Autónoma de México.

Received July 2, 2014; Accepted December 2, 2014

Abstract

The increase in the number of businesses started by women around the world, has led to greater demand for qualitative and quantitative research on the topic of women's entrepreneurship. In Mexico there has begun to be important advances in the understanding of this phenomenon.

The aim of this work is to increase the literature on this topic by analyzing the personal and social factors that influence the likelihood for women become entrepreneurs in Mexico using logistic regression models with data from the Global Entrepreneurship Report from Mexico (GEM). The results show that personal factors (perceived skills and less fear of failure) and social factors (rate of informal investment and entrepreneurs access to social networks) have a positive effect on the probability that women become entrepreneurial while that factors (perception of opportunity, level of education, positive attention from the media towards entrepreneurship and entrepreneurship association with high social status) do not show to have any influence.

Entrepreneurshi	p. W	omen.	México.
-----------------	------	-------	---------

**Citation:** ELIZUNDIA-María. Personal and social factors that influence female entrepreneurship in Mexico. ECORFAN Journal-Spain 2014,1-1:12-25

\_\_\_\_\_

<sup>†</sup> Researcher contributing first author.

December 2014 Vol.1 No.1 12-25

#### Introduction

Within the topic of entrepreneurship, a sector that has been showing strong growth is the business started and operated by women. It has been shown that this type of entrepreneurship has an important impact on economic development of the countries in poverty reduction and employment generation (Brush and Cooper, 2012).

Much of the research on women's entrepreneurship started from the eighties (Brush & Hisrich, 1991). Although the subject remains little studied, new research has increased the knowledge about it, which in the beginning was mainly focused on the problems of financing and access to capital to women (Hughes et al faced, 2012.; Lucas, 2006) to actually evolve in the knowledge of other subjects such as what are the main reasons that women have to take their desires to seek a balance between work and family and the different definitions the word means success both as for men and women (Brush and Cooper, 2012).

The Global Entrepreneurship Report for Women (2012) shows that currently exist around the world 126 million women aged between 18-64 involved in some kind of venture. Some of the trends of this study show strong opportunities for research on this topic in countries in development since most studies have focused on the US and Europe. From here you have begun to emerge a significant studies in Latin America where what is sought is to know the different motifs and forms of entrepreneurship that women choose to compare with other countries in the region (Weeks and Seiler 2001).

In Mexico and the world has begun to promote female entrepreneurship as in most countries, rates of female participation in this topic are still lower than those of men (Kelley et al., 2013). Also from academia, has begun to emerge a strong interest in this subject. For several years now, several authors began to discuss about the factors that help and / or promote entrepreneurship (Gartner, Verheul, 2009;.. Busenitz et al, 2003; Kirchkoff, 2002: Stevenson, 2006: Alvarez and Urban, 2014; among others), although still very few have focused specifically on female entrepreneurship.

"The more the phenomenon of female entrepreneurship is understood, the more you know about entrepreneurship as a whole" (Brush and Cooper, 2012; pg. 5)

The aim of this paper is to analyze the personal and social factors that influence the likelihood that women become entrepreneurs in Mexico. Logistic regression models with data from the Global Entrepreneurship Report of Mexico are used. This paper is structured as follows: first, a literature review of major studies that have addressed the effect of gender on the subject of entrepreneurship is presented. This review proposed research hypotheses are derived. Methodology and database was use, finally the results and conclusions are presented.

#### Literature review

The theories of entrepreneurship have gone through different perspectives over time. Schumpeter (1934) from an economic perspective argues that entrepreneurs are creating new combinations, new markets, products and distribution systems.

Mc.Clelland (1989) focused mainly on psychological risk characteristics, achievement and gives you control. Aldrich and Martinez (2001) defines the entrepreneur as someone who initiates new activities intended to culminate in a viable business. Kirzner (2005) identifies entrepreneurs as those that best use the information to help them discover opportunities in a way that others do not. Bruin et. al., (2007) define the entrepreneur as an individual to discover, evaluate and exploit opportunities to introduce new goods and services, different forms of organization, markets, processes, raw materials and / or organizational efforts that did not exist. According Ventura and Quero entrepreneurship is a complex process that ultimately culminates in a decision that is taken by individuals in different contexts and under different personal circumstances. Some seek to improve or maintain their standard of living and others will seek more independence.

In all these examples assume that the entrepreneur is generic and that its characteristics do not change except when compared to non-entrepreneurs. Under this provision no need to separate men and women and is supposed to have the same characteristics (Hurley, 1999). In this case what is observed is that there are differences between women and men in terms of background, experience, education, needs, perceptions and motives, as well as external factors that help and promote them.

Some of the drivers of both male and female entrepreneurship have part of its basis in the theory of resources and it says that to compete and get a good result are decisive tangible and intangible assets owned by the company and depends largely part of their education, their experience, their knowledge, their perception of opportunity and skills, the environment in which it will develop.

December 2014 Vol.1 No.1 12-25

The capital, its reputation and the expectations he or she has about the future of their business (Wernerfelt, 1984, Eisenhardt, 1996).

According Minniti (2010), the development of a company depends on personal factors (history, values, attitudes or motivations) and social factors (culture, social support and the perception of the individual about what people think regarding to create a company) (Krueger and Brazeal, 1994).

Personal (perception skills, perceived opportunities, educational level and the fear of failure) and social factors (the rate of informal investment: hence the model proposed in this research which seeks to analyze the phenomenon under these factors arises, entrepreneurial social networks, the attention of the media towards entrepreneurship and venture association with high social status), all these data from the Global Entrepreneurship Report for Mexico.

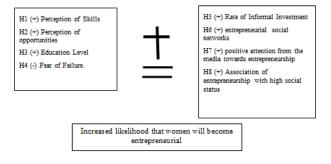


Figure 1 Model of Research

#### **Perception Skills**

As perception skills belief that individuals that possess the skills, knowledge and experience to start their business (Kelley et. Al., 2013).

December 2014 Vol.1 No.1 12-25

Personal perceptions of individuals play an important role in the decision to undertake. Many authors believe that men and women think the same way when they value their knowledge, skills and experience you have to start a new business (Hamilton, 2003; Birley, 1989). Others show that women are less confident in their entrepreneurial skills compared to men (Minniti, 2010;... Wilson et al, 2007).

The literature emphasizes the importance of the perception of women in entrepreneurial skills, both from a general perspective of society (to what extent society perceives that women are able to create companies), and from the point of view of entrepreneurial (that shape women were self-perceived as able to start a business) (Alvarez et. al., 2014).

Since the economies of the countries benefiting from people who are able to recognize that they have the skills needed to start a business is considered an important emerging analyze here our first hypothesis factor:

Hypothesis 1: The perception of entrepreneurial skills has a positive effect on the likelihood that women will become entrepreneurial

#### **Sensing opportunity**

Opportunities always exist but the function of the entrepreneur is known recognize (Drucker, 2007). The perception of opportunity is measured by asking adults if they perceive that in the next six months will be good opportunities for starting a business in the region where you live (GEM 2013).

Dettienne and Chandler (2007) Guzman and Rodriguez (2008) found that men and use different ways to identify opportunities and each has different clusters of knowledge and perceptions. The relationship between perceived skills and identifying opportunities suggests that in societies where women feel they have the skills and capacities to undertake, they are more likely to identify business opportunities. In less developed equal countries even though there is creating new opportunity for businesses between men and women, many of them are still undertaking (Quevedo et. Al., 2010).

Emerging from here our second hypothesis

Hypothesis 2: The perception that are good opportunities for starting a business in the region where one lives, has a positive effect on the likelihood that women will become entrepreneurial

#### **Education Level**

The role of the education system at all levels; starting from the basic is a trigger in the perception and reality of entrepreneurship in people. Although this is one of the most relevant to female entrepreneurship internal factors, there are not many studies addressing this neither issue nor broad consensus on the results thereof (Alvarez et al., 2014). Some authors propose that this has positive effects (Wilson et al., 2007; Fairlie and Robb, 2009) and others who disagree that this will affect the level of entrepreneurship (Grilo and Irigoyen, 2006). Wilson et al. (2007) found in their research a positive relationship between higher education of women and the increase in the rate of women entrepreneurs.

In the same vein, Swinney et al., (2006) and Fairlie and Robb (2009) observed the existence of a positive relationship between educational level of women, entrepreneurship and better performance.

When the educational level does not exceed the secondary level, men and women undertake similarly, in passing average education levels are more men who start a business. By passing this level are more women who start a business (Diaz Casero et. Al., 2007). It seems that women with a higher level of preparation increases their confidence and self-perception of their skills and knowledge and therefore feels safer to take a step toward entrepreneurship.

In this paper it is proposed that education is a factor influencing female entrepreneurship in emerging here our third hypothesis:

Hypothesis 3: The educational level has a positive effect on the likelihood that women will become entrepreneurial.

#### Fear of Failure

Fear of failure can be considered as one of the main problems affecting future entrepreneurs. This fear affects entrepreneurship in both men and women because although there are people able to identify opportunities and think they have the skills and abilities to start a business, might not come to realize fear of failure. This factor decreases with increasing the level of development of countries (Kelley et. Al., 2013).

The Lags in the environment increases the risk of failure of a business. It has been shown in several studies that women entrepreneurs are more risk averse and this has a negative connotation in their level of development (Minniti, 2010; Diaz Casero et al, 2007;... Carter et al., 2007.).

December 2014 Vol.1 No.1 12-25

It is important to emphasize that in the process of entrepreneurship success stories exist not only has been observed that the existence of one of them is likely to exist one or more back stories of failure, which is also important to document. Efforts of the education system, universities and government programs to help reduce this fear and allow seeing it as part of the normal process until you find the right opportunity must exist.

## Hence our next hypothesis

Hypothesis 5: A minor fear of failure has a positive effect on the likelihood that women will become entrepreneurial

#### **Informal investment**

Funding has always been an important issue in creating businesses. The main sources of funding for a new business come from formal investors (bank loans), informal (who often have a family relationship, friendship or working relationship with the entrepreneurial act selflessly and often invest small amounts without waiting a specific return) (Riding, 2008) and also called "angel investors" (people who have no prior relationship with the entrepreneur, but invest in the business because they have captured an opportunity that can report them some kind of profit. they usually have experience in business and in many cases not only provide capital but also ideas, advice and sometimes also end up getting involved in the business (Bygrave, 2003).

Given the problems of entrepreneurs to gain access to formal investment, informal investors and the Angels have begun to have an increasingly important role in the process of entrepreneurship role and have become one of the main sources of resources that they count (Burke et. al., 2010).

Research has shown that women present major obstacles to get some kind of financing either formal or informal (Verheul et al, 2009;... Lucas, 2006). Given the growing importance of this group and its contribution to the economy, it is important for women to have access to a greater number of alternatives that allow them to obtain adequate financing and also have greater exposure to these angel investors, although in Mexico his participation is still very low, increasingly becomes more important.

To evaluate this factor to individual participants are asked whether in the last three years, personally provided funds for a new business have started by someone else. Therefore, the following hypothesis is proposed:

Hypothesis 5: Increased participation in the informal and Angel Investors investment has a positive effect on the likelihood that a woman will become entrepreneurial

#### **Entrepreneurial social networks**

Social support networks and contact with other new and established entrepreneurs are an important factor for the decision, creation and implementation of a business. In the GEM, this indicator is defined as the percentage of the personally know population who entrepreneur (Kelley et. Al., 2013). Several studies have demonstrated the positive impact that knowing entrepreneurs and inspirational roles since they provide motivation and confidence toward entrepreneurship. Business owners launch and other entrepreneurs who have also closed their businesses constitute a and important resource for entrepreneurs (as) (Arenius and Minniti, 2005).

Entrepreneurial social networks built by women are similar to those of men but tend to be smaller (in no country has found that more

December 2014 Vol.1 No.1 12-25

women than men entrepreneurs know) and they tend to be less diverse primarily looking for family support and other women (Gatewood et al 2009; Minniti, 2010; Diaz and Jimenez, 2010).

Therefore it is proposed the following hypothesis:

Hypothesis 6: Social networking entrepreneurs have a positive effect on the likelihood that women will become entrepreneurial

#### Media

Another social aspect that impacts the entrepreneurial environment refers to interest the media in covering stories put entrepreneurial success. In most advanced countries the results show that the media devote sufficient time and attention to successful entrepreneurs, creating a positive environment for entrepreneurship. Urban et. al., (2014) study shows that high media attention towards new businesses increases the likelihood of becoming an entrepreneur.

An interesting result is that the attention of the media decreases as development of the country while entrepreneurship also decreases as you move, suggesting that media attention may have more importance than it seems because it has observed that along with education, media attention has a long term effect on the attitudes of society towards entrepreneurship (Kelley et. al., 2013). The stories told through the media have an important boost to new businesses and that identify and legitimizing role. This is called cultural entrepreneurship.

December 2014 Vol.1 No.1 12-25

These stories are important for future entrepreneurs but also for investors and other institutions, such as banks, foundations, etc. (Wry et. Al., 2011).

Therefore the following hypothesis arises:

Hypothesis 7: A positive attention from the media has a positive effect that women become entrepreneurial

#### **Social status**

The last factor to analyze is the social status, ie the perception of the individual about what they think the people closest relative to forming a company (Krueger and Brazal, 1994) and how much society places high or low recognition the people pursuing opportunities and take risks (Abebe, 2012). For a while this indicator came to have a negative connotation because it was thought that the entrepreneur who had been unable to find work and had no other way but self-employed (Kelley et. Al., 2013). The environment has changed and the entrepreneur has managed to gain respect and recognition. Currently over half of the population believes that entrepreneurs enjoy high social recognition and prestige (Diaz Casero et. Al., 2007).

The project combines several complex behaviors that are developed depending on the cultural and social conditions in each country. The positive or negative perception that society has toward entrepreneurship can influence the motivation of people to start a business so it remains important to continue promoting entrepreneurship as a source of inspiration and as highly desirable socially, arising our last hypothesis:

Hypothesis 8: A partnership venture with a high social status in the country has a positive effect on the probability that the woman entrepreneur is back.

## Methodology

As mentioned above, this research explores the relationship between personal and social factors of female entrepreneurship in Mexico. The information was obtained from the database of the Global Entrepreneurship Monitor project in Mexico in 2010. The GEM project is one of the most important researches for the study and analysis of entrepreneurial activity in the world. This project was born in the year of 1999 by two of the most renowned institutions in the area of business and entrepreneurship: Babson College (USA) and London Business School (UK) seeking to form a homogeneous data between countries in order to compare entrepreneurial activity between them, to analyze the role of entrepreneurship in economic growth each addressing also the issue of female entrepreneurship. It has been 14 years since this initiative was held for the first time starting with 10 countries. To date have involved about 100 economies around the world (Brush and Cooper, 2012).

#### **Dependent variables**

In this article three dependent variables are Initially the binary used. variable entrepreneurship (TEA) which is one of the best known indicators of GEM project and define the entrepreneur as those individuals who are in the process of starting a business and / or owners who are currently using a new company up to 3.5 years. Subsequently binary variables and male entrepreneurship female comparison and analysis of the results are used. Is presented below in the Table 1 the operationalization of the variables of the study.

December 2014 Vol.1 No.1 12-25

## CROWDSOURCING

Variable name Entrepreneurship (TEA) Definition The individual is an entrepreneur (Yes = 1, No = 0) Female Entrepreneurship The individual is enterprising woman (Yes = 1, No = (teavyfem) Male Entrepreneurship The individual is enterprising man (Yes = 1, No = 0) (teavymal) Perception abilities The individual considered to have skills, knowledge and experience to start a business (Yes = 1, No = 0) (suskilyy) Sensing opportunity The individual perceives that in the next six months (opportyy) will be good opportunities for starting a business in the region in which they live (Yes = 1, No = 0) Educational level of free secondary Education (gemeduc) postsecondary individual (Yes = 1, No = 0) Fear of Failure (frfailop) The individual believes that fear of failure would slow if I had to start a business (Yes = 1, No = 0) Entrepreneurial social The individual personally know someone who has started a business in the last two years (Yes = 1, No networks (knoentyy) Informal investment rate The individual has personally provided funds for a new business started by someone else (excluding purchase of stocks or mutual funds) (Yes = 1, No = 0) (busangyy) Positive attention from the The individual sees the media as promoters of media toward entrepreneurship entrepreneurial success stories (Yes = 1, No = 0) Association of entrepreneurship The individual believes that entrepreneurs have a with high social status high social prestige (Yes = 1, No = 0) (nbstatyy)

Table 1 Operationalization of Variables of the Study

For statistical analysis, using as a basis the methodology used by Alvarez et. al. (2011) were is used Chi-squared correlations in order to verify whether there was significant relationship between the dependent variables and the factors proposed and finally the Binary Logistic Regression analysis for the three groups. The data was analyzed using SPSS version 22.0. Table 2 summarizes the most important characteristics of research.

#### **Independent variables**

As mentioned earlier in this investigation are considered to female entrepreneurship that are influenced by personal factors (perception skills, perceived opportunities, educational level and the fear of failure) and social factors (rate of informal investment, networks social entrepreneurs, the attention of the media towards entrepreneurship and venture association with high social status).

ISSN-On line: 2444-3204 ECORFAN® All rights reserved. Of all these factors, the APS data base (2010 GEM project for Mexico contains binary information explained in Table 1. Since the three dependent variables are binary in nature, the effect of the factors proposed is estimated through a logistic regression model.

	MEDIA	١	STD	1	2	3	4	5
Entrepreneural	.10		.304	1				
activity Enterprising man	.11		.309	1.000	1			
Enterprising woman	.10		.300	1.000	.*	1		
Perception of Skills	.65		.478	.130	.126	.135	1	
Sensing opportunity	.56		.497	.149	.147	.151	.276	1
Secondary	.61		.487	011	020	.000	015	.000
Post secondary	.39		.487	.011	.020	.000	.015	.000
Fear of Failure	.34		.475	105	107	.103*	148	٠.٠
Informal investment	.09		.286	.171	.205	.128	.118	.126
Entrepreneural social networks	.55		.498	.139	.144	.132	.123	.259
Media	.54		.499	.000	.003	002	.100	.137
Social Status	.63		.484	.023	.047	001	.104	.111
Age	36.7		12.9	011	017	005	013	.018
Age 2	1510.2	2	1079.3	022	026	019	028	.010
Average income	.45		.498	053	058	048	030	036
High income	.54		.498	.053	.058	.048	.030	.036
	6	7	8	9	10	11	12 13	14
Secondary	1							
Post secondary	1.000	1						
Fear of failure	013	.013	1					
Informal investment	063	.063	.090					
Entrepreneurial social networks	095	.095	061	1				
Media	.055	055	001	.067	1			
Social Status	.003	003	.014	.009	.253	1		
Age	.229	229	005	036	.008	.001	1	
Age 2	.223	223	011	054	.001	003 .	982 1	
Average income	.265	265	029	139	.017	052 -	.008 .011	1

Table 2 Descriptive statistics and correlation matrix

### Results

Table 2 presents the mean, standard deviation and correlation matrix for the study variables. Likewise, Table 3.4 and 5 present the results of logistic regression to the proposed factors, distinguishing between entrepreneurship in general, female and male entrepreneurship. As Alvarez et. al. (2011) for each of these dependent variables two models, a first model that includes all variables and a second model presents only the significant variables.

ELIZUNDIA-María. Personal and social factors that influence female entrepreneurship in Mexico.

December 2014 Vol.1 No.1 12-25

## CROWDSOURCING

The results indicate that all models are significant, some with more variables and others less. In all, the Nagelkerke Rcuadrado exceeds 0.10, the Hosmer and Lemeshow tests are superior to 0.05 and the percentage of correct responses is greater than 84%.

	Modelo 1	Model 2		
	_	Std.	_	Std. Err
	В	Err	В	Sta. Err
Personal factors				
Perception of Hab.	0.69**	0.255	.699**	0.242
Educ. Less than sec.	0.135	0.189		
Fear of failure	562**	0.209	466**	0.2
Informal investment	1.057**	0.214	1.116**	0.207
Social Factors				
Social network	0.541	0.204	0.616	0.197
Media attention	-0.378	0.184	-0.374	0.172
Social Status	0.144	0.199		
Control variables				
Age	0.02	0.039		
Age 2	0	0		
Average income	-0.182	0.117		
High income	0.182	0.117		
Constant	-2.947	0.813	0.291	
No. Obs	1.521		1.156	
Nagerleke	0.104		0.098	
Log likelihood	858.1		919.37	
Percentage	84.8		84.9	

 Table 3
 Logistic
 Regression
 Results
 Total

 Entrepreneurial Activity

	Model 1	Model 2		
		Std.		
	В	Err	В	Std. Err
Personal factors	.862*	0.384	.967**	0.345
Perception of Hab.	0.028	0.28		
Educ. Less than sec.	662*	0.309		
Fear offailure	.746*	0.372	.794*	0.334
Informal investment				
Social Factors	0.746	0.295	.834**	0.274
Social network	-0.235	0.27		
Media attention	0.039	0.291		
Social Status				
Control variables	0.035	0.062		
Age	001*	0.001		
Age 2	-0.106	0.169		
Average income	0.106	0.169		
High income	-3.254	1.253	-2.934	0.454
Constant				
No. Obs	529		598	
Nagerleke	0.101		0.095	
Log likelihood	411.3		438.08	
Percentage	85.3		84.4	
				_

**Table 4** Logistic Regression Results Female Entrepreneurship

ISSN-On line: 2444-3204 ECORFAN® All rights reserved.

	Modelo 1	Modelo 2	Modelo 2		
	В	Std.	В	Std. Err	
		Err			
Personal factors	0.515	0.347			
Perception of Hab.	0.192	0.26			
Educ. Less than sec.	-0.376	0.292			
Fear offailure	1.305**	0.279	1.563	0.218	
Informal investment					
Social Factors	0.374	0.285			
Social network	-,540*	0.259	-0.142	0.193	
Media attention	0.192	0.277			
Social Status					
Control variables	0.014	0.052			
Age	0	0.001			
Age 2	-0.248	0.164			
Average income	0.248	0.164			
High income	-2.769	1.096	-2.337	0.144	
Constant					
No. Obs	555		1.206		
Nagerleke	0.121		0.075		
Log likelihood	441.7		779.1		

**Table 5** Logistic Regression Results Male Entrepreneurship

Percentage

To analyze the results are considered first personal factors, social factors and then finally the control variables. As for the personal, Hypothesis 1 suggests that the perception of the person who possesses skills, have a positive impact on the likelihood that women will become entrepreneurial. As shown in Table 4, this factor is shown to have significant positive influence on the group of women therefore this hypothesis is not rejected. Analyzing your odds ratio (odds ratios) shows that an increase in perception skills to undertake in women, increases the probability of being entrepreneurial in 2.63. In the group of males (Table 5), this factor does not have to have any influence. These results are consistent with studies Alvarez et. al., (2011) and Urban and Alvarez (2014), who also analyzed the influence of factor in female this entrepreneurship.

December 2014 Vol.1 No.1 12-25

### CROWDSOURCING

Hypothesis 4 proposed that a lower fear of failure, has a positive effect on the likelihood that women will become entrepreneurial, shows significant positive influence such as is observed in Table 4 but again no significant results in the group males (Table 5), so that this hypothesis is rejected not coincide this with investigations (Ventura and Quero, 2013: Alvarez et al, 2011;. Martinez et al 2010;. Arenius and Minniti, 2005) who have been analyzed in various parts of the world, the importance of this factor in the entrepreneurial effect. Analyzing your odds ratio or odds ratios shows that less fear of failure increases the likelihood of becoming an entrepreneur at 48.4% for women.

Hypotheses 2 and 3 suggest that the educational level and perceived opportunities have a positive impact on the likelihood that women will become entrepreneurial, are rejected as neither of these two factors is shown to have significant influence (see Table 4).

As for the social, Hypothesis 5 proposed that the existence of informal investors have positive influence on the probability of women entrepreneurship has become a positive and significant impact in the three groups (see Table 3.4 and 5) so neither this hypothesis is rejected. Analyzing your odds ratio shows that this factor is higher for male entrepreneurship as a higher level of informal investors, the likelihood that women will become entrepreneurial increased by 2.10 times for women and 3.68 times for men.

Hypothesis 6 suggests that entrepreneurs have social networks have a positive impact on the likelihood that women will become entrepreneurial, also shows positive and significant results so this hypothesis (Table 4) is not rejected.

Analyzing their odds ratios, they show that an increase in the number of entrepreneurial social networks increases 2.19 times the likelihood that women will become entrepreneurial. Again no have significant

influence on the group of boys.

As for the hypothesis 7 proposes that positive attention from the media has a positive influence on female entrepreneurship, have not shown significant results in the group of women (Table 4) and shown to have a negative effect on male venture so this hypothesis is rejected (Table 5). 8 The hypothesis proposes that a partnership venture with a high social status has a positive effect on the probability that the woman entrepreneur is rejected again because none of the groups presented significant results (Table 3, 4 and 5). In recent literature has shown that in other countries factors influence two do the entrepreneurial environment (Urban and Alvarez, 2014). Mexico the social In entrepreneur exposure to the media and social recognition is recent and therefore, has not been sufficient time to submit influence. Moving forward in time, these two factors probably begin to present important results.

Finally in terms of the control variables: age, age squared and income level, age squared only shown to have a significant influence on the likelihood that women will become entrepreneurial coinciding with the results of Elizundia (2014) where it is shown that the probability that women become enterprising is usually higher than that of men (they tend to start between 30-45 years compared with younger males usually start) and this, in both cases increases with age to reach a peak from which it starts to decrease (Levesque and Minniti. 2006).

December 2014 Vol.1 No.1 12-25

Also the coefficients of Table 3, 4 and 5 indicate that the income level in either group presents significant results, although the level of average income in the three cases decreases the probability of being an entrepreneur.

#### **Conclusions**

This research has presented a quantitative analysis of the personal and social factors that influence female entrepreneurship. The results indicate that personal factors (perception skills and less fear of failure) and social factors (rate of informal investment and access entrepreneurial social networks) have a positive effect on the likelihood that women will become entrepreneurial while factors opportunity, (perception of educational attainment, positive attention from the media entrepreneurship towards and venture association with high social status) do not have to have any effect.

It is noteworthy that all significant variables that come out in the group of women (perception of skills, less fear of failure, the rate of informal investment and access entrepreneurial social networks) do not come out significant in the group of boys. The only variable that goes significantly in this group and not in the women is the positive attention from the media toward entrepreneurship. According to the GEM study (2013), the attention of the media in Mexico, shows one of the lowest in the world. This is probably due to the fact that the media tend to focus more and promote the successes of men, but has lately been advancement and promotion show success stories of women. Likely to continue this media exposure, this variable will begin to be important in the group of women.

The only variable that does not appear significant in any of the three models is the recognition of entrepreneurial activity with a high social status. This may be because while the venture did not have this boom and importance. By increasing the unemployment problem, entrepreneurship begins to give higher status, as society begins to see that there are alternatives and opportunities, and the positive effect on employment and economic growth. It is important to publicize these cases of success and failure for this factor begins to be more important.

The case of the educational level has not presented significant results is striking since in several investigations (Espinosa and Stiepoviae, 2010) women are more likely to start a business when they have higher education, while men with media studies create business at higher rates than women. Warrants further investigated.

As more and more women are being incorporated into the topic of entrepreneurship, research should begin to move beyond the start of the business and analyze the many problems that women and men have to survive and grow. Women must break free of the stigma of business failure (which must also be documented) know and believe it has the same entrepreneurial skills than men and the need to expand its network of social beyond their personal network contacts. This will benefit you in the future to obtain funds more easily.

There is significant progress on this issue in Latin America and have begun to emerge in Mexico important studies trend (Guerrero et al, 2014;.. Monjarás et al., 2010.). Also, these results allow advance knowledge of female entrepreneurship in our country. In a future research is proposed to extend the period of analysis comparing the results with other countries mainly from Latin America.

As with all studies, this work has its limitations. As most of the research on entrepreneurship, the data used were obtained at a given time. GEM also the latest reports are not available to the general public, which does not reveal more current information. As they are published and opening the researcher pubic, will leave feed back the model. Finally, the results are limited only to Mexico

#### References

Abebe, M. A. (2012). Social and Institutional Predictors of Entrepreneurial Career Intention:: Evidence from Hispanic Adults in the U.S. *Journal of Enterprising Culture*, 20(1), 1-23.

Aldrich, H., & Martinez, M. (2001). Many are Called, but Few are Chosen: An Evolutionary Perspective for the Study of Entrepreneurship. *Entrepreneurship: Theory & Practice*, 25(4), 41.

Alvarez, C., Noguera, M., & Urbano, D. Condicionantes del entorno y emprendimiento femenino: un estudio cuantitativo en España. *Economía industrial, ISSN 0422-2784, Nº 383, 2012.* 

Arenius, P., & Minniti, M. (2005). Perceptual Variables and Nascent Entrepreneurship. *Small Business Economics*, 24(3), 233. doi: 10.1007/s11187-005-1984-x

Birley, S. (1989). Female Entrepreneurs: are the really any Different? *Journal of Small Business Management*, 27(1), 32-37.

Brush, C. G., & Cooper, S. Y. (2012). Female entrepreneurship and economic development: An international perspective. *Entrepreneurship & Regional Development*, 24(1), 1-6. doi: 10.1080/08985626.2012.637340

December 2014 Vol.1 No.1 12-25

Brush, C. G., & Hisrich, R. D. (1991). Antecedent Influences on Women-Owned Businesses. *Journal of Managerial Psychology*, 6(2), 9.

Burke, A., Hartog, C., van Stel, A., & Suddle, K. (2010). How does entrepreneurial activity affect the supply of informal investors? *Venture Capital*, *12*(1), 21-47.

Bygrave, W., & Kirchhoff, B. (2002). *The Portable MBA in Entrepreneurship* (Second Edition ed.): John Wiley & Sons.

Busenitz, L., West, P., Shepherd, D., & Nelson, T. (2003). Entrepreneurship research in emergence: Past trends and future directions. 29(3), 285.

Carter, S., Shaw, E., Lam, W., & Wilson, f. (2007). Gender, Entrepreneurship, and Bank Lending: The Criteria and Processes Used by Bank Loan Officers in Assessing Applications. *Entrepreneurship Theory and Practice*.

de Bruin, A., Brush, C. G., & Welter, F. (2007). Advancing a Framework for Coherent Research on Women's Entrepreneurship. Entrepreneurship: Theory & Practice, 31(3), 323.

DeTienne, D. R., & Chandler, G. N. (2007). The Role of Gender in Opportunity Identification. *Entrepreneurship: Theory & Practice*, 31(3), 365.

Diaz Casero, J. C., Hernandez, R., & Barata, M. (2007). Estudiantes universitarios y creación de empresas. Un análisis comparativo entre España y Portugal. *Conocimiento, innovación y emprendedores: camino al futuro*.

Drucker, P. (2007). Innovation and Entrepreneurship: Practice and Principles.

Díaz García, C. y. Jiménez. M. J. (2010). Recursos y resultados de las pequeñas empresas: nuevas perspectivas del efecto del género. *Cuadernos de Economía y Dirección de Empresa*, 42, 151-176.

Eisenhardt, K. M., & Schoonhoven, C. B. (1996). Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *organization Science*, 7(2), 136.

Elizundia, M. E. (2014). ¿Existen diferencias en los antecedentes de los nuevos negocios comenzados por hombres y mujeres en la ciudad de México y el desempeño que obtienen? UNAM Revista de Contaduría y Administración.

Espinosa, J. E. A., & Stiepoviæ, O. P. (2010). Mujeres y dinámica emprendedora: un estudio exploratorio. *Revista Universidad & Empresa*, 8(11).

Fairlie, R. W., & Robb, A. M. (2009). Gender differences in business performance: evidence from the Characteristics of Business Owners survey. *Small Business Economics*, *33*(4), 375. Gartner, W. (1985). A conceptual framework for describing the phenomenon of new venture creation., 696.

Gatewood, E., Brush, C., Carter, N., Greene, P., & Hart, M. (2009). Diana: a symbol of women entrepreneurs' hunt for knowledge, money, and the rewards of entrepreneurship. *Small Business Economics*, 32(2), 129-144.

Grilo, I., & Irigoyen, J.-M. (2006). Entrepreneurship in the EU: To Wish and not to be. *Small Business Economics*, 26(4), 305-318.

December 2014 Vol.1 No.1 12-25

Guerrero Ramos, L., Gómez Gutiérrez, E. L., y del Carmen, A. A. (2014). MUJERES EMPRENDEDORAS: SIMILITUDES Y DIFERENCIAS ENTRE LAS CIUDADES DE TORREÓN Y SALTILLO, COAHUILA. (Spanish). Revista Internacional Administración y Finanzas (RIAF), 7(5), 77.

Guzmán, J. y. Rodríguez M. J. (2008). Comportamiento de las mujeres empresarias: una visión global. *Revista de Economía Mundial Universidad de Huelva*.

Hamilton, L. (2003). Competitive advantages and the smes: the role of distinctive competences as determinants of success, are there differences across gender, sector, and size? (Dissertation/Thesis), Universitat Autònoma de Barcelona.

Hang, M., & Van Weezel, A. (2005). *Media and entrepreneurship: A survey of the literature relating both concepts.* Paper presented at the 18th Scandinavian Academy of Management Meeting, Aarhus School of Business, Denmark.

Hughes, K. D., Jennings, J. E., Brush, C., Carter, S., & Welter, F. (2012). Extending Women's Entrepreneurship Research in New Directions. *Entrepreneurship: Theory & Practice*, 36(3), 429-442.

Hurley, A. (1999). Incorporating feminist theories into sociological theories of entrepreneurship. *Women In Management Review, Vol. 14 Iss: 2, pp.54 - 62.* 

Kelley, D., Brush, C., Green, P., & Litovsky, Y. (2013). Global Entrepreneurship Monitor 2012 Women's Report. *Global Entrepreneurship Monitor, Babson College*.

Kirchhoff, B. (2002). The Influence os R&D Expenditures on New Firm Formation and Economic Growth. *Babson University*.

Kirzner, I. M. (2005). Human Attitudes and Economic Growth. *CATO Journal*, 25(3), 465. Krueger Jr, N. F., & Brazeal, D. V. (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship: Theory & Practice*, 18(3), 91-104.

Levesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21(2), 177.

Lucas, L. M. (2006). Capital Accessibility, Gender, and Ethnicity: The Case of Minority Women-owned Firms. *New England Journal of Entrepreneurship*, *9*(1), 41.

McClelland, D. (1989). Estudio de la motivación humana (G. Solana, Trans.): Narcea.

Minniti, M. (2010). Female Entrepreneurship and Economic Activity. *European Journal of Development Research*, 22(3), 294.

Monjarás, L. M. Q., Landeta, J. M. I., & Rojas, L. R. (2010). Factores endógenos y exógenos de mujeres y hombres emprendedores de España, Estados Unidos y México. *Investigación y Ciencia*, 18(46), 57.

Quevedo, L., Izar, J., & Romo, L. (2010). Factores endógenos y exógenos de mujeres y hombres emprendedores de España, Estados Unidos y México. *Investigación y Ciencia*, 18(46), 57-63.

Riding, A. L. (2008). Business angels and love money investors: segments of the informal market for risk capital. *Venture Capital*, 10(4), 355-369.

Schumpeter, J. (1934). *Teoría del desenvolvimiento económico*. Mexico F.C.E. Stevenson, H. (2006). *A Perspective on Entrepreneurship*.

December 2014 Vol.1 No.1 12-25

Swinney, J., Runyan, R., & Huddleston, P. (2006). Differences in Reported Firm Performance By Gender. *Does Industry Matter?*, *Vol.11*(Issue 2), 99-100-115.

Urbano, D., & Alvarez, C. (2014). Institutional dimensions and entrepreneurial activity: an international study. *Small Business Economics*, 42(4), 703-716.

Ventura Fernández, R., & Quero Gervilla, M. J. (2013). Factores explicativos de la intención de emprender en la mujer. Aspectos diferenciales en la población universitaria según la variable género.

Verheul, I., Carree, M., & Thurik, R. (2009). Allocation and productivity of time in new ventures of female and male entrepreneurs. *Small Business Economics*, *33*(3), 273.

Weeks, J., & Seiler, D. (2001). Women's entrepreneurship in Latin America: an exploration of current knowlede. *Inter-American Development Bank*.

Wernerfelt, B. (1984). A Resource-based View of the Firm. *Strategic Management Journal*, 5(0143), 171-180.

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education. *Entrepreneurship: Theory & Practice*, 31(3), 387.

Wry, T., Lounsbury, M., & Glynn, M. A. (2011). Legitimating Nascent Collective Identities: Coordinating Cultural Entrepreneurship. *Organization Science*, 22(2), 449.