

FUNDAÇÃO GETÚLIO VARGAS
ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO

DANIEL LANGE VAIDERGORIN

ENTREPRENEURSHIP FAILURE:
Is Culture to Blame?

SÃO PAULO
2013

FUNDAÇÃO GETÚLIO VARGAS
ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO

DANIEL LANGE VAIDERGORIN

ENTREPRENEURSHIP FAILURE:
Is Culture to Blame?

Dissertação apresentada à Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas, como requisito para obtenção do título de Mestre Profissional em Gestão Internacional.

Campo do Conhecimento:
Empreendedorismo e Estudos Culturais

Orientador Prof. Dr. Gilberto Sarfati

SÃO PAULO
2013

Lange Vaidergorin, Daniel.

Entrepreneurship Failure: is Culture to Blame? / Daniel Lange Vaidergorin.
- 2013.

58 f.

Orientador: Gilberto Sarfati

Dissertação (MPGI) - Escola de Administração de Empresas de São Paulo.

1. Empreendedorismo - Estudos interculturais. 2. Fracasso (Psicologia). 3. Culturais. I. Sarfati, Gilberto. II. Dissertação (MPGI) - Escola de Administração de Empresas de São Paulo. III. Título.

CDU 658.011.49

DANIEL LANGE VAIDERGORIN

ENTREPRENEURSHIP FAILURE:
Is Culture to blame?

Dissertação apresentada à Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas, como requisito para obtenção do título de Mestre Profissional em Gestão Internacional.

Campo do Conhecimento:
Empreendedorismo e Estudos Culturais

Data de Aprovação:
__/__/__.

Banca Examinadora:

Prof. Dr. GILBERTO SARFATI
(ORIENTADOR)

Prof. Dr. GERMANO GLUFKE REIS

Prof. Dr. MARCOS HASHIMOTO

Acknowledgements

I would like to express my deep gratitude to my master thesis advisor, Dr. Gilberto Sarfati. For his no-nonsense advice, for his availability, for his patience during the correction process and for his precise comments that made elaborating, improving and correcting this thesis a simpler process.

I would also like to thank the FGV-EAESP professors that helped me with the Statistics part, be it modeling or analysis. So my thanks go to Dr. Eduardo de Rezende Francisco, Dr. Felipe Zambaldi and Dr. Germano Glufke Reis for your voluntary help, time and advice.

Also, I would like to thank my master student colleagues, national and international, that helped me with advice, support and practical suggestions.

Thanks also to my friends and girlfriend who supported me during this process and were understanding when I was busy or not available.

Last but not least, I would like to thank my family for their unconditional support. This master would not be possible without them, supporting and encouraging me and making me strive to be a better person.

Abstract

Although entrepreneurship and culture are topics with extensive research on Management Studies, there is still relatively few research on the influence of Culture has on Entrepreneurship. The main objective of this work is to investigate the influence of culture on entrepreneurship rate of failure. Using a correlational approach, 40 countries out of Hofstede (2001) IBM employees database and the Entrepreneurship Data present on the Global Entrepreneurship Monitor (GEM) database. The analysis results suggest that the dimension Individualism vs. Collectivism as the only significant cultural dimension when discussing affecting entrepreneurship rate of failure.

KEY WORDS: ENTREPRENEURSHIP, ENTREPRENEURSHIP FAILURE, FEAR OF FAILURE, CULTURE, CROSS-CULTURE, CULTURAL DIMENSIONS.

Resumo

Apesar de Empreendedorismo e Cultura serem tópicos com extensa literatura na área de estudos de Administração de Empresas, existe relativamente pouca pesquisa na influencia que a Cultura exerce no Empreendedorismo. O principal objetivo deste trabalho é investigar a influencia da cultura no índice de fracasso do empreendedorismo. Através de uma abordagem de correlação, utilizando 40 países da database do Hofstede (2001) de trabalhadores da IBM e dados presentes na database do *Global Entrepreneurship Monitor* (GEM). Os resultados desta análise sugerem que Individualismo VS. Coletivismo é a única dimensão cultural significativa quando se discute os efeitos da cultura no índice de fracasso do Empreendedorismo.

PALAVRAS CHAVE: EMPREENDEDORISMO, FRACASSO NO EMPREENDEDORISMO, MEDO DE FRACASSO, CULTURA, ESTUDOS INTERCULTURAIS, DIMENSÕES CULTURAIS.

Table of Content

| | |
|---|----|
| Acknowledgements | 2 |
| Abstract..... | 3 |
| Resumo..... | 4 |
| 1 – Introduction | 8 |
| 1.1 – Introduction..... | 8 |
| 2 – Literature review..... | 11 |
| 2.1 – Culture..... | 11 |
| 2.1.1 – Cross - Culture..... | 13 |
| 2.1.2 – Hofstede’s Cultural Dimensions..... | 16 |
| 2.2 – Entrepreneurship..... | 20 |
| 2.2.1 – Entrepreneurship Failure | 23 |
| 2.2.2 – Fear of Failure | 25 |
| 2.3 – Relationship between Culture and Failure..... | 27 |
| 3 – Methodology..... | 32 |
| 3.1 – Introduction | 32 |
| 3.2 – Participants | 34 |
| 3.2.1 – Hofstede’s Cultural Dimensions..... | 34 |
| 3.2.2 – Global Entrepreneurship Monitor (GEM) Data..... | 35 |
| 3.3 – Model Design..... | 36 |
| 4 – Data Analysis..... | 38 |
| 4.1 – Correlation Analysis..... | 38 |
| 4.2 – Partial Least Squares Structural Equation Model Analysis..... | 39 |
| 4.3– Regression Analysis | 41 |
| 4.4 – Results | 43 |
| 5 – Conclusions | 44 |
| 6 – References | 46 |

Index of Tables

| | |
|---|----|
| Table 1 – Table of Power Distance – Ten Differences..... | 16 |
| Table 2– Table of Uncertainty Avoidance – Ten Differences..... | 17 |
| Table 3 – Table of Individualism vs. Collectivism – Ten Differences..... | 18 |
| Table 4 – Table of Masculinity vs. Femininity – Ten Differences..... | 19 |
| Table 5 – Literature Review Main Ideas on Culture and Entrepreneurship..... | 29 |
| Table 6 – Literature Review Main Ideas on Fear of Failure and Culture & Failure | 30 |
| Table 7 – Correlation Individualism vs. Collectivism and Rate of Failure..... | 41 |
| Table 8 – Regression Individualism vs. Collectivism and Rate of Failure | 42 |

Index of Graphs

| | |
|--|----|
| Graph 1 – PLS-SEM Model | 39 |
| Graph 2 – PLS-SEM Model Analysis | 40 |
| Graph 3 – PLS-SEM Model Analysis Bootstrapped..... | 40 |
| Graph 4 – IDV x RF | 41 |

1 – Introduction

1.1 – Introduction

Entrepreneurship is not a new field of research. For more than 200 years, scholars have been studying and discussing this field as well as its main characteristics and traits (Low & MacMillan, 1988; Van Praag, 1999). The same can be said of Culture, with its several definitions developed through years of multidisciplinary research (Straub et al., 2002; Leidner & Kayworth, 2006). Even the consideration that culture affects entrepreneurship is not new, with the famous article „Essays in Sociology“ by Weber already associating culture to entrepreneurship in beginning of the 20th century (Thomas & Mueller, 2000).

Still, there have not been many studies connecting these two fields of study (Lee, & Peterson, 2000; Hayton, George, & Zahra, 2002; and Baughn & Neupert, 2003). There are several reasons for this, like lack of comparable entrepreneurship data (Sternberg & Wennekers, 2005) or culture data prior to Hofstede’s Cultural Dimensions (Gerstner & Day, 1994).

Another reason for it is the complexity of the comparison due to abstract tendency of the main variables. For example, Failure is a natural consequence of entrepreneurship (Mantere et al., 2013). So much so that there are several different definitions of Entrepreneurship Failure in the Academia (McKenzie & Sud, 2008). But, even though it is an integral part of entrepreneurship, Entrepreneurship Failure has relatively few works dedicated to it (Arasti, Zandi, & Talebi, 2012; Michael & Combs, 2008).

Fear of failure, a byproduct of Entrepreneurship failure has been recently identified as a social consequence whose behavior is influenced by culture (Vaillant & Lafuente, 2007; Landier, 2004; Begley & Wee Liang, 2001 and Cardon, Stevens, & Potter, 2011). Even though this phenomenon has been much less studied than Hofstede’s Cultural Dimensions, it is also a relevant cultural element when discussing entrepreneurship.

The objective of this research is to introduce a study comparing Hofstede’s National Culture Dimensions and Entrepreneurship Fear of Failure to Entrepreneurship Rate of Failure. The aim of the study is to investigate if there is a relation between National

Culture (through its different sub dimensions) and Entrepreneurship Rate of Failure in an effort to improve the level of knowledge regarding practical influences of Culture have on the real world beyond the abstract and the vague.

It is important to note that Culture, is by no means the only variable that influences Entrepreneurship Failure. Many others reasons such as, Economic Cycles (Schane, 1996), Lack of Financing (Berggren & Silver, 2010), or even Personality of the Entrepreneur (Brandstätter, 2011) exist.

Therefore, the research question “Does National culture affects the rate of failure of entrepreneurship?” was elaborated as to reflect in the most simple and synthetic way the relationship being studied, which is the relation between Entrepreneurship, and more specifically, Rate of Failure of Entrepreneurship, with National Culture, the usual unit of comparison in Cross Cultural Management.

In order to achieve the study main objective some intermediary objectives were set as shown below:

To produce a current and relevant literature review as to enable a solid theoretical basis for the following work as well as to enable a productive discussion of the main ideas currently being discussed in the Academia related to Entrepreneurship (Entrepreneurship, Entrepreneurship Failure and Entrepreneurship Fear of Failure) and Cross Cultural Management (Culture and Cross-Culture).

To bring new insights into the relationship between these two fields of research by using a clear and direct statistical analysis coupled with logical deductions supported by the data collected.

To test the relevance of the analysis through statistical methods and to suggest which dimensions of culture as defined by Hofstede (1980, 2001) are the most relevant when considering Entrepreneurship Failure.

The methodology was planned as to make a positivist comparison analysis involving the concepts of Culture and Entrepreneurship possible. In order to do so, the participants were chosen as to acts as proxies for these 2 concepts.

The proxies for Culture were chosen from Hofstede’s (2001) original four Cultural Dimensions (Power Distance, Uncertainty Avoidance, Individualism vs. Collectivism,

Masculinity vs. Femininity). The Global Entrepreneurship Monitor Database was chosen to represent Entrepreneurship Fear of Failure as well as Entrepreneurship Failure Rates. The sample is a selection of 40 countries with data available and present on both databases.

The design chosen was a Correlational approach as well as a Partial Least Squares Structural Equation Model (PLS-SEM) Analysis aiming to find a pattern between Hofstede's Dimensions and the fear of failure and the rate of failure of entrepreneurship in the nations common to both Hofstede's Dimensions and GEM database. In case of significant results, a regression analysis was made to evaluate the level of influence of the independent variables (Hofstede's Dimensions and Entrepreneurship Fear of Failure) have on the dependent variable (Rate of Failure).

The results of this study aims to prove the relationship between Culture and Entrepreneurship failure, as well as to identify which dimensions are more significant to the said failure. Although this is an initial exploratory research on the topic, the findings of this study aims to help researchers and concerned government officials, and to foster discussion over the causes of Entrepreneurship Failure.

2 – Literature review

Although Entrepreneurship and how Culture influences management are topics that have been studied in business management for a long time, there has not been many studies connecting these two fields of study (Thomas & Mueller, 2000; Lee, & Peterson, 2000; Hayton, George, & Zahra, 2002; and Baughn & Neupert, 2003). One might point out that the reason for this is that entrepreneurship usually studies a company in its early stages of existence when, on most cases, it is not in any way international and therefore subject to only one national culture, the culture of the country where it is located (USA Department of Commerce, 2013). But even then, when there is only the one national culture present, does it not influence the company?

2.1 – Culture

Culture is a complex concept with several different definitions across different fields of study.

Straub et al. (2002) introduces culture as a thorny concept that has been studied for more than 100 years through a wide variety of disciplines and scholars originally being a term borrowed from agriculture.

Since then, social sciences progressed quite a lot on the discussion over what culture can be defined as. DiMaggio (1997) believes one reason for that has been the convergence over the study of culture by the fields of psychology and sociology.

Still, Leidner & Kayworth (2006) agrees that the first challenge when studying culture is to actually understand what is involved with the concept of culture since there is a “myriad of definitions, conceptualizations, and dimensions used to describe this concept” (p. 359). Kroeber and Kluckhohn (1952), for example, identified more than 160 definitions of culture more than 60 years ago.

In the beginning of the 20th century, culture was believed to be the sum of all human knowledge as defined by Blumenthal (1936) as “the sum-total of cultural minds extant at any one time plus all past cultural minds in so far as their parts survive in present cultural minds or are ascertainable by them from material symbols”. (p. 880)

Dulfano (2011) noticed that the current concept of culture evolved from a notion that culture was once just a collection of fine arts, geography and history exclusively to a much more complex concept defined as “deep culture, (...) a broader perspective that fuses the written and unwritten aspects of culture, as much as the universal and local idiosyncratic blueprints into one” (p. 76).

Hofstede and Bond (1988), on the other hand, defined culture as “the collective programming of the mind that distinguishes the members of one category of people from those of another. Culture is composed of certain values, which shape behavior as well as one's perception of the world.” (p. 6).

Leidner & Kayworth (2006), agree with the previous definition by concluding that the basic assumptions that define human beliefs, behavior, relationships and finally what the truth is, are at the core of what culture actually is. “These basic assumptions represent cognitive structures or interpretive schemes that people use to perceive situations and to makes sense of ongoing events, activities, and human relationships, thereby forming the basis for collective action.” (p. 359).

Schwartz (1999: 25) also uses the concept of cultural values to explain culture. To him, “Cultural values represent the implicitly or explicitly shared abstract ideas about what is good, right, and desirable in a society”.

Since there is no consensus in the academia over the definition of culture, for the purpose of this study, the definition of culture will be borrowed from Kohls (1979: 17-18):

Culture is an integrated system of learned behavior patterns that are characteristic of the members of any given society. Culture refers to the total way of life of particular groups of people. It includes everything that a group of people thinks, says, does and makes, its customs, language, material artifacts and shared systems of attitudes and feelings. Culture is learned and transmitted from generation to generation.

As defined above, culture is something learned and transmitted from generation to generation. This makes culture a slow-changing concept, especially when referring to culture of macro regions or groups, such as countries.

2.1.1 – Cross - Culture

People in different cultures have strikingly different construals of the self, of others, and of the interdependence of the 2. These construals can influence, and in many cases determine, the very nature of individual experience, including cognition, emotion, and motivation. (Markus & Kitayama, 1991, p. 224)

According to Luthar & Luthar (2007), Hofstede and Schwartz are two of the most prominent authors in the cross-cultural field. Tung & Verbeke (2010: 1259) agree that “Hofstede’s influence on the fields of IB and management is undeniable”.

In his original study, Hofstede (1980) introduces the concept of cultural dimensions by analyzing the differences in thinking and social actions of IBM employees in 40 different nations and identifying four cultural dimensions along which countries and their national cultures differ.

The dimensions are the following: Power Distance Index (PDI), Individualism vs. Collectivism (IDV), Uncertainty Avoidance Index (UAI) and Masculinity vs. Femininity (MAS). As Luthar & Luthar (2007) explain, Hofstede’s cultural dimensions are a set of 4 indexes that permits the comparison between different countries. Power Distance Index (PDI) measures the power gaps between individuals. Individualism vs. Collectivism (IDV) measures how individualistic a country is. For example western countries such as USA have a score of 91 while Hong Kong has a score of 25. Uncertainty Avoidance Index measures the degree that a country’s society tolerates ambiguity and uncertainty. Finally, Masculinity vs. Femininity (MAS) measures the variations in the role of the two genders in the national culture.

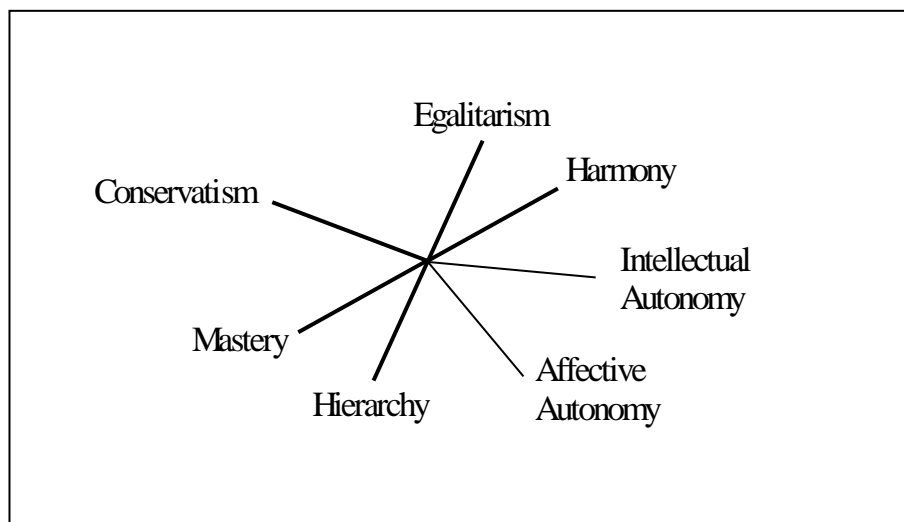
Later on, Hofstede (1991, 2001), added the concepts Long Term Orientation vs. Short Term Orientation (LTO) added on 1991 and Indulgence vs. Restraint (IVR) added on 2001. Long Term Orientation vs. Short Term Orientation (LTO) refers to the preferred horizon of planning of the society and Indulgence vs. Restraint refers to how the society deals with gratification versus control of basic human desires related to enjoying life.

Although widely accepted in the field of cross-cultural studies, Hofstede suffered critics from a wide array of scholars such as Mc Sweeney (2002a, 2002b) who criticized Hofstede methodological approach as well as the general acceptance of said flawed

articles and Blodgett, Bakir & Rose (2008: 342), who although recognizing the influence of Hofstede works states that: “the cultural framework, when applied at the individual unit of analysis, is lacking in both convergent and discriminant validity”.

Schwartz (1999) on the other hand, introduces a different model to the discussion, known as Cultural Values. Although the author agrees with Hofstede on the fact that culture should be studied on a collective basis instead of on individual level, the author in the end of his study concludes with different if somewhat similar cultural dimensions. The model is composed of 7 values which can be seen on the following chart.

Figure 1 – Schwartz’s 7 Cultural Values.



Source: Adapted from Schwartz (1999)

Cong, Borg, & Spector (2004) who used the Schwartz model, define it in a clear way. The model is divided in 3 polar dimensions, one of which is Y shaped. This Y shaped dimension describes the relation between group and the individual. On the Conservatism side, “the individual is embedded in collectivity and finds the meaning of life through social relationships and groups interests” (p.1071). On the opposite side lie the autonomous individuals’ societies, which find meaning for life by striving to be unique through the search of success in Affective and/or Intellectual ways.

The next dimension relates to society response to the unequal distribution of power, resources and authority. On one extreme there is Egalitarianism where every member of society is equal in the eyes of its members and therefore deserves as equal as possible share of power, resources and authority. On the other extreme, there is Hierarchy where

the individual are not equals and therefore power, authority and resources are (and should be) concentrated on the top of the society.

Finally, the third dimension discusses the relationship between humanity and the planet. On the mastery side, people believe to be the rightful masters of the world and must answer only to themselves while on the opposite side Harmony people believe that the best approach is a harmonious integration with the rest of the planet, its people and environment.

A point of communality is that Schwartz (1999) himself believes that the dimension Conservatism x Autonomy (Affective and Intellectual) to be equivalent to Hofstede's (1980) Individualism vs. Collectivism dimension.

Gouveia and Ros (2000) criticize some points of Schwartz's Cultural model. According to the authors, there is little association between Schwartz model and economic indicators due to conceptual reasons. Therefore, Hofstede's model is better indicated when studying macro-economic variables while Schwartz model is more suited to studying macro-social variables. "Since Hofstede model is more commonly applied, other studies linking Hofstede to other fields of study such as personality tests have already been employed by other authors in different fields such as Psychology, Marketing, and Advertizing; and even recognized as a valid methodology by the creator of said dimensions, Hofstede (2011). Therefore linking Hofstede's Cultural Dimensions Model to entrepreneurship is not an unusual choice.

2.1.2 – Hofstede’s Cultural Dimensions

A further look into the four original Cultural dimensions is necessary. On table 1, it is possible to see ten differences between Small- and Large- Power Distance Societies to better understand PDI Dimension (Hofstede, 2011).

Table 1 – Table of Power Distance – Ten Differences

| Small Power Distance | Large Power Distance |
|---|--|
| Use of power should be legitimate and is subject to criteria of good and evil | Power is a basic fact of society antedating good or evil: its legitimacy is irrelevant |
| Parents treat children as equals | Parents teach children obedience |
| Older people are neither respected nor feared | Older people are both respected and feared |
| Student-centered education | Teacher-centered education |
| Hierarchy means inequality of roles, established for convenience | Hierarchy means existential inequality |
| Subordinates expect to be consulted | Subordinates expect to be told what to do |
| Pluralist governments based on majority vote and changed peacefully | Autocratic governments based on co-optation and changed by revolution |
| Corruption rare; scandals end political careers | Corruption frequent; scandals are covered up |
| Income distribution in society rather even | Income distribution in society very uneven |
| Religions stressing equality of believers | Religions with a hierarchy of priests |

Source: Hofstede (2011). p.9

According to Taras, Kirkman, & Steel (2010: 406) “there is very little variation in how power distance was defined in subsequent research, and most cultural value measurement instruments are highly consistent with Hofstede’s operationalization”.

Therefore, the original definition from Hofstede (1980b: 45) still stands as “the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally”

According to Zhao (2005), countries that display low power distance are more prone to innovation and entrepreneurship.

On table 2, it is possible to see ten differences between Weak- and Strong- Uncertainty Avoidance Societies to better understand UAI Dimension (Hofstede, 2011).

Table 2– Table of Uncertainty Avoidance – Ten Differences

| Weak Uncertainty Avoidance | Strong Uncertainty Avoidance |
|--|---|
| The uncertainty inherent in life is accepted and each day is taken as it comes | The uncertainty inherent in life is felt as a continuous threat that must be fought |
| Ease, lower stress, self-control, low anxiety | Higher stress, emotionality, anxiety, neuroticism |
| Higher scores on subjective health and well-being | Lower scores on subjective health and well-being |
| Tolerance of deviant persons and ideas: what is different is curious | Intolerance of deviant persons and ideas: what is different is dangerous |
| Comfortable with ambiguity and chaos | Need for clarity and structure |
| Teachers may say 'I don't know' | Teachers supposed to have all the answers |
| Changing jobs no problem | Staying in jobs even if disliked |
| Dislike of rules - written or unwritten | Emotional need for rules – even if not obeyed |
| In politics, citizens feel and are seen as competent towards authorities | In politics, citizens feel and are seen as incompetent towards authorities |
| In religion, philosophy and science: relativism and empiricism | In religion, philosophy and science: belief in ultimate truths and grand theories |

Source: Hofstede (2011). p.10

Hofstede (1980b: 45) defines UAI as “the extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these situations by providing greater career stability, establishing more formal rules, not tolerating deviant ideas and behaviors, and believing in absolute truths and the attainment of expertise.”

Litvin, Crotts, & Hefner (2004) translate the original definition into how comfortable members of a same culture feel when confronted with unfamiliar situations UAI is not to be confused with Risk avoidance because “it does not describe one’s willingness to take or avoid risk, but rather is associated with preferences for clear rules and guidance” (Hofstede, 2001, p. 149).

According to Zhao (2005) weak UAI levels is also an indicator of a culture more prone to entrepreneurship and innovation.

Venaik, & Brewer (2010) note that Hofstede’s Uncertainty Avoidance index is the prime source of data for cross-cultural researchers when researching uncertainty avoidance.

On table 3, it is possible to see ten differences between Collectivist and Individualist Societies to better understand IDV Dimension (Hofstede, 2011).

Table 3 – Table of Individualism vs. Collectivism – Ten Differences

| Individualism | Collectivism |
|---|--|
| Everyone is supposed to take care of him- or herself and his or her immediate family only | People are born into extended families or clans which protect them in exchange for loyalty |
| "I" – consciousness | "We" –consciousness |
| Right of privacy | Stress on belonging |
| Speaking one's mind is healthy | Harmony should always be maintained |
| Others classified as individuals | Others classified as in-group or out-group |
| Personal opinion expected: one person one vote | Opinions and votes predetermined by in-group |
| Transgression of norms leads to guilt feelings | Transgression of norms leads to shame feelings |
| Languages in which the word "I" is indispensable | Languages in which the word "I" is avoided |
| Purpose of education is learning how to learn | Purpose of education is learning how to do |
| Task prevails over relationship | Relationship prevails over task |

Source: Hofstede (2011). p.11

Originally, Hofstede (1980b: 45) defined Individualism as “a loosely knit social framework in which people are supposed to take care of themselves and of their immediate families only”, while Collectivism was characterized as “a tight social framework in which people distinguish between in-groups and out-groups; they expect their in-group (relatives, clan, organizations) to look after them, and in exchange for that they feel they owe absolute loyalty to it.” Later, Hofstede (1994: 6) simplified the concept to “the degree to which people in a country prefer to act as individuals rather than as members of groups”.

Following research on the individualism and collectivism construct started suggesting that the two dimensions may be independent (Taras, Kirkman, & Steel, 2010) with authors, such as Tiessen (1997) defending, against most of the academia belief, that the two dimensions correlate positively with entrepreneurship, but later on Taras, Kirkman, & Steel, (2010) concluded that there was conflicting empirical evidence.

Therefore, Individualism vs. Collectivism dimension, it still “is a powerful explanatory construct that will continue to have a strong influence on cross-cultural psychology in future decades.” (Schimmack, Oishi, & Diener, 2005, p. 18) Even though Oyserman, Coon, & Kimmelmeier (2002) challenged the importance of the said dimension as an explanatory construct.

On table 4, it is possible to see the ten differences between Feminine and Masculine Societies to better understand MAS Dimension (Hofstede, 2011).

Table 4 – Table of Masculinity vs. Femininity – Ten Differences

| Femininity | Masculinity |
|---|---|
| Minimum emotional and social role differentiation between the genders | Maximum emotional and social role differentiation between the genders |
| Men and women should be modest and caring | Men should be and women may be assertive and ambitious |
| Balance between family and work | Work prevails over family |
| Sympathy for the weak | Admiration for the strong |
| Both fathers and mothers deal with facts and feelings | Fathers deal with facts, mothers with feelings |
| Both boys and girls may cry but neither should fight | Girls cry, boys don't; boys should fight back, girls shouldn't fight |
| Mothers decide on number of children | Fathers decide on family size |
| Many women in elected political positions | Few women in elected political positions |
| Religion focuses on fellow human beings | Religion focuses on God or gods |
| Matter-of-fact attitudes about sexuality; sex is a way of relating | Moralistic attitudes about sexuality; sex is a way of performing |

Source: Hofstede (2011). p.12

Even though “Women's roles differ from men's roles in all countries” (Hofstede, 1994, p. 6) “The distribution of roles between the sexes is [a] fundamental issue for any society” (Hofstede & Bond, 1988, p. 11) Therefore, it is important to define the dimension well.

Hofstede (1994: 6) defined MAS as “the degree to which values like assertiveness, performance, success and competition, which in nearly all societies are associated with the role of men, prevail over values like the quality of life, maintaining warm personal relationships, service, care for the weak, and solidarity, which in nearly all societies are more associated with the role of women.”

Fischer & Al-Issa (2012) translate the definition into simpler terms as the measurement of how “tough” or “tender” the national culture is. Where masculine societies tend to have clearly distinct social gender roles, while on feminine societies the social gender rules tend to overlap.

McGrath, MacMillan, & Scheinberg (1992) believe that entrepreneurs usually display higher level of masculinity. Therefore more masculine societies should display higher levels of entrepreneurship.

2.2 – Entrepreneurship

Every morning in Africa, a gazelle wakes up. It knows it must run faster than the fastest lion or it will be killed. Every morning a lion wakes up. It knows it must outrun the slowest gazelle or it will starve to death. It doesn't matter whether you are a lion or a gazelle. When the sun comes up, you better start running (Friedman, 2005, p. 114).

Entrepreneurship has become, in recent years, its own field of study, multi disciplinary but mostly associated with Business Management (Peneder, 2009). Mitchell (2011) goes even farther by defining “entrepreneurship research as a field of excellence”. (p. 615) Shane & Venkataraman (2000), on the other hand, believe that “entrepreneurship has become a broad label under which a hodgepodge of research is housed.” (p. 217)

The contradictory nature of entrepreneurship derives from, according to Peneder (2009), the contradictory multidisciplinary literature that involves the fields of business management, economics, sociology, organizational behavior and psychology.

Long (1983: 47) believes that the ambiguity in the entrepreneurship concept is not entirely bad to the development and definition of the concept. According to the author, “An effective definition should not necessarily remove all the ambiguity from the concept, but rather ambiguity should be confined to disputable areas where its continuing value is to be provocative”.

Arthur & Hisrich (2011) studied the development of the concept of Entrepreneurship through a historical review. According to it, the term entrepreneur comes from the French and it means, “between-taker” or “go between” (p.1.), such as Marco Polo who represented a commercial bridge between east and west.

According to Miller & Collier (2010) the original definition of entrepreneur comes from 1800 and belongs to the French economist Jean-Baptist Say. Say defined the entrepreneur as one who “shifts economic resources out of an area of lower and into an area of higher productivity and greater yield” (Drucker, 1985, p. 21). Long (1983) disagrees by noting that Richard Cantillon already formally defined entrepreneurs before Say, circa 1730, “as self-employment of any and every sort.” (p. 48)

By the end of the 19th century, Alfred Marshall further developed the concept of entrepreneurship by putting the entrepreneur at the center of his economic model. As Marshall (2004: 1) said “Thus it is on the one side a study of wealth, and on the other, and more important side, a part of the study of man.”

After Marshall, Van Praag (1999), believed that Frank Knight built upon the theory of Cantillon by better defining the difference between risk and uncertainty. Knight was the first to define that “The economic function of the entrepreneur is bearing the real uncertainty.” (p. 322). This means that the successful entrepreneur is an agent capable of making profit by better judging uncertainty.

By the 20th century, the concept again changed due to the contribution of Schumpeter (1952), who defined entrepreneurship as a process of reforming or revolutionizing production, as to be intimately related to innovation. Long (1983: 50) resumed Schumpeter thought to “the entrepreneur's challenge was to find and use new ideas to jostle the economy out of otherwise repetitive cycles of activities.” While Schumpeter (1952) believed that entrepreneurship was an economic mechanism to jostle the economy out of equilibrium, Kirzner (1997) believed almost the opposite. According to the author, it is through the entrepreneurial activities that economic inefficiencies are discovered and solved as to achieve a better equilibrium.

Low & MacMillan (1988) proposes that only through a multi-level analysis (individual, group, organizational, ecological and societal) can entrepreneurship be truly understood. Davidsson & Wiklund (2001) followed Low & MacMillan (1988) and defined that entrepreneurship focus “should be on emergence, but what emerges is new economic activity and not necessarily a new organization. We would also like to emphasize the quality of what emerges in terms of how radical new combinations the new enterprise represents and how much value it creates on micro- and aggregate levels.” (p. 89)

According to Shane & Venkataraman (2000) entrepreneurship is much simpler and “involves the nexus of two phenomena: the presence of lucrative opportunities and the presence of enterprising individuals” (p. 218).

Long (1983: 55), who studied the development of the concept of entrepreneurship through history, concludes that there are three major and recurring themes in almost all formal entrepreneurship theories, that can be said to define what entrepreneurship is.

They are: “1) uncertainty and risk; 2) complementary managerial competence; and 3) creative opportunism”

Still, these 3 themes are too vague as a definition of a concept. Therefore, a current broad definition of entrepreneurship was borrowed from Hisrich, Peters, & Shepherd. (2010: 8):

Entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence.

This current definition encompasses several important characteristics of Entrepreneurship, which are, entrepreneurship is the process of making something new, that takes time and effort to be made, and comes with risks and rewards that goes beyond only monetary satisfaction to personal satisfaction and independence.

2.2.1 – Entrepreneurship Failure

Into the risks section, one of the biggest risks is the risk of Failure. Such a common occurrence that Mantere et al. (2013) states that “Failure and entrepreneurship are natural siblings”. (p. 460) Arthur & Hisrich (2011) noticed that even though entrepreneurship has been gaining exposure and media coverage the rate of failure is really high.

Therefore, some scholars such as Shane (1996) have started studying entrepreneurship failure rate trying to identify its causes. Unfortunately, there are several different definitions of entrepreneurship failure.

Shepherd (2004) defines it simply as bankruptcy. Arasti, Zandi, & Talebi (2012) use a term that is simpler and manages to encompass most cases which is business discontinuation. Hamrouni & Akkari (2012) borrows from the theory of organizational ecology the notion of disappearance from the environment. Cochran (1981) adds the earning criterion failure where the business fails when it does not earn an acceptable rate of return over invested capital. Finally, McKenzie & Sud (2008), review most of the previous definitions before adding the broadest definition of all, that entrepreneurship failure “as simply a deviation from the entrepreneurs’ desired expectations” (p. 127).

For the purpose of this work, entrepreneurship failure will follow Arasti, Zandi, & Talebi (2012) definition and can be defined as all businesses that have discontinued its operation.

Michael & Combs (2008) go even further by stating that it is fundamental, in studying entrepreneurship, to understand the causes of business owners’ success and failure. Still, Arasti, Zandi, & Talebi (2012) raise the issue that the majority of entrepreneurship studies are focused on Business success while few authors focus on failure.

Therefore, authors such as Hamrouni & Akkari (2012) who also identified the lack of studies pertaining entrepreneurship failure attempts to shed some light on the causes that leads a business to fail. First, it is during the early stages that companies are most exposed to business failure (Venkataraman et al., 1990). Hamrouni & Akkari (2012) identifies that companies are most vulnerable before completing 4 years of existence

mainly due to lack of financial resources and lack of experience and competences in management. Plehn-Dujowich (2010) goes even further and affirms that lack of enough startup capital, lack of experience (with failure) of the entrepreneur, and lack of personal wealth contributes to failure.

Through an hermeneutical approach, Mckenzie & Sud (2008) conclude that the causes of failure are not always under the control of the entrepreneur, such as flawed strategy or planning, sometimes it can be caused by forces outside said control.

On the other hand, Ucbasaran et al. (2013) notices a positive aspect to business failure by arguing that “just as dynamic ecosystems depend on death to replace senescent organisms with vigorous growth, the termination of uneconomic ventures is essential to wealth creation.” (p. 164) Also, business failure can lead to reduced costs for surviving businesses via vicarious organizational learning (Madsen & Desai, 2010).

Even so, Ucbasaran et al. (2013) recognizes that the “effects of business failure on the individual entrepreneur, however, are more complex and arguably paradoxical” (p. 164) since it may lead to greater experience to the entrepreneur who learns from failure (Plehn-Dujowich, 2010) and is prepared for the risk involved (McGrath, 1999) it can also lead to shame since the entrepreneur lost to the competition (Tezuka, 1997) and besides emotional and financial costs (Shepherd, 2003), as Cope (2011) noticed, there is also the “damage caused to personal and professional relationships”. (p. 604)

Therefore, even though it is possible for the entrepreneur to learn from business failure (Plehn-Dujowich, 2010), this learning comes with great personal cost and effort from the entrepreneur to overcome the grief of failure (Cope, 2011). Shepherd (2003) believes that the grief process is an important factor in the learning experience because “negative emotions stimulate search processes, learning, and adaptation.” (p. 319)

Finally, Pretorius & Le Roux (2011) add that the grieving process is not enough. For the entrepreneur to learn from failure “will be possible only if they have already been through a loss-orientation process” (p. 6). If the entrepreneur does not pass through this process, it might repeat its past mistakes.

2.2.2 – Fear of Failure

“Starting a business requires courage – courage to take the risks of putting money into idea – courage to take a leap into an unknown future.” (Chowdhury, 2007, p. 246)

All the risks involved with entrepreneurship activities generate fear on its main actor, the entrepreneur. Since the main risk in entrepreneurship is failing, stands to reason that the main fear of an entrepreneur is the fear of failure.

According to Ekore and Okekeocha (2012), “fear of failure concerns the feeling that leaves a person discouraged and afraid that he or she will not succeed even before making an attempt”. (p. 516) Although correct, this definition is too broad for a more thorough analysis of the concept of fear of failure.

Nawaser et al (2011), break down this concept in smaller fears. The main fears that affect an entrepreneur are the fear of losing personal capital and the fear of lacking the ability to manage the business especially due to high work pressure.

Khan (1986) believed that fear of failure together with approval-seeking behavior are the two main contra-indicators of an ideal entrepreneur. Following this thought, Branstätter (1997) argued that an entrepreneur must be emotionally stable to deal with all the insecurities surrounding entrepreneurship.

Opposite to the previous belief, Koellinger, Minniti, & Schade (2007) believe that a measure of fear of failure is necessary to compensate the entrepreneurs’ overconfidence. Their research proposes that “High failure rates and low average returns suggest that too many people may be entering markets as entrepreneurs.” (p. 502)

According to Fried-Buchalter (1992), fear of failure arises from what Mckenzie and Sud (2008) described as exogenous forces causing the failure of the company. This lack of control, where even when striving the entrepreneur does not always achieve success, creates fear. Moreover, failing also leads to loss of value in the eyes of others.

Ubasaran et al. (2013) noticed that children of entrepreneurs who experienced failure and did not recover from it already develop fear of failure. On the other hand, children of entrepreneurs who overcome failure tend to be more resilient to fear of failure.

Wyrwich (2012) perceived the influence of the legacy of socialism as form of government. The population of ex-socialist countries tends to be more used to economic security and more fearful of failure in entrepreneurship.

On the other hand, Koellinger & Minniti (2006) discovered that “Fear of failure seems to decrease once individuals make the transition from non-entrepreneurs to nascent entrepreneurs, and further to baby business ownership.” (p.71)

This is confirmed through a statistics study regarding fear of failure where Wagner (2005) came to the same conclusion that: “The share of ‘cowards’ is smallest among the infant entrepreneurs; it is nearly twice as high among the nascent entrepreneurs, and four times as high among the paid employees and unemployed.” (p. 7)

Wagner (2007) noticed that fear of failure affects differently men and women. According to the research, women are more risk averse than men, preferring to avoid being entrepreneurs due to a bigger fear of failure.

2.3 – Relationship between Culture and Failure.

Vaillant & Lafuente (2007), notice that consequences of entrepreneurial failure go beyond the formal legal and financial spheres. There is also informal social repercussions that can act as deterrent to entrepreneurship and tend to vary from region to region. These tendencies of social repercussions to vary from region can and has been associated to local cultures.

Landier (2004) identifies this informal social repercussion effect, as an actual social stigma in Europe. This social stigma is a consequence of entrepreneurship failure, which is culturally unaccepted in Europe. The same author notices that other countries, such as United States have a much greater social tolerance to entrepreneurship failure than Europe.

Begley & Wee-Liang (2001) again noticed different levels of social repercussion, and subsequent fear of being public ashamed due to failure, between Anglo-Saxon and East Asian countries.

Cardon, Stevens, & Potter (2011) who analyzed the influence of regional culture over entrepreneurship failure noted that:

A community's perspective concerning venture failure may have implications for the level of entrepreneurial activity that occurs within that community, influencing the acceptability of entrepreneurship as a viable career path, legitimacy of working within these ventures as employees, personal and venture capital available to nascent entrepreneurs, and the existence of support networks for emerging ventures. (p.79)

Venkataraman (2004) goes to the center of the discussion by asking “What is it about some regions that encourages a culture of technological entrepreneurship, while the patterns of other regions work to stifle, discourage, or at best ignore technological entrepreneurship and innovation?” (p. 158)

The answer that Venkataraman (2004) found is that the presence of a virtuous or vicious cycle of entrepreneurship depends mainly on cultural reasons. In countries where entrepreneurship is valued, it attracts the best talents, who attracts critical resources and

creates successful enterprises which generates successful stories that attract the best talents, closing the virtuous cycle.

On the other hand, cultures that do not value entrepreneurship tend to create a vicious cycle where instead of attracting the best talents, entrepreneurship is done mostly out of necessity, making the venture more risky and low-quality, which in turn scares the investors away from providing the critical resources necessary to generate successful companies, generating failure stories that scare the best talents from becoming entrepreneurs, which closes the vicious cycle (Venkataraman, 2004)

Therefore, there is a recent trend in the literature to associate culture to entrepreneurship but it still on an embryonic stage due to several difficulties specially related to such an abstract term as culture. Grigore (2012) defines the situation well when it states “culture, whatever its exact definition, represents a combined image of the political and economical world in a society. In fact, culture is in itself a kind of productive force as well” (p. 140).

Hofstede (1980a) warns that since it is impossible to find one universally accepted concept of culture, some concessions must be made in order to go beyond vague definitions to an actual empirical study. Cardon, Stevens, & Potter (2011) add that “Cultural views of failure, particularly the propensity to blame failure (...), are not universal and should be carefully modeled and measured in future research.” (p. 91)

Therefore, in order to study the relationship between culture, entrepreneurship, entrepreneurship failure and fear of failure; the Hofstede culture model was chosen due to its empirical roots and wide acceptance in the Academia even though the acceptance is not unanimous as shown previously.

Table 5 – Literature Review Main Ideas on Culture and Entrepreneurship

| Culture | |
|--|---|
| Kohls (1979) | Culture refers to the total way of life of particular groups of people. It includes everything that a group of people thinks, says, does and makes, its customs, language, material artifacts and shared systems of attitudes and feelings. Culture is learned and transmitted from generation to generation. |
| Cross - Culture | |
| Hofstede (1980a, 1980b, 1991, 2001,2011) | 6 Cultural Dimensions: Power Distance Index (PDI), Individualism vs. Collectivism (IDV), Uncertainty Avoidance Index (UAI), Masculinity vs. Femininity (MAS), Long Term Orientation vs. Short Term Orientation (LTO) and Indulgence vs. Restraint (IVR) |
| Schwartz (1992) | Introduces a new different cultural model known as 7 Cultural Values |
| Gouveia & Ros (2000) | Criticized some points of Schwartz's Cultural model. There is little association between Schwartz model and economic indicators due to conceptual reasons. |
| Entrepreneurship | |
| Hisrich, Peters, & Shepherd (2010) | Entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence. |
| Entrepreneurship Failure | |
| Arthur & Hisrich (2011) | Noticed that even though entrepreneurship has been gaining exposure and media coverage the rate of failure is really high |
| Arasti, Zandi, & Talebi (2012) | Defined it as business discontinuation. |
| Mckenzie & Sud (2008) | Believes that causes of failure are not always under the control of the entrepreneur |
| Ubasaran et al. (2013) | Noted that effects of business failure on the individual entrepreneur can be paradoxical |
| Plehn-Dujowich (2010) | Believes it may lead to greater experience to the entrepreneur who learns from failure |
| Tezuka (1997), Shepherd (2003), and | Believe it can also lead to shame, |

| | |
|-------------|---|
| Cope (2011) | emotional and financial costs, and cause damage to personal and professional relationships. |
|-------------|---|

Table made by the author.

Table 6 – Literature Review Main Ideas on Fear of Failure and Culture & Failure

| Fear of Failure | |
|--------------------------------------|---|
| Ekore and Okekeocha (2012) | Defined Fear of failure as the feeling that leaves a person discouraged and afraid that he or she will not succeed even before making an attempt. |
| Nawaser et al (2011) | Broke down the concept in smaller fears. The main fears that affect an entrepreneur are the fear of losing personal capital and the fear of lacking the ability to manage the business especially due to high work pressure. |
| Koellinger, Minniti, & Schade (2007) | Believe that a measure of fear of failure is necessary to compensate the entrepreneurs' overconfidence |
| Fried-Buchalter (1992), | Believe fear of failure arises from lack of control, where even when striving the entrepreneur does not always achieve success |
| Koellinger & Minniti (2006) | Discovered that Fear of failure seems to decrease once individuals make the transition from non entrepreneurs to nascent entrepreneurs, and further to baby business ownership. |
| Wagner (2007) | Noticed that fear of failure affects differently men and women. Women are more risk averse than men, preferring to avoid being entrepreneurs due to a bigger fear of failure. |
| Culture & Failure | |
| Vaillant & Lafuente (2007) | Noticed that consequences of entrepreneurial failure go beyond the formal legal and financial spheres. There is also informal social repercussions, associated to local cultures, that can act as deterrent to entrepreneurship and tend to vary from region to region. |
| Landier (2004) | Identifies this informal social repercussion effect, as an actual social stigma in Europe. |

| | |
|----------------------------------|---|
| Begley & Wee Liang (2001) | Noticed different levels of fear of being public ashamed due to failure, between Anglo-Saxon and East Asian countries. |
| Cardon, Stevens, & Potter (2011) | Noted that a community's perspective concerning venture failure may have implications for the level of entrepreneurial activity that occurs within that community |
| Venkataraman (2004) | Discovered that the presence of a virtuous or vicious cycle of entrepreneurship depends mainly on cultural reasons. |

Table made by the author.

3 – Methodology

3.1 – Introduction

The Research question “Does National culture affects the rate of failure of entrepreneurship?” was elaborated as to reflect in the most simple and synthetic way the relationship being studied, which is the relation between Entrepreneurship, and more specifically, Rate of Failure of Entrepreneurship, which is an important theme in the Entrepreneurship field, with National Culture, the usual unit of comparison in Cross Cultural Management.

In order to answer said question, a main Hypothesis was proposed, based on the Literature previously shown, in order to be tested.

H₀ – Culture Affects Entrepreneurship Failure Rates.

Since Culture is an abstract concept with no accepted single index which can be compared to the very real concept of Entrepreneurship Rate of Failure it was necessary to create Sub Hypotheses using the 4 original Cultural Dimensions developed by Hofstede (1980a), a theoretical construct that managed to transform the abstract concept of culture into 4 original Cultural Dimensions that are measurable and accepted as valid by most of the Scientific Community (currently there are 6 Cultural Dimensions, but **Long Term Orientation** vs. Short Term Orientation (LTO) added on 1991 and **Indulgence Versus Restraint** (IVR) added on 2001 will not be considered since they are newer and still under consideration of the Academia). Therefore, this study will test the relation between the 4 original Cultural Dimensions (**Power Distance Index** (PDI), **Individualism** vs. Collectivism (IDV), **Uncertainty Avoidance Index** (UAI) and **Masculinity** vs. Femininity (MAS)) through the following Sub Hypotheses.

Following the theory previously defended by Zhao (2005), countries that display low power distance are more prone to innovation and entrepreneurship. Therefore, it is possible to infer that countries with high levels of PDI should have higher rates of failure. Therefore, the first sub Hypothesis is that:

H₁ – There is a positive correlation between Power Distance Index (PDI) and Entrepreneurship Failure Rates.

Since the theory raised by Tiessen (1997) defending that Individualism vs. Collectivism are two dimensions that correlate positively with entrepreneurship is regarded dubiously due to conflicting results of empirical testing (Taras, Kirkman, & Steel, 2010). It was decided to test the original assumptions made by Hofstede (2001) that individualistic countries tend to have higher levels of entrepreneurship making it possible to conclude that:

H₂ - There is a negative correlation between Individualism vs. Collectivism (IDV) and Entrepreneurship Failure Rates.

Following the thoughts of Zhao (2005) that concluded that weak UAI levels is also an indicator of a culture more prone to entrepreneurship and innovation it is possible to infer that countries with higher levels of uncertainty avoidance are more exposed to failure. This thought can be structured as:

H₃ - There is a positive correlation between Uncertainty Avoidance Index (UAI) and Entrepreneurship Failure Rates.

Considering that entrepreneurs usually display higher level of masculinity (McGrath, MacMillan, & Scheinberg (1992), is it possible to infer that more masculine societies should achieve higher levels of success when starting new businesses. This means that

H₄ - There is a negative correlation between Masculinity vs. Femininity (MAS) and Entrepreneurship Failure Rates.

There is evidence that support that Fear of failure should be linked with rate of failure. Following Koellinger, Minniti, & Schade (2007) that believe that a measure of fear of failure is necessary to compensate the entrepreneurs' overconfidence it is possible to extrapolate that higher levels of collective fear of failure will prevent entrepreneurs with more risky ideas from testing them in a way as to make more probable to only start businesses that the entrepreneurs are more confident on. Following this logic:

H₅ - There is a negative correlation between Fear of Failure and Rate of Failure

The methodology was planned as to make possible a comparison between countries cultures and also to relate this comparison to the respective rate of failure of the individual countries. As it is impractical to sample from the entire population proposed, it was decided to use a theoretical construct based on Hofstede's Culture dimensions

(Hofstede, 1980, 2001) and correlate it with indexes of entrepreneurship failure rate and fear of failure provided by the Global Entrepreneurship Monitor (GEM).

3.2 – Participants

3.2.1 – Hofstede’s Cultural Dimensions

As one of the most accepted cross-cultural studies, Hofstede’s dimensions are a theoretical construct created by Geert Hofstede based on an IBM database, more specifically, on employee values scores collected between 1967 and 1973 covering more than 70 countries, although initially only the 40 largest were studied, afterwards the author extended the analysis to 50 countries (Hofstede, 1980a). Currently, there is data available for 78 countries (Hofstede, 2001) using the original cultural dimensions. In order to be as statistically significant as possible, the most recent study will be used as a data source in this research.

It is important to notice, as the author states, culture changes in an extremely slow pace, therefore the dimensions numbers raised in that research should remain basically untouched through time.

Moreover, not only Hofstede’s Cultural Dimensions is the most used index for cross-cultural research purposes but also it is the best suited cross-cultural index for macro-economic comparisons (Gouveia & Ros, 2000).

Therefore, the first participant defined to be used as a proxy for national culture comparisons is Hofstede’s Cultural Dimensions database.

3.2.2 – Global Entrepreneurship Monitor (GEM) Data

Second, as again it is impractical to collect the primary data necessary from individuals as to make a statistically acceptable sample of the population already defined by Hofstede's database, a proxy must be used.

The GEM is an initiative that started between London Business School and Babson College and began in 1999 with 10 countries participating with the aim of studying entrepreneurship and its relation to economic development. Currently, there are more than 100 national teams who gather or have gathered data about entrepreneurial activity worldwide.

GEM was chosen as a data source because it is one of the few datasets that provide harmonized, up-to-date, internationally comparable data about Entrepreneurship (Sternberg & Wennekers, 2005).

One of its main tools of research made available by the GEM consortium is the Adult Population Survey (APS), a comprehensive yearly questionnaire, administered to a minimum of 2000 adults in each GEM country, which tracks the entrepreneurial attitudes, activity and aspirations of individuals.

This APS data is then processed into an APS Global Annual National Level Report. Currently, the newest report available is from 2009, published on 2013. This report has a total population of 55 countries.

Considering that the Global Entrepreneurship Monitor is one of the leading institutions in regards to entrepreneurship studies, it was decided to use the **Entrepreneurship Failure Rates** and **The Fear of Failure Rates**, divided by countries, available in the GEM 2009 APS Global - National Level Data Report.

The Entrepreneurship Failure Rate is available in the report with the label **Disent09** and describes the percentage of entrepreneurs with age between 18 and 64 that exited a business in the last 3 years and the business did not continue. Therefore, business discontinuation is being used as the criteria for entrepreneurship failure following the approach of Arasti, Zandi, & Talebi (2012).

The Fear of Failure Rate is available in the report with the label **Frfail09** and describes the percentage of entrepreneurs with age between 18 and 64 that fear of failure would prevent the respondent from starting its own business.

3.3 – Model Design

The design chosen was a Correlational approach as well as a Partial Least Squares Structural Equation Model (PLS-SEM) Analysis aiming to find a pattern between Hofstede's Dimensions and the fear of failure and the rate of failure of entrepreneurship in the nations common to both Hofstede's Dimensions and GEM 2009 APS Global - National Level Data Report as to make it possible to test the hypothesis and sub hypotheses previously shown. In case of significant results, a regression analysis will be made as to evaluate the level of influence of the independent variables have on the dependent variable (Rate of Failure).

In order to do the analysis, seven different steps were taken. First, collect the indexes of the Dimensions from all the 78 nations available in Hofstede's database. As secondary data, it is available in virtual form.

Second, collect the entrepreneurship failure rates and fear of failure rates from the GEM database (55 countries available in GEM 2009 APS report).

Third, after uniting both data sources, there were 40 countries with data available in both sources, as to be able to make the correlation analysis possible. These countries were then plotted on graphs to analyze its patterns and verify if there existed countries with outlier behavior. Jamaica was discovered to consistently present outlier behavior and was therefore excluded from the sample being analyzed. Therefore, the total sample is 39 countries ($n=39$).

According to Anderson, Sweeney and Williams (2007), a relevant positive or negative correlation, although it shows a relation, does not prove causality between the variables. But, the repetition of the pattern of correlation in a relevant way on a series of isolated samples, according to Reiter (2000), does. Fourth, tested the 4 sub hypotheses and through them the main hypothesis that national culture DOES influence entrepreneurship rate of failure in countries (a relevant positive (or negative) result in the correlation analysis confirms the hypothesis, any other results such as lack of relevance (failure of the t-test) and/or low correlation results disprove the hypothesis).

Fifth, in order to be sure of the relation between the variables, as well as to confirm the relative significance of the independent variables have on the dependent variable; a

Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis was applied (Hair, Ringle, & Sarstedt, 2011).

This analysis enabled to create a correlation model that allows considering both the main hypothesis as well as all the following sub-hypotheses using a different methodology in order to check the validity of the results of the previous correlation analysis (step four).

The sixth step was a regression analysis of all the previously identified statistically significant correlations in order to measure their influence on the Rate of Failure variable. In order to be better illustrate the regression analysis, ANOVA and t-test were also applied. Finally, the seventh step was the drawing of conclusions and proposal of further research based on the results of previous step.

4 – Data Analysis

4.1 – Correlation Analysis

On the following Correlation Analysis (Table 8), it is possible to visualize all the correlations between all the variables previously introduced. The purpose of this table is to evaluate the level of significance of the correlations necessary to test the sub hypotheses. Considering the minimum acceptable level of significance to be a coefficient of Pearson below 0,05, the only correlation that manages to achieve said level is Individualism vs. Collectivism (IDV) x Rate of Failure (RF) with a coefficient of Pearson of 0,01. All the other correlations do not pass the minimum threshold to be significant, making it impossible to scientifically test using the current model and data whether the sub hypotheses **H₁**, **H₃**, **H₄** and **H₅** are true or not. Therefore, the PLS-SEM model will be applied to see if there is way of analyzing the available data so as to test the remaining hypotheses.

Table 7 – Correlation Analysis

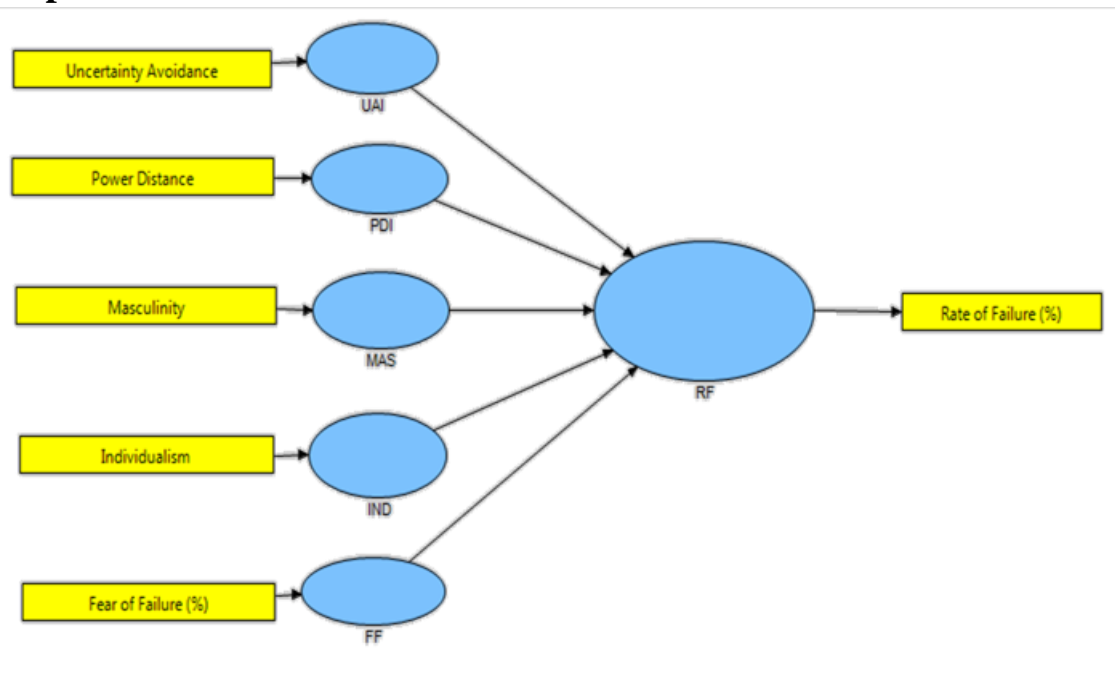
| | | <i>PDI</i> | <i>UAI</i> | <i>IDV</i> | <i>MAS</i> | <i>RF</i> | <i>FF</i> |
|------------|----------------------------|------------|------------|------------|------------|-----------|-----------|
| <i>PDI</i> | <i>Pearson Correlation</i> | 1,00 | ,34 | -,73 | ,06 | ,16 | ,08 |
| | <i>Sig. (2-tailed)</i> | | ,04 | ,00 | ,73 | ,33 | ,65 |
| | <i>N</i> | 39 | 39 | 39 | 39 | 39 | 39 |
| <i>UAI</i> | <i>Pearson Correlation</i> | ,34 | 1,00 | -,34 | ,01 | ,12 | ,16 |
| | <i>Sig. (2-tailed)</i> | ,04 | | ,03 | ,96 | ,46 | ,33 |
| | <i>N</i> | 39 | 39 | 39 | 39 | 39 | 39 |
| <i>IDV</i> | <i>Pearson Correlation</i> | -,73 | -,34 | 1,00 | ,02 | -,42 | ,11 |
| | <i>Sig. (2-tailed)</i> | ,00 | ,03 | | ,88 | ,01 | ,52 |
| | <i>N</i> | 39 | 39 | 39 | 39 | 39 | 39 |
| <i>MAS</i> | <i>Pearson Correlation</i> | ,06 | ,01 | ,02 | 1,00 | ,05 | ,09 |
| | <i>Sig. (2-tailed)</i> | ,73 | ,96 | ,88 | | ,77 | ,58 |
| | <i>N</i> | 39 | 39 | 39 | 39 | 39 | 39 |
| <i>RF</i> | <i>Pearson Correlation</i> | ,16 | ,12 | -,42 | ,05 | 1,00 | -,19 |
| | <i>Sig. (2-tailed)</i> | ,33 | ,46 | ,01 | ,77 | | ,25 |
| | <i>N</i> | 39 | 39 | 39 | 39 | 39 | 39 |
| <i>FF</i> | <i>Pearson Correlation</i> | ,08 | ,16 | ,11 | ,09 | -,19 | 1,00 |
| | <i>Sig. (2-tailed)</i> | ,65 | ,33 | ,52 | ,58 | ,25 | |
| | <i>N</i> | 39 | 39 | 39 | 39 | 39 | 39 |

Table made by the author.

4.2 – Partial Least Squares Structural Equation Model Analysis

In order to analyze the data, it was first plotted on a Structural Equation Model chart (graph 1), where the variables to the left (the four Hofstede's Cultural dimensions and GEM's Fear of Failure) represent the independent variables while the variable to the right (GEM's Rate of Failure) represent the dependent variable.

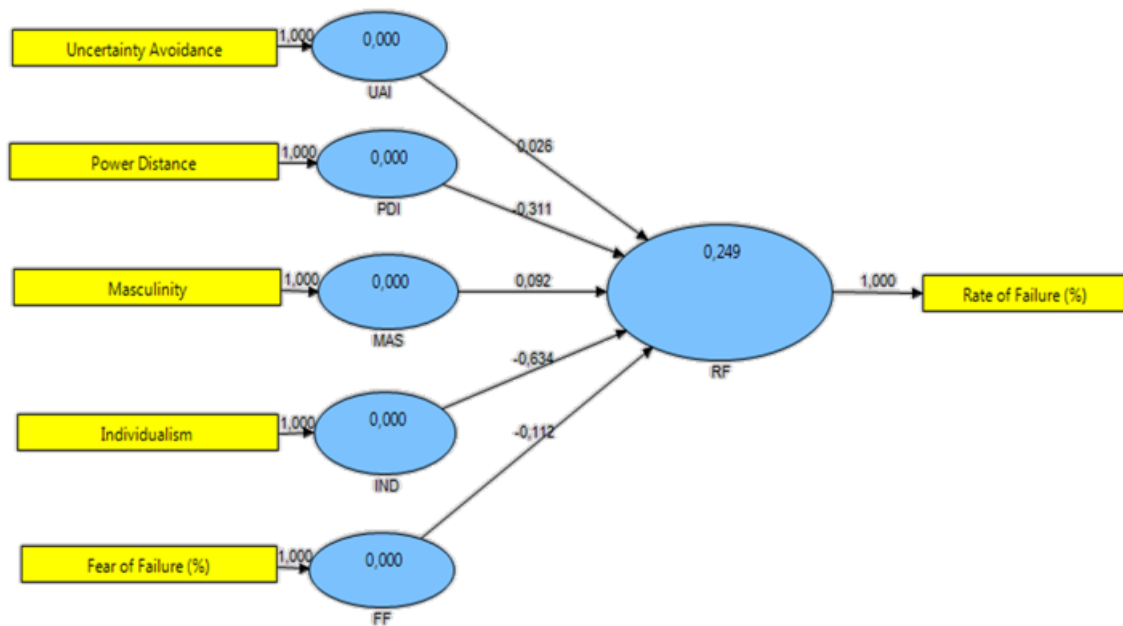
Graph 1 – PLS-SEM Model



Graph made by the author.

The model was then run through the PLS-SEM to see the influence of the independent variables have on Rate of failure. The result (graph 2) of the PLS-SEM Model analysis is that some independent variables seem to have more influence on the dependent variable than others. The most influential variable on Rate of Failure is Individualism x Collectivism (-0,634), followed by Power Distance (-0,311).

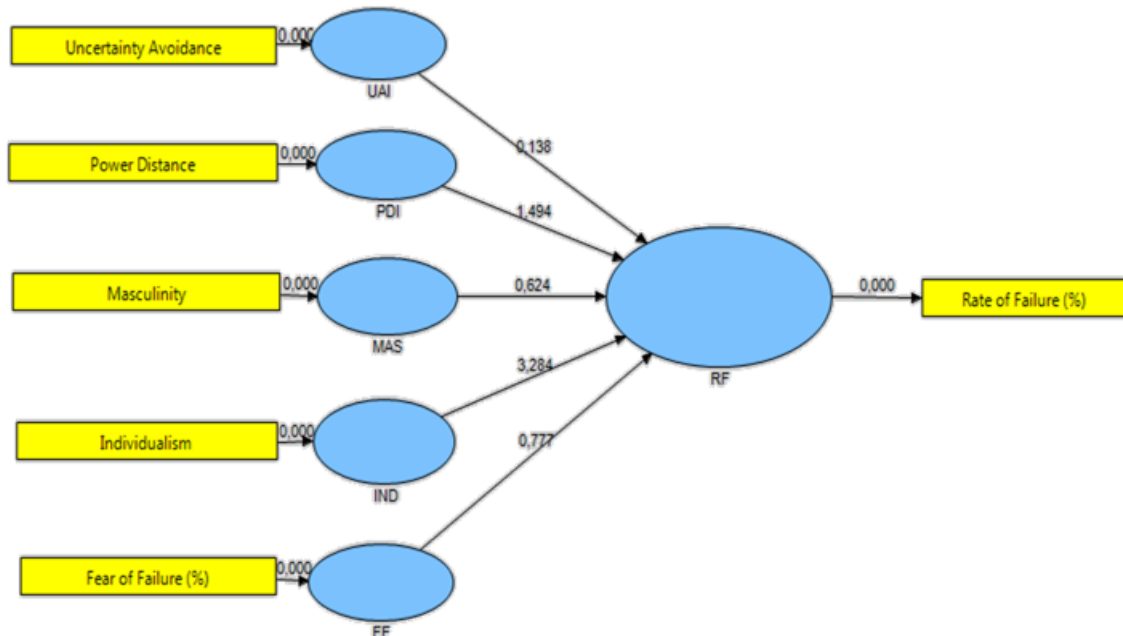
Graph 2 – PLS-SEM Model Analysis



Graph made by the author.

Bootstrapping the model to 5000 cases (graph 3), it is possible to see in perspective the influence of each independent variable has on RF.

Graph 3 – PLS-SEM Model Analysis Bootstrapped



Graph made by the author.

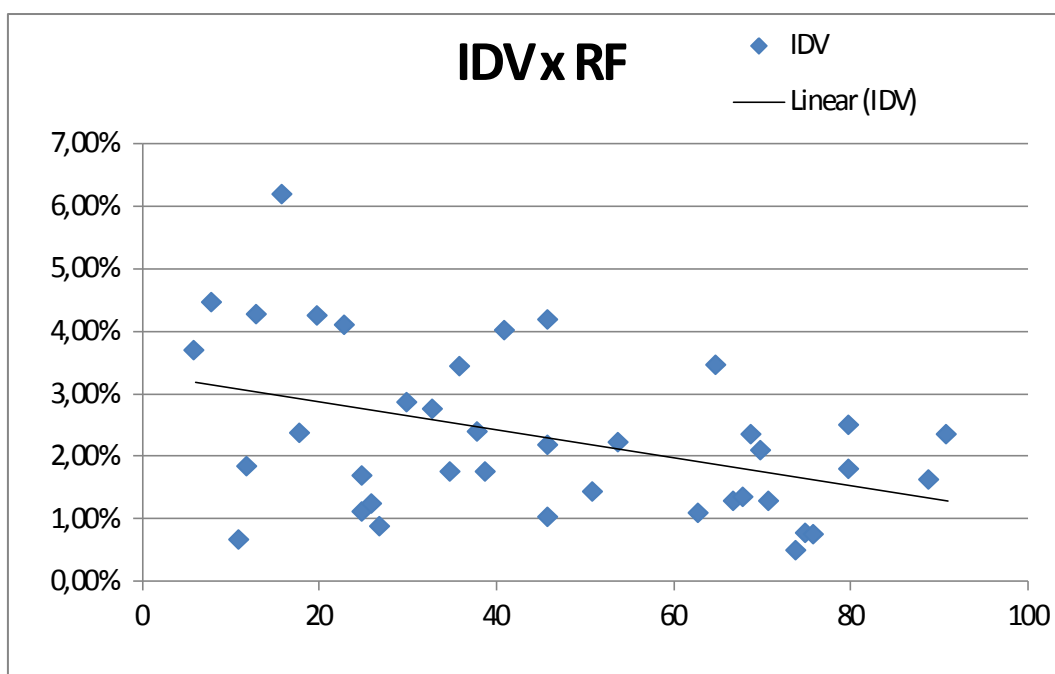
After running the model through the 5000 cases it is possible to confirm, again, that only Individualism vs. Collectivist (t-test = 3,284) is a significant influence on Rate of Failure.

4.3– Regression Analysis

Since only Individualism vs. Collectivism has a significant influence on Rate of Failure in Entrepreneurship on both models (Correlation Analysis and PLS-SEM Analysis), the following regression is going to focus on said relation.

It is possible to see on graph IDV x RF (graph 1), the correlation between Individualism vs. Collectivism and Rate of Failure, isolated on table 9, has a negative inclination (-0,42), corroborating with the second sub hypothesis (H_2).

Graph 4 – IDV x RF



Graph made by the author.

Table 7 – Correlation Individualism vs. Collectivism and Rate of Failure

| | | IDV | RF |
|-----|---------------------|------|------|
| IDV | Pearson Correlation | 1,00 | -,42 |
| | Sig. (2-tailed) | | ,01 |
| | N | 39 | 39 |
| RF | Pearson Correlation | -,42 | 1,00 |
| | Sig. (2-tailed) | ,01 | |
| | N | 39 | 39 |

Table made by the author.

Based on this correlation IDV x RF, a regression study (Table 10) was made using the same variable in order to see the degree of influence of the independent variable (Hofstede's Individualism vs. Collectivism Index) has on the dependent variable (Rate of Failure of Entrepreneurship).

Table 8 – Regression Individualism vs. Collectivism and Rate of Failure

| <i>R</i> | <i>R Square</i> | <i>Adjusted R Square</i> | <i>Std. Error of the Estimate</i> |
|----------|-----------------|--------------------------|-----------------------------------|
| ,42 | ,18 | ,18 | 1,21 |

ANOVA (RF)

| | <i>Sum of Squares</i> | <i>df</i> | <i>Mean Square</i> | <i>F</i> | <i>Significance</i> |
|-------------------|-----------------------|-----------|--------------------|----------|---------------------|
| <i>Regression</i> | 11,97 | 1 | 11,97 | 8,12 | ,01 |
| <i>Residual</i> | 54,53 | 37 | 1,47 | | |
| <i>Total</i> | 66,49 | 38 | | | |

Coefficients (RF)

| | <i>B</i> | <i>Std. Error</i> | <i>Beta</i> | <i>t</i> | <i>Significance</i> |
|-------------------|----------|-------------------|-------------|----------|---------------------|
| <i>(Constant)</i> | 3,32 | ,40 | ,00 | 8,20 | ,00 |
| IDV | -,02 | ,01 | -,42 | -2,85 | ,01 |

Table made by the author.

Through this regression, it is possible to see that due to the high value of the $F_{crit}(1, 37) = 3.68$ at $\alpha = 0.05$ there is a relation between the two variables as previously seen on the regression analysis. And the low R^2 (0,18) means is not possible to explain the dependent variable of Rate of Failure by using only IDV dimension since IDV can explain only 18% of the variance of RF. This means that IDV does influence RF but not in such a strong way as to enable to predict behavior of RF of a country only by using the IDV index of the same country.

4.4 – Results

The sub hypotheses **H₁**, **H₃**, **H₄** and **H₅** cannot be tested in a significant way. This means that the model is not sufficient to study the influence of the independent variables Power Distance Index (PDI), Uncertainty Avoidance Index (UAI), Masculinity vs. Femininity (MAS) and Fear of Failure have on Rate of Failure, the only dependent variable of the study.

On the other hand, the model managed to test and support **H₂**, which means that there is a significant negative correlation between Individualism vs. Collectivism (IDV) and Entrepreneurship Failure Rates. Moreover, the regression analysis enabled to estimate the influence of IDV in being able to explain 18% of the variance of RF.

Also, by proving **H₂**, the main hypothesis of this study, **H₀** – Culture Affects Entrepreneurship Failure Rates – was also supported. The consequences of the results will be discussed on the next section, Conclusions.

5 – Conclusions

Several different conclusions can be drawn out of this analysis. First and most importantly culture does influence entrepreneurship. This means that a new company has a different probability of success, all other variables being the same, based solely on different culture. Therefore, culture can and should be used as a criterion by the management, during the decision process, of where to start the new company, or new branch.

On the other hand, at least based on this study, the influence of culture is not so strong as to be one of the main causes of success or failure of a new venture based on the population of the study as a whole. Still, it might be wise for countries experiencing difficulties with entrepreneurship or high levels of failure on the early stages to see if culture is not one of the causes.

Out of the four original Hofstede's Culture Dimensions, at least according to the methodology previously applied, Individualism vs. Collectivism (IDV) is the most relevant dimension when researching entrepreneurship failure. This conclusion is not surprising, since individualism is a trait long being associated with entrepreneurship.

Also, the high degree of significance of IDV on the correlation analysis suggests that IDV exerts a much stronger influence on the success or failure rate of a new enterprise than, not only the other cultural dimensions, but also fear of failure.

Moreover, the negative IDV correlation with Rate of Failure also helps explain the macro situation where collectivist countries have a much higher entrepreneurship failure rates such as Peru (6,20%), Ecuador (4,47%) and Colombia (4,27%) than highly individualistic countries such as USA (2,34%), Great Britain (1,63%) or Denmark (0,49%). This means that, although other factors are also responsible for this situation, collectivist countries should worry if their collectivist culture might not be affecting their entrepreneurship performance. Although further research is necessary to be sure, in case of confirmation of the said case, steps should be taken to remedy the situation such as, to foster individualistic traits on actual and potential entrepreneurs, or to remedy the negative influence of the collectivism.

Unfortunately, the four other sub hypothesis could not be tested due to lack of statistical significance. This means that the 4 questions raised on the methodology will have to be left unanswered by the model here shown with the data currently available.

Still, the connection of Culture with Entrepreneurship is extremely important and recent. The implications of culture become much more relevant due to globalization because the fast communication and low transportation costs make location, once a not easily changeable aspect of entrepreneurship, a matter of choice. And this choice should be as logical and rational as possible following the positivistic approach. This means that culture becomes an aspect to be considered, measured and finally managed. Some further research is necessary to see if it is possible to use the research model previously shown to answer the sub hypotheses that were left untested. In order to do so it would be necessary to gather more data as to increase the statistical population of the model (the number of countries being correlated).

Since the author of this research already used all the countries available as secondary data on both databases, it would be necessary to process the raw data available on primary source or to switch the Global Entrepreneurship Monitor database by other source of entrepreneurship data. The second option would make it impossible to compare the new model with the old one.

It is also necessary to better understand the implications of Individualism vs. Collectivism have on entrepreneurship. Therefore, a more specific model should be specially created as to be able to better measure and understand it. Also further research should be done to identify what aspects of collectivist culture negatively influence entrepreneurship in order to identify the causes that are the actual root of the problem. Although Hofstede is the most popular theoretical construct currently being employed by the academia to understand cultural differences, the use of other models such as Schwartz would shed new light on the subject as well as help to reduce the influence of subjectivity.

Finally, more effort is needed on gathering primary data, especially related to entrepreneurship, because economic and financial data is not enough now that entrepreneurship is becoming more and more a multi disciplinary field.

6 – References

- Anderson D. R., Sweeney, D. J., & Williams T. A. (2007). *Estatística Aplicada à Administração e Economia* (2nd Ed.). São Paulo, SP: Thomson Learning.
- Arasti, Z., Zandi, F., & Talebi, K. (2012). Exploring the Effect of Individual Factors on Business Failure in Iranian New Established Small Businesses. *International Business Research*, 5(4), 2-11. doi:10.5539/ibr.v5n4p2
- Arthur, S. J., & Hisrich, R. D. (2011). Entrepreneurship through the ages: Lessons learned. *Journal Of Enterprising Culture*, 19(1), 1-40.
- Baughn, C., & Neupert, K. E. (2003). Culture and National Conditions Facilitating Entrepreneurial Start-ups. *Journal Of International Entrepreneurship*, 1(3), 313-330.
- Berggren B., Silver L., (2010). Financing entrepreneurship in different regions: The failure to decentralise financing to regional centres in Sweden. *Journal of Small Business and Enterprise Development*, 17(2), 230 – 246. doi: 10.1108/14626001011041238
- Begley, T. M., & Wee-Liang, T. (2001). The Socio-Cultural Environment for Entrepreneurship: A Comparison Between East Asian and Anglo-Saxon Countries. *Journal Of International Business Studies*, 32(3), 537-553.
- Blodgett, J. G., Bakir, A., & Rose, G. M. (2008). A test of the validity of Hofstede's cultural framework. *Journal of Consumer Marketing*, 25(6), 339-349. doi: 10.1108/07363760810902477

- Blumenthal, A. (1936). The nature of culture. *American Sociological Review*, *1*(6), 875-893.
- Brandstätter, H. (1997). Becoming an entrepreneur—a question of personality structure?. *Journal of economic psychology*, *18*(2), 157-177. doi: 10.1016/S0167-4870(97)00003-2
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and individual differences*, *51*(3), 222-230. doi: 10.1016/j.paid.2010.07.007
- Cardon, M. S., Stevens, C. E., & Potter, D. R. (2011). Misfortunes or mistakes?: Cultural sensemaking of entrepreneurial failure. *Journal of Business Venturing*, *26*(1), 79-92. doi: 10.1016/j.jbusvent.2009.06.004
- Chowdhury, M. S. (2007). Overcoming entrepreneurship development constraints: the case of Bangladesh. *Journal of Enterprising Communities: People and Places in the Global Economy*, *1*(3), 240-251. doi: 10.1108/17506200710779549
- Cochran, A. B., (1981). Small business mortality rates: A review of the literature. *Journal of Small Business Management*, *19*(4), 50-59.
- Cong, L., Borg, I., & Spector, P. E. (2004). Measurement Equivalence of the German Job Satisfaction Survey Used in a Multinational Organization: Implications of Schwartz's Culture Model. *Journal Of Applied Psychology*, *89*(6), 1070-1082. doi:10.1037/0021-9010.89.6.1070
- Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal Of Business Venturing*, *26*(6), 604-623. doi:10.1016/j.jbusvent.2010.06.002

- Davidsson, P., & Wiklund, J. (2001). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship Theory and Practice*, 25(4), 81-100.
- DiMaggio, P. (1997). Culture and Cognition. *Annual Review of Sociology*, 23, 263-287.
- Drucker, P. (1985). *Innovation and Entrepreneurship*. New York, NY: Harper & Row Publishers.
- Dulfano, I. (2011). Culture critique: The imperative to integrate culture into the foreign language classroom. *Review Of Business Research*, 11(2), 74-79.
- Ekore, J. O., & Okekeocha, O. C. (2012). Fear of Entrepreneurship among University Graduates: A Psychological Analysis. *International Journal Of Management*, 29(2), 515-524.
- Fischer, O., & Al-Issa, A. (2012). In for a surprise piloting the Arab version of the VSM 94. *International Journal of Intercultural Relations*, 36(5), 737-742. doi: 10.1016/j.ijintrel.2012.04.007
- Fried-Buchalter, S. (1992). Fear of success, fear of failure, and the imposter phenomenon: A factor analytic approach to convergent and discriminant validity. *Journal Of Personality Assessment*, 58(2), 368-379.
- Friedman, T. L. (2005). *The world is flat: A brief history of the twenty-first century*. New York, NY: Farrar, Straus and Giroux.
- Gerstner, C. R., & Day, D. V. (1994). Cross-cultural comparison of leadership prototypes. *The Leadership Quarterly*, 5(2), 121-134.

- Gouveia, V. V., & Ros, M. (2000). Hofstede and Schwartz's models for classifying individualism at the cultural level: their relation to macro-social and macro-economic variables. *Psicothema*, 12(Suplemento), 25-33.
- Grigore, A. (2012). A Nation's Culture and its Openness to Entrepreneurship: An Established Liaison Notes about the Situation in Romania Today. *International Journal Of Business & Social Science*, 3(9), 139-144.
- Hair, J., Ringle, C, & Sarstedt, M. 2011. PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice*, 19(2): 139–152.
- Hamrouni, A., & Akkari, I. (2012). The Entrepreneurial Failure: Exploring Links between the Main Causes of Failure and the Company life Cycle. *International Journal Of Business & Social Science*, 3(4), 189-205.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrepreneurship: Theory & Practice*, 26(4), 33-52.
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2010). *Entrepreneurship*, (8th ed.), New York, NY: McGraw-Hill Irwin.
- Hofstede, G. (1980a). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.
- Hofstede, G. (1980b). Motivation, leadership, and organization: do American theories apply abroad? *Organizational dynamics*, 9(1), 42-63. doi: 10.1016/0090-2616(80)90013-3
- Hofstede, G., & Bond, M. (1988) 'The Confucius connection: from cultural roots to economic growth', *Organizational Dynamics* 15(1), 4-21.

- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London, UK: McGraw-Hill.
- Hofstede, G. (1994). Management Scientists Are Human. *Management Science*, 40(1), 4-13.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hofstede, G. (2011). Dimensionalizing culture: The Hofstede model in context. *Online Reading in Psychology and Culture*, 2(1). doi:<http://dx.doi.org/10.9707/2307-0919.1014>
- Kirzner, I. M. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of economic Literature*, 35(1), 60-85.
- Khan, A. M. (1986). Entrepreneur characteristics and the prediction of new venture success. *Omega*, 14(5), 365-372. doi: 10.1016/0305-0483(86)90077-0
- Koellinger, P., & Minniti, M. (2006). Not for lack of trying: American entrepreneurship in black and white. *Small Business Economics*, 27(1), 59-79. doi: 10.1007/s11187-006-0019-6
- Koellinger, P., Minniti, M., & Schade, C. (2007). "I think I can, I think I can": Overconfidence and entrepreneurial behavior. *Journal of Economic Psychology*, 28(4), 502-527. doi: 10.1016/j.joep.2006.11.002
- Kohls, R. L. (1979). *Survival kit for overseas living*. Chicago, IL: Systran.
- Kroeber, A. L. & Kluckhohn, C. (1952). *Culture: A Critical Review of Concepts and Definitions*, Cambridge, MA: The Museum.

- Landier, A. (2004). Entrepreneurship and the stigma of failure. Paper presented at the MIT Finance, Development and Macro Workshops.
- Lee, S. M., & Peterson, S. I. (2000). Culture, Entrepreneurial Orientation, and Global Competitiveness. *Journal Of World Business*, 35(4), 401-416.
- Leidner, D. E., & Kayworth, T. (2006). Review: A review of culture in information systems research: Toward a theory of information technology culture conflict. *MIS Quarterly*, 30(2), 357-399.
- Litvin, S. W., Crotts, J. C., & Hefner, F. L. (2004). Cross-cultural tourist behaviour: a replication and extension involving Hofstede's uncertainty avoidance dimension. *International Journal of Tourism Research*, 6(1), 29-37. doi: 10.1002/jtr.468
- Long, W. (1983). The Meaning of Entrepreneurship. *American Journal Of Small Business*, 8(2), 47-56.
- Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of management*, 14(2), 139-161.
- Luthar, V. K., & Luthar H. K. (2007). A theoretical framework explaining cross-cultural sexual harassment: Integrating Hofstede and Schwartz. *Journal of Labor Research*, 28(1), 169-188.
- Madsen, P. M., & Desai, V. (2010). Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. *Academy of Management Journal*, 53(3), 451-476. doi:10.5465/AMJ.2010.51467631

- Mantere, S., Aula, P., Schildt, H., & Vaara, E. (2013). Narrative attributions of entrepreneurial failure. *Journal of Business Venturing*, 28(4), 459-473. doi: 10.1016/j.jbusvent.2012.12.001
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review*, 98(2), 224-253.
- Marshall, A. (2004). *Principles of economics*. Digireads.com. (First edition 1890).
- McGrath, R. G. (1999). Falling forward: Real options reasoning and entrepreneurial failure. *Academy of Management Review*, 24(1), 13-30.
- McGrath, R. G., MacMillan, I. C., & Scheinberg, S. (1992). Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of business venturing*, 7(2), 115-135. doi: 10.1016/0883-9026(92)90008-F
- McKenzie, B., & Sud, M. (2008). A hermeneutical approach to understanding entrepreneurial failure. *Academy Of Entrepreneurship Journal*, 14(1/2), 123-148.
- McSweeney, B. (2002a). Hofstede's model of national cultural differences and their consequences: A triumph of faith — a failure of analysis. *Human Relations*, 55(1), 89-118. doi:10.1177/0018726702055001602
- McSweeney, B. (2002b). The essentials of scholarship: A reply to Geert Hofstede. *Human Relations*, 55(11), 1363. doi:10.1177/00187267025511005
- Michael, S. C., & Combs, J. G. (2008). Entrepreneurial Failure: The Case of Franchisees. *Journal Of Small Business Management*, 46(1), 73-90. doi:10.1111/j.1540-627X.2007.00232.x

- Miller, R. A., & Collier, E. W. (2010). Redefining Entrepreneurship: A Virtues and Values Perspective. *Journal Of Leadership, Accountability & Ethics*, 8(2), 80-89.
- Mitchell, R. K. (2011). Increasing Returns and the Domain of Entrepreneurship Research. *Entrepreneurship: Theory & Practice*, 35(4), 615-629. doi:10.1111/j.1540-6520.2011.00473.x
- Nawaser, K., Sadeq Khaksar, S., Shakhsian, F., & Jahanshahi, A. (2011). Motivational and legal barriers of entrepreneurship development. *International Journal Of Business & Management*, 6(11), 112-118. doi:10.5539/ijbm.v6n11p112
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3–72. doi: 10.1037//0033-2909.128.1.3
- Peneder, M. (2009). The Meaning of Entrepreneurship: A Modular Concept. *Journal Of Industry, Competition & Trade*, 9(2), 77-99. doi:10.1007/s10842-009-0052-7
- Plehn-Dujowich, J. (2010). A theory of serial entrepreneurship. *Small Business Economics*, 35(4), 377-398. doi:10.1007/s11187-008-9171-5
- Pretorius, M., & Le Roux, I. (2011). Successive failure, repeat entrepreneurship and no learning: A case study. *SA Journal of Human Resource Management*, 9(1), 13-pages. doi:10.4102/sajhrm.v9i1.236
- Reiter, J. (2000). Using statistics to determine causal relationships. *The American Mathematical Monthly*, 107(1), 24-32. doi:10.2307/2589374.

- Schimmack, U., Oishi, S., & Diener, E. (2005). Individualism: A valid and important dimension of cultural differences between nations. *Personality and Social Psychology Review*, 9(1), 17-31.
- Schumpeter, J. (1952). *Can capitalism survive?* New York, NY: Harper & Row.
- Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied Psychology: An International Review*, 48, 23-47.
- Shane, S. (1996). Explaining variation in rates of entrepreneurship in the United States: 1899-1988. *Journal Of Management*, 22(5), 747-781.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Shepherd, D. A. (2003). Learning from business failure: Propositions of grief recovery for the self-employed. *Academy Of Management Review*, 28(2), 318-328. doi:10.5465/AMR.2003.9416377
- Shepherd, D. A. (2004). Educating entrepreneurship students about emotion and learning from failure. *Academy Of Management Learning & Education*, 3(3), 274-287. doi:10.5465/AMLE.2004.14242217
- Sternberg, R., & Wennekers, S. (2005). Determinants and Effects of New Business Creation Using Global Entrepreneurship Monitor Data. *Small Business Economics*, 24(3), 193-203. doi:10.1007/s11187-005-1974-z
- Straub, D., Loch, K., Evaristo, R., Karahanna, E., & Srite, M. (2002). Toward a theory-based measurement of culture. *Journal of Global Information Management*, 13-23.

- Taras, V., Kirkman, B. L., & Steel, P. (2010). Examining the impact of Culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95(3), 405-439. doi: 10.1037/a0018938
- Tezuka, H. (1997). Success as the Source of Failure? Competition and Cooperation in the Japanese Economy. *Sloan Management Review*, 38(2), 83-93.
- Thomas, A. S., & Mueller, S. L. (2000). A Case for Comparative Entrepreneurship: Assessing the Relevance of Culture. *Journal Of International Business Studies*, 31(2), 287-301.
- Tiessen, J. H. (1997). Individualism, collectivism, and entrepreneurship: A framework for international comparative research. *Journal of Business Venturing*, 12(5), 367-384. doi: 10.1016/S0883-9026(97)81199-8
- Tung, R. L., & Verbeke, A. (2010). Beyond Hofstede and GLOBE: Improving the quality of cross-cultural research. *Journal of International Business Studies*, 41(8), 1259-1274. doi: 10.1057/jibs.2010.41
- Ucbasaran, D., Shepherd, D. A., Lockett, A., & Lyon, S. J. (2013). Life After Business Failure The Process and Consequences of Business Failure for Entrepreneurs. *Journal of Management*, 39(1), 163-202. doi: 10.1177/0149206312457823
- Vaillant, Y., & Lafuente, E. (2007). Do different institutional frameworks condition the influence of local fear of failure and entrepreneurial examples over entrepreneurial activity? *Entrepreneurship & Regional Development*, 19(4), 313-337. doi:10.1080/08985620701440007

- Van Praag, C. M. (1999). Some classic views on entrepreneurship. *De Economist*, 147(3), 311-335.
- Venkataraman, S., Van de Ven, A. H., Buckeye, J., & Hudson, R. (1990). Starting up in a turbulent environment: A process model of failure among firms with high customer dependence. *Journal of Business Venturing*, 5, 277-295. doi: 10.1016/0883-9026(90)90006-F.
- Venkataraman, S. (2004). Regional transformation through technological entrepreneurship. *Journal of Business venturing*, 19(1), 153-167. doi: 10.1016/j.jbusvent.2003.04.001
- Venaik, S., & Brewer, P. (2010). Avoiding uncertainty in Hofstede and GLOBE. *Journal of International Business Studies*, 41(8), 1294-1315. doi: 10.1057/jibs.2009.96
- U.S. Department of Commerce (2013). Exporting is Good For Your Bottom Line. *Export.gov*. Retrieved 2013, September 11, from <http://www.trade.gov/cs/factsheet.asp>
- Wagner, J. (2005). *Nascent and infant entrepreneurs in Germany: Evidence from the Regional Entrepreneurship Monitor (REM)*. IZA Discussion Paper No. 1522
- Wagner, J. (2007). What a difference a Y makes-female and male nascent entrepreneurs in Germany. *Small Business Economics*, 28(1), 1-21. doi: 10.1007/s11187-005-0259-x
- Wyrwich, M. (2012). Can socioeconomic heritage produce a lost generation with regard to entrepreneurship?. *Journal of Business Venturing* (2012). doi: 10.1016/j.jbusvent.2012.09.001

Zhao, F. (2005). Exploring the synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behaviour & Research*, 11(1), 25-41.
doi: 10.1108/13552550510580825