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**Opportunity Discovery and  
Creation in Social  
Entrepreneurship: An  
Exploratory Study in Mexico**

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Doctorado en Ciencias  
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México D.F., 30 Enero, 2013



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Thesis to receive the doctoral degree  
in Business Administration

Presented by:

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México D.F., January 30, 2013

## Resumen

El emprendimiento social ha surgido como un nuevo fenómeno en el que, desde hace dos décadas, se han desarrollado nuevos modelos de negocio para ayudar a resolver algunos problemas o necesidades sociales. Mientras la mayoría de los investigadores se han enfocado en tratar de definir el constructo "emprendimiento social", sólo algunos de ellos se han interesado en realizar investigación para entender el proceso de emprendimiento o emprendurismo asociado al fenómeno de "emprendimiento social".

Al considerar que la identificación de oportunidades es un elemento clave del proceso emprendedor, la investigación alrededor de este tema ha surgido como una corriente nueva en las ciencias administrativas. Sin la identificación de una oportunidad no es posible comenzar alguna actividad emprendedora. Además, es importante entender con más claridad los diferentes factores involucrados en el proceso de identificación de oportunidades debido a que se ha sugerido una posible influencia entre la forma en que los emprendedores identifican las oportunidades y el desarrollo y la explotación de éstas. Asimismo, se ha sugerido una posible influencia en la manera en que los emprendedores abordan estas tres fases (identificación, desarrollo y explotación) y el éxito de los emprendimientos.

Este estudio brinda claridad sobre el proceso de identificación de oportunidades en el emprendimiento social mediante la aplicación de las teorías del descubrimiento y creación de oportunidades desarrolladas en el emprendimiento comercial o tradicional.

En este estudio propongo un marco teórico y conceptual para el proceso de identificación de oportunidades en emprendimiento social. Este marco considera algunos factores que pudieran estar presentes en el descubrimiento de oportunidades como la búsqueda de información sobre soluciones de negocio previamente desarrolladas; percepción precisa del medio ambiente; número y diversidad de los lazos-débiles de las redes sociales de los emprendedores sociales; y, algunos factores que pudieran estar presentes en la creación de oportunidades como las capacidades de "bricolage" del emprendedor; la radicalidad de las innovaciones para las soluciones; y, las variaciones miopes o ciegas de los emprendedores sociales.

Para probar la independencia de los constructos "descubrimiento de oportunidades" y "creación de oportunidades" desarrollé escalas válidas y confiables para medirlos. Asimismo, desarrollé un sistema de ecuaciones simultáneas estimando los parámetros por medio de mínimos cuadrados de dos etapas y el uso de variables instrumentales. Además, utilicé un diseño mixto (cuantitativo y cualitativo) para probar las relaciones existentes entre cada uno de los factores identificados y el descubrimiento y creación de oportunidades.

La principal contribución de este estudio es la comprobación de la mutua exclusividad de los constructos "descubrimiento de oportunidades" y "creación de oportunidades". Pruebo que ambos son constructos que constituyen dos elementos diferentes del proceso de identificación de oportunidades en emprendimiento social y no un solo elemento como algunos investigadores lo han venido considerando.

**Palabras clave:**

Emprendimiento social; emprendedor social; oportunidad social; nuevos modelos de negocio; identificación de oportunidades; descubrimiento de oportunidades; creación de oportunidades; creación de valor social.



## **Abstract**

Social entrepreneurship has emerged as a new phenomenon where, for the past two decades, new business models have been developed to help solve some social problems or needs. While most of the scholars have focused on trying to define the construct 'social entrepreneurship', just a few of them have been interested in conducting research to understand the entrepreneurial process associated to social entrepreneurship phenomenon.

Considering that opportunity identification is a key element within the entrepreneurial process, research around this topic has emerged as a novel stream in management. Without the identification of an opportunity it is not possible to start any entrepreneurial activity. Furthermore, it is important to understand with more clarity the different factors involved in the opportunity identification process since these factors could lead social entrepreneurs to a correct opportunity development and exploitation; which finally might be influencing the success of social ventures.

This study sheds light on the opportunity identification process in social entrepreneurship through the application of the theories of opportunity discovery and opportunity creation developed in commercial entrepreneurship.

In this study I propose a theoretical and conceptual framework for the opportunity identification process in social entrepreneurship. This framework includes some factors that might be present in opportunity discovery such as social entrepreneur's information search of preexisting business solutions; social entrepreneur's accurate perception of the environment; number and diversity of weak-ties of social entrepreneurs' social networks; and some factors that might be present in opportunity creation such as social entrepreneur's *bricolage* capabilities; innovation radicalness of solutions; and, social entrepreneur's blind or myopic variations.

To test the independence of the constructs 'opportunity discovery' and 'opportunity creation' I developed valid and reliable scales to measure them. In addition, I developed a system of two simultaneous equations estimated by two-stage least squares using instrumental variables. Moreover, I used a mixed design (quantitative and qualitative) to test the relationships between each factor and opportunity creation and discovery.

The main contribution of this study is the confirmation of the mutual exclusivity of the constructs 'opportunity discovery' and 'opportunity creation'. I prove that both constructs are different elements of the opportunity identification process in social entrepreneurship and not a single element as it has been considered by some scholars.

**Keywords:**

Social entrepreneurship; social entrepreneur; social opportunity; new business models; opportunity identification; opportunity discovery; opportunity creation; social value creation.

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In an entrepreneurial society individuals face a tremendous challenge, a challenge they need to exploit as an opportunity: the need for continuous learning and relearning.

—Peter F. Drucker, *Innovation and Entrepreneurship* (1985)

## **1. Introduction**

Identification and exploitation of social opportunities has emerged as a novel stream of research in social entrepreneurship. While most of the scholars have focused in trying to define the construct 'social entrepreneurship', just few of them have been interested in conduct research to bring light on the entrepreneurial process associated to the social entrepreneurship phenomena. Within this entrepreneurial process, the identification and exploitation of opportunities has been studied from different perspectives. However, there is still no empirical research based on existent theory that could bring light on the way social entrepreneurs create or discover social opportunities.

There is the consensus among scholars that opportunity identification is the most fundamental element in the entrepreneurial process (Corner and Ho, 2010; Gaglio and Katz, 2001; Short et al., 2010). Without the identification of an opportunity it is not possible to start any entrepreneurial activity. Moreover, it is important to understand with more clarity the factors involved in the opportunity identification process since this could lead to a correct opportunity development, exploitation, and a possible successful venture.

The discovery and creation of opportunities (Alvarez and Barney, 2007; Vahgely and Julien, 2010) are the two main theories developed around the process of opportunity identification. Nevertheless, there are few empirical studies in social entrepreneurship related to understand the factors that lead social entrepreneurs to discover or create social opportunities.

The main purpose of this research is to advance the theory in opportunity identification in social entrepreneurship by applying the theories of creation and discovery of opportunities.

## **1.1. Problem statement**

Research on the identification of opportunities in social entrepreneurship has attracted scholarly attention only recently. Therefore, little is known about how social opportunities are formed and exploited by social entrepreneurs. Furthermore, there is still no empirical quantitative research based on the existent theory that could bring light on the ways social entrepreneurs create or discover social opportunities.

Trying to understand with more clarity the different factors involved in the opportunity identification process in social entrepreneurship will permit a better understanding of the impact of these factors in the development and exploitation of opportunities and will contribute to set the basis for future research in the field.

The research conducted in this study will be guided by the following research question: Which factors lead social entrepreneurs to discover or create social opportunities?

### **1.1.1. Research questions**

The research questions derived from the research problem are:

- What is social value?
- How can the term “social opportunities” be defined?
- Which factors lead social entrepreneurs to discover social opportunities?
- Which factors lead social entrepreneurs to create social opportunities?
- Is it possible that the same social entrepreneur sometimes discover social opportunities and some others create social opportunities?
- What will make the difference between one situation and the other?
- Is the context relevant in the discovery or creation of social opportunities?

### **1.1.2. Research objectives**

General objective:

- To conduct research in the field of social entrepreneurship to understand with more clarity the different factors involved in the identification of social opportunities through the perspective of the theories of discovery and creation of opportunities.

Specific objectives:

- To identify from the theories of discovery and creation of opportunities in entrepreneurship the main factors that lead entrepreneurs to discover or create opportunities that could be applied to social entrepreneurship.
- To propose a conceptual and theoretical model of the factors that lead social entrepreneurs to create or discover social opportunities.
- To construct an instrument to test the proposed hypotheses using a sample of social entrepreneurs who founded their social projects in Mexico.

## **1.2. Justification**

Among the different social problem in many countries around the world, poverty alleviation has been one of the top priorities that governments have faced in both developed and developing countries for the last years. More recently, business people, civil society and scholars have joined to the efforts done by governments and other international organizations to find a solution to this and some other social issues in order to enhance the living conditions of millions of people around the world.

One of the main global efforts done to alleviate poverty has been the World Summit for Social Development, which in March 1995 described poverty eradication 'as an ethical, political and economic imperative', and it was identified as "one of the three pillars of social development. Poverty eradication has since become the overarching objective of development, as reflected in the internationally agreed development goals, including the Millennium Development Goals, which set the target of halving global extreme poverty by 2015" (UN, 2010:iii).

In spite of the willingness of many people to alleviate poverty, there is still long road to walk. There are studies that show that income and wealth disparities have grown and the number of poor people has increased in the last years (Lewis, 2007; UN, 2010). In this sense, the last Human Development Report published by the United Nations Development Programme, estimates that almost 1.75 billion people in 104 countries are living in multidimensional poverty (UNDP, 2010:96). Multidimensional poverty is a new way to measure poverty without just centering the attention in monetary variables which is the case for "income poverty". This

new concept includes variables such as health, education and living standards and it is suggested that it captures in a better way the reality of millions of people in the world.

In the case of Mexico, in 2010, from 112.3 million people living in the country (INEGI, 2011) 52.1 million were in a situation of "poverty" which means that they did not have the income to satisfy at least one of the following minimal needs: health, education, food, shelter, and clothes (CONEVAL, 2012:48-49). Moreover, in the period 2008-2010, the number of poor people increased in more than three million people, from 48.8 million people in 2008 to 52.1 million people in 2010, which represents an increase of 1.7% (CONEVAL, 2012:48).

Some of the efforts done by the Mexican government to reduce the number of poor people are represented by social programs such as *Oportunidades* (Opportunities), and *Hábitat*.

*Oportunidades* is a social program created in 1997 with the previous name of *Progresa*. In 2002, President Vicente Fox Quesada changed the name and the scope of this program to include food, education, and health (DOF, 2002). The main objective of this program is to provide support to the people in extreme poverty in rural Mexico, bringing them access to better conditions of life through the enhancement of their alimentation, health, education and opportunities to work. On the other hand, *Hábitat* is a social program created in 2003<sup>1</sup> to overcome the condition of poverty of those people living in cities with at least 15 thousand inhabitants, and to enhance their standard of living through the construction of dwellings and communities centers (DOF, 2009). More recently, the Mexican government created the *Seguro Popular* (Popular Insurance) to give assistance to those people who do not have public (*i.e.* ISSSTE and IMSS) or private health insurances.

Despite the efforts done by the Mexican government to implement social programs to help people in disadvantage to improve their quality of life, national statistics shown that the number of poor people has increased in the last years (CONEVAL, 2012).

These indicators give us an idea of the difficulties the Mexican government has faced to fight against poverty, and some other social problems. There is evident the existence of a gap between the efforts done by the government and the real situation. This gap represents an

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<sup>1</sup><http://innova.fox.presidencia.gob.mx/ciudadanos/biblioteca>, date of access: October 10<sup>th</sup>, 2010.



opportunity for civil society, businesses and academy, to contribute in finding a solution to address main social problems.

From the field of management, there are interesting proposals to improve the condition of millions of people in what Prahalad and Hart have denominated “the bottom of the economic pyramid” (2002). Jeffrey Sachs, for example, proposes a key strategy for ending extreme poverty by 2025. This strategy focuses on investment in people and infrastructure in impoverished communities around the world, empowering individuals to achieve better life conditions and establishing a system of governance that will let them be responsible and live with dignity (Sachs, 2005). In a more recent vision to address the problem of poverty, Hart (2007) proposes investment in the ‘base of the pyramid markets’ by the creation of new business models which imply “radical business model innovation” (2007:136), and the conception of the poor as partners to create “entirely new business ecosystems” (2007:156). These types of businesses can be seen as more inclusive businesses, which, in some cases, have been also known as social enterprises. This is how, in the efforts to contribute to alleviate poverty and some other social problems, it has been revealed the presence of a new phenomenon: social entrepreneurship (Seelos et al., 2006). Indeed, in many countries, there is evidence that shows that through social entrepreneurship people can improve their lives in a sustainable way. Therefore, there is a need to have a better understanding of the way social entrepreneurs identify social opportunities.

Since the opportunity identification process is a key element within social entrepreneurship, the research done in this study will bring light to that process through applying the theories of discovery and creation of opportunities. The results of this research will help social entrepreneurs, scholars and policy makers to understand with more clarity the different factors associated to the process of discovery and creation of social opportunities.

### **1.3. Delimitation of the research topic**

Since the entrepreneurial process includes the identification, development and exploitation of opportunities, in this study I am focused in the first stage of the entrepreneurial process, the opportunity identification. To approach to the research topic, this study is informed by the previous work developed in social entrepreneurship related to the definitions of some

important constructs such as 'social entrepreneurship', 'social entrepreneur', 'social opportunity', 'social value', and 'social value creation'; and by the work related to opportunity identification in this field.

This study is also informed by the literature in opportunity identification in commercial entrepreneurship; specifically, the theories of opportunity discovery and opportunity creation.

#### **1.4. Structure of the study**

This study is divided in eight chapters. In the first chapter I present the research problem, the research questions and the general and specific objectives. I also include the justification and the relevancy of the study.

In the Chapter 2 I present the literature review on social entrepreneurship related to the main topics that I used to build the conceptual framework. I also present the literature review on opportunity identification and the theories of discovery and creation. I identify the main factors that might be present in opportunity discovery and opportunity creation.

In the Chapter 3 I present the theoretical and conceptual model I have developed for opportunity identification in social entrepreneurship. I develop the hypothesis for each factor that I identified that might be present in the processes of opportunity discovery and opportunity creation.

In the Chapter 4 I present the study design and the methodology I followed to do the study including the operationalization of the variables, the construction of the questionnaire and the empirical approach I used to analyze the data.

In the Chapter 5 I present the results of this study. The chapter is divided in three parts: the results on the qualitative analysis, the results on the quantitative analysis, and the comparison between qualitative and quantitative data analyses.

In the Chapter 6 I present the discussion of the contributions of this study on the light of the literature in social and commercial entrepreneurship.

Finally, in the Chapter 7 I present the conclusions, limitation of the study, implications for social entrepreneurs and supporters, and future routes of research.

### **1.5. Relevance of the study**

This study is relevant since I develop the theory of opportunity identification in social entrepreneurship based on the previous theory developed in commercial entrepreneurship, which contributes, in an overall way, to advance the theory of social entrepreneurship and to give further support to the legitimacy of this field as an independent field of knowledge (Cummings, 2007).

The majority of researchers in both commercial and social entrepreneurship agree with the notion of opportunity as the main element of the entrepreneurial process (e.g. Drucker, 1985; Dees, 2001; Mair and Martí, 2006; Peredo and McLean, 2006; Venkataraman, 1997; Weerawardena and Mort, 2006). Without the identification of an opportunity there is not possible to start any commercial or social business.

This study set the basis for future research in the fields of social and commercial entrepreneurship related to the process of opportunity identification through the lenses of the theory of discovery and creation of opportunities. With the results of this study it will be possible to continue the research on different routes including the impact of opportunity identification on the entrepreneurial action and its relationship with the success or failure of a business or social venture.

To delimit the relevancy of this study, I considered the four criteria introduced by Shank and Vilella (2004:48): "investigative depth, interpretative adequacy, illuminative fertility, and participatory accountability."

Investigative depth refers to study of areas of knowledge previously unaddressed with enough depth. In this study I intend to bring light in the relationships established between the two dependent variables I have identified as "opportunity discovery" and "opportunity creation", and their independent variables: "entrepreneurial alertness" for the former and "bricolage capabilities", "innovation radicalness", and "blind or myopic variations" for the last

one. These relationships have been not studied before in a context of social entrepreneurship and the contribution done by this study could give new directions to scholars interested in this field of knowledge.

The criterion of interpretative adequacy refers to the degree of understanding of the things that have been emerging through the investigative depth. This new findings have to be understood for all impartial readers who are interested in this field of knowledge. In this sense, this study intends to provide sufficiency of qualitative and quantitative data in an adequate context.

Illuminative fertility refers to the extent our findings shed light on new ways to understand and live in the world. What will be the impact of the findings of this study to change the actual practice? This study will contribute to the foundation of a theory of opportunity identification that will permit a more depth understanding of the actions taken by social entrepreneurs to form or discover an opportunity to change society. It is intend that social entrepreneurs and their supporters will give clearer steps toward the formation of successful solutions for social problems previously identified. It is suggested that if social entrepreneurs have a better understanding of the ways they form social opportunities, they will have a change in their actions because they will have more tools to take decisions more consciously. This consciousness could be the initial point in the path to a successful social project.

Finally, participatory accountability is considered in this study. Each participant was informed about the scope, objectives, and results of the study. I also intend to publish the significant findings of this study to contribute to legitimate this nascent field of knowledge.

In the next chapter I present the literature review in social entrepreneurship, particularly in opportunity identification.

## **2. Literature review**

### **2.1. Current state of social entrepreneurship**

Social entrepreneurship is a novel stream of research in management. Literature on this topic has been developed since the 80's and has moved in different areas of knowledge: from public policy to for-profit organizations. However, there are multiple definitions for the construct "social entrepreneurship" and its boundaries are still not clear (Short et al., 2009).

Some scholars center the study of social entrepreneurship on the characteristics of the entrepreneur (Drayton, 2002; Thompson et al., 2000; Bornstein, 1998), but social entrepreneurship implies more than the study of those characteristics, it also involves the study of the processes and the organizations such as social enterprises (Mair and Martí, 2006). There are still some doubts about the differences between social entrepreneurs and other actors who have similar characteristics to the former but who are not social entrepreneurs. More importantly, there is now emerging the idea that communities can also be seen as entrepreneurs as a whole (Peredo and Chrisman, 2006) sustaining that by examining the set of activities underlying social entrepreneurship as a process (Mair and Martí, 2006) could be a more fruitful approach than only center the study in the characteristics of entrepreneurs. This way, the entrepreneurial process focuses on the actions done by social entrepreneurs instead of just studying their characteristics (Dees, 1998).

To try to understand what social entrepreneurship is, some scholars have started to analyze the two components of the word: the entrepreneurial and the social components (Mair and Martí, 2006; Peredo and McLean, 2006). We can understand how difficult it has been for researchers to obtain consensus in defining a construct of social entrepreneurship by considering the myriad of definitions just for the construct "entrepreneurship" (Shane and Venkataraman, 2000; Davidsson et al., 2001).

For Venkataraman, entrepreneurship "seeks to understand how opportunities to bring into existence "future" goods and services are discovered, created, and exploited, by whom, and with what consequences"(1997:120). This author also embraces the consequences for the exploiter, stakeholders, and society as a whole (Short et al., 2009). From Venkataraman's definition of entrepreneurship, we could derive that the person who discovers, creates and

exploits the opportunities is the entrepreneur. From a “minimalist” perspective, an entrepreneur is a “person who starts or organizes a commercial enterprise, especially one involving financial risk” (Peredo and McLean, 2006:57); however, this definition lacks the concepts of opportunity and value creation, which are basic elements when talking about entrepreneurship. To give an example we can think of a person in Mexico that sells “tamales”, which is a traditional Mexican dish, on the street. From the perspective of value creation this person is not an entrepreneur because he or she is not creating value (Dees, 1998) through innovative processes, products, services or means (Drucker, 1985).

For Drucker (1985) entrepreneurship involves the identification, development and exploitation of opportunities through the innovative use of resources and means to generate a business model that will create value to the owners.

On the other hand, the social aspect of social entrepreneurship has been less studied by scholars and it has not been defined yet. Some scholars sustain that the social aspect of the construct refers to the social mission of the ventures started by social entrepreneurs: “There is a broad agreement that social entrepreneurs and their undertakings are driven by social goals; that is, the desire to benefit society in some way or ways” (Peredo and McLean, 2006:59). This perspective would situate in the social entrepreneurship domain just those individuals who have social goals; however, there is research in social entrepreneurship that shows successful cases of individuals who have pursued both social and for-profit goals (Hart, 2007; Karnani, 2006; Seelos and Mair, 2005).

If we talk about the domains of social entrepreneurship, the majority of scholars allocate social entrepreneurship to the world of non-for-profit organizations (Lasprogata and Cotton, 2003; Mort et al., 2003). On the other hand, there are researchers who believe that social entrepreneurship can also apply to the world of for-profit organizations (Austin et al, 2006; Seelos and Mair, 2005). There is also a third group who believes that social entrepreneurs can be found in a hybrid context of for-profit and not-for-profit organizations, and even in the public/governmental sector (Austin et al., 2006; Bornstein, 2007; Dees, 1998; Peredo and McLean, 2006). In this hybrid context there have been case studies about the work of for-profit companies collaborating with social entrepreneurship partners to alleviate the condition of millions of poor people in “the Bottom of the Pyramid” (2005). A fourth group where the

term “social entrepreneurship” has been applied is the “voluntary” or “citizen” or “third sector”, as some researchers named it to refer to those individuals who work to serve others and, at the same time, create social value (Thompson, 2002).

In an effort to help delimit the boundaries of social entrepreneurship, Short et al. (2009) did the most recent review of the literature of social entrepreneurship and tried to establish a new point of departure for research in this area. They looked for all the articles published in different “management and entrepreneurship journals where the primary topic of interest was related to social entrepreneurship or the social entrepreneurship phenomena” (2009:162). The articles they considered were those written exclusively in English, and they found publications from the U.K, U.S., India, Canada, Australia, Brazil, Israel, Italy, Kenya, Nepal, New Zealand, Nigeria, Norway, South Africa, and Spain. In the articles they reviewed, definitions of social entrepreneurship were developed in different domains, such as not-for-profits, for-profits, the public sector, and combinations of the three. They suggested that this diversity of contexts was a factor that has impeded the development of a single definition or construct. They also tried to understand the boundaries of social entrepreneurship, and proposed a framework for the three domains where this topic has been developed: entrepreneurship, public and nonprofit management, and social issues in management. The boundaries of social entrepreneurship would be in the intersection between entrepreneurship and public and nonprofit management, entrepreneurship and social issues, and entrepreneurship and public and nonprofit management and social issues in management. We can observe that “entrepreneurship” is the central element that links the three domains. Short et al. (2009:172) conclude that the conceptual overlap among these three domains “presents social value creation as combining resources to exploit opportunities to solve social problems and contribute to human well-being.” In this conclusion, Short et al. (2009) consider social value creation as something that affects only human beings and they are not considering other living organisms on earth. I believe there is the need to consider a more holistic definition for “social value” creation since there are some scholars who have started a debate about the different elements that could be considered as “social value”, including the environment, the non-living and living organisms on earth (Brickson, 2007).

Finally, Short et al. (2009) consider context plays a key role in social entrepreneurship research. In this sense, Austin et al. (2006) suggest that tax, regulatory, sociocultural,

demographic, political, and macroeconomic factors all impact social entrepreneurship. Weerawardena and Mort (2006) sustain that social value creation is constrained by turbulent and dynamic context that impacts venture performance and resource acquisition.

## **2.2. Definitions**

### **2.2.1. Definitions of social entrepreneurship**

Different efforts have been done to define the construct social entrepreneurship. While some definitions are narrow and see this phenomenon as the creation of new business models to provide products and services to satisfy social needs of people in disadvantage (e.g. Seelos and Mair, 2005), other are broader and see the construct as a process with multiple dimensions (e.g. Peredo and McLean, 2006; Weerawardena and Mort, 2006).

Broader definitions highlight the inclusion of terms associated with entrepreneurship such as innovation, social value creation, recognition and exploitation of opportunities, innovative use and combination of resources to pursue opportunities, and risk management. However, some of these concepts are vaguely defined and in many cases do not differentiate among the terms “social entrepreneurs”, “social entrepreneurship”, and “social enterprise”. There is a lack of inclusion of these three elements in the majority of the definitions (e.g. Dees, 1998; Peredo and McLean, 2006). Mair and Martí (2006) give a broader definition of social entrepreneurship and clearly differentiate among these three actors of social entrepreneurship. They define social entrepreneurship as a “process involving innovative use and combination of resources to pursue opportunities to catalyze social change and/or address social needs.” (2006:37).

What is clear is that most definitions of social entrepreneurship agree with the idea that it is an innovative activity to create social value rather than personal and shareholder wealth (Zadek and Thake, 1997; Austin et al., 2006) and that the key element in common in the majority of definitions is the entrepreneurial component of the term. Indeed, the concept of opportunity is relevant in the literature of commercial entrepreneurship and there is the consensus among scholars that opportunity is also a crucial element in social entrepreneurship (Mair and Martí, 2006).



According to Dees (1998) "contemporary writers in management and business have presented a wide range of theories of entrepreneurship. Many of the leading thinkers remain true to the Say-Schumpeter tradition while offering variations on the theme." (1998:2). For Drucker (1985) entrepreneurs exploit opportunities that cause change (in technology, consumer preferences, social norms, etc.). Therefore, we can see how "opportunity" is a key concept of social entrepreneurship (Mair and Martí, 2006).

Some of the different definitions of social entrepreneurship reviewed in this study are presented in Table 2.1. These definitions were selected because they come from the most cited authors in the literature of social entrepreneurship.

**Table 2.1. Definitions and domains of social entrepreneurship (chronological order).**

Author	Social entrepreneurship definition	Domains			
		Not-for-profit organizations	Governmental organizations	Hybrid (Pursuing social and for-profit objectives)	Individual
Dees (1998)	Any definition of social entrepreneurship should reflect the need for a substitute for the market discipline that works for business entrepreneurs.  He defines social entrepreneurship in terms of social entrepreneurs.	*		*	*
Mort, Weerawardena and Carnegie (2003)	Social entrepreneurship is a multidimensional construct involving the expression of entrepreneurially virtuous behavior to achieve the social mission, a coherent unity of purpose and action in the face of moral complexity, the ability to recognize social value-creating opportunities and key decision-making characteristics of innovativeness, proactiveness, and risk-taking. (p.76).	*			

Pomerantz (2003)	Social entrepreneurship can be defined as the development of innovative, mission-supporting, earned income, job creating or licensing, ventures undertaken by individual social entrepreneurs, nonprofit organizations, or nonprofits in association with for profits. (p. 25).	*	*	*	*
Seelos and Mair (2005)	Entrepreneurship that creates new models for the provision of products and services that cater directly to basic human needs that remain unsatisfied by current economic or social institutions. (p. 243-244).	*	*	*	
Austin (2006)	Social entrepreneurship is innovative, social value creating activity that can occur within or across the nonprofit, business, and public sectors. (p. 22).	*	*	*	
Cho (2006)	Social entrepreneurship is a set of institutional practices combining the pursuit of financial objectives with the pursuit and promotion of substantive and terminal values. (p. 36).	*		*	
Mair and Marti (2006)	Social entrepreneurship is a process involving innovative use and combination of resources to pursue opportunities to catalyze social change and/or address social needs. (p.37).	*		*	*

Mair and Noboa (2006)	Social entrepreneurship is the innovative use of resource combinations to pursue opportunities aiming at the creation of organizations and/or practices that yield and sustain social benefits. (p. 122).	*		*	
Peredo and McLean (2006)	Social entrepreneurship is exercised where some person or group: (1) aim(s) at creating social value, either exclusively or at least in some prominent way; (2) show(s) a capacity to recognize and take advantage of opportunities to create that value ("envision"); (3) employ(s) innovation, ranging from outright invention to adapting someone else's novelty, in creating and/or distributing social value; (4) is/are willing to accept an above –average degree of risk in creating and disseminating social value; and (5) is/are unusually resourceful in being relatively undaunted by scarce assets in pursuing their social venture. (p. 64).	*		*	*
Perrini and Vurro (2006)	Social entrepreneurship is a dynamic process created and managed by an individual or team (the innovative social entrepreneur), which strives to exploit social innovation with an entrepreneurial mindset and a strong need of achievement, in order to create new social value in the market and community at large. (p. 78).	*		*	

Robinson (2006)	Social entrepreneurship is a process that includes: the identification of a specific social problem and a specific solution... to address it; the evaluation of the social impact, the business model and the sustainability of the venture; and the creation of a social mission-oriented for-profit or a business-oriented nonprofit entity that pursues the double (or triple) bottom line. (p.95).	* (Business oriented)		* (Associated with a not-for-profit)	
Weerawardena and Mort (2006)	Social entrepreneurship is a behavioral phenomenon expressed in non-for-profit organization context aimed at delivering social value through the exploitation of perceived opportunities. (p. 25).  Social entrepreneurship can be viewed as an overall abstraction of innovativeness, proactiveness and risk management within the constraints of environment, sustainability and social mission. (p. 33).	*			
Shaw and Carter (2007)	The term "social entrepreneurship" has emerged as a new label for describing the work of community, voluntary and public organizations, as well as private firms working for social rather than for-profit objectives. (p.419).	*	*	*	
Zahra et al. (2008)	Social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by	*		*	

	creating new ventures or managing existing organizations in an innovative manner. (p. 118).				
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We can observe in the Table 2.1 that even though there is not a unique definition of social entrepreneurship, in general terms there are elements which are most mentioned by several scholars such as 'identification of social problems', 'innovation', 'mission', 'social change', 'social value creation', 'opportunity', 'new models', 'use and combination of resources', 'solutions'. Some of these common elements can be understood as "entrepreneurial elements" since they are elements present in the literature of commercial entrepreneurship. We can also observe from this table that social entrepreneurship has been highly identified in not-for-profit context followed by the hybrid context.

Despite Dees (1998) is one of the most quoted authors, he does not define the construct. This can be understood because he is one of the first scholars who started to talk about this subject and research was in its initial point. More recently, scholars have been conceptualizing social entrepreneurship as a process which involves the identification of opportunities, the organizational launch and functioning, and the innovative use and combination of resources (financial, capital and human) to pursue social change (Mair and Marti, 2006; Perrini and Vurro, 2006; Robinson, 2006; Weerawardena and Mort, 2006).

With the exception of Cho (2006), none of the authors mentioned in the Table 2.1 explain what 'social' or 'social value creation' mean. Cho sustains that the vision of the "social" aspect of 'social entrepreneurship' is referred to organizations which operate to promote a positive change that will benefit a community in outstanding ways.

The call of the majority of scholars in this area of research is the development of a more integrative definition which can contemplate the different elements that have characterized social entrepreneurship until now.

### 2.2.2. Definitions of social entrepreneur

Since the unit of analysis in this study is the social entrepreneur it is necessary to review the literature to understand the different definitions that have been developed for this construct. The Table 2.2 shows some definitions proposed in literature for the concept 'social entrepreneur'.

**Table 2.2. Different definitions for “social entrepreneur” (chronological order).**

Author(s)	Definition for social entrepreneur
Waddock and Post (1991)	<p>“Social entrepreneurs are private sector citizens who play critical roles in bringing about “catalytic changes” in the public sector agenda and the perception of certain social issues.” (p. 393).</p>
Dees (1998)	<p>“Social entrepreneurs play the role of change agents in the social sector, by:</p> <ul style="list-style-type: none"> <li>• Adopting a mission to create and sustain social value (not just private value),</li> <li>• Recognizing and relentlessly pursuing new opportunities to serve that mission,</li> <li>• Engaging in a process of continuous innovation, adaptation, and learning,</li> <li>• Acting boldly without being limited by resources currently in hand, and</li> <li>• Exhibiting heightened accountability to the constituencies served and for the outcomes created.” (p. 2-3).</li> </ul>
Drayton (2002)	<p>“Social entrepreneurs are individuals who focus their entrepreneurial talent on solving social problems.” (p. 123).</p>
Mort et al. (2003)	<p>“Social entrepreneurs differ from business entrepreneurs in terms of their mission. Social entrepreneur is one who is socially entrepreneurially virtuous, and whose mission is to create social value for the social organization with which they are associated. Three criteria have been established for virtue:</p> <ol style="list-style-type: none"> <li>1) That the agent is consciously aware of what she/he is doing.</li> <li>2) The agent must choose to perform the virtuous action for its own sake, not for any ulterior motive.</li> <li>3) The agent must continue to act in this way until the action has become habituated.” (p.83).</li> </ol>

Baron (2005)	"The term social entrepreneur is used to refer to one who is willing to create a CSR [Corporate Social Responsibility] firm at a financial loss. The latter sacrifices financial returns but gains satisfaction." (p.5).
Christie and Honig (2006)	"The social entrepreneur is acting as a change agent to create and sustain social value without being limited to resources currently in hand." (p. 2).
Mair and Noboa (2006)	"Social entrepreneurs are moved by different motivations to discover and exploit a distinct category of opportunities; [...] the way they pursue opportunities might diverge from typical business approaches; [...] the outcomes social entrepreneurs aim for involves both social and economic aspects." (p.121).
Perrini and Vurro (2006)	"Social entrepreneurs are change promoters in society; they pioneer innovation within the social sector through the entrepreneurial quality of a breaking idea, their capacity building aptitude, and their ability to concretely demonstrate the quality of the idea and to measure social impacts." (p. 69).
Seelos, Ganly and Mair (2006)	"The Schwab Foundation defines a social entrepreneur as someone who [among other things]: 'identifies and applies practical solutions to social problems...; innovates by finding a new product, service or approach...; focuses... on social value creation...; resists being trapped by the constraints of ideology or discipline; [and] has a vision, but also a well-thought out roadmap as to how to attain the goal.'" (p. 241).
Shaw and Carter (2007)	"Social entrepreneurs are those people who bring to social problems the same enterprise and imagination that business entrepreneurs bring to wealth creation. Are individuals who initiate social innovation and change and individuals who are motivated by the opportunity to adopt an innovative approach and creative use of resources and contacts to satisfy needs which state welfare systems cannot or will not meet." (p. 422).
Bacq et al. (2011)	"Social entrepreneurs share a series of behavioral characteristics with the commercial entrepreneurs, such as: the ability to detect opportunities, the drive to innovate, the willingness to bear risk, and the display of proactive behavior towards survival, growth and serving the market. [However] they show a key difference in terms of motivation to engage in social activities: social entrepreneurs demonstrate a socio-moral motivation in their entrepreneurial activities." (p.6).

We can observe from the definitions in the Table 2.2 that the majority of the researchers highlight the social mission as the main driver for social entrepreneurs. There are also some characteristics of social entrepreneurs that have been pointed out by these authors: social entrepreneurs act as change agents who are focused in create social value through the identification of opportunities and the innovative use of resources to satisfy social needs or solve social problems.

The concept of social entrepreneur was first associated to the work developed in the public domain by individuals pertaining to private sector (Waddock and Post, 1991). Their main activities were to find resources from different organizations “to solve social problems by involving other individual and organizational actors in a long-term process of problem solving resulting from changed public attitudes and awareness of the issues.” (1991:400). However, the advancement of the literature in social entrepreneurship has shed light on the behavior and characteristics of social entrepreneurs which has lead researchers to include new elements to define these individuals.

Some authors have distinguished between commercial and social entrepreneurs (e.g. Mair, 2006; Bacq et al., 2001). The distinctions have been focused in the mission each one pursues. While commercial entrepreneurs look for the creation of commercial value, social entrepreneurs intend to create social value. However, there are still questions related to the differences and similarities between these two types of entrepreneurs.



### **2.2.3. Definitions of social opportunity**

The majority of scholars agree with the idea that opportunity is a key element in defining both commercial and social entrepreneurship constructs (e.g. Drucker, 1985; Dees, 2001; Mair and Martí, 2006; Peredo and McLean, 2006; Venkataraman, 1997; Weerawardena and Mort, 2006). Nevertheless, scholars distinguish between commercial and social opportunities (Austin et al. 2006; Dorado, 2006; Mair, 2006; Robinson, 2006), establishing the differences in the type of mission and the type of value creation of each one.

Zahra et al. (2008) point out the vagueness in literature to define social opportunity and they sustain that this definition needs to go beyond the merge of the terms “economic” and “non-economic.” However, they do not propose a definition for the construct. Instead, they propose that social opportunities are global in nature just because social problems are so. What they do is to talk indistinctively between social needs, social problems and social opportunities leading to confusion among these concepts. Certainly, social needs are global in nature because human beings all over the world are facing problems related to health, poverty, shelter, developments, etc. However, the ways to solve those problems, in many cases, are particular to every region in the world. It is not the same, for example, to help solving the problem of water scarcity in a developing country than in a developed one.

What the authors do is to mix the terms global needs and global opportunities. In a general way, human needs are global in nature because these needs will be present in every country in the world. However, the solutions to satisfy those needs might be different in each region.

These authors use the five criteria proposed by the behavioral theory of the firm to decide if any social opportunity is globally viable. These criteria are: prevalence, relevance, urgency, accessibility, and radicalness (2008:122). However, once more, these authors got confused while they tried to differentiate between the problem and the solution. As we will see later in this chapter, opportunities are related to solutions more than to problems. I can see a problem but if I do not have any solution to that problem, how can I have an opportunity there? I can see the problem and have an idea to solve the problem but if that idea is not feasible how can I talk about an opportunity? Only when I have a solution that can be launched or started is when I can talk about an opportunity.

The first criterion, prevalence, is related to the frequency a social problem is present in some regions of the world. Zahra et al. (2008) sustain that social opportunities might vary depending on the different interests of social entrepreneurs. This means that, for example, for some social entrepreneurs, poverty might form social opportunities while for others, climate change would do it. In this point, the authors get into a contradiction because they sustain that opportunities are global in nature but they give examples of local solutions to describe this criterion. It is not that they give a global solution that could apply to each region of the world where similar social problems exist.

Relevance is the second criterion proposed by the behavioral theory of the firm. This criterion is related to the specific characteristics of social entrepreneurs, these are their background, values, talents, skills, and resources. For each entrepreneur social problems will have different priority and consequently the opportunities they identify will also be different. Zahra et al. (2008:123) point out that in some situations a conflict might arise between the opportunities social entrepreneurs identify and those they really can address. They give the example of a social entrepreneur who identifies the opportunity to help solving blindness in some region of the world, but he or she really does not have the knowledge, experience and resources to do so. Instead, this social entrepreneur could have the abilities to teach and he or she finds more feasible to start a project to train people in disadvantage and prepare them to find a job or work in a handicraft profession.

The third criterion, urgency, is related to the promptness in solving social problems originated by unpredictable events such as natural disasters, wars, or political instability. When an event of this nature occurs, different opportunities might be formed and there is the need for social entrepreneurs to act quickly to identify them and exploit them. Zahra et al. (2008:123), consider that "urgent societal problems typically push entrepreneurs to engage in a *problem solving search*."

The fourth criterion, accessibility, refers to the difficulty to solve social problems. The more accessible a problem is will be easier to solve it. On the contrary, the less accessible a problem is, the more difficult will be to solve it. The authors suggest that social entrepreneurs would be looking to address those social problems that are less accessible or highly difficult to solve. By assuming this, the authors are suggesting that social entrepreneurs might see

opportunities only in social problems with high difficulty, which is not completely true if we consider that any social problem represents a social opportunity that could be addressed by social entrepreneurs.

The fifth and last criterion proposed by Zahra et al. (2008) to delimit a social opportunity is radicalness, which is closely related to accessibility because if a social problem is less accessible, more radical solutions are needed to solve it. This means that innovative solutions might be a central characteristic of those opportunities addressed by social entrepreneurs.

Since Zahra et al. (2008) do not succeed in defining the construct for 'social opportunity'; we can see how they got confused about the differences between social problems and social opportunities. This confusion is more evident when the authors applied the five criteria to delimit social opportunities. They applied indistinctly the first three attributes to denote problems and opportunities, and only for the last two attributes do they clearly relate them to opportunities. Moreover, the authors did not conduct empirical research to confirm the presence of these attributes to define social opportunities.

Other authors consider that opportunities in social entrepreneurship are a "cognitive process followed by entrepreneurs as they intentionally identify a solution to a specific problem or need because of diverse motivations, including financial rewards" (Perrini and Vurro, 2006:65). However, this definition is very general and could be applied to both commercial and social entrepreneurship, which does not give support to the social aspect of social entrepreneurship.

The concept of opportunities has been mainly developed in commercial entrepreneurship, and its importance comes from the outcomes that follow opportunity development, including new firm creation, new venture growth, and small firm growth (Short et. al, 2010:56). It has also been highly linked to the concept of entrepreneurial action by many researchers (Eckhardt and Shane, 2003; Shane, 2003; Venkataraman, 1997; Alvarez and Barney, 2007). Indeed, Short et al. (2010) in their very up-to-date research have identified opportunities as one of the key concepts that define the boundary and exchange conditions of the entrepreneurship field (Short et al., 2010:41); they also found that the research surrounding

the opportunity construct has been theoretically rich, and has embraced a multitude of theories, including coherence theory, creation theory, discovery theory, organizational learning, research on affect, social cognitive theory, and structuration theory.

To have a better understanding of how social opportunities differ from commercial ones, it is important to review the work done by some scholars that have been trying to define the construct of *opportunity*.

The Webster's Encyclopedic Unabridged Dictionary of the English Language (1989:1010) defines 'opportunity' as "an appropriate or favorable time or occasion, a situation or condition favorable for attainment of a goal, a good position, chance, or prospect for advancement." The word 'opportunity' has its roots in the Latin word *opportunitāt* which means 'fitness'. This would be the definition for the word 'opportunity' in general terms.

However, in the academy, the definition of opportunity has been associated with each field where this concept has been used and with the different processes associated with it. This situation has led to multiple ways to define the construct, "variance in using the term opportunity may be a function of differences in theoretical perspectives" (Short et al., 2010:54). While some scholars define opportunities in a general sense such as "a favorable set of circumstances for doing something such as establishing a new venture" (Corner and Ho, 2010:636), others give a more specific definition like Eckhardt and Shane (2003:336) who define opportunities as "situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends, or means-ends relationships."

Short et al. (2010) take the notion of ideas and dreams as the basis for opportunities. They define ideas as a function of creativity and learning which can evolve to opportunities when they are carefully vetted and developed. On the other hand, dreams are aspirations whose connection to authentic opportunities remains undefined and are often related to noneconomic goals (2010:54). From their review of the literature they detected three main aspects related to the nature of opportunities: the discovery versus the creation of opportunities, the temporal dynamics surrounding opportunities, and the evolution of ideas and dreams into opportunities. With these issues in mind, they defined entrepreneurial

opportunity as “an idea or dream that is discovered or created by an entrepreneurial entity and that is revealed through analysis over time to be potentially lucrative.” (2010:55). In this definition, it is clear the for-profit goal of the entrepreneurial action as the main objective to be pursued, which is not the case for social entrepreneurship where the main goal is to generate a positive social impact in the community. This means that the efforts done by social entrepreneurs would be oriented to bringing solutions that would increase the living conditions of many and not only for the owner of the company or the stakeholders.

While commercial opportunities are pursued for those who have a main ‘for-profit interest’, some scholars consider that initiatives from those who have exploited commercial opportunities as ways to pursue social goals might be considered examples of social entrepreneurship. In this context, social entrepreneurship is seen as a mean to create new business models through value creation and innovation, promoted by non-profit or for-profit individuals or groups -even communities (Peredo and Chrisman, 2006). Some examples of these initiatives are: the Institute for Oneworld Health in USA; Sekeem in Egypt; Grameen Bank and Grameen Telecom in Bangladesh; KickStart in Kenya and other parts of East Africa; Starbucks Corporation in Chiapas, Mexico; Damiler-Chrysler in Amazonas, Brazil; ITC and Project ‘Shakti’ in India, just to mention some (Hart, 2007; Karnani, 2006; Seelos and Mair, 2005). However, the question is if they are initiatives of social entrepreneurship or if these initiatives exist as part of the social responsibility of some companies? We could go back again to those scholars who sustain that the mission of the entrepreneur is crucial to consider if the project is within the boundaries of social entrepreneurship (e.g. Dees, 1998; Drayton, 2002; Mort et al., 2003; Shaw and Carter, 2007). It would be interesting to know the impact of the social projects started by commercial companies in the communities they are addressing compared to the impact of the projects of individuals in their target communities.

Considering that the majority of scholars identify the entrepreneurial element of social entrepreneurship, it might be suggested that social entrepreneurship is similar to commercial entrepreneurship in that the identification of opportunities to “create or innovate is the initiation point of the entrepreneurial process.” (Corner and Ho, 2010:635). In both types of entrepreneurship, opportunities are central to develop entrepreneurial action. However, scholars distinguish between commercial and social opportunities (Austin et al. 2006; Dorado, 2006; Mair, 2006; Robinson, 2006), establishing the differences in the type of mission and the

type of value creation of each one. In this sense, commercial value creation will be pursued for those individuals, groups or organizations that want to achieve personal and/or shareholder wealth (Austin et al., 2006). On the contrary, social value creation is “about resolving social issues such as generating income for the economically disadvantaged or delivering medical supplies to poverty-stricken areas of the globe and requires innovation just as economic value creation in the commercial sector does” (Corner and Ho, 2010:636), and also Dees (1998:4) sustains that in social entrepreneurship “profit is not the gauge of value creation; nor is customer satisfaction; social impact is the gauge.”

Some scholars refer to social value creation as engaging with social problems to try to generate solutions for these problems; however, they have neglected research to obtain a deeper understanding of what social value creation really means. To give some examples, Mulgan (2010:38) equates social value with public value or civic value and defines it as “the value that nongovernmental organizations (NGOs), social enterprises, social ventures, and social programs create.” Thompson (2002) links social value creation with social capital, which encompasses issues that are valuable to communities. Corner and Ho (2010) sustain that social value creation is related with philanthropic activities, social activism, and the implementation of business models that enable poor people to be self-sufficient. Zahra et al. (2008:118) introduce the concept of ‘social wealth’ to refer to ‘economic, societal, health, and environmental aspects of human welfare.’ More broadly, Brickson (2007:866) defines social value as “that which enhances well-being for the earth and its living organisms.” As we can see, in these definitions of social value creation there is a lack of precision in describing what exactly social value means and the different elements that constitute this construct. The question is still in the air. What does “social value creation” really mean?

Due to the importance of the construct “social value creation” as a concept involved in the process of social entrepreneurship, there is the need for further research to develop a clear construct that can embrace the different elements associated to it and delimit its boundaries.

Although the word ‘social’ has been use widely in different domains, it has not been fully defined when applied to social entrepreneurship and consequently to the term ‘social value creation’. Literature in management does not differentiate among the different conceptualizations for the word ‘social’ when applied to social entrepreneurship. Just few

scholars question this term and the real meaning of it but the majority of scholars take the term as an 'obvious', 'predetermined', 'given' or 'understood' concept that does not need further explanation. However, "the concept of 'social' turns out to be quite complicated" (Cho, 2006:37-38).

According to the Oxford Dictionary<sup>2</sup>, the word 'social' has its origins in the old French term '*socius*' which means 'friend', or from the Latin word '*sociali*' which means 'allied'. Thus the word 'social' is related to society or its organization. In sociology this is a "general term which [...] has been applied to the processes of relationships among individuals (interactions), to the reciprocally oriented actions of individuals, and to the relatively stable formations that emerge among individuals" (Karl-Heinz, 2001:827).

On the other hand, the term 'value' can have different meanings depending on the domain it is used. For example, the Encyclopedia of Sociology defines 'value' as "cognitive representations of human needs [...]. Values indicate preferences people share for certain types of outcomes in their lives and for certain types of conduct." (Borgatta and Borgatta, 1992:2222). This definition applies to human values.

In the case of economics, classical economics define value as "the amount of money or other goods that must be paid to obtain something." (Beckert and Zafirovski, 2006:701). While neoclassical value theory also treats value as a market price, it is also determined by impersonal forces of supply and demand. However, even for economics the concept has been changing over time, as new trends in economics have been emerging. For example, in evolutionary economics, the concept of "value is modeled in term of the 'beliefs and norms' [of a particular group of individuals] to promote some generally useful good [or service]." (Beckert and Zafirovski, 2006:703).

From an economic point of view 'value creation' is "the act of obtaining rents (widely defined as financial, social, or personal) that exceed the total costs (which may or may not include average rates of return for a particular industry) associated with that acquisition. More

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<sup>2</sup> <http://oxforddictionaries.com/>, date of access: May 4, 2011

specifically, value creation is any outcome that has a positive utility (which may be economic or non-economic in nature) for any member of the subsystem.”<sup>3</sup>

In management, value creation can be understood from different perspectives: the organization, the customer, the stakeholders, the company owners, or society. To give an example, the resource theory of the firm sustains that organizations create value “when they implement strategies that respond to the market opportunities by exploiting their internal resources and capabilities.” (Marr et al., 2004:312).

As we can see, there is not a clear definition which could apply to the term ‘social value creation’. I sustain that “social value creation” will be defined as ‘the production of goods, services or means that benefit society in a holistic and positive way, and having a respect for the environment and culture of each group of individuals’. For example, an indigenous group of people in Sierra Tarahumara, Mexico, can be benefited from building more schools in their villages for teaching Tarahumaran children. These children will have more opportunities to enhance their quality of life.

The differences between commercial and social value creation can be extended to the concept of opportunity because there is evidence that shows that social entrepreneurs approach opportunities differently than commercial or traditional entrepreneurs, since the interests to create or discover an opportunity of the former are different from those of commercial entrepreneurs (Mair, 2006).

Finally, while the majority of scholars do not highlight the importance to define the construct for “social opportunity”, I emphasize the importance of defining it since there are examples of definitions for the construct of ‘commercial opportunity’ (Eckhardt and Shane, 2003; Short et al., 2010), and there is the need to establish a clear differentiation between both types of entrepreneurial opportunities to give support to this nascent theory of identification of opportunities in social entrepreneurship (Mair, 2006).

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<sup>3</sup> Bamford, Charles E., *Creating value*, *Blackwell Reference Online*, Blackwell Publishing Inc., consulted online at [http://www.blackwellreference.com/public/tocnode?id=q9780631233176\\_chunk\\_q97814051165036\\_ss1-9](http://www.blackwellreference.com/public/tocnode?id=q9780631233176_chunk_q97814051165036_ss1-9) on January 22, 2013.



In the same way as business opportunities, social opportunities would be represented by the solutions given by social entrepreneurs to solve specific social problems. In the case of social entrepreneurship, social entrepreneurs will create or discover ways to solve these problems. The question at this point is how social entrepreneurs create or discover social opportunities? I elaborate an answer to this question in the next section.

From the analysis done in this section, I propose defining the concept "social opportunity" as: "the conjunction of factors that lead to the discovery or creation of a business or entrepreneurial solution to a social problem. This solution is revealed to potentially create social value which will have a positive impact in a group or groups of people in disadvantage or to the environment, and that will endure in the short, medium and/or long terms." I take the broad definition of social value given by Brickson (2007:866) who defines it as "that which enhances well-being for the earth and its living organisms."

### **2.3. Opportunity identification in social entrepreneurship**

There is consensus among scholars that opportunity identification is the most fundamental element in the entrepreneurial process (Corner and Ho, 2007; Gaglio and Katz, 2001; Short et al., 2010). Without the identification of an opportunity it is not possible to start an entrepreneurial activity. Furthermore, it is important to understand with more clarity the factors involved in the opportunity identification process since this could lead to a correct opportunity development and exploitation, and finally to help to understand the differences between successful and unsuccessful entrepreneurial ventures.

Research on opportunity identification in social entrepreneurship has attracted scholar's attention just recently, therefore too little is known about how social opportunities are formed and exploited by social entrepreneurs. To know more about current research focused on this process, I searched for papers related to opportunity identification in social entrepreneurship using the most prestigious and widely recognized databases (PROQUEST/ABI/INFORM, EBSCO, INFORMAWORLD from Taylor and Francis, ScienceDirect from Elsevier, and JSTOR). The terms I used to search the articles were: "opportunity identification", "opportunity recognition", and "social entrepreneurship". I found four papers concerning this

subject (i.e. Austin et al., 2006; Corner and Ho, 2007; Shaw and Carter, 2007; and Perrini et al., 2010).

These four papers were mainly case studies with a phenomenological approach; therefore, it is not possible to generalize the findings, making it difficult the progress on the construction of the theory of social entrepreneurship and the contribution to the legitimacy of this nascent field of knowledge.

Initial research suggests factors that may influence the perception social entrepreneurs have toward opportunities such as their social mission, their background, and social or institutional barriers to entry in a particular social market (Corner and Ho, 2010). However, those studies are not empirical and remain in the sphere of conceptual analyses. In addition, there are still questions regarding social opportunities wondering if they are discovered, created or both. However, these questions remain unanswered (Mair, 2006).

Scholars have called researchers' attention to conduct studies in this topic since there is empirical evidence that supports the importance of opportunity identification in social entrepreneurship and literature shows that the identification of an opportunity is vital to start any entrepreneurial activity in both commercial and social entrepreneurship. (Corner and Ho, 2010; Shaw and Carter, 2007; Weerawardena and Mort, 2006)

Although many scholars mention the term "opportunity identification", there is no clarity in what exactly this term means. The term "opportunity recognition" was used previously to the term "opportunity identification" because the first studies in entrepreneurship related to understand the way entrepreneurs perceived opportunities were based on the theory of opportunity discovery (Ardichvili et al., 2003; Chandler et al., 2003; Gaglio and Katz, 2001; Shane and Venkataraman, 2000).

For example, Gaglio and Katz (2001) define "opportunity identification" as a process through which the entrepreneur recognizes an opportunity. This definition implies that opportunities exist independent to the entrepreneur. However, literature shows that opportunities can also be formed by entrepreneurs (Alvarez and Barney, 2007; Baker and Nelson, 2005; Sarasvathy et al., 2003; Vaghely and Julien, 2010).

Ardichvili et al. (2003) misunderstood the term “creation” with “development” of an opportunity. They sustain that all opportunities are made and not found and that just the elements of opportunities are things such as resources, products, and likewise. They continue their argument by suggesting that create the opportunity is to develop de opportunity. However, they do not realize that create an opportunity is different from develop the opportunity. For them, “the need or resource “recognized” cannot become a viable business without this “development” (2003:113). And by the “development” they refer to the creation of the new business, making equivalent the concept of business development to opportunity creation which are different by definition.

Considering that opportunities can either be discovered or created, “identifying” them could be understood as the entrepreneur’s awareness of the existence of an opportunity. Moreover, it seems that the term “opportunity identification” is related to the notion of how opportunities are formed. Alvarez and Barney (2007) describe with clarity these processes. They suggest that opportunities can be formed by exogenous shocks or by the entrepreneurs. Therefore, the term “opportunity identification” refers to the ways opportunities are formed and the entrepreneurs’ awareness of being in front of an opportunity, whether it has been created or discovered.

### **2.3.1. Theories of opportunity discovery and opportunity creation**

The first efforts to understand the process of opportunity identification come from research in commercial entrepreneurship. In this field, the main theory to study opportunity identification has been opportunity discovery.

The theory of opportunity discovery sustains that opportunities are seen as a function of a tangible reality, which means that opportunities exist “out there” just waiting to be found (Alvarez and Barney, 2007). In this theory, opportunities exist independent to entrepreneurs (Eckhardt and Shane, 2003; Gartner et al., 2003). This theory has its foundations in the previous work done by the Austrian scholars Kirzner (1973) and Schumpeter (1983). Kirzner (1973) based his analysis of the market process in the theory of the imperfect competition and gave a central role to entrepreneurship and competition. He sustained that those entrepreneurs who discovered opportunities are able to have information that other

entrepreneurs would not have and have the ability to “see” the opportunities through what Kirzner called “entrepreneurial alertness”.

In the theory of opportunity discovery the identification of opportunities is related to the term ‘recognition’ due to the nature of the opportunities which are conceived to be objective phenomena, that is, to exist ‘independent’ of the entrepreneur (Eckhardt and Shane, 2003; Gartner et al., 2003). The idea here is that opportunities are “objects that are there”, “just waiting to be discovered” or recognized (Alvarez and Barney, 2007:11). Therefore, the term ‘recognition’ implies searching and discovering (finding) opportunities.

In recent years, it has emerged a new theory that sustains that opportunities are created by entrepreneurs, which implies that opportunities depend on them and will be seen as ‘subjective’ phenomena. The theory of opportunity creation has been gaining strength since there are more scholars who have provided empirical evidence that shows that some entrepreneurs start an iterative process of enactment to form opportunities (Alvarez and Barney, 2005; Alvarez and Barney, 2007; Baker and Nelson, 2005; Sarasvathy, 2001); which means that opportunities will be created as a consequence of social entrepreneur’s actions.

The idea of enactment comes from the work developed mainly by Weick (1988:306) who sustains that “when people act, they bring events and structures into existence and set them in motion.” This assumption implies that social entrepreneurs might not be really conscious about what they want to create; it might be possible that they just know that they want to do something to address a social or environmental problem and they start to work trying to develop a solution.

It is important to recall that opportunities in social entrepreneurship are different from those in commercial or traditional entrepreneurship. In social entrepreneurship, opportunities are discovered or created when a social and/or environmental problem is detected. In this context, opportunities would exist due to competitive imperfections in the market or industry just if they represent a social or environmental problem that could be addressed by some social entrepreneurs (Austin et al., 2006:3).

Alvarez and Barney (2007) have studied the theories of discovery and creation of opportunities in commercial entrepreneurship considering the nature of opportunities, the nature of entrepreneurs and the nature of the decision making context. They establish a difference between these three elements for each theory sustaining that opportunities are different in both scenarios. In discovery theory, opportunities are independent from entrepreneurs while in creation theory, opportunities do not exist without the entrepreneur.

In the case of the entrepreneur, the authors sustain that there are two types of entrepreneurs, for one side those who discover opportunities and on the other, those who create them. The 'discovery entrepreneur' might perceive himself as different from non-entrepreneurs before he recognizes the opportunity because he believes that he has different abilities and characteristics than non-entrepreneurs, which lets him to see and develop the opportunity. On the other hand, the 'creation entrepreneur' might or might not perceive himself as different from non-entrepreneurs before the opportunity is created. According to these authors, this is possible because the 'creation entrepreneur' has the characteristics and abilities needed to form an opportunity. Those characteristics will be revealed until the entrepreneur starts the process of forming the opportunity and not before.

Alvarez and Barney (2007) do not consider the possibility that the same entrepreneur might discover or create opportunities. This assumption can be considered for debate since there are empirical studies that suggest that the same entrepreneur might create or discover opportunities such as the study by Corner and Ho (2010:656) who conducted a qualitative study that demonstrated that the same social entrepreneur can create and discover opportunities. However, it is not clear if social entrepreneurs have a mixture between the processes of discovery and creation to identify a single opportunity or if each process is linked to a single opportunity in different time and places. I mean with this that it might be possible that any social entrepreneur might discover one, and just one opportunity in one moment, in one place; and that in another moment, in another place that social entrepreneur could create another opportunity. We would be talking about two different processes of opportunity identification working in the same social entrepreneur. On the other hand, it might also be possible that one social entrepreneur might have a mixture of the discovery and creation processes for a single opportunity, in one specific time and place.

To bring some clarity about the discovery and creation processes, I give some examples.

Francisco Arroyo is a social entrepreneur from Mexico. He is an agronomist who discovered the opportunity to cultivate vegetables among low income families living in urban areas. The main objective of his project was to reduce hunger, malnutrition and poverty. The program he developed was named “Programa de Producción Urbana de Alimentos” (Urban Food Production Program)<sup>4</sup> and has its origins in the work done by religious groups such as Jesuits and Combonians missionaries working in Valle de Chalco, State of Mexico. Francisco Arroyo started working with these missionaries and he learned how to launch an initiative to prevent malnutrition among different impoverished communities.

On the other hand, an example of a social entrepreneur who created an opportunity is Lillian Liberman<sup>5</sup>, a Mexican film director who produces videos to prevent child sexual abuse, child abduction, pregnancy in teenagers, violence toward children, and prevention of children and teenagers drug addiction. She had an interest in the prevention of sexual abuse in children since she was very young, and she had clear that her mission was to do some material to prevent these social problems. In 1991, she created a film that talked about sexual abuse and was oriented to alert children about this situation. This film was named “El Árbol de Chicoca” (The Chicoca Tree) and it has won different prizes such as the UNESCO-Uruguay in 1993, and one from the Bureau International Catholique de L'enfance in France. When she finished the direction and production of that film, Lillian believed that her work was finished but she was surprised when she noticed that teacher from elementary schools were not prepared to talk about this subject. Then, she started to train teachers and to promote the distribution of the film among the different elementary schools in Mexico City. This is how she created “Yaocíhuatl”, the organization that gave the infrastructure to develop the social project she is currently working.

The last example is a good one of a social entrepreneur who first discovered a social opportunity, and then created more opportunities departing from the first one. His name is Hector Castillo Berthier<sup>6</sup>, the founder and director of “Circo Volador” (Flying Circus) in Mexico City. “Circo Volador” is a social project oriented to bring new options of personal and

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<sup>4</sup> <http://www.tuwebmejoraeconomia.ws/>

<sup>5</sup> <http://www.shottama.org/>

<sup>6</sup> <http://www.circovolador.org/>

professional development to different groups in disadvantage in urban areas, especially young people from gangs. Hector Castillo is an academic researcher at the Instituto de Investigaciones Sociales (Institute of Social Research) in Mexico. The idea to start "Circo Volador" came when Hector Castillo was invited by the local government to develop a strategy to address youth from urban low income groups identified as "urban gangs". These are groups of young people with specific needs and culture. When Hector Castillo was working with these groups he discovered the opportunity to address them because he searched in the city for different options that were already working with this type of groups. He noticed that there was a physical space at the Chopo Museum, which was used as a flea market by some urban gangs. However, the space did not belong to the urban gangs and they should pay for it to have the chance to sell their products which consisted mainly in t-shirts, music recorded by them, or handcrafts. With this idea in his mind, he decided to broadcast a radio show to have a greater range of young people from gangs. Some years later, the local government donated a building, and he invited urban gangs to help remodeling it. In this space, he formally started "Circo Volador" in 1997.

In the first years of "Circo Volador", Hector Castillo was oriented to provide a physical space for gangs to express themselves through music and graffiti. But, over time he has created new opportunities. One example is the creation of workshops to teach different professions to the youth.

If we consider that the same entrepreneur might discover or create opportunities, it is more likely to believe that there might be some factors that might lead entrepreneurs to create or discover an opportunity to address a social problem in a single moment. This thought is related with the nexus between the individual and the opportunity developed by Shane (2003) who sustains that there is a unique connection between each opportunity and the individual. I am not meaning with this that the individual could not identify lots of opportunities, but what I am saying here is that every opportunity he or she identifies is associated to the individual in a one to one relationship in a specific time and place.

Scholars recognize different factors that are involved in the opportunity identification process in commercial entrepreneurship (Ardichvili et al., 2003; Baker and Nelson, 2005; De Koning, 2003; Eckhardt and Shane, 2003; Vaghely and Julien, 2010).

The Table 2.3 and Table 2.4 summarize the main factors I identified for opportunity discovery and creation in commercial entrepreneurship.

**Table 2.3. Factors involved in the discovery of opportunities in commercial entrepreneurship.**

<b>Opportunity Discovery</b>	
<b>Factor</b>	<b>Author(s)</b>
Entrepreneur's knowledge of new solutions.	Eckhardt and Shane, 2003
Entrepreneur's idiosyncratic prior knowledge.	Ardichvili et al., 2003; Eckhardt and Shane, 2003
Entrepreneurial alertness.	Alvarez and Barney, 2007; Ardichvili et al., 2003; Gaglio and Katz, 2001; Busenitz, 1996; Kirzner, 1973.
Entrepreneur's social networks.	Ardichvili et al., 2003; De Koning, 2003



**Table 2.4. Factors involved in the creation of opportunities in commercial entrepreneurship.**

<b>Opportunity Creation</b>	
<b>Factor</b>	<b>Author (s)</b>
Use of resources at hand: "make do with whatever is at hand".	Baker and Nelson, 2005
Entrepreneur consciously and consistent test conventional limitations.	Baker and Nelson, 2005.
Entrepreneur's bricolage capabilities: creativity, improvisation, combinative capabilities, tolerance for ambiguity, messiness and setbacks.	Baker and Nelson, 2005.
Entrepreneur works on a basis of trial an error.	Baker and Nelson, 2005; Alvarez and Barney, 2007.
Entrepreneurs act and observe how consumer and markets respond to their actions.	Alvarez and Barney, 2007
Initial entrepreneur's perceptions and beliefs about opportunities that need to be tested in the market in an iterative process.	Alvarez and Barney, 2007
Blind or myopic variations: actions started by entrepreneurs which can create an opportunity.	Alvarez and Barney, 2007

The entrepreneur's knowledge about new solutions in a market or industry makes the entrepreneur to discover opportunities related to new products, new methods of production, new sources of supply or to create new markets. (Eckhardt and Shane, 2003).

Entrepreneur's prior knowledge triggers the recognition of new information and guides the entrepreneur to discover new opportunities because he recognizes the value of new information. (Ardichvili et al., 2003; Eckhardt and Shane, 2003). In this sense, it is suggested that entrepreneurs will discover only those opportunities related to their prior knowledge.

Ardichvili et al. (2003) suggest that entrepreneurs will perceive opportunities depending on their sensitivity to recognize the "shift" between a need or problem previously identified and a solution that creates new value. This sensitivity might be influenced by the entrepreneurs' genetics, their background and experience, and/or the amount and type of information they possess about a particular opportunity.

Many scholars agree with the notion of entrepreneurial alertness as a key characteristic of those entrepreneurs who discover opportunities (Alvarez and Barney, 2007; Ardichvili et al., 2003; Gaglio and Katz, 2001; Busenitz, 1996; Kirzner, 1973). According to Alvarez and Barney (2011), entrepreneurial alertness "is the ability that some people have to recognize competitive imperfections in markets". Based on Kirzner, Alvarez and Barney (2011) sustain that entrepreneurs become aware of competitive imperfections through their day-to-day activities and not necessary because they are searching for them. The possession of idiosyncratic information is a key component of the entrepreneurial alertness, which means that entrepreneurs will be aware of those opportunities related with the information they have.

Related to social networks, De Koning (2003) and Ardichvili et al. (2003) sustain that entrepreneurs will discover opportunities while they are actively interacting with an extensive network of people. In this interaction, entrepreneurs gather information, think through talking and assess resources.

Baker and Nelson (2005), use the concept of bricolage to explain the behavior of those entrepreneurs who create opportunities. They define bricolage as "making do by applying combinations of the resources at hand to new problems and opportunities." (2005:333).

Making do implies that entrepreneurs will try to get what they want, no matter what obstacles they have in their path to get it. Sometimes, to pursue their objectives, entrepreneurs will combine resources for new purposes. In this scenario, entrepreneurs act as “bricoleurs” who constantly are refusing commonly accepted limitations. Baker and Nelson (2005) have identified creativity and improvisation as the main characteristics to overcome limitations, “in part because it relies heavily on the trial and error and tolerance for setbacks and also because it creates situations in which out-of-the-ordinary behavior can result in visible, out-of-the-ordinary-results.” (2005:354).

Alvarez and Barney (2007) sustain that in creation theory, opportunities are formed by the “actions, reactions, and enactment of entrepreneurs exploring ways to produce new products or services.” (2007:131). In opportunity creation entrepreneurs do not search, they act and observe how consumers and markets respond to their actions. This means that the actions will evolve until they form an opportunity. This process of action and reaction is known as “blind variation”, which is defined as “an action that emerges without any self-conscious planning or foresight.” (2007:132).

In the Chapter 3 I develop the theory for opportunity identification in social entrepreneurship based in the factors identified in the Table 2.3.

### **2.3.2. Factors involved in the identification of social opportunities**

Few scholars have studied the identification of opportunities in social entrepreneurship. Corner and Ho (2010) suggest that opportunity identification for social entrepreneurs could be influenced by their social mission (Dees, 2001), “by social and institutional barriers to entry in a particular social market” (2010:635), and by the entrepreneurs’ background.

The literature in commercial entrepreneurship gives evidence which shows that entrepreneurs’ background is a factor that leads entrepreneurs to identify opportunities (e.g. Ardichvili et al., 2003; Eckhardt and Shane, 2003; Shane, 2003; Short et al., 2010). Transferring this factor to social entrepreneurship and based on the different semi-structured interviews I did, I suggest that social entrepreneurs will be attracted to specific social

problems depending on their personal interests, academic formation, experience and characteristics of personality.

Even that the entrepreneurs' background seems to be an important factor that might lead social entrepreneurs to identify social opportunities, I believe that this factor will be present in both discovery and creation of social opportunities, because social entrepreneurs will first identify a social problem and then will try to find a solution to solve it. It will be in this point where it might be differences between the paths a social entrepreneur can choose. One social entrepreneur could discover an opportunity while other could create it.

It is at this point of getting a solution to address a social problem, where I propose different factors that could lead a social entrepreneur to discover or create a solution. These factors are explained in detail in the Chapter 3.

### **3. Proposed model**

In Chapter 2 I pointed out the importance of the opportunity identification process to start any entrepreneurial venture. Considering that the main objective of this study is to advance the theory of opportunity identification in social entrepreneurship, in this chapter I propose a model based on the existing theory of discovery and creation of opportunities in business or commercial entrepreneurship. I adapt the factors that I identified in the previous chapter and that seem to be present in the ventures started by social entrepreneurs.

#### **3.1. Conceptual framework and hypotheses**

To establish the constructs I am using in this model, I start by defining social entrepreneurship. Social entrepreneurship is a novel stream of research in management (Short et al., 2009) which has been studied from different perspectives such as public policy, non-for-profit organizations, for-profit-organizations, for-profit operated by non-for-profit, philanthropy, or community based enterprises (e.g. Wallace, 1999; Lasprogata and Cotton, 2003; Baron, 2005; Austin et al., 2006; Mair and Martí, 2006; Peredo and Chrisman, 2006; Ostrander, 2007). This span of perspectives has made very difficult the unification of criteria to define the construct 'social entrepreneurship' (Dees, 1998; Christie and Honig, 2006; Mair and Martí, 2006; Weerawardena and Mort, 2006).

Broader definitions of social entrepreneurship see this construct as a process with multiple dimensions (e.g. Dees, 1998; Pomerantz, 2003; Mair and Martí, 2006; Peredo and McLean, 2006; Weerawardena and Mort, 2006). What is highlighted in broader definitions is the inclusion of terms associated with entrepreneurship, like innovation, social value creation, recognition and exploitation of opportunities, innovative use and combination of resources to pursue opportunities, and risk management. What is missing in some of those definitions is the differentiation among social entrepreneurs, social entrepreneurship, and social enterprise; and the definition of the construct in terms of just one of the three actors (e.g. Dees, 1998; Peredo and McLean, 2006). Mair and Martí (2006) are the only scholars who clearly differentiate among these three actors of social entrepreneurship.

In all definitions of social entrepreneurship, the key concept in common is the entrepreneurial component of the word. According to Dees (1998) "contemporary writers in management and business have presented a wide range of theories of entrepreneurship. Many of the leading thinkers remain true to the Say-Schumpeter tradition while offering variations on the theme." (1998:2). For Drucker (1985) entrepreneurs exploit opportunities that cause change (in technology, consumer preferences, social norms, etc.). This is how social entrepreneurs will exploit opportunities to foster social change.

Although there is no agreement among scholars about what exactly social entrepreneurship is, there are common elements in the majority of definitions that can point to an entrepreneurial activity that has the main objective to catalyze social change in an innovative way. The definition that most integrates these elements is the one proposed by Mair and Marti (2006) who define social entrepreneurship as a "process involving innovative use and combination of resources to pursue opportunities to catalyze social change and/or address social needs." (2006:37). I decided to choose this definition of social entrepreneurship because it includes social projects which can or cannot pursue profits as their main objective.

For the construct "social entrepreneur", scholars agree with the idea of an individual who catalyzes social change (Waddock and Post, 1991; Dees, 1998; Perrini and Vurro, 2006; Drayton, 2002; Seelos, Ganly and Mair, 2006; Shaw and Carter, 2007). For the purpose of this study I take the definition proposed by Drayton (2002:123) who defines a social entrepreneur as "an individual who focuses his or her entrepreneurial talent on solving social problems."

There are few authors who have been advocated to define the term 'social opportunity'. Austin et al. (2006) take the definition of 'opportunity' from Sahlman (Austin et al. 2006:5) who define it as "any activity requiring the investment of scarce resources in hopes of a future return." These definition is broad and could apply to both commercial and social entrepreneurship; however, I differentiate between these two fields and I sustain that they way opportunities are conceived by social entrepreneurs differs from their counterparts. For this reason, I define 'social opportunity' as 'the conjunction of factors that lead to the discovery or creation of a business solution to address a social problem. This solution is revealed to potentially create social value which will have a positive impact in a group or

groups of people in disadvantage or to the environment, and that will endure in the short and/or long terms.' I define "social value creation" as 'the production of goods, services or means that benefit society in a holistic and positive way considering and respecting the environment and culture of each group of individuals', and I take the broad definition of social value given by Brickson (2007:866) who defines it as "that which enhances well-being for the earth and its living organisms."

Drucker (1985) considered that entrepreneurship consisted in more than just starting a new business to create profits but to apply management concepts and management techniques to standardize the processes and to use the resources efficiently using innovative means. Therefore, I define 'business solution' as the "business model based on management concepts and techniques to implement innovative methodologies, products or services to address social problems or needs".

Related to the concept of 'opportunity identification', for many years, research in commercial entrepreneurship had associated the identification of opportunities with the term "recognition of opportunities" because several scholars sustained that opportunities could only be discovered. However, in Chapter 2 I mentioned that in recent years, some scholars have suggested that opportunities can also be formed by entrepreneurs (Alvarez and Barney, 2007; Baker and Nelson, 2005; Sarasvathy et al., 2003; Vaghely and Julien, 2010).

If we assume that opportunities can either be discovered or created, it seems that "opportunity identification" refers to the ways opportunities are formed and the ways entrepreneurs are conscious of being in front of an opportunity whether it had been discovered or created.

With these constructs in mind, I take some factors I have identified from the theory of opportunity identification in entrepreneurship, which I believe are present in social entrepreneurship, and I apply them to the field of social entrepreneurship and I propose a new theory of opportunity identification in social entrepreneurship.

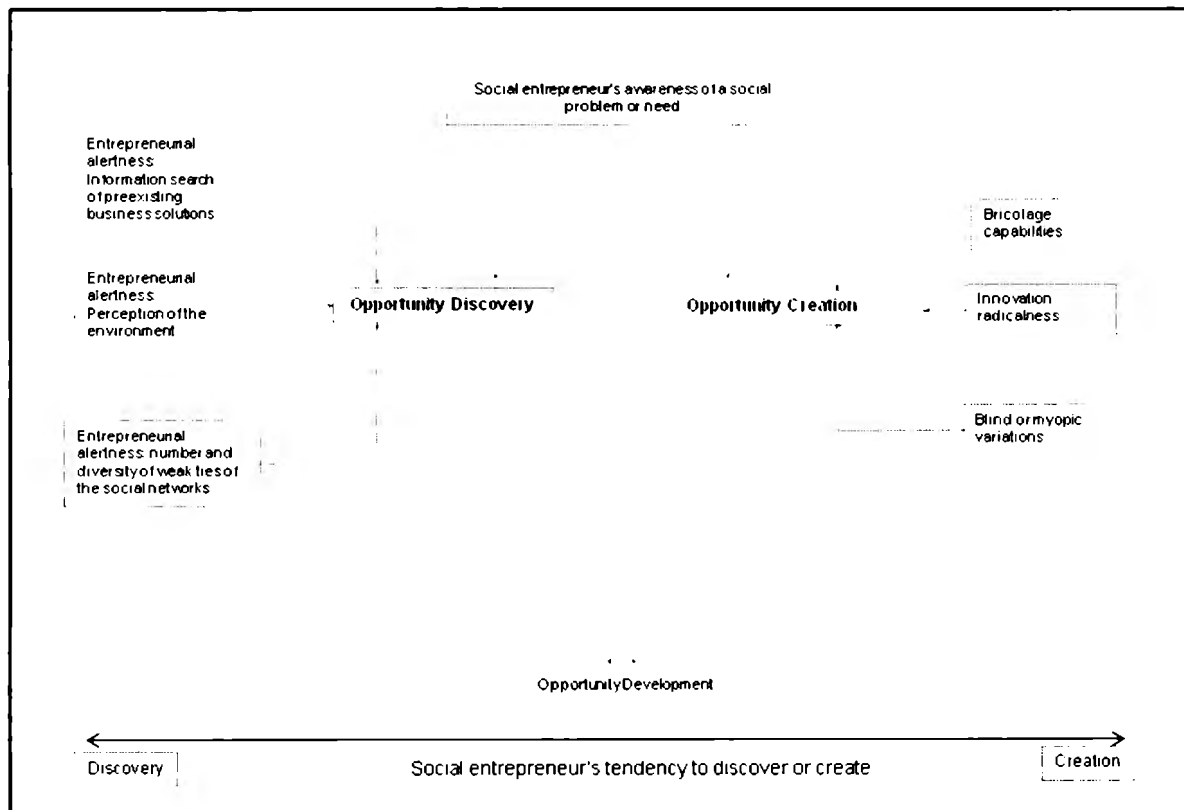
The main factor identified in the literature that may lead to opportunity discovery in social entrepreneurship is entrepreneurial alertness. I operationalized entrepreneurial alertness in

three dimensions: information search of solutions, entrepreneurs' perception of the environment and social networks.

On the other hand, the factors I have identified that might lead to the creation of opportunities in social entrepreneurship are: social entrepreneur's bricolage capabilities, innovation radicalness, and blind or myopic variations.

The Figure 3.1 shows the conceptual model I am proposing in this chapter.

**Figure 3.1. Conceptual and theoretical model of the factors that lead social entrepreneurs to discover or create social opportunities.**



Source: Author.



The model in the Figure 3.1 is a flow chart that shows the process of opportunity identification which starts with the social entrepreneur's awareness of the problem followed by the processes of opportunity discovery or creation. Once the opportunity has been identified the social entrepreneur can develop it.

Since the objective of this study is to analyze the factors that are present in the creation or discovery of social opportunities, the analysis is limited to the study of those factors, which I describe in detail in the following sections.

### **3.1.1. Factors involved in the discovery of social opportunities: entrepreneurial alertness.**

The majority of scholars have identified entrepreneurial alertness in commercial entrepreneurship as the main entrepreneurs' attribute that can lead entrepreneurs to discover opportunities. Some scholars point out Kirzner (1973) as the first researcher to use the term "alertness" (Ardichvili et al., 2003; Gaglio and Katz, 2001).

For Kirzner (1997:72) entrepreneurial alertness "refers to an attitude of receptiveness to available (but hitherto overlooked) opportunities." In this sense, entrepreneurs are continuously scanning the environment ready to make discoveries. But, in many situations they do not know exactly what they are looking for neither they use any specialized methodology to search for opportunities. Instead, they find them by surprise. Therefore, the commercial entrepreneur is characterized for an open attitude toward unnoticed features of the environment which he or she perceives to be potentially profitable. For social entrepreneurs the search would be oriented not only for profitable features but mainly for features of the environment which could improve the living conditions of human beings in disadvantage.

In the theory of opportunity discovery in commercial entrepreneurship, opportunities are formed by changes in the market (Eckhardt and Shane, 2003) or by competitive imperfections in a particular market or industry (Alvarez and Barney, 2007; Kirzner, 1973), thus the entrepreneur's ability to scan the environment searching for competitive imperfections is fundamental since it will lead to opportunity identification. This means that changes in

technology, consumer preferences, politics or some other event that can disrupt the competitive equilibrium that exists in a market or industry might form opportunities (Shane, 2003).

However, in social entrepreneurship failures in the market or government originate social problems that could lead to opportunity discovery or creation (Karnani, 2011; Datta-Chaudhuri, 1990). The problems originated by these failures might have deep roots in their origins. This implies that while some social problems have prevailed in some communities for years, in some other, on the contrary, they are very new and they might be arising by changes in the structure of society. A good example of these changes is the emergence of the “Ninis” segment in Mexico’s population.

“Ninis” (“Ni estudia-Ni trabaja”, “Do not study- Do not work”) is a segment formed by young people from 15 to 29 years old who do not study and are unemployed due to different factors. In Mexico, this segment of the population represents 24.8% of the total young people in that range of age (OECD, 2011:360), which in numbers mean more than 7 million people who are unemployed and are vulnerable (INEGI, 2010).

According to Eckhardt and Shane (2003), when entrepreneurs have knowledge about changes in the market or have idiosyncratic information about a specific industry or market it will be possible for them to discover opportunities. In a parallel way, when social entrepreneurs have knowledge of specific social problems and look for information related to the solutions for those problems, they might discover opportunities.

Since social entrepreneurs approach in a different way to social problems than commercial entrepreneurs approach to problems or changes in the market, it is suggested that social entrepreneurs would be attracted to those problems that have a match with their personal interests, values and background (Ardichvili et al., 2003; Zhara et al. 2008; Corner and Ho, 2010).

#### a) Information search

When social entrepreneurs analyze and understand the social problem that has attracted their attention, they might start an information search related to the possible solution or solutions to solve it. This search of idiosyncratic information has been identified by some scholars as the main element of entrepreneurial alertness (Kirzner, 1973; Busenitz, 1996; Gaglio and Katz, 2001; Eckhardt and Shane, 2003; Gartner et al., 2003; Shane, 2003; Sarasvathy et al., 2003).

Kaish and Gilad (1991) conducted an empirical study to test the theory proposed by Kirzner (1973) who related entrepreneurial alertness with the information search. Kaish and Gilad's study is recognized as the first attempt to empirically test entrepreneurial alertness. They operationalized entrepreneurial alertness using three dimensions: source of information, alertness to information, and information cues. Source of information is related to the different places, persons or media entrepreneurs do access to gather information. Alertness to information refers to the different things entrepreneurs do to heighten they readiness to perceive an opportunity. Information cues refer to the characteristics the information may possess to alert them than an opportunity is at hand.

Kaish and Gilad (1991) also proposed that entrepreneurial alertness would exhibit itself in a continuum, going from a broad undirected scanning that takes place at unconventional times and places, to a directed, rational search, which takes place in specific times and places (1991:49). Even with the limitations of the study, the results showed that entrepreneurial alertness is related with the information search and the development of social networks.

Busenitz (1996) replicated and expanded the study proposed by Kaish and Gilad (1991). He used a sample of 124 founders (1996:37), which was a larger sample than that one used by Kaish and Gilad (1991). The respondents that were considered in the sample were those that were founders of their firms within the last two years since the foundation of the company and/or were planning to start another venture within the next five years at the time the study was done. Results showed that the construct "entrepreneurial alertness" needed to be re-evaluated and broaden since Kaish and Gilad only considered the discovery of new opportunities by specific or deliberated searches of information while Kirzner (1973) also contemplated the serendipitous discovery of opportunities.

Shane (2003) also considered information search as a key element of entrepreneurial alertness; however, he also included cognitive processes as important elements of the construct. He identified four categories for cognitive processes: intelligence, perceptive ability, creativity and not seeing risks. Shane provided examples of empirical studies that suggest intelligence is correlated with the discovery of more valuable opportunities (2003:55). The next category, perceptive ability, refers to the capacity of an entrepreneur to formulate outcomes of future recombination of resources (2003:56). The third category, creativity, is the capacity of an entrepreneur to create new solutions to problems (2003:56). The last category, not seeing risks, does not mean that entrepreneurs will not see the risk involved in any opportunity but they will estimate more valuable the opportunity than the risk itself (2003:58). Self-efficacy is another element considered (Shane, 2003) in entrepreneurial alertness. It seems that entrepreneurs with a strong self-efficacy and self-confidence are more likely to see opportunities instead of risks.

Transferring the characteristics of entrepreneurial alertness to social entrepreneurship, I propose that social entrepreneurs with a high entrepreneurial alertness start to search for information which can be deliberately or not. This means that some social entrepreneurs will start a search of solutions to social problems and will find the solution by surprise. On the contrary, other social entrepreneurs will start a deliberately search of solutions for a specific problem. This means that these social entrepreneurs will start looking for a solution by planning the information search. They might look up at the Internet, conferences, specialized magazines, academic institutions or other institutions, people they know.

Social entrepreneurs with a higher inclination to search for information to find a solution to solve a specific social problem are more likely to discover social opportunities than those social entrepreneurs who do not search for information to find a solution to solve a specific social problem.

One example to illustrate how social opportunities are discovered through the information search to find a solution is represented by the initiative of a group of Mexican producers who noticed the lack of support for Mexican farmers to cultivate organic products. This group of producers searched information about the different forms to distribute their products and

started Aires de Campo in 2001. The main objective of this social enterprise is to create a direct distribution channel between family farms, indigenous and peasant cooperatives, and small to medium agribusinesses operating by the principles of equal economic development, social fairness, and environmental sustainability.<sup>7</sup>

Considering the theoretical assumption that social entrepreneurs who start information search related to preexisting business solutions will tend to discover social opportunities, I established the following hypothesis:

*Hypothesis 1. Social entrepreneurs' high information search of preexisting business solutions is positively related to opportunity discovery.*

#### b) Perception

Perception is another element of entrepreneurial alertness. Entrepreneurs who discover opportunities are supposed to perceive reality more accurately than those who do not discover them. In this sense, social entrepreneurs who make more accurately assumptions of reality and take decision according to those assumptions discover social opportunities (Shane, 2003; Alvarez and Barney, 2007).

Shane (2003) argues that beliefs and information are part of entrepreneurial alertness. Entrepreneurs might discover opportunities depending on the beliefs they have about the nature of opportunities, the environment, and themselves.

Gaglio and Katz (2001) added the element "perception" to the operationalization of entrepreneurial alertness (Kirzner, 1997). Entrepreneurs who discover opportunities are supposed to perceive reality more accurately than those who do not discover opportunities. This means that entrepreneurs would make assumptions of reality and act in consequence (Alvarez and Barney, 2007).

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<sup>7</sup> <http://airesdecampo.com/>

For Sarasvathy et al. (2003) entrepreneurial alertness is a scarce resource which leads alert entrepreneurs to detect or notice “errors” that arise from misadjustments between the perceptions, beliefs or expectations of entrepreneurs about the environment and reality. This means, for example, that “entrepreneurs’ buying and selling decisions are not always correct and this process leads to “errors” that create shortages, surpluses, and misallocated resources. An individual alert to the presence of an “error” may buy resources where prices are “too low”, recombine them and sell the outputs where prices are “too high”. (Sarasvathy et. al, 2003:152). For these authors, information, perceptions, beliefs and expectations are crucial elements to discover an opportunity.

Considering the arguments above, I sustain that social entrepreneurs who make more accurate assumptions of reality and make decisions based on those assumptions are more likely to discover social opportunities than those social entrepreneurs who make less accurate assumptions of reality and do not take decisions based on those assumptions.

*Hypothesis 2: Social entrepreneurs’ accurate perception of the environment is positively related to opportunity discovery.*

### c) Social networks

In traditional or business entrepreneurship, the entrepreneurs’ social network has been considered another key element of entrepreneurial alertness. However, little research has been done related to understand the role of social networks in the discovery of opportunities (De Koning, 2003; Singh, 2000).

Entrepreneurs are in contact with different people at different levels of relationships with different type of relationships. These relationships constitute what scholars have defined as social networks. Singh (2000) defines social network as “a set of nodes (e.g., persons, organizations) linked by a set of social relationships (e.g., friendship, transfer of funds, overlapping membership) of a specified type.” (2000:3). Some characteristics of social networks have been studied due to their relevance as important sources of information which could let the entrepreneur to discover new opportunities (Ardichvili et al., 2003; Hills et al., 1997; Shane, 2003; Singh, 2000). Indeed, Baker and Nelson (2005), as well as many other

scholars, hold that "opportunity discovery could be interactive and social, rather than a process requiring an individual epiphany." (2005:359).

c.1) Weak ties of social entrepreneurs' social networks

The first efforts to study social networks in entrepreneurship come from the theory of social networks in Sociology. In this context, the most frequently cited article in the literature is Granovetter's (1973) who considers weak ties as sources of unique information.

Based on Granovetter (1973) and Burt (1992), Hills et al. (1997) identify weak ties and structural holes as elements that might lead entrepreneurs to have access to more information. In contrast to strong ties, which are represented by the relationships among the entrepreneur and his/her immediate network of closets individuals such as family and/or friends, weak ties are represented by the relationships among the entrepreneur and the people he/she knows in casual terms in different places and situations (Hills et al., 1997). According to these authors, weak ties are casual acquaintances which "do not require individuals to expend much time or contact to maintain the relationship (as opposed to strong ties). A friend of a friend, or a causal business contact would be considered a weak tie." (1997:204). There are some empirical studies that give support to the assumption that entrepreneurs will have access to more information through the people they know less (e.g., Hills et al., 1997; Kaish and Gilad, 1991; Singh, 2000).

On the other hand, the concept of structural holes is related to the size and heterogeneity of the social networks. Based on Burt (1992), Singh (2000) defines structural holes as the different connections an entrepreneur can have with different people that do not have a linkage among each other. The "spaces" (Hills et al., 1997) or "holes" among those people who do not know each other in the entrepreneur's social network are what Burt (1992) defines as structural holes. It is suggested by some scholar that the more structural holes in a social network, the more diverse people the entrepreneur will know and thus he or she will have more access to different information coming from different individuals that might lead him/her to discover new opportunities (Ardichvili et al., 2003; Busenitz, 1996; Kaish and Gilad, 1991; Shane, 2003).

De Koning (2003) is another researcher who followed the ideas of Granovetter (1973) and Burt (1992) to develop a cognitive model of opportunity discovery that considers a network of weak ties as the main source of information for entrepreneurs. For her, entrepreneurs play a role as 'information brokers' in a "large network of weak ties" (2003:286) who are constantly looking to meet new people who they consider that would be useful sources of information. In her literature review she found studies that show that entrepreneurs are the ones who initiate the contact with people that they perceive to be useful sources of information. She also introduces the concept of 'networking activities' to describe the ways entrepreneurs are involved in an iterative process of creation and maintenance of weak ties relationships to expand their network of weak ties.

Entrepreneurs will tend to expand their network of weak ties because it has been suggested by some scholars that over time the individuals who form the network of weak ties will tend to know each other and the information they will provide will be more redundant. This is one reason why entrepreneurs need to be creating new weak ties relationships constantly (De Koning, 2003).

As well as business entrepreneurs, social entrepreneurs are in contact with a large number of different people. Considering the concepts of weak ties and structural holes reviewed before, I suggest that social entrepreneurs will tend to initiate contact with different people that they perceive to be important sources of information. Through this process of building and developing their network of weak ties, they will have more possibilities to find new opportunities. In this sense, I suggest that social entrepreneurs who have extended networks of weak-ties are more likely to discover social opportunities than those social entrepreneurs who have less extended networks of weak-ties.

One example of a social entrepreneur who discovered an opportunity through her network of weak ties is Laura Valdes who is working in environment protection. She found an opportunity when she met someone who gave her information about bioregionalism<sup>8</sup>.

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<sup>8</sup> Personal interview done by the author on August 11<sup>th</sup>, 2011.



Considering the size of the network of weak ties I established the following hypothesis:

*Hypothesis 3a: There is a positive relation between the high number of weak-ties of the social entrepreneurs' networks of weak ties and opportunity discovery.*

c.2) Diversity of social entrepreneurs' social network of weak-ties

The second attribute of social entrepreneurs' social network of weak-ties that might have an influence in the discovery of opportunities is the diversity of the people who constitute that social network. Social networks formed by more homogeneous people are known as dense networks and are characterized by people that give redundant information. In more diverse or heterogeneous networks the people with whom the entrepreneur has ties increases the probability that he or she will get non-redundant information (Shane, 2003:49; Singh, 2000).

While the size of the network of weak ties is important to have access to more information, it is also important that such information comes from diverse individuals to increase the probability of getting different information provided by different people. De Koning (2003) conducted an exploratory study that showed that entrepreneurs who identified more business opportunities were in contact with different people in different places. They were continuously attending different places or trying different means to have more chances to meet new people. The patterns of the more successful entrepreneurs in the study suggested "that a greater diversity was sought and maintained, although perhaps not consciously." (2003:292).

This attribute of diversity of a social network of weak ties can be also applied to the social entrepreneurs' social networks of weak ties. I suggest that social entrepreneurs that have more diverse social networks of weak ties are more likely to discover social opportunities than social entrepreneurs who have less diverse networks of weak ties.

*Hypothesis 3b: The high diversity of social entrepreneurs' social networks of weak ties is positively related to opportunity discovery.*

In general terms, one example of a social entrepreneur who discovered a social opportunity is Gustavo Alanis. He is a Mexican lawyer who founded the "Centro Mexicano de Derecho Ambiental, A.C." (Mexican Center of Environmental Law). While he was working for the Mexican government he noticed the lack of laws to protect the environment in this country. He also noticed that there were no academic institutions in Mexico that offered a specialization in environmental law. This way he decided to study a Master in Environmental Law offered by the American University in the United States. During the time he was studying his master he started information search related to environmental law consultants in Mexico and he found that there were no enterprises that offered these services. Thus, he founded a social enterprise to give legal advice and support to people in disadvantage that want to protect the environment in their communities in Mexico.<sup>9</sup>

### **3.1.2. Factors involved in the creation of social opportunities: social entrepreneur's *bricolage* capabilities, innovation radicalness of the solution, and blind or myopic variations.**

#### a) Social entrepreneur's "bricolage" capabilities

Alvarez and Barney (2007) argue that in creation theory opportunities are formed by the "actions, reactions, and enactment of entrepreneurs exploring ways to produce new products or services." (2007:131). Related to the actions of entrepreneurs to form opportunities, some scholars have considered Lévi-Strauss's (1966) concept of 'bricoleur' to develop the theory of opportunity creation (e.g., Baker and Nelson, 2005; Garud and Karnoe, 2003).

Baker and Nelson (2005) take Lévi-Strauss's concept of "bricolage" to study the process of opportunity creation. The work done by these researchers has been considered the most developed view of entrepreneurial bricolage (Phillips and Tracey, 2007). The Lévi-Strauss's (1966) concept of 'bricoleur' is based on the French term 'bricoleur' which is applied to "someone who works with his hands and uses devious means compared to those of a craftsman." (1966:16-17). Lévi-Strauss used it to identify those individuals who "make do with 'whatever is at hand' [...]" (1966:17) and Baker and Nelson (2005) redefined it to be more

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<sup>9</sup> Personal interview done by the author on July 18<sup>th</sup>, 2011.

integrative and oriented to opportunities: "making do by applying combinations of the resources at hand to new problems and opportunities." (2005:333).

"Making do" means that the entrepreneur makes things happen and it implies a constant tendency to disregard any limitations, understanding "limitations" as "deceptive conclusions". Deceptive conclusions would be seen by persons as constraints, barriers or prohibitions that would not enable them to act (Weick, 1979:149). This researcher suggests that people who have a high fear of failure might stop before limitations and their knowledge might be based on avoided tests, which means that people will learn from every situation they are avoiding.

On the contrary, people who have a low fear of failure will continue forward and will acquire knowledge based on their actions. It would seem that such ways of obtaining knowledge would be a kind of negative and positive reinforcements. In this sense, social entrepreneurs who create social opportunities would be acting as *bricoleurs* who do not let any obstacle stop them from reaching their objectives, and will do whatever is on their hands to make things happen using the resources they have at hand or looking for them. The resources the entrepreneurs have at hand are their skills, abilities, and knowledge that they have accumulated throughout their lives and which they can use to create new products and services (Baker and Nelson, 2005; Sarasvathy, 2001).

The concept of effectuation is linked to the concept of "making do". For Sarasvathy (2001), effectuation implies that the entrepreneur will use a particular set of means that he or she has at hand to create a new business model; or even if the entrepreneur does not have the necessary resources to create the new venture, he or she will look for the ways to have them. For example, it might be possible that the entrepreneur will look for a partner to have more financial resources to start his/her business. Through effectuation entrepreneurs can have as many ends as their imagination let them use the resources they have at hand or the resources they can get from different sources. "The process of effectuation allows the entrepreneur to create one or more several possible effects irrespective of the generalized end goal with which she [or he] started." (2001:247). Again, the entrepreneurs who act through the effectuation process will not let any obstacle to stop them of reaching the objectives they have in mind.

Social entrepreneurs who create opportunities will use the resources they have at hand to solve social or environmental problems. They will not be stopped by any obstacle to reach their goals and will show a low fear of failure. One example of a social entrepreneur who had a low fear of failure is Helen Samuels. Her most successful social project has been the creation of a 'self-management' model to empower young people from different poor neighborhoods in Mexico City and some large cities in the United States. She started her project only with her abilities, skills, knowledge and with a strong conviction that she would make things happen.<sup>10</sup>

I sustain that social entrepreneurs with a low fear of failure are more likely to create social opportunities than social entrepreneurs with a higher fear of failure. Considering this assumption I establish the following hypothesis:

*Hypothesis 4a: Social entrepreneurs' low fear of failure is positively related to opportunity creation.*

The second attribute highlighted in Baker and Nelson's (2005) definition of 'bricolage' is the combination of resources at hand. Combination of the resources at hand for new purposes implies that entrepreneurs will look for new ways to use the existing resources they have to create new forms to serve markets. In the case of social entrepreneurs who create solutions for social or environmental problems, they will combine the resources they have at hand to bring into existence the things they have in their mind.

The research done by Baker and Nelson (2005) shows that 'bricolage' appears to create a context in which creativity; improvisation; combinative capabilities; tolerance for ambiguity, messiness, setbacks; and the development of social skills and networks are encouraged. The exploratory study conducted by these researchers showed that there are entrepreneurs who could not imagine how to use, combine or reuse the preexisting resources for new purposes. To define 'resources at hand' they considered all the abilities, skills, knowledge, ideas, social networks, and the material preexisted resources available for the entrepreneurs of their study. They also included in the definition resources that could be obtained for free or for a very low

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<sup>10</sup> Personal interview done by the author on August 6<sup>th</sup>, 2011.

price. In their study they found that nine entrepreneurs from a sample of 29 could not combine and use the resources at hand while the remaining 20 entrepreneurs did it (2005:340). These results suggest that entrepreneurs who have 'bricolage' capabilities will then to create opportunities.

By applying the concepts of 'bricolage' capabilities developed in this subsection to social entrepreneurship, I suggest that social entrepreneurs who show a higher ability to combine and use the resources they have at hand to solve social problems are more likely to create social opportunities than social entrepreneurs with less ability to combine and use the resources they have at hand to solve social problems.

One example of a social entrepreneur who combined and used the resources she had at hand to create a solution for a social problem is Alicia Argüelles who developed a methodology to prevent drug and alcohol abuse in young people. She was very young when she started her project. She was finishing the last year of Psychology at the university and she did not have the financial resources to acquire expensive material to start with conferences and workshops at different neighborhoods of Mexico City, therefore she used the resources she had at hand and with some cardstocks she made a flipchart and she designed her own material. That was in the decade of the 70's. Now, she is one of the most recognized people working in the prevention of drug and alcohol abuse in Mexico.<sup>11</sup>

*Hypothesis 4b: Social entrepreneurs' high ability to combine and use the resources at hand to solve social problems is positively related to opportunity creation.*

b) Innovation radicalness of the business solution

As I have explained in a previous section, Zahra et al. (2008) use the five criteria from the behavioral theory of the firm to conceptualize social opportunities: prevalence, relevance, urgency, accessibility, and radicalness. Prevalence refers to the frequency a social problem is present in some regions of the world. Relevance refers to the specific characteristics of social entrepreneurs that make entrepreneurs to be interested in certain social problems. Urgency is related to the readiness to solve social problems originated by unpredictable

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<sup>11</sup> Personal interview done by the author on July 4<sup>th</sup>, 2011.

events. Accessibility refers to the difficulty of solving social problems. And the last one, radicalness refers to the “extent to which a major innovation or social change is necessary to address a particular problem” (2008:124).

The first four criteria are focused on social problems and not on the solutions. The last one, radicalness, is the only one which focuses on solutions. Considering this, I suggest that the first four criteria could apply to both discovery and creation of social opportunities because if a social problem prevails, the solutions to solve it can be discovered or created. The same happens with the relevance of the problem which will depend on the interests of social entrepreneurs who can create or discover opportunities. Similarly, if a problem is urgent or/and have high difficulty, social entrepreneurs could discover or create the opportunity to solve it. Radicalness, however, would be more associated with the creation of new solutions.

The concept of radicalness is closely related with the concept of innovation. Rogers (1995:11) defines innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption. It matters little, so far as human behavior is concerned, whether or not an idea is objectively new as measured by the lapse of time since its first use or discovery. The perceived newness of the idea for the individual determines his or her reaction to it. If the idea seems new to the individual, it is an innovation.”. This definition implies that the idea, practice, or object can exist before the entrepreneur has knowledge about it, in this case, the entrepreneur would be discovering the idea, practice or object.

On the other hand, Marvel (2012:448) defines radicalness as the “degree to which an output represents a significant departure from existing technologies and their corresponding products or services in the larger society.”

When the concept of radicalness is linked to the concept of innovation, the result is a novel solution that has an extremely highly positive consequence (Leifer et al., 2000; Dahlin and Behrens, 2005; Marvel and Lumpkin, 2007).

For the case of social entrepreneurship, I sustain that innovation radicalness refers to a novel solution which has distinctive features that are missing in previously observed solutions and that has extreme positive impact in society and/or the environment. This way, social

entrepreneurs who introduce novel radical solutions to address social problems might be more oriented to create those solutions instead of discovering them.

Social entrepreneurs who introduce radical solutions to address social problems are more likely to create opportunities than those social entrepreneurs who do not introduce radical solutions to address social problems, the more radical the solution the more likely to create opportunities.

*Hypothesis 5: A high innovation radicalness of social entrepreneurs' solutions is positively related to opportunity creation.*

One example of a social entrepreneur who created a radical social opportunity is Leticia Jáuregui Casanueva. She founded Comunidades de Emprendedores Sociales, A.C. (Community of Social Entrepreneurs- CREA) in 2008. When Leticia Jáuregui was doing her field research for her undergraduate dissertation, she went to the State of Zacatecas in Mexico, and she noticed there was a social problem in that region of the country. Men were leaving their communities to emigrate to the United States as illegal laborers. Those men were leaving behind their families without any income to survive. As a way to generate income, the women of that region started to produce processed food, cooked at their homes, handcrafts, clothes, and some other products. When Leticia Jáuregui studied this problem, she created an innovative business model to train these women.

CREA is a non-for-profit organization oriented to develop entrepreneurial capabilities and skills among rural women in Mexico. The strategy followed by CREA is divided in three lines of action: first, students from different universities teach courses related to developing entrepreneurial skills among rural women such as accounting, marketing, and sales; second, CREA helps in establishing a link between women entrepreneurs and suppliers, credit sources, and customers abroad, mainly in the United States of America. In third place, CREA selects those projects which have more possibilities of success to give them deeper support to be launched.<sup>12,13</sup>

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<sup>12</sup> Personal interview done by the author on November 23, 2010

<sup>13</sup> <http://www.creoencrea.org/>

c) Blind or myopic variations

In a creation context, entrepreneurs will engage in an iterative process of trial and error while forming the opportunity (Baker and Nelson, 2005; Alvarez and Barney, 2007). “In creation theory, entrepreneurs do not search [...] they act, and observe how consumers and markets respond to their actions” (Alvarez and Barney, 2007: 131); this assumption implies the existence of blind or myopic variations.

In creation theory, blind variations are actions that entrepreneurs start unconsciously or without planning; and even if they start the action deliberately, it is suggested that these actions can start a process of action and reaction that makes possible the formation of opportunities. The main characteristic of this type of variation is that entrepreneurs will not be able to see the “whole picture”, which means that entrepreneurs will not know the implications of their actions until they finish with the process of action and reaction and the opportunity is created.

Social entrepreneurs, as well as commercial entrepreneurs will tend to start actions and reactions to form a social opportunity. Indeed, social entrepreneurs with a higher inclination to work more on a basis of trial and error, acting and observing how target individuals, groups or communities respond to their actions are more likely to create social opportunities than social entrepreneurs who tend to work less on a basis of trial and error.

Considering this, I derive the following hypothesis:

*Hypothesis 6. A high number of blind or myopic variations started by social entrepreneurs are positively related to opportunity creation.*

This means that if a social entrepreneur starts more actions with or without planning, oriented to address a social or environmental problem, that social entrepreneur will have a tendency to create opportunities.

Table 3.1 summarizes the hypotheses formulated in this section.



**Table 3.1. Hypotheses of the study.**

<b>Theoretical framework</b>	<b>Contributors (in chronological order)</b>	<b>Research Hypothesis</b>	<b>Expected Results</b>
Opportunity discovery/ entrepreneurial alertness: information search related to preexisting solutions	Kirzner (1973); Kaish and Gilad (1991); Busenitz (1996); Gaglio and Katz (2001); Ardichvili et al. (2003); Eckhardt and Shane (2003); Sarasvathy et al. (2003); Shane (2003); Gartner et al. (2003); Alvarez and Barney (2007).	H <sub>1</sub>	Confirmation of H <sub>1</sub> : There is a positive relationship between the high information search related to preexisting entrepreneurial solutions and opportunity discovery.
Opportunity discovery/ entrepreneurial alertness: accurate perception of the environment	Kirzner (1973); Kaish and Gilad (1991); Busenitz (1996); Gaglio and Katz (2001); Ardichvili et al. (2003); Eckhardt and Shane (2003); Sarasvathy et al. (2003); Shane (2003); Gartner et al. (2003); Alvarez and Barney (2007).	H <sub>2</sub>	Confirmation of H <sub>2</sub> : There is a positive relationship between social entrepreneurs' accurate perception of the environment and opportunity discovery.
Opportunity discovery/ entrepreneurial alertness: weak ties of social networks	Granovetter (1973); Kaish and Gilad (1991); Burt (1992); Hills et al. (1997); Singh (2000), Ardichvili et al. (2003); De Koning (2003).	H <sub>3a</sub>	Confirmation of H <sub>3a</sub> : There is a positive relationship between the high number of weak ties of the social entrepreneurs' network of weak ties and opportunity discovery.
Opportunity discovery/ entrepreneurial alertness: Diversity of social networks	Singh (2000); De Koning (2003); Shane (2003)	H <sub>3b</sub>	Confirmation of H <sub>3b</sub> : There is a positive relationship between the high diversity of social entrepreneurs' social networks of weak ties and opportunity discovery.
Opportunity creation/ bricolage capabilities: social entrepreneurs' low fear of failure	Lévi-Strauss (1966); Weick (1979); Sarasvathy (2001); Garud and Karnoe (2003); Baker and Nelson (2005)	H <sub>4a</sub>	Confirmation of H <sub>4a</sub> : There is a positive relationship between social entrepreneurs' low fear of failure and opportunity creation.

Opportunity creation/ bricolage capabilities: social entrepreneurs' combination and use of resources at hand to solve social problems	Lévi-Strauss (1966); Weick (1979); Sarasvathy (2001); Garud and Karnoe (2003); Baker and Nelson (2005)	H <sub>4b</sub>	Confirmation of H <sub>4b</sub> : There is a positive relationship between the social entrepreneurs' high ability to combine and use the resources at hand to solve social problems and opportunity creation.
Opportunity creation: innovation radicalness	Rogers (1995); Leifer et al. (2000); Dahlin and Behrens (2005); Marvel and Lumpkin (2007); Zahra et al. (2008)	H <sub>5</sub>	Confirmation of H <sub>5</sub> : There is a positive relationship between the high innovation radicalness of social entrepreneurs' solutions and opportunity creation.
Opportunity creation: blind or myopic variations	Baker and Nelson (2005); Alvarez and Barney (2007).	H <sub>6</sub>	Confirmation of H <sub>6</sub> : There is a positive relationship between the high number of blind or myopic variations started by social entrepreneurs and opportunity creation.

In the next chapter I define the methodology and the study design to test these hypotheses.

## **4. Methodology**

In this chapter I describe the structure of the study and the methods I used in each part of this research.

### **4.1. Methodological approach**

According to Esterberg (2000) the study of social phenomena can be addressed in different ways. Morgan and Smircich (1980) used the scheme of analysis from Burrell and Morgan to develop a framework of the different paradigms a social researcher can adopt in order to approach to a social research. In their framework, the study of social science can move from the most subjective approach to the most positivist one, considering assumptions the researcher has in three main elements: ontology, epistemology and human nature.

Considering the framework developed by Morgan and Smircich (1980), this study adopts a positivist paradigm. From a positivist perspective, the universe has order, independent of human perceptions, and the function of researchers is to discover that order (Hatch, 2002). Departing from these ideas and considering previous theoretical findings, I sustain the existence of specific factors that lead social entrepreneurs to create or discover social opportunities. It is through the empirical research done in this study that I intend to confirm the hypotheses presented in Chapter 3.

### **4.2. Study design**

Since the research on opportunity identification in social entrepreneurship is its nascent stage, I decided to design a mixed study, divided in two parts, following the mixed methods research proposed by Creswell (2009) who considers four important aspects which need to be taking into account in a mixed design: timing, weighting, mixing, and theorizing.

In the first part of this research, I conducted an exploratory study to have a better understanding of the phenomenon (Leedy and Ormrod, 2005). In this stage of the study, I gathered information from some social entrepreneurs from Ashoka Mexico and conducted several semi-structured interviews with some of those social entrepreneurs and I asked them about their understanding of social entrepreneurship phenomenon and the some questions

related to the form they got the idea to start their social projects and to develop the opportunity.

The second part of the study consists in a descriptive, correlational and explanatory design. For the descriptive phase, I developed an instrument to measure the two dependent variables and the seven independent variables I identified in Chapter 3. I included some socio-demographic items as control variables. The instrument was administered in four modes: personal interview, telephone, Skype and e-mail. Considering the time and form the survey was conducted, it is defined as a cross-sectional study since it is "based on observations representing a single point in time." (Babbie, 2004:101).

In the correlational and explanatory stages, I analyzed the data through several multivariate techniques such as factor analysis, normality tests, and two stages least squares to prove the hypotheses (Kerlinger and Lee, 2000, Wooldrige, 2000).

#### **4.3. Part 1. Exploratory study using semi-structured interviews**

In the exploratory phase of this study I conducted semi-structured interviews with thirteen social entrepreneurs who founded several social projects. The interviews served for two purposes: first, to have a better understanding of the way social entrepreneurs had the idea and generated a proposal to address a social/environmental problem, and second, to shed light on the ways social entrepreneurs understand the concept of 'opportunity' and know more about the language they use in order to develop the items for the questionnaire.

##### **4.3.1. Research methods**

The research methods used in the first part of the study are qualitative. Esterberg (2000) sustains that the use of qualitative methods do not need large samples since the objective of the exploratory research is to have a deep understanding of social issues instead of looking for generalizations.

### 4.3.2. Sample

In Mexico, researchers in social sciences pass hard time trying to find information related to the subjects that will constitute the population of the study. The lack of information about social entrepreneurs in Mexico makes difficult to know with certainty the total number of social entrepreneurs working in the country. Furthermore, since the figure of 'social entrepreneur' is new in Mexico, few people know about them.

Centro Mexicano para la Filantropía (CEMEFI-Mexican Center for Philanthropy) has gathered the data of approximately 1,166 members (CEMEFI, 2012) in different categories: individuals, philanthropic institutions, non-for-profit and for-profit-organizations, and commercial companies involved in social ventures. However, the information is not classified by type of organization or project and it would be necessary to contact each person by telephone or e-mail to filter the contacts and build a database with those individuals that fulfill the social entrepreneur definition which, in practical terms, would be a colossal effort for just one person.

One option to locate social entrepreneurs is the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM or Tecnológico de Monterrey). This university has promoted research on social entrepreneurship since 2001 through the work done by the School of Business of the ITESM (EGADE Business School) and the Social Enterprise Knowledge Network (SEKN), a consortium formed by prestigious academic institutions from Iberoamerica, Harvard Business School, and Fundación AVINA, which main goal is the generation and distribution of knowledge related to social entrepreneurship in Iberoamerica (Leguizamón, 2003).

The Tecnológico de Monterrey is in the process of gathering information related to social entrepreneurs through their Vicerrectoría de Investigación, Emprendimiento y Desarrollo Social (Vice-rectorate for Research, Entrepreneurship and Social Development). I contacted the Director of Social Entrepreneurship and Impulse of Micro-Business at Campus Monterrey, and the Director of Social Development at Campus Santa Fe who was leading a project to collect information of social entrepreneurs in Mexico. Both Directors expressed that the project to gather information of social entrepreneurs in Mexico was in construction and that they could not give me information related to social entrepreneurs at that moment. Their

recommendation was to contact the responsible of the office of the Tecnológico de Monterrey's Institute for the Social and Sustainable Development (Instituto para el Desarrollo Social Sostenible- IDESS) at each campus to ask for information.

Another option to have access to the information of social entrepreneurs in Mexico was Ashoka Mexico. Ashoka is an international institution that promotes social entrepreneurship around the world. Ashoka in Mexico was launched in 1987, and was the first program of Ashoka to be implemented in North America and the second one in Latin America. Ashoka Mexico and Central America supports around 204 social entrepreneurs in Mexico, Nicaragua, Guatemala, Costa Rica and El Salvador. Mexico was the first country where the program "Economic Citizenship for all" was implemented. This program is a hybrid model in which companies and civil organizations are meeting to create new business models to foster social change.

Finally, I decided to build the database of social entrepreneurs considering three sources: Ashoka Mexico, Tecnológico de Monterrey and through recommendations. Ashoka Mexico's website was the main source of information of the majority of social entrepreneurs that constitute the population for this study since it was the most practical way to gather information. To complete the population, I gathered information of some other social entrepreneurs through the Tecnológico de Monterrey and by the recommendation of colleagues and other social entrepreneurs that I had contacted. The total number of social entrepreneurs that constitute the population for this study is 190 social entrepreneurs.

To select the social entrepreneurs for the interviews I use the non probabilistic methods of snowball sampling and purposive sampling. According to Babbie (2004) the snowball sampling is an appropriate procedure "when the members of a special population are difficult to locate [...]. In snowball sampling, the researcher collects data on the few members of the target population he or she can locate, then asks those individuals to provide the information needed to locate other members of that population whom they happen to know. "Snowball" refers to the process of accumulation as each located subject suggests other subjects." (Babbie, 2004:184).

On the other hand, purposive sampling is used when there are some difficulties to gather the data of the entire population object of the study and there is available data of the subjects that represent a small portion of that unidentified population. In this sense, the researcher can collect enough data for his or her purposes (Babbie, 2004). Both procedures are used mainly for exploratory purposes.

Through Ashoka Mexico's website I could obtain the names of the social entrepreneurs working in Mexico City, the name and description of each project and the field of work where each project was classified. With that information, I browsed looking for more information related to each social entrepreneur such as telephone numbers, e-mail, or any other data that could give me the opportunity to contact him or her. I contacted 22 social entrepreneurs via e-mail and/or telephone. I chose those 22 social entrepreneurs because their projects are good examples of social projects allocated in the six fields of work that Ashoka has established to support social entrepreneurs: learning/education, economic development, human rights, environment, civic engagement, and health. From those 22 social entrepreneurs, 12 accepted to participate in the study. I conducted eight interviews in person and three via Skype. One more social entrepreneur was recommended by a colleague and the interview was conducted in person.

I chose a sample of 13 social entrepreneurs (n=13) since it is suggested by Leedy and Ormrod (2005:1349) that when using phenomenological approach, a typical sample size can be from 5 to 25 individuals who have direct experience with the phenomenon being studied.

#### **4.3.3. Semi-structured interviews**

The interviews were conducted in Spanish and the questions that serve as a guide for the semi-structured interviews were:

1. How did you have the idea to found this social project?
2. For you, what is an opportunity?
3. How is a social problem transformed into an opportunity?
4. The idea for your social project was something that you created? How did you find your project?

5. The idea for your social project emerged from a search that you started looking for similar projects in some other place in the world?
6. Do you think you are a social entrepreneur? Why?
7. How do you describe yourself? What abilities, characteristics, and competences do you think you have?

All interviews were recorded and transcribed. Table 4.1 shows the social entrepreneurs interviewed for this part of the study.

**Table 4.1. Social entrepreneurs interviewed in the exploratory part of the study.**

Interview No.	Date of interview	Social entrepreneur (founder)	Social project	Description of social project	Recording time	Date of transcript
01	Nov-23-10	Lic. Leticia Jáuregui	CREA (Comunicadores de Emprendedores sociales - Communities of Social Entrepreneurs)	Development of entrepreneurial capabilities and skills among rural women in Mexico	40 minutes	Nov-28-10
02	Jun-01-11	Dr. Hector Castillo Berthier	Circo Volador (Flying Circus)	Work with low income young people (gangs): work training, forum for artistic expressions, lessons of music, and recording studio among other workshops	65 minutes	Jul-1-11
03	Jun-28-11	Mtra. Lillian Liberman	Shettama	Prevention of child sexual abuse	71 minutes	Jul-1-11
04	Jul-1-11	Mtro. Francisco Javier Arroyo	Consultancy on agro-ecology, urban agriculture, and sustainable ecology sanitation.	Improves the alimentary diet of the population in vulnerability through house-farming	32 minutes	Jul-2-11
05	Jul-4-11	Mtra. Alicia Arguelles	Fundación de Investigaciones Sociales, A.C. (Social Research Foundation)	Prevention of alcohol abuse in young people	44 minutes	Jul-4-11
06	Jul-8-11	Mtra. Martha Heredia	Work with people with disabilities, empowerment for women, and co-founder of DanceAbility project in Mexico	disabilities, trainer for women in vulnerability, dance trainer for people with disabilities in the	108 minutes	Aug-30-11
07	Jul-18-11	Mtro. Gustavo Alanís	Centro Mexicano de Derecho Ambiental A.C. (Mexican Center for Environmental Law)	Support to farmers, communities, and individuals in cases related to environment protection	21 minutes	Sep-3-11
08	Aug-1-11	Dra. Susan Pick	Instituto Mexicano de Investigación de Familia y Población, A.C. (Mexican Institute for Research on Family and Population)	Training of women to empower them and provide them with capabilities to improve their lives. Support to open micro businesses among women in vulnerability	22 minutes	Sep-5-11
09	Aug-5-11	Prof. Carlos Mendoza	Canal Seis de Julio, A.C. (Channel July Sixth)	Creation of documentaries to inform people about issues related to governance and citizenship	91 minutes	Sep-5-11
10	Aug-5-11	Helen Samuels	Tekno.net	Work with young people from gangs, women empowerment, ecology education, trainer of "tools for living" for people in vulnerability	34 minutes	Sep-3-11
11	Aug-10-11	Lic. Pablo Romo	Observatorio de la Conflictividad Social en México (Observatory of Social Conflicts in Mexico)	Detection of social problems that could jeopardize the peace of some region in the country. Promotor of different mechanisms that could bring peace to regions in conflict	56 minutes	Sep-11-11
12	Aug-11-11	Lic. Laura Valdés Kuri	Movimiento Bioregional en México (Bioregional Movement in Mexico)	Education of people in different regions to protect the environment and use natural resources in efficient ways. Consultory for the development of micro businesses in indigenous communities related to protect the environment	57 minutes	Sep-14-11
13	Aug-12-11	Lic. Andrés Aguilar	Risaterapia A.C.	Laughter therapy in different hospitals in Mexico. Training in laughter therapy	151 minutes	Aug-13-11
Total recording times:					853	



#### 4.3.4. Analysis of the interviews

Since the objectives of this part of the study is to have a better understanding of the ways social entrepreneurs identify opportunities, and to get familiar with the language social entrepreneurs use when they refer to the different forms they started their social projects, I analyze the interviews identifying the main themes in them. I started using two types of coding techniques. First, I applied an “open coding” (Babbie, 2004; Estebeg, 2002) that let me identify the trending topics in the interviews. Second, I used the qualitative method of “code by list” (Babbie, 2004). I previously established a list of words or topics based on the study by Gartner et al. (2003) who identify the words related to the language used in opportunity discovery and creation (Gartner et al., 2003) in commercial entrepreneurship.

Using the coding by list, I found that social entrepreneurs use the ‘discovery’ and ‘creation’ words established by Garter et al. (2003:108). The ‘discovery words’ I detected were: ‘search’, ‘notice’, ‘find’, ‘look’, ‘see’, ‘observe’, ‘turn around and see’, and ‘it was there’. In the case of the ‘creation words’, Gartner et al. (2003:110) propose that individuals refer to ‘creation’ when they use words that “describe their actions and the circumstances surrounding their actions. [This way] opportunities will be the result of what individuals do, rather than the result of what they see.” It is interesting noticing how in the case of creation, the word majorly refer to the actions of the individual, meaning with actions verbs that imply to do something more than just observe or look for something. In some sense, it implies a greater level of innovation. Such words are: “create”, “invent”, “did something new”, words that I also identify in the interviews I did.

From the analysis, I identified 42 codes by list and 101 open codes. The codes by list were related with the following verbs: doing things, search, find, build, create, try, face, act, know, develop, realize, identify, solve, see, observe, innovate, invent, investigate, and turn around. On the other hand, the open codes were related with the social entrepreneurs’ characteristics or the characteristics of the social projects. Some examples of these words are: by accident, fate, chance, love for humanity, family background, professional background, assertiveness, clarity of objectives, pursuing achievement, social commitment, confidence, empathy, it was there, following models, generating ideas, sustainable model, generating resources, and focus on the problem correctly. The complete list of codes is in the Appendix 1.

The two list of codes let me compare the language use by the social entrepreneurs, the different verbs they used, and the different ways they got to the proposal of a solution with the factors I am proposing in the Chapter 3. Actually, there is a match between the factors and the actions done by these thirteen social entrepreneurs when they explain how they generate the proposal of attention to the social problem of their interest. However, to support this argument it is necessary to prove these relationships quantitatively.

To prove the hypotheses developed in the Chapter 3, I build a questionnaire considering the list of codes that I generated through the analysis of the semi-structured interviews. Using those codes I developed a pool of 87 items. I explain the process I followed to build the questionnaire in the next sections.

#### **4.4. Part 2. Descriptive, correlational and explanatory research**

In the second part of this research, I designed an instrument to measure the different variables identified in the literature. Data was collected from a sample of 62 social entrepreneurs and analyzed through qualitative and quantitative methods.

##### **4.4.1. Research methods**

The methods used in this part of the study are qualitative and quantitative. I developed an instrument to measure the dependent and independent variables. The first part of the instrument includes one open question which was qualitatively analyzed and from the second to the fourth parts of the instrument I applied quantitative techniques to analyze the data and prove the hypotheses.

##### **4.4.2. Variables**

In this study there are two dependent variables: opportunity discovery and opportunity creation. Opportunity discovery refers to the identification of preexisting business solutions to solve a social problem. This variable is related to three independent variables: entrepreneurial alertness-information search, entrepreneurial alertness-perception of the environment, and entrepreneurial alertness-social networks. Entrepreneurial alertness is an attitude of receptiveness to available (but hitherto overlooked) opportunities.

On the other hand, opportunity creation is the construction of a novel business solution or sustainable proposal to solve a social/environmental problem. This variable is related to three independent variables: entrepreneur's bricolage capabilities, innovation radicalness, and blind or myopic variations.

While entrepreneur's bricoleur capabilities are a set of skills and abilities to combine and reuse resources at hand to create a new solution to solve a social problem, innovation radicalness is the creation of a novel solution that has an extreme positive consequence to solve a social problem. Blind or myopic variations are the actions started by social entrepreneurs, conscious or unconsciously, which create an iterative process of action and reaction that makes possible the formation of opportunities.

#### **4.4.3. Operationalization of the variables**

As it was explained in a previous section, I generated a pool of 87 items using the analysis of the thirteen semi-structured interviews and following the measurement model proposed by DeVellis (2003:14). This author assumes that individual items are comparable indicators of the underlying construct. It means that each item I developed is an indicator of the latent variable I want to measure. I chose a Likert scale because it is widely accepted to measure opinions, beliefs, and attitudes (DeVellis, 2003:79). I decided to use a five points Likert scale (1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree). I added a neutral middle option because this way I give the respondents the chance to think more carefully their answer without forcing them to choose between an agree or disagree answer (Fowler, 1995:65-66).

The pool of items was validated by three Professors from the EGADE Business School, Mexico City Campus. From the validation by experts, the pool of items was reduced to 35 items. The items were writing in Spanish.

Now, I describe how I used these 35 items to operationalize each variable. To measure the dependent variable 'opportunity discovery' I used the following items (the notation between the parentheses in each item is to identify the variable. The letters denote the variable that is being measured and the numbers denote the position of the item in the questionnaire):

- "Descubrí una solución para el problema." (I discovered the solution to the problem). (OD1).
- "Esta solución ya existía, yo únicamente la encontré." (This solution already existed and I only found it). (OD3).
- "Me di cuenta de una solución." (I realized there was a solution). (OD5).
- "Encontré una solución para el problema." (I found a solution to the problem). (OD7).

To measure the dependent variable 'opportunity creation' I used the following items:

- "Creé una solución para el problema." (I created a solution to the problem). (OC2).
- "Hice una solución para el problema." (I did a solution to the problem). (OC4).
- "Desarrollé una respuesta para el problema." (I developed an answer to the problem). (OC6).
- "Esta solución no existía, yo la he ido creando." (This solution did not exist, I have been creating it). (OC8).

To measure the independent variable "entrepreneurial alertness", I have operationalized it in three dimensions: information search related to preexisting solutions, entrepreneur's perception of the environment, and entrepreneur's social networks.

Information search of preexisting business solutions: it occurs when social entrepreneurs have knowledge of specific social problems and look for information related to the solutions for those problems. The information search can be started by the social entrepreneur deliberately or not. To measure this dimension I considered any action taken by the social entrepreneur in order to search for information to find a solution to solve the social problem identified by the entrepreneur.

The items I developed to measure this variable are:

- “Busqué información sobre soluciones para el problema.” (I searched for solutions to solve the problem). (INFO1).
- “Busqué una solución que ya hubiera sido hecha en otro lado.” (I looked for any solution that was already done in other place). (INFO3).
- “Busqué soluciones para generar ingresos para la gente.” (I looked for solutions to generate income for the people). (INFO5).
- “Busqué quién más estuviera trabajando en un problema similar.” (I looked for someone else who were working in a similar problem). (INFO9).
- “Busqué información sobre una solución a través de otras asociaciones civiles.” (I looked for information for a solution through other civic organizations). (INFO11).
- “Tomé una solución de uno o varios modelos que encontré.” (I did a solution from one or more models that I found). (INFO12).
- “Observé otros trabajos que se estaban haciendo relacionados con algunas soluciones para el problema que yo identifiqué.” (INFO14).

Social entrepreneur’s perception of the environment is represented by the assumptions made by the social entrepreneur about reality and the consequent decisions he or she will make according to those assumptions. To measure this dimension I considered the match between the assumptions done by social entrepreneurs about the way they believed the social problem would be solved and what actually happened. The items I developed to measure this variable are:

- “Me parecía que esta solución tenía futuro en México.” (I perceived that this solution would have future in Mexico). (PERCEP4).
- “Creo que mi percepción del problema fue correcta.” (I believe that my perception of the problem was good). (PERCEP7).
- “Mi percepción del problema me llevó a encontrar una solución.” (The perception I have of the problem leaded me to find a solution). (PERCEP10).

Entrepreneur's social networks attributes identified in this study are weak ties and social networks diversity. To measure the weak ties, I considered the acquaintances the social entrepreneur has in his or her social networks. The items I developed to measure this variable are:

- “Pregunté a conocidos sobre alguna solución para el problema.” (I asked my acquaintances if they knew a solution to the problem). (SNWEAK2).
- “Conocí personas que estaban trabajando en una solución para resolver el problema que me interesaba.” (I met people that were working on developing a solution to the problem in which I was interested). (SNWEAK6).
- “Pregunté a otras personas cómo habían resuelto un problema similar al que yo identifiqué.” (I asked some persons about the way they solved a similar problem to the one I identified). (SNWEAK13).
- “Tengo una red de contactos muy grande lo que me permitió tener acceso a más información para encontrar una solución para el problema.” (I have a very large social network which let me have access to more information to find a solution to the problem). (SNWEAK15)

To measure the diversity of the social entrepreneur's social network I considered the variations in the characteristics of the people that are part of the social network of the social entrepreneur. The item to measure this variable is:

- “Conozco personas de diversos ámbitos lo que me permitió conseguir información para resolver el problema social.” (Knowing people from diverse circles let me have access to information to solve the social problem). (SNWEAK\_DIV8).

To measure the independent variable “bricolage capabilities”, I considered the attributes: low fear of failure, and use and combination of the resources at hand. To measure social entrepreneurs' low fear of failure I developed the following items:

- “No tuve miedo de fallar mientras actuaba para tratar de solucionar el problema.” (I was not afraid of failing while I was working trying to solve the problem). (BRIFEAR1).

- “He ido venciendo todos los obstáculos para crear una solución para el problema.” (I have overcome all the obstacles to create a solution for the problem). (BRIFEAR5).

To measure the independent variable use and combination of the resources at hand, I developed the following items:

- “Inventé una nueva forma de hacer las cosas para intentar solucionar el problema.” (I invented a new form of making things to try to solve the problem). (BRIUSE2).
- “Reutilicé los recursos que tenía a la mano para crear la solución para el problema.” (I reused all the resources at hand to create a solution to the problem). (BRIUSE6).
- “He creado una propuesta de solución de principio a fin.” (I have created a proposal to solve the problem from the beginning to the end). (BRIUSE9).
- “Combiné los recursos que tenía a la mano para crear una propuesta de solución para el problema.” (I combined the resources at hand to create a proposal of a solution to the problem). (BRIUSE12).

To measure the independent variable “innovation radicalness”, I am considering any novel solution that is invented by the social entrepreneur and that has an extreme positive impact in society and/or the environment. The items to measure this variable are:

- “Consideré que se requería una mayor innovación para solucionar el problema.” (I considered that a higher innovation was required to solve the problem). (RAD3).
- “La solución que yo desarrollé es única.” (The solution I developed is unique). (RAD7).
- “La propuesta de solución que yo creé ha generado un cambio positivo de gran impacto.” (The proposal of a solution that I created has generated a high impact positive change). (RAD10).

To measure the independent variable “blind or myopic variations”, I am considering the actions started by social entrepreneurs when they have acted on a basis of trial and error, which means that they first act and then they observed how the people responded to their actions to make the necessary adjustments and start an iterative process of action and reaction until they consider that they have created the solution to solve the social problem. To measure this variable I developed the following items:

- “Actué y después vi cómo mis acciones impactaban en el problema.” (I first acted and then I saw how my actions impacted in the problem). (BLIND4).
- “Después de ver cómo impactaban mis acciones en el problema, decidí hacer algunos cambios para mejorar la solución.” (After observing how mi actions impacted on the problem, I decided to make some changes to improve the solution). (BLIND8).
- “No tenía claro cómo lo iba a hacer pero empecé a crear una propuesta de solución para el problema.” (I was no clear about how I was going to do the things but I started to create a proposal to solve the problem). (BLIND11).

#### **4.4.4. Questionnaire**

I structured the questionnaire in four parts. In the first part I included two open questions. The first question is related to the ways the social entrepreneur got the idea to solve the social problem in which he or she was interested. The purpose to include this question is that the entrepreneur can remember how and when he or she generated the proposal to address a social problem and put him or her in a context to answer the second and third parts of the questionnaire which include the 35 items.

The second open question is related to the year the social entrepreneur generated the idea to solve the problem. Again, the purpose of this question is to put the social entrepreneur in a context in his or her mind to answer the next sections of the questionnaire. The third question in this part is related to the field of impact of the social entrepreneur’s project.

The second part of the questionnaire includes the 8 items related to measure the dependent variables merged in a one by one procedure (one from OD, one from OC).



The third part of the questionnaire includes the items developed to measure the independent variables, organized in two groups. The first group includes 15 items related to the independent variables for OD ordered randomly (Valdez, 204:108). The second group includes the 12 items related to the independent variables for OC ordered randomly.

The fourth part of the questionnaire includes items related to the personal information such as social entrepreneur's name, the name of the social project, telephone number, and e-mail. This part also includes socio-demographic items that serve as control variables such as gender, age and the last level of education.

It is important to mention that this version of the questionnaire was developed after several modifications while I was administering the first questionnaires. This final version of the questionnaire is placed in the Appendix 2.

Since the few studies related to social opportunities conducted by some researchers use mostly qualitative methods such as case studies and grounded theory (e.g. Baker and Nelson, 2005; Corner and Ho, 2010, Zahra et al., 2008), there is not a clear reference point to determine the size of the sample for this survey.

Literature in commercial entrepreneurship reports studies were surveys have been conducted with small samples, between 50 and 60 entrepreneurs (e.g. Kaish and Gilad, 1991). Departing from this basis, I administered the questionnaire to a sample of 64 social entrepreneurs. I had three sources to get to these entrepreneurs: the Ashoka database I previously created in the exploratory part of this study, the Tecnológico de Monterrey and by recommendation of other social entrepreneurs. In the case of the Ashoka database, I chose the social entrepreneurs who had started a social project in Mexico City and I used the non probabilistic methods of snowball sampling and purposive sampling (Babbie, 2004). The questionnaire was administered in four forms: personal interview, telephone, Skype and e-mail. After administering the questionnaire in a period of 22 weeks, I codified the answers and prepared the data to be analyzed through qualitative and quantitative methods.

#### **4.4.5. Data analysis**

I divided the analysis of the data in two parts. In the first part I did a qualitative analysis of the open answer in the questionnaire related to the ways the social entrepreneurs generated the ideas to address the social problem or need. In the second part I did a quantitative analysis that includes the descriptive statistics and multivariate statistical analysis.

In the qualitative analysis I used Excel worksheets to group the social entrepreneurs by field of impact. In each worksheet I included the name; gender; age; name of the social project; number of questionnaire; mode of administration; if the interview was recorded or not; the transcription of the answer to the open item: 'Please briefly describe the social or environmental problem that you are interested to address and the way you have contributed to help solving it.'; the analysis of the answer; the tendency of opportunity identification I identified which I divided in four categories: discovery, creation, combination of discovery/creation with a tendency to discover, and combination of discovery/creation with a tendency to create.

I recorded 25 interviews with a tape recorder. For the other remaining 39 interviews I wrote the response as the social entrepreneur answered the item. The reason I could not record those interviews is because they were conducted by telephone.

To analyze each answer I used the qualitative method code by list. I used the list of 'words and terms' that I developed in the first part of this study to identify those words or expressions that were related to 'discovery' and 'creation'. Afterwards, depending on the number of words for each opportunity identification process, I classified each social entrepreneur in one of the four categories described previously. I used this procedure with 61 social entrepreneurs. With the remaining social entrepreneur I could not apply the procedure because he sent me his questionnaire via e-mail and I could not identify any 'discovery' or 'creation' word from his answer to the open question. Therefore, I excluded this questionnaire from the qualitative analysis.

In the quantitative analysis, I analyzed the data in three phases. To analyze the data in the first and second phases I used the statistical software SPSS 16.0. In the first phase I present

the descriptive statistics. In the second phase I present the factor analysis, the analysis of normality and the analysis of reliability.

In the third phase, I present the correlations for opportunity discovery and opportunity creation with all the independent variables. In this phase I also present a system of two simultaneous equations estimated by two-stage least squares through the use of instrumental variables. The instrumental variables were obtained by regressing each endogenous variable on all the predetermined variables in the system of equations through ordinary least squares. To analyze the data in this phase I used the statistical softwares SPSS 16.0 and STATA 10.1.

In the next chapter I explain with detail the methods I introduced in this section and I present the results of the quantitative and qualitative analyses.

## 5. Results

In this chapter I describe the different procedures I used to analyze the data gathered by the survey conducted with the sample of social entrepreneurs from Mexico City and the results I obtained.

As I mentioned previously in the Chapter 4, this study includes social entrepreneurs from three different sources: Ashoka, Tec de Monterrey, and recommendations from other social entrepreneurs. Regarding the social entrepreneurs from Ashoka Mexico, I considered the population as those who started any social project in Mexico. That number is 172 social entrepreneurs. From that population I chose the social entrepreneurs located in Mexico City and its metropolitan area to administer the questionnaire. The number of those social entrepreneurs is 98 and represents the 57% of the population. From those 98 social entrepreneurs I excluded the ten social entrepreneurs that I interviewed in the exploratory part of this research, and I contacted the remaining 88 social entrepreneurs. From this number, 57 agreed to answer the questionnaire. These 57 social entrepreneurs represent the 32.94% of Ashoka Mexico's population.

The total sample consisted of 74 social entrepreneurs: 57 from Ashoka Mexico, nine were contacted through the Tecnológico de Monterrey and eight by the recommendations of other social entrepreneurs that I interviewed. These 74 social entrepreneurs were working in six different fields of social impact: human rights, economic development, education, environment, civic engagement, and health.

I excluded the first ten questionnaires because I did some changes in the wording of the items and the order of the group of items while I was administering the questionnaire. After I ran a first statistical analysis with the depending variables opportunity discovery and opportunity creation with the remaining sample of 64 social entrepreneurs, two observations were behaving as outliers and I decided to exclude them from the final analysis. The final sample consisted of 62 social entrepreneurs, 50 from Ashoka Mexico, six through Tecnológico de Monterrey and six by recommendation of other social entrepreneurs. The 50 social entrepreneurs from Ashoka Mexico represent the 29% of the population of Ashoka

Mexico; however, due that the sampling methods are non-probabilistic, the results cannot be projected to the population.

### **5.1. Qualitative analysis**

I analyze the data collected in the first part of the questionnaire; basically, the open question related to the different forms the social entrepreneurs generated the idea to start their social projects.

I grouped the questionnaires by the field of impact of each social project. The first group, human rights, was formed with 16 social entrepreneurs. The second group, economic development, had twelve social entrepreneurs. The third group, education, consisted of eight social entrepreneurs. The fourth group, environment, had seven social entrepreneurs. The fifth group, civic engagement, had eight social entrepreneurs, and the last group, health, was formed with eleven social entrepreneurs. For each group, I transcribed the parts of the interviews where the entrepreneurs refer to the forms they got to the solution to address a social or environmental problem.

I analyzed all the transcriptions using the 'coding by list' procedure described in the Chapter 4. With the 'discovery' and 'creation' words that I found in the discourse of each social entrepreneur, I classified the identification process in four forms: tendency to discover, tendency to create, mixture of discovery and creation with a tendency to discover, mixture of discovery and creation with a tendency to create.

The classification of each group of social entrepreneurs and their tendency to identify opportunities is summarized in the Table 5.1.

**Table 5.1. Processes of opportunity identification derived from the analysis of the open question of the questionnaire.**

<b>Field of impact</b>	<b>Number of social entrepreneurs</b>	<b>Tendency to discover</b>	<b>Tendency to create</b>	<b>Discovery/Creation with tendency to discover</b>	<b>Discovery/Creation with tendency to create</b>
Human Rights	16	8	5	1	2
Economic Development	12	8	3	1	0
Education	8	4	3	1	0
Environment	7	5	0	0	2
Civic Engagement*	8	4	2	1	0
Health	11	8	2	1	0
<b>Totals</b>	<b>62</b>	<b>37</b>	<b>15</b>	<b>5</b>	<b>4</b>

\*Note: One social entrepreneur did not understand the question and from his answer I could not identify his tendency to identify opportunities.

We can observe from the table that the process of opportunity identification that is more used by the sample of social entrepreneurs is the discovery process. In the last section of this chapter, I compare these results with the quantitative results obtained in the following sections. To see the complete qualitative analysis, see the Appendix 3.

## **5.2. Quantitative analysis**

To analyze the quantitative data in this section, I used the statistical software SPSS 16.0 and for the estimation of the two-stage least squares I used the statistical software STATA 10.1.

### **5.2.1. Descriptive statistics**

Related to the composition of the final sample of 62 social entrepreneurs, the Table 5.2 shows that from the total sample, 58% were males and 42% females. The range of ages of all the individuals in the sample were: from 20 to 30 years old, 1.6%; from 31 to 40 years old, 25.8%; from 41 to 50 years old, 19.4%; from 51 to 60 years old, 32.3%; and, more than 60 years old, 21%.

In the level of education, 2% of the social entrepreneurs had secondary education; 6.5%, high school; 48.4% bachelor's degree; 33.9%, master degree; 3.2%, doctorate; and 6.5% other type of education such as specializations or certifications.

Related to the major field of impact of their social projects, 25.8% of the social entrepreneurs are working in human rights; 19.4%, in economic development; 12.9%, in education; 11.3%, in the protection of the environment; 12.9%, in civic engagement; and, 17.7% in health.

By the mode of administration, the questionnaire was administered 25.8% in person; 46.8% through the telephone; 17.7% via Skype; and, 9.7% via e-mail. I administered all the questionnaires which let me have a standardized methodology to administering it in every interview; therefore, I had the less possible bias by the way it was administered.

It is interesting to see the results of cross-tabulations. The Table 5.2, Table 5.3, and Table 5.4 show that from the 58% of men in the sample, the larger group of social entrepreneurs by age is the category from 31 to 40 years old which represents the 39% of the men. This group is working in two main fields of impact: economic development and civic engagement. This group of males has the greater number of men with bachelor's degree and master's degree. These results show that from the sample of male social entrepreneurs more young men with higher education are interested to address social problems related to economic development and civic engagement.

Table 5.2. Frequencies by gender and age.

Gender	Quantity	% Total Sample	Ages									
			20-30		31-40		41-50		51-60		More than 60	
			Qty	% Sex	Qty	% Sex	Qty	% Sex	Qty	% Sex	Qty	% Sex
Males	36	58%	0	0%	14	39%	4	11%	11	31%	7	19%
Females	26	42%	1	4%	2	8%	8	31%	9	34%	6	23.0%
Total	62	100%	1		16		12		20		13	

Table 5.3. Frequencies of males by age and level of education.

Age	Quantity	%	Level of education															
			No education		Elementary		Secondary		High School		Bachelor's degree		Master's degree		Doctorate		Other	
			Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age
20-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-40	14	39%	0	0	0	0	1	7.1%	0	0	7	50%	5	35.7%	0	0	1	7.1%
41-50	4	11%	0	0	0	0	0	0	0	3	75%	1	25%	0	0	0	0	0
51-60	11	31%	0	0	0	0	0	0	0	4	36.4%	5	45.5%	1	9.1%	1	9.1%	0
More than 60	7	19%	0	0	0	0	0	0	1	14.3%	2	28.6%	2	28.6%	0	0	0	0

Table 5.4. Frequencies of males by age and field of impact.

Age	Quantity	%	Field of impact											
			Human Rights		Economic Development		Education		Environment		Civic Engagement		Health	
			Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age
20-30	0	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
31-40	14	39%	2	14%	3	21%	2	14%	2	14%	3	21%	2	14%
41-50	4	11%	2	50%	0	0%	1	25%	0	0%	1	25%	0	0%
51-60	11	31%	1	9%	3	27%	3	27%	1	9%	0	0%	3	27%
More than 60	7	19%	1	14%	2	29%	0	0%	2	29%	1	14%	1	14%
Total	36	100.0%	6		8		6		5		5		6	

On the other hand, the Table 5.5 and Table 5.6 show that from the 42% of females, the larger group of social entrepreneurs by age is from 51 to 60 years old which represents the 34% of the women in the sample. This group is working in two main fields of impact: economic development and health, and has the higher number of women with a level of education of bachelor's degree. These results show that from the sample of female social entrepreneurs more mature women with higher education are interested to address social problems related to economic development and health.



Table 5.5. Frequencies of females by age and level of education.

Age	Quantity	%	Level of education															
			No education		Elementary		Secondary		High School		Bachelor's degree		Master's degree		Doctorate		Other	
			Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age
20-30	1	4%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%
31-40	2	8%	0	0%	0	0%	0	0%	0	0%	1	50%	1	50%	0	0%	0	0%
41-50	8	31%	0	0%	0	0%	0	0%	2	25%	2	25%	3	38%	1	12%	0	0%
51-60	9	34%	0	0%	0	0%	0	0%	1	11%	5	56%	1	11%	0	0%	2	22%
More than 60	6	23%	0	0%	0	0%	0	0%	0	0%	3	50%	3	50%	0	0%	0	0%

Table 5.6. Frequencies of females by age and field of impact.

Age	Quantity	%	Field of impact											
			Human Rights		Economic Development		Education		Environment		Civic Engagement		Health	
			Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age	Qty	% Age
20-30	1	4%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
31-40	2	8%	0	0%	1	50%	1	50%	0	0%	0	0%	0	0%
41-50	8	31%	5	62.5%	0	0%	1	12.5%	1	12.5%	1	12.5%	0	0%
51-60	9	34%	2	22%	3	33%	0	0%	0	0%	1	12%	3	33%
More than 60	6	23%	2	33%	0	0%	0	0%	1	17%	1	17%	2	33%
Total	26	100.0%	10		4		2		2		3		5	

It is important to highlight that the ages showed in these results correspond to those by the time social entrepreneurs answered the questionnaire and not by the time when they started the social project, which, if we consider the qualitative analysis, including the date when the social entrepreneurs launched their initiatives, we can observe that those projects that have endure more were started by women, and that more young men are starting new social projects.

### **5.2.2. Factor analysis, analysis of normality and analysis of reliability.**

The final instrument consisted in four parts. In the first part, I had two open questions related to the ways the social entrepreneurs generated the ideas and proposal of solutions to address the social problem of their interest. In this part, I also included a closed question related to the field of impact of their social projects. In the second and third parts, there are the items developed to measure the dependent and independent variables. And, in the final part I have some socio-demographic items (For more detail, see Chapter 4).

In this section, I analyze the quantitative data derived from the second and third parts of the instrument.

To build the dependent and independent variables I used the multivariate statistical technique of factor analysis which has been demonstrated to be a good form to validate constructs in social sciences since “factor analysis enables us to assess the factorial validity of the questions that make up our scales by telling us the extent to which they seem to be measuring the same concepts or variables.” (Bryman and Cramer, 2011:318). A good explanation of this technique is given by Johnson and Wichern (1992:396) who summarize the purpose of the technique as describing “the covariance relationships among many variables in terms of a few underlying, but unobservable, random quantities called *factors*.”

For the purposes of this study I am using exploratory factor analysis (Hair et al., 2010) since one of the objectives of this study is to examine the relationships between various variables without determining the extent to which the results fit a perfect hypothetical solution (Bryman and Cramer, 2011).

To build each variable, I used the method of extraction of principal components, considering those factors with eigenvalues greater than 1, and, in the cases where it applied, I used the Kaiser varimax criterion for the rotation of the matrix to get the best solution (Johnson and Wichern, 1992).

Based on the original values of the items I generated a factor score for each observation. According to Kerlinger and Lee (2000:845), “factor scores are measures of individuals on factors.” In practical terms, they are weighted averages calculated according to the factor

loadings. The advantage of using these scores instead of the original values is that they represent an averaged variable of those loadings that are explaining the highest variability in the original set of values for the items (Hair et al., 2010:127). When the method of extraction is principal components, the factor scores are computed directly from the original set of values.

The Table 5.7 shows a summary of how each variable was built, the results obtained for the total variance explained for each variable, the results on the test of normality and the results of the analysis of reliability.

**Table 5.7. Summary of the construction of each variable, the results of the total variance explained for each variable, the test of normality and the analysis of reliability.**

Variables	Type	ITEMS	% of Total variance explained	Normality		Reliability Cronbach's Alpha
				Shapiro-Wilk	W	
Opportunity Discovery	Dependent	OD1, OD7	72.40	0.922	0.001	0.619
Opportunity Creation	Dependent	OC2, OC4	78.67	0.889	0.000	0.728
Search of information	Independent for OD	INFO1, INFO3	84.51	0.842	0.000	0.804
Perception of the Environment	Independent for OD	PERCEP7, PERCEP10	69.26	0.836	0.000	0.555
Weak-Ties of social networks	Independent for OD	SNWEAK6, SNWEAK15	79.96	0.830	0.000	0.749
Diversity of social networks of weak ties	Independent for OD					
Fear of failure	Independent for OC	BRIFEAR1, BRIFEAR5	65.87	0.939	0.004	0.474
Use and combination of resources at hand	Independent for OC	BRIUSE6, BRIUSE12	82.49	0.752	0.000	0.771
Innovation radicalness	Independent for OC	RAD7, RAD10	65.68	0.941	0.005	0.463
Blind or myopic variations	Independent for OC	BLIND4, BLIND11	62.02	0.897	0.000	0.384

In the next sections it is explained with detail the content of the Table 5.7.

### 5.2.2.1. Dependent variables: opportunity discovery and opportunity creation

#### a) Opportunity Discovery

The initial step I did was to run a correlation matrix for the four items that make up the scale of Opportunity Discovery (OD): OD1, OD3, OD5, OD7, to test if they were correlating each other which would mean that they could be forming one or more factors. All excepting one of the items were significantly correlated at less than the .05 level with one another, which suggested that they may constitute one or more factors. The component matrix showed that the items were loading in one factor which confirmed that they were measuring the same construct. The factor explains the 48.5% of the total variance of the correlation matrix (Johnson and Wichern, 1992:405; Pett et al, 2003:102). Therefore, I decided to run several tests excluding some variables. The best combination of items was OD1 and OD7, which are the items with the higher loadings. With this combination of items, the factor explains the 72.4% of the total variance which according to Hair et al. (2010:109) is acceptable since "a solution that accounts for 60 percent of the total variance (and in some instances even less)" is considered as satisfactory. These results confirm that the variable formed with the items OD1 and OD7 validates the construct "opportunity discovery".

To test the normality of the distribution of the variable opportunity discovery I used the Shapiro-Wilk test since it is recommended for small samples ( $n < 50$ ) (Hair et al, 2010). The results show that the variable is not behaving normally since  $p < .05$ . See Table 5.7.

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency, which is the most widely used measure (Bryman and Cramer, 2011; Hair et al., 2010). The Table 5.7 shows an acceptable value of the reliability coefficient ( $\alpha = .62$ ) for the scale since Hair et al (2010:92, 125) consider that the range of .60 to .70 is the lowest limit of acceptability in exploratory research. With this alpha of .62 I can affirm that the scale has internal consistency.

With the results for validity and reliability it is confirmed that the scale is measuring the construct 'Opportunity Discovery' proposed in the Chapter 3.

## b) Opportunity Creation

I ran the correlation matrix for the four items that were developed to measure the dependent variable Opportunity Creation (OC): OC2, OC4, OC6, OC8. The correlation matrix showed that the items OC4 and OC6, and OC6 and OC8 are negatively correlated and their correlations are not significant. The items OC2 and OC4, OC2 and OC8, and OC8 and OC4 are correlated at less than the .05 level of significance, which suggests that they may constitute one or more factors.

The first time I ran factor analysis it extracted two factors. The first factor was loading the items OC2, OC4 and OC8, and explained the 49% of the total variance of the correlation matrix. The second factor was loading the item OC6 and explained the 25% of the total variance of the factor matrix. After several tests, I decided to drop the items OC6 and OC8 and run the test including OC2 and OC4 which are the items with the higher loadings. With the exclusion of the items OC6 and OC8 the factor increases the explanation of the total variance to 78.7% which is a satisfactory percentage in social sciences (Hair et al., 2010:109).

I tested the normality of the distribution of the variable opportunity creation using the Shapiro-Wilk test. The results showed that the variable is not behaving normally ( $p < 0.05$ ). See Table 5.7.

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows a good result of the reliability coefficient ( $\alpha = .73$ ) for the scale (Hair et al, 2010:92). With this alpha of .73, I can affirm that the scale has internal consistency and confirms the validation of the construct, which means that the scale is measuring the construct 'Opportunity Creation' proposed in the Chapter 3.

### 5.2.2.2. Independent Variables

a) Independent variables for opportunity discovery: Information search, Perception of the environment and Weak ties and diversity of social networks.

#### a.1) Information search (INFO)

I ran the correlation matrix for the six items that comprise the scale Information search (INFO): INFO1, INFO3, INFO9, INFO11, INFO12, INFO14, to test if they were correlating each other which would mean that they could be forming one or more factors. The results show that all the items are correlating significantly. The analysis extracted one factor which explained the 62.6% of the total variance of the correlation matrix. However, I decided to run more tests to increase the level of explanation. Finally, I decided to drop the items INFO9, INFO11, INFO12, and INFO14 and run the test again with INFO1 and INFO3 which are the items with the larger loadings. With this combination of items the percentage of explanation of the total variance has increased to 84.6%. To test the normality of the variable Information search of preexisted business solutions, I ran the Shapiro-Wilk test of normality. The results showed that the variable is not behaving normally.

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows a very good value of reliability ( $\alpha = .80$ ) for the scale (Hair et al, 2010:92). With this alpha of .80, I can affirm that the scale has internal consistency and confirms the validation of the construct, which means that the scale is measuring the construct 'Information search of preexisted business solutions' proposed in the Chapter 3.

#### a.2) Perception of the environment (PERCEP).

I ran the correlation matrix for the three items that comprise the scale Perception of the Environment (PERCEP): PERCEP4, PERCEP7, PERCEP10, to see if they are correlating each other which will mean that they could be forming one or more factors. The results showed that all the items excepting PERCEP4 and PERCEP7 are significantly correlated. From the analysis one factor was extracted which explained the 54.2% of the total variance of

the correlation matrix. Since the item PERCEP4 showed the lowest level of communality, I decided to drop it to improve the percentage of explanation of the total variance for that factor. With this combination of items the percentage of explanation of the total variance increases to 69.3%. I ran the Shapiro-Wilk test of normality for the variable Perception of the environment. The results showed that the variable is not behaving normally.

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows an almost acceptable value of reliability ( $\alpha = .56$ ) for the scale since Hair et al (2010:92) consider that the range of .60 to .70 is the lower limit of acceptability in an exploratory study. With this alpha of .56 it is suggested that the scale has quite internal consistency and might serve to validate the construct, which means that the scale is relatively measuring the construct 'Perception of the environment' proposed in the Chapter 3.

a.3) Social networks: Number of weak ties (SNWEAK) and diversity of weak-ties (SNWEAK\_DIV).

I ran the correlation matrix for the five items that make up the scale Social Network (SNWEAK and SNWEAK\_DIV): SNWEAK2, SNWEAK6, SNWEAK13, SNWEAK15, SNWEAK\_DIV8 to see if they are correlating each other which will mean that they could be forming one or more factors. The results show that all the correlations are significant. One factor was extracted with these items, which explained 53.5% of the total variance of the correlation matrix. After several tests, I decided to drop the items SNWEAK2, SNWEAK13, SNWEAK\_DIV8, which have the lowest loadings. I ran the test again using the items SNWEAK6 and SNWEAK15 and the results showed a considerably increase of the percentage of the explanation of the total variance to 80%. I ran the Shapiro-Wilk test of normality for the variable and the results showed that the variable is not behaving normally since  $p < 0.05$ .

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows a good value of reliability ( $\alpha = .75$ ) for the scale (Hair et al, 2010:92). With this alpha of .75, I can affirm that the scale has

internal consistency and confirms the validation of the construct, which means that the scale is measuring the construct 'Weak ties of Social Network' proposed in the Chapter 3.

b) Independent variables for opportunity creation: *Bricolage* capabilities, Innovation radicalness and Blind or myopic variations.

b.1) *Bricolage* capabilities: Low fear of failure (BRIFEAR).

I ran the correlation matrix for the two items that comprise the scale *Bricolage* Capabilities: Low fear of failure (BRIFEAR): BRIFEAR1 and BRIFEAR5. The correlation matrix showed that the two items are correlating significantly ( $r=.317$ ,  $p=.006$ ,  $n=62$ ). We can observe in the Table 5.7 that the factor extracted explains the 66% of the total variance of the factor matrix which is an acceptable level of explanation (Hair et al., 2010:109). I ran the Shapiro-Wilk test of normality for the variable and the results showed that the variable is not behaving normally since  $p<0.05$ .

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows an unacceptable value of reliability ( $\alpha= .47$ ) for the scale (Darren and Mallery, 2007:369). This alpha of .47 implies that the scale has poor internal consistency and it is not good enough to validate the construct 'Bricolage Capabilities: Low fear of failure' proposed in the Chapter 3.

b.2) *Bricolage* capabilities: Use and combination of resources at hand (BRIUSE).

I ran the correlation matrix for the four items that comprise the scale of *Bricolage* Capabilities: Use and combination of resources at hand (BRIUSE): BRIUSE2, BRIUSE6, BRIUSE9, BRIUSE12 to test if they were correlating each other which would mean that they could be forming one or more factors. The results showed that all the items are correlating significantly with the exception of the items BRIUSE2 and BRIUSE12 ( $r=.097$ ,  $p=.228$ ,  $n=62$ ), and BRIUSE9 and BRIUSE12 ( $r=.178$ ,  $p=.083$ ,  $n=62$ ), which are not significantly correlated.

The factor analysis extracted two factors. The first factor loaded the items BRIUSE6 and BRIUSE12 and explained the 48.8% of the total variance of the correlation matrix. The



second factor loaded the items BRIUSE2 and BRIUSE9 and explained the 27.2% of the total variance. Since the items BRIUSE6 and BRIUSE12 are more related with the combination and reuse of resources, I decided to keep this factor and exclude the second factor from this analysis since the items loaded in this last factor are more related with the concept of "making something new for the first time". I ran again the factor analysis just for the items BRIUSE6 and BRIUSE12 and the factor extracted explains the 82.5% of the total variance.

I ran the Shapiro-Wilk test of normality for the variable and the results showed that the variable is not behaving normally since  $p < 0.05$ .

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows an acceptable value of reliability ( $\alpha = .77$ ) for the scale (Hair et al, 2010:92).

With the results of validity and reliability for this variable, I can affirm that the scale has internal consistency and confirms the validation of the construct, which means that the scale is correctly measuring the construct 'Bricolage Capabilities: Use and combination of resources at hand' proposed in the Chapter 3.

### b.3) Innovation radicalness (RAD).

I ran the correlation matrix for the three items that comprise the scale Innovation radicalness (RAD): RAD3, RAD7, RAD10, to test if they are correlating each other which would mean that they could be forming one or more factors. The results showed that all the items except RAD3 and RAD 10 ( $r = .168$ ,  $p = .097$ ,  $n = 62$ ) are correlating significantly.

The factor analysis extracted one factor which explained the 50% of the total variance of the correlation matrix. Since the item RAD3 shows the lowest communality, I decided to exclude it from the analysis and run the test again. The percentage of explanation of the total variance increases to 65.7%.

I ran the Shapiro-Wilk test of normality for the variable and the results showed that the variable is not behaving normally since  $p < 0.05$ .

To test the reliability of this scale I employed the Cronbach's alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows an unacceptable value of reliability ( $\alpha = .46$ ) for the scale (Darren and Mallery, 2007:369).

The results of the analysis of validity and reliability for the scale show that even though the variable has been validated, it shows poor internal consistency and it is not good enough to measure the construct 'innovation radicalness' proposed in the Chapter 3.

#### b.4) Blind or myopic variations (BLIND).

I ran the correlation matrix for the three items that comprise the scale Blind or myopic variations (BLIND): BLIND4, BLIND8, BLIND11 to test if they are correlating each other which will mean that they could be forming one or more factors. The results show that the items BLIND4 and BLIND8 ( $r = -.109$ ,  $p = .199$ ,  $n = 62$ ), and BLIND8 and BLIND11 ( $r = -.251$ ,  $p = .025$ ,  $n = 62$ ) are negatively correlated and while the correlation of the first pair of items is not significant, the correlation between the second pair of items is indeed significant. The other significant correlation is between the items BLIND4 and BLIND11 ( $r = .240$ ,  $p = .030$ ,  $n = 62$ ). Since the item BLIND8 is loading negatively in the factor, I decided to exclude it from the analysis to increase the explanation of the total variance of the solution. The Table 5.7 shows that the factor extracted using the items BLIND4 and BLIND11 explains the 62% of the total variance of the correlation matrix which is a satisfactory level (Hair et al., 2010:109).

I ran the Shapiro-Wilk test of normality for the variable and the results show that the variable is not behaving normally since  $p < 0.05$ .

To test the reliability of this scale I employed the Cronbach's Alpha measure of internal consistency (Bryman and Cramer, 2011). The Table 5.7 shows an unacceptable value of reliability ( $\alpha = .38$ ) for the scale (Darren and Mallery, 2007:369) which means that even though the scale shows validity of construct, it does not have internal consistency and the items are not good enough to measure the construct 'Blind or myopic variations' proposed in the Chapter 3.

### **5.2.3. Scattered chart for the opportunity identification processes**

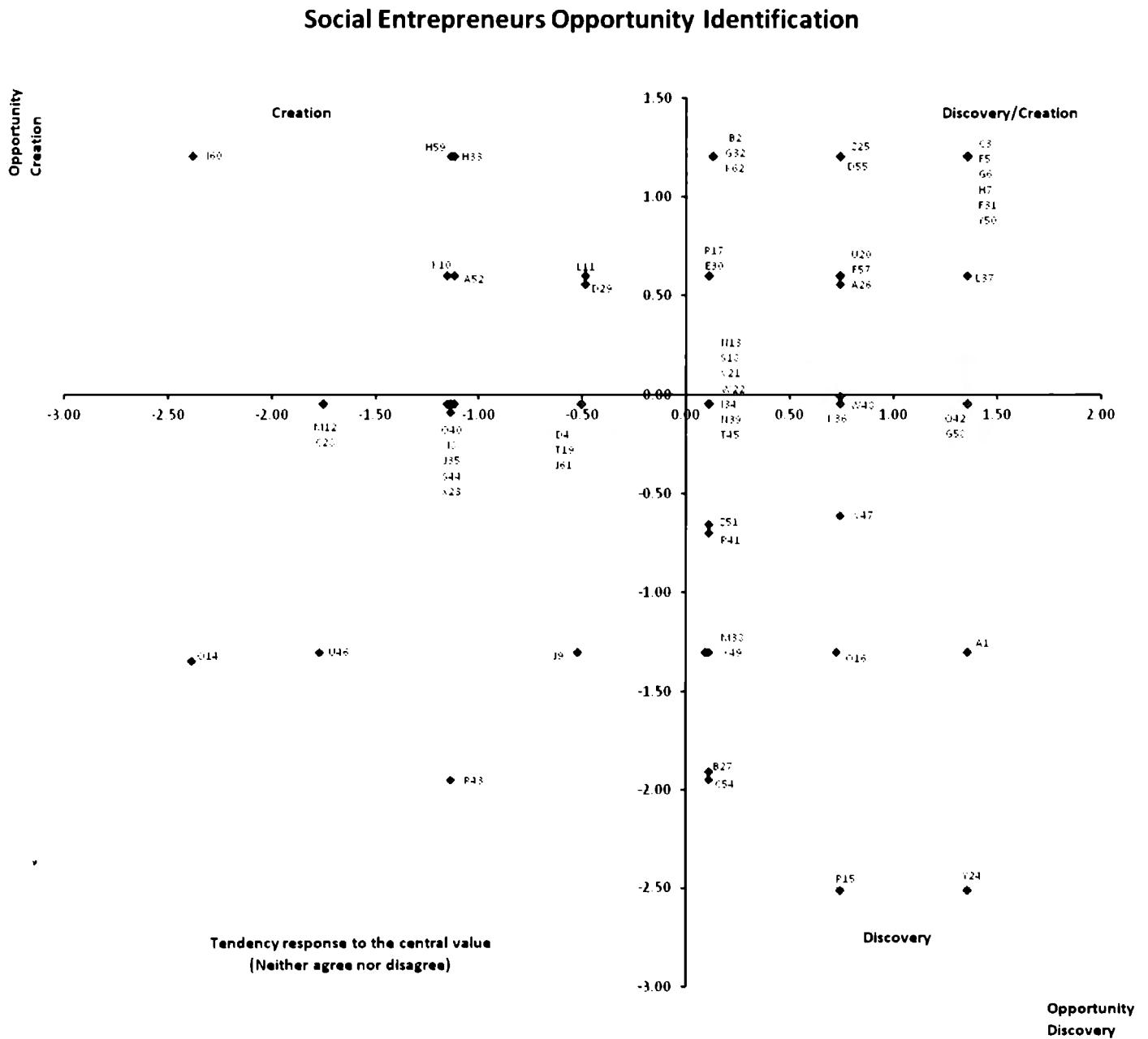
To have a better idea of how the variables 'Opportunity Discovery' and 'Opportunity Creation' were behaving, I plotted the ordered pairs of factor scores of each variable in a scattered chart to observe how they were spreading. The Chart 5.1 shows the scattered chart for the opportunity identification processes of the social entrepreneurs in the sample.

We can observe from the chart that according to the answers given by the social entrepreneurs to the second part of the questionnaire (the part related to the dependent variables) and the values of the ordered pairs, they are spreading in four quadrants. In the upper right quadrant are those social entrepreneurs who have the highest values of both discovery and creation. In the bottom right quadrant are those social entrepreneurs who have a greater value of discovery than creation. In the upper left quadrant are those social entrepreneurs who have a greater value of creation than discovery. And, in the bottom left quadrant are those social entrepreneurs who showed a tendency to respond on the central value of the instrument (the Likert scale 3=neither agree nor disagree).

In general terms, the ordered pairs show that the majority of social entrepreneurs from the sample present greater values in the variable opportunity discovery (See Appendix 4).

The spreading of the observations in the Chart 5.1 gives us the idea that the social entrepreneurs are sharing some elements of discovery and some others of creation which is an indicator of the possible inter-correlation of some predictors of both processes or even between the dependent variables. I am proving these assumptions in the next sections.

Chart 5.1. Opportunity Identification Processes of the 62 Social Entrepreneurs.



Note: The labels in each point are just for notation and correspond to the number of the questionnaire of each social entrepreneur.

#### 5.2.4. Correlations for opportunity discovery and opportunity creation with all the independent variables.

The first step to know if there were correlations between all the pairs of variables was to run a correlation matrix in SPSS using the Pearson correlation coefficient. The Table 5.8 shows the results.

**Table 5.8. Pearson correlation matrix for opportunity discovery and opportunity creation with all the independent variables.**

	Opportunity Discovery	Opportunity Creation	Information search	Perception of the environment	Number of weak ties of social networks	Fear of failure	Use and combination of resources	Innovation radicalness	Blind or myopic variations
Opportunity Discovery	1.00								
Opportunity Creation	0.10	1.00							
Information search	<b>0.41**</b>	0.05	1.00						
Perception of the environment	0.05	<b>0.27*</b>	0.23	1.00					
Number of weak ties of social networks	0.24	0.04	<b>0.42**</b>	0.19	1.00				
Fear of failure	0.09	0.08	-0.05	<b>0.32*</b>	0.06	1.00			
Use and combination of resources	0.10	0.22	0.05	<b>0.39**</b>	-0.01	<b>0.34**</b>	1.00		
Innovation radicalness	0.12	<b>.31*</b>	-0.03	0.01	-0.20	<b>0.26*</b>	0.21	1.00	
Blind or myopic variations	0.02	0.15	-0.11	0.04	-0.19	0.20	0.24	0.08	1.00

The Table 5.8 shows the correlation coefficients for the dependent and independent variables. Coefficients in bold denote a statistical significance at a 1% level for \*\* and at a 5% level for \*, using a two sided test.

There are significant correlations between: Opportunity Discovery and Information search of preexisted business solutions ( $r=.412$ ,  $p=.001$ ,  $n=62$ ); Opportunity Creation and Perception of the environment ( $r=.266$ ,  $p=.037$ ,  $n=62$ ); Opportunity Creation and Innovation radicalness ( $r=.307$ ,  $p=.015$ ,  $n=62$ ); Information search of preexisted business solutions and Weak ties of social networks ( $r=.423$ ,  $p=.001$ ,  $n=62$ ); Perception of the environment and Use and combination of resources at hand ( $r=.389$ ,  $p=.002$ ,  $n=62$ ); Fear of failure and Use and combination of resources at hand ( $r=.336$ ,  $p=.008$ ,  $n=62$ ); Perception of the environment and Fear of failure ( $r=.322$ ,  $p=.011$ ,  $n=62$ ); Fear of failure and Innovation radicalness ( $r=.256$ ,  $p=.045$ ,  $n=62$ ). It also shows a relatively significant correlation between Use and combination of resources at hand and Blind or myopic variations ( $r=.244$ ,  $p=.056$ ,  $n=62$ ).

It is interesting to observe that the variable 'perception of the environment', which is an independent variable for 'opportunity discovery', correlates significantly with the dependent variable 'opportunity creation' and with the independent variables 'use and combination of resources at hand' and 'low fear of failure' which are two independent variables for 'opportunity creation'. These results might be suggesting that "perception of the environment" might be seen more as a process constituted by different elements than as an individual action. Moreover, these results might be indicating a possible interdependency between the dependent variables. An appropriated method to test this assumption is through a system of two simultaneous equations estimated by two-stages least squares.

#### **5.2.5. System of two simultaneous equations estimated by two-stage least squares**

In the previous sections, I showed that there is evidence that might be suggesting that opportunity discovery and opportunity creation could not be mutually exclusive but, instead, be one process. The most adequate form to prove it is through a system of two simultaneous equations in the form of structural equations. (Pindyck and Rubinfeld, 2000).

We talk of simultaneity when two or more structural equations are jointly determined. A structural equation has a dependent or endogenous variable in the right side that is determined within the system. This way, the presence of two or more endogenous variables

requires additional tools to build the model and estimate the parameters since the results obtained using the ordinary least squares might be inconsistent or biased. One form to estimate the parameters of a simultaneous system of equations is through Two-Stage Least Squares (2SLS). (Pindyck and Rubinfeld, 2000).

The estimation of 2SLS uses the available information of the specification of a system of equations to get a unique estimation for each structural parameter. This means that in the first stage, we estimate the endogenous variables by regressing each of them on all the predetermined variables in the system of equations through ordinary least squares. Therefore, this stage let us build a variable that is linearly related with all the variables in the model without being related with the error term. This variable is known as an instrumental variable. According to Wooldridge (2000) an instrumental variable "is uncorrelated with the error in the equation, and is (partially) correlated with the endogenous explanatory variable." (Wooldridge, 2000:796).

In the second stage we estimate the parameters of the structural equations in the system by, first, replacing the fitted endogenous variable obtained in the first stage for each equation, and second, regressing the dependent variables on the fitted endogenous variable and the explanatory variables for each equation. This procedure will generate consistent parameters for each structural equation.

I would like to explain briefly how instrumental variables are used to estimate the parameters through the two-stage least squares procedure. Consider the simple regression model written as:

$$y = \beta_0 + \beta_1 x + U \quad \dots\dots\dots (1)$$

where  $y$  is the dependent variable,  $x$  the explanatory variable, and  $U$  is the structural error term. Let us suppose that  $y$  is opportunity discovery and  $x$  is opportunity creation, and that opportunity creation is an explanatory variable for opportunity discovery, then the variable opportunity creation, which is also a dependent variable in this study, will be an endogenous

variable and furthermore, it is not independent of the structural error term  $U$ . (Chan et al., 2012).

According to Wooldridge (2000) to obtain consistent estimators of  $\beta_0$  and  $\beta_1$  it is not convenient to use ordinary least squares (OLS) since it will lead to biased and inconsistent estimators. This way it is necessary to have a new variable 'z' "that satisfies two assumptions: 1) z is uncorrelated with  $U$ , and 2) z is correlated with  $x$ ." (Wooldridge, 2000:463). This new variable z is called an instrumental variable for the endogenous explanatory variable  $x$ .

Now, consider the following structural equation with multiple explanatory variables:

$$y_1 = \beta_0 + \beta_1 y_2 + \beta_2 x_1 + \dots + \beta_k x_{k-1} + U_1 \dots\dots\dots(2)$$

where  $y_2$  is an endogenous variable and  $x_j$  are exogenous variables that are uncorrelated with the structural error term  $U_1$ . If we assume that:

$$E(U_1) = 0, \text{Cov}(x_j, U_1) = 0, j = 1, \dots, k.$$

And that:

$$y_2 = \pi_0 + \pi_1 x_1 + \dots + \pi_{k-1} x_{k-1} + \pi_k x_k + v_2 \dots\dots\dots(3)$$

With the coefficient  $\pi_k$  different from zero, then  $x_k$  is a valid instrumental variable for  $y_2$ .

Now, we regress  $y_2$  on  $x_j$  and we obtain the fitted value for each observation in the sample:

$$\hat{y}_2 = \hat{\pi}_0 + \hat{\pi}_1 x_1 + \dots + \hat{\pi}_{k-1} x_{k-1} + \hat{\pi}_k x_k \dots\dots\dots (4)$$

The estimated  $\hat{y}_2$  is used as the instrumental variable for  $y_2$ . Finally, to estimate (2) we replace  $y_2$  with  $\hat{y}_2$ , and we regress  $y_1$  on  $\hat{y}_2$  and  $x_1$ .



In summary, the estimation of the parameters of (2) is in two stages of least squares. In the first stage we run the regression in (4), where we obtain the fitted values  $\hat{y}_2$ . In the second stage we regress  $y_1$  on  $\hat{y}_2$  and  $x_1$ . Since we are using  $\hat{y}_2$  in place of  $y_2$ , the parameters obtained through 2SLS can differ substantially from those obtained through OLS. (To see a detailed explanation of the 2SLS procedure using instrumental variables, see Wooldridge, 2000).

For this study, I have developed a system of two simultaneous equations that includes the dependent variables Opportunity Discovery and Opportunity Creation as both dependent and explanatory variables. The system is represented by the following equations:

$$OD = \alpha_0 + \alpha_1 OC + \alpha_2 INFO + \alpha_3 PERCEP + \alpha_4 SNWEAK + \alpha_5 D_1 + \alpha_6 D_2 + \alpha_7 D_3 + \alpha_8 D_4 + \alpha_9 D_5 + \alpha_{10} D_6 + \alpha_{11} D_7 + U_1 \dots\dots\dots (5)$$

$$OC = \beta_0 + \beta_1 OD + \beta_2 BRIFEAR + \beta_3 BRIUSE + \beta_4 RAD + \beta_5 BLIND + \beta_6 D_1 + \beta_7 D_2 + \beta_8 D_3 + \beta_9 D_4 + \beta_{10} D_5 + \beta_{11} D_6 + \beta_{12} D_7 + U_2 \dots\dots\dots (6)$$

Where:

OD= Opportunity Discovery

OC= Opportunity Creation

INFO= Information search of preexisted business solutions

PERCEP= Perception of the environment

SNWEAK= Social Network of weak ties

BRIFEAR= Bricolage capability: Low fear of failure

BRIUSE= Bricolage capability: Use and combination of resources at hand

RAD= Innovation radicalness

BLIND= Blind or myopic variations

$\alpha$ = regression coefficients for the predictors on OD.

$\beta$ = regression coefficients for the predictors on OC.

$u_1$  = random variable for OD.

$u_2$  = random variable for OC.

### Dummy variables

For the variable 'gender', which is grouped in two categories, I decided to form the dummy variable with the category 'male' because it has the greatest number of observations in the sample.

$D_1$ = Dummy variable for male gender, (1= yes, 0= no).

I decided to group the variable 'age' in three categories: young, middle-aged and old social entrepreneurs. The category 'young' comprises the social entrepreneurs from 20 to 40 years old, the category 'middle-aged' comprises the social entrepreneurs from 41 to 60 years old, and the category 'old' comprises the social entrepreneurs who are more than 60 years old. This last category has the less number of observations thus I used the two first categories to specify the dummy variables for the variable 'age'.

$D_2$ =Dummy variable for young social entrepreneurs (from 20 to 40 years old),  
(1=yes, 0=no).

$D_3$ = Dummy variable for middle-aged social entrepreneurs (from 41 to 60 years old),  
(1=yes, 0=no).

For the variable 'level of education', I decided to group it in three categories: bachelor's degree, graduate and other. The category 'bachelor's degree' comprises the social entrepreneurs who obtained a degree of higher education from any university. This is the category with the greatest number of observations in the sample. The category 'graduate'

comprises those social entrepreneurs who obtained a Master's degree or/and a PhD degree. The category 'other' comprises those social entrepreneurs who completed the high school or have certifications. Since this last category has the less number of observations I decided to use the first two categories to form the dummy variables.

$D_4$ = Dummy variable for education level of 'bachelor's degree', (1=yes, 0=no).

$D_5$ = Dummy variable for 'graduate' education, (1=yes, 0=no).

For the variable 'field of impact', I grouped it in three categories: human rights, economic development and environment. The category of 'human rights' comprises those social entrepreneurs who are working in projects related to human rights and civic engagement since they are oriented to solve problems or situations that violate people's rights in different areas such as labor, fair trails, sexual abuse, etc. This category has the greatest number of observations in the sample. The category 'economic development' includes those social entrepreneurs who work in projects related to foster the economic development of communities, including their health and education. The category 'environment' includes those social entrepreneurs who are working in projects related to protect the environment in specific communities. Since this is the category with the less number of observations, I decided to use the first two to form the dummy variables.

$D_6$ = Dummy variable for the field of impact of 'human rights', (1=yes, 0=no).

$D_7$ = Dummy variable for the field of impact of 'economic development', (1=yes, 0=no).

### Estimation of parameters

To estimate the parameters of the structural equations I ran in STATA 10.1 the two-stage least squares command with the use of instrumental variables.

To estimate the parameters for the equation (5) I used as the dependent variable opportunity discovery (OD); as the explanatory variables opportunity creation (OC), information search of

preexisted business solutions (INFO), perception of the environment (PERCEP), number of weak-ties of social networks (SNWEAK), and the seven dummy variables. The instrumental variable for opportunity creation in this equation is given by  $\hat{OC}$ . I instrumented this variable using the explanatory variables information search of preexisted business solutions (INFO), perception of the environment (PERCEP), number of weak-ties of social networks (SNWEAK), bricolage capability: low fear of failure (BRIFEAR), bricolage capability: use and combination of resources at hand (BRIUSE), innovation radicalness (RAD) and blind or myopic variations (BLIND).

To estimate the parameters for the equation (6) I used as the dependent variable opportunity creation (OC); as the explanatory variables opportunity discovery (OD), bricolage capability: low fear of failure (BRIFEAR), bricolage capability: use and combination of resources at hand (BRIUSE), innovation radicalness (RAD), blind or myopic variations (BLIND) and the seven dummy variables. The instrumental variable for opportunity discovery in this equation is given by  $\hat{OD}$ . I instrumented this variable using the explanatory variables information search of preexisted business solutions (INFO), perception of the environment (PERCEP), number of weak-ties of social networks (SNWEAK), bricolage capability: low fear of failure (BRIFEAR), bricolage capability: use and combination of resources at hand (BRIUSE), innovation radicalness (RAD) and blind or myopic variations (BLIND).

The Table 5.9 shows the results of the models.

**Table 5.9 Two-stages least squares model summary for opportunity discovery and opportunity creation.**

		Model for Opportunity Discovery	Model for Opportunity Creation
Adjusted R <sup>2</sup>		<b>0.161</b>	0.122
ANOVA Test:	F	2.12	1.69
	Sig.	0.036	0.098

The results for Opportunity Discovery show an adjusted  $R^2=0.161$  and in the ANOVA test the  $F= 2.12$ , which is statistically significant since the p-value is lower than 0.05, ( $p=.036$ ). This result tells us that the 16.1% of the variation in opportunity discovery is explained by the regression equation.

The results for Opportunity Creation show an adjusted  $R^2=0.122$  and in the ANOVA test the  $F= 1.69$ , which is marginally significant at the 10% level since the p-value is greater than .05 but less than .10 ( $p=.098$ ). With this result can be proved that the 12.2% of the variation in opportunity creation is explained by the regression equation.

The Table 5.10 and Table 5.11 show the summary of the beta coefficients for Opportunity Discovery and Opportunity Creation.

**Table 5.10. Two-stage least squares estimators for opportunity discovery.**

<b>Model for Opportunity Discovery</b>			
	<b>b coefficients</b>	<b>t-value</b>	<b>p-value</b>
Constant	0.322	0.56	0.581
Opportunity Creation	0.237	0.86	0.396
<b>Information Search</b>	<b>0.470</b>	<b>3.44</b>	<b>0.001</b>
Perception of the environment	-0.168	-1.11	0.270
Number of weak ties of social networks	0.132	0.96	0.343
Male	-0.127	-0.48	0.634
Young social entrepreneurs	-0.522	-1.40	0.169
<b>Middle-aged social entrepreneurs</b>	<b>-0.677</b>	<b>-2.06</b>	<b>0.044</b>
Bachelor's degree	0.125	0.34	0.736
Graduate	-0.443	-1.17	0.249

Human Rights	0.256	0.61	0.543
Economic Development	0.496	1.13	0.263

The parameters of the predetermined variables show (in bold) that only the estimated regression coefficient for the variable 'information search of preexisted business solutions' (INFO) ( $b=0.470$ ,  $p=0.001$ ) and the estimated regression coefficient for the dummy variable 'middle-aged social entrepreneurs' ( $D_3$ ) ( $b= -0.677$ ,  $p=0.044$ ) are statistically significant. These results tell us that each time 'information search of preexisted business solutions' changes by one unit in the Likert scale of five points, opportunity discovery increases by .470.

On the other hand, since the regression coefficient of the dummy variables are interpreted in relation to the left-out category, the results show that the influence of the category 'middle-aged social entrepreneurs' is 0.677 less than the category 'old social entrepreneurs'. The actual influence of this last category is imbedded in the constant term.

The results of the dummy variable 'middle-aged social entrepreneurs' are in accordance with the results of the analysis of the spreading of the ordered pairs in the previous section 5.2.3 that shows that while the 53% of the social entrepreneurs in the category 'middle-aged social entrepreneurs' tend to discover, the 76.9% of the social entrepreneurs in the category 'old social entrepreneurs' tend to discover social opportunities.

We can observe that since the dummy variable is measured in a different form than 'information search of preexisted business solutions' it is necessary to observe the beta coefficients in order to do comparisons between both variables. The beta coefficient ( $\beta$ ) for 'information search of preexisted business solutions' is equal to .470, which is the same as the regression coefficient. However, the beta coefficient ( $\beta$ ) for the dummy variable 'middle-aged social entrepreneurs' is equal to -.341, which is telling us that the impact of the former in its relationship with opportunity discovery is greater than the last one. This means that the variable 'information search of preexisted business solutions' has more importance in the discovery of social opportunities than the gender of social entrepreneurs.

**Table 5.11. Two-stage least squares estimators for opportunity creation.**

**Model for Opportunity Creation**

	<b>b coefficients</b>	<b>t-value</b>	<b>p-value</b>
Constant	-0.756	-1.25	0.218
Opportunity Discovery	0.026	0.11	0.914
Fear of failure	-0.009	-0.07	0.948
Use and combination of resources at hand	0.171	1.23	0.223
<b>Innovation radicalness</b>	<b>0.388</b>	<b>2.70</b>	<b>0.009</b>
Blind or myopic variations	0.053	0.42	0.679
Male	0.255	0.92	0.360
Young social entrepreneurs	0.347	0.95	0.349
Middle-aged social entrepreneurs	0.539	1.58	0.121
Bachelor's degree	-0.515	-1.32	0.193
Graduate	-0.151	-0.38	0.707
Human Rights	0.485	1.05	0.298
Economic Development	0.704	1.63	0.110

The parameters of the predetermined variables show (in bold) that only the estimated regression coefficient for 'innovation radicalness' (RAD) ( $b=0.388$ ,  $p=0.009$ ) is statistically significant. This means that each time 'innovation radicalness' changes by one unit in the Likert scale of five points, opportunity creation increases by .388. However, we must recall that the regression equation is marginally significant at the ten percent level which implies

that we need to re-specify the model in order to have a better level of statistical significance that could confirm the explanation and prediction for opportunity creation with the independent variables stated in the equation (6).

It is interesting to notice that even though the regression model is marginally significant, we can observe an estimated regression coefficient that is statistically significant. This can be possible since these are the results of two different tests. While the adjusted  $R^2$  is telling us the overall predictive power of the regression equation that best adjust to the data, the regression coefficients are telling us the relative importance of each independent variable in the prediction of the dependent variable (Hair et al., 2010). This last result is suggesting that the regression coefficient might be different from zero. Again, it is necessary to re-specify the model to test the importance of the variable 'innovation radicalness' to know if there is an improvement in the predictive power of the regression equation.

To re-specify the models for 'opportunity discovery' and 'opportunity creation' I decided to exclude some variables that do not show good reliability and which are not statistically significant. After several tests, the best results were given with the exclusion of the independent variables 'fear of failure' and 'blind or myopic variations'. The Table 5.12 shows the results for the re-specified models.

**Table 5.12 Re-specification of the two-stage least squares models for opportunity discovery and opportunity creation.**

		Model for OD	Model for OC
Adjusted $R^2$		<b>0.164</b>	<b>0.151</b>
ANOVA Test:	F	2.11	2.08
	Sig.	0.036	0.043



We can observe from this table that the model for 'opportunity discovery' remains statistically significant and in the case of the model for opportunity creation there is an improvement in the result giving a re-specified model that is statistically significant.

The results for Opportunity Discovery show that the adjusted  $R^2$  and the statistic F remains practically the same with a p-value lower than 0.05 ( $p=.036$ ), which confirms the statistical significance of the model. This result tells us that the 16.4% of the variation in opportunity discovery is explained by the regression equation.

On the other hand, the results for Opportunity Creation show an adjusted  $R^2=0.151$  and in the ANOVA test the  $F= 2.08$ , which is statistically significant since the p-value is lower than 0.05 ( $p=.036$ ). This result means that the 15.1% of the variation in opportunity creation is explained by the regression equation.

The Tables 5.13 and 5.14 show the results of the two-stage least squares estimators for the re-specified models.

**Table 5.13. Two-stage least squares estimators for the re-specified model for opportunity discovery.**

<b>Model for Opportunity Discovery</b>			
	<b>b coefficients</b>	<b>t-value</b>	<b>p-value</b>
Constant	0.314	0.54	0.592
Opportunity Creation	0.223	0.77	0.444
<b>Information Search</b>	<b>0.469</b>	<b>3.44</b>	<b>0.001</b>
Perception of the environment	-0.164	-1.08	0.287
Number of weak ties of social networks	0.133	0.96	0.340

Male	-0.124	-0.47	-0.640
Young social entrepreneurs	-0.517	-1.38	0.173
<b>Middle-aged social entrepreneurs</b>	<b>-0.672</b>	<b>-2.05</b>	<b>0.046</b>
Bachelor's degree	0.121	0.33	0.745
Graduate	-0.448	-1.17	0.248
Human Rights	0.259	0.62	0.538
Economic Development	0.506	1.15	0.256

For the opportunity discovery model the results show (in bold) that again only the estimated regression coefficients for the variables 'information search of preexisted business solutions' (INFO) ( $b=0.469$ ,  $p=0.001$ ) and the dummy variable 'middle-aged social entrepreneurs' ( $D_3$ ) ( $b= -0.672$ ,  $p=0.046$ ) are statistically significant. Once more, when comparing the beta coefficients of both variables, we can observe that the coefficient for 'information search of preexisted business solutions' is greater ( $\beta=0.469$ ) than the coefficient for 'middle-aged social entrepreneurs' ( $\beta= -0.339$ ) which tells us that 'information search of preexisted business solutions' has a positive impact in opportunity discovery and is more important than the variable 'middle-aged social entrepreneurs' which continue showing a less influence on opportunity discovery than the category 'old social entrepreneurs'.

This last result might be telling us that 'middle-aged social entrepreneurs' would tend to discover less social opportunities than 'old social entrepreneurs'.

**Table 5.14. Two-stage least squares estimators for the re-specified model for opportunity creation.**

**Model for Opportunity Creation**

	<b>b coefficients</b>	<b>t-value</b>	<b>p-value</b>
Constant	-0.741	-1.33	0.190
Opportunity Discovery	0.007	0.03	0.976
Use and combination of resources at hand	0.181	1.41	0.165
<b>Innovation radicalness</b>	<b>0.392</b>	<b>2.82</b>	<b>0.007</b>
Male	0.251	0.93	0.356
Young social entrepreneurs	0.341	0.96	0.343
Middle-aged social entrepreneurs	0.540	1.63	0.109
Bachelor's degree	-0.537	-1.48	0.145
Graduate	-0.164	-0.44	0.661
Human Rights	0.485	1.07	0.288
Economic Development	0.712	1.68	0.099

These results show that the estimated regression coefficient for 'innovation radicalness' has an increase (RAD) ( $b=0.392$ ,  $p=0.007$ ) remaining statistically significant.

It is important to highlight that in both models the original and the re-specified, the coefficients for the predictor variables 'opportunity discovery' and 'opportunity creation' are not significant which confirms that opportunity discovery is not statistically related to opportunity creation. In

other words, from the statistical point of view, the two dependent variables opportunity discovery and opportunity creation are mutually exclusive which implies that they are two different constructs. These results confirm partially the model proposed in the Figure 1 of the Chapter 3.

Related to the normality of the residuals, since the method used to estimate the parameters is based on the least squares procedure, the assumption of normality is not needed to obtain the estimators of  $\beta$  because they can be obtained without knowing the exact distribution of the error terms  $u$  (Ramanathan, 1993:259). However, as a mode of confirmation, the normality of the error terms was tested through the Shapiro-Wilk test of normality for both models, the original and the re-specified, and in both cases the results showed that the residuals are behaving normally since the p-value  $> 0.05$  (Hair et al., 2010).

#### Results on the hypotheses

The results of the original model of two-stage least square (2SLS) estimation for opportunity discovery show that the variable 'information search of preexisted business solutions' ( $b=0.470$ ,  $p=0.001$ ) is relevant in the equation as a predictor for opportunity discovery. On the other hand, the variables 'perception of the environment', 'number of weak ties of social networks', and the dummy variables 'male gender', 'young social entrepreneurs', 'bachelor's degree', 'graduate', 'human rights' and 'economic development' do not show statistical significance which means that they might be not considered as predictors of opportunity discovery. But we must be cautious about these results since this is an exploratory study and there is the need of further research to confirm or discard these variables.

With the previous explanation of the results of the quantitative analysis of this study, Hypothesis 1 can be confirmed: Social entrepreneurs' high search for information related to preexisting business solutions is positively related to opportunity discovery. This hypothesis implies that social entrepreneurs who are interested in dealing with social or environmental problems and who have an inclination to look for information to find new solutions will discover opportunities.

On the other hand, derived from all the quantitative results presented in the previous sections the Hypothesis 2: "Social entrepreneurs' accurate perception of the environment is positively related to opportunity discovery"; the Hypothesis 3a: "There is a positive relation between the high number of weak-ties of the social entrepreneurs networks of weak-ties and opportunity discovery", and the Hypothesis 3b: "The high diversity of social entrepreneurs' social networks of weak ties is positively related to opportunity discovery" cannot be confirmed.

The 2SLS model for opportunity creation showed that the variable 'innovation radicalness' ( $b=0.388$ ,  $p=0.009$ ) is a predictor for opportunity creation. On the other hand, the variables 'low fear of failure', 'use and combination of resources at hand', 'blind or myopic variations', and the dummy variables 'male gender', 'young social entrepreneurs', 'middle-aged social entrepreneurs', 'bachelor's degree', 'graduate', 'human rights' and 'economic development' are not statistically significant which means that they might be not considered as predictors for opportunity creation. Once again, these results must be confirmed by future research.

In the case of the hypotheses related to opportunity creation, the Hypothesis 4a: "Social entrepreneurs' low fear of failure is positively related to opportunity creation" and the Hypothesis 4b: "Social entrepreneurs' high ability to combine and use the resources at hand to solve social problems is positively related to opportunity creation" cannot be confirmed.

The Hypothesis 5: "A high innovation radicalness of social entrepreneurs' solutions is positively related to opportunity creation" is partially confirmed since the 2SLS re-specified model for opportunity creation is statistically significant and the estimated regression coefficient for the variable 'innovation radicalness' is also statistically significant in both models the original and the re-specified. However, the variable does not have internal consistency which means that the scale is not measuring the variable appropriately. These results are telling us that despite the low internal consistency of the scale, it shows a positive causal relationship with opportunity creation. Therefore, it is suggested that by developing new items and extending the sample size, the positive relationship between 'innovation radicalness' and opportunity creation will be confirmed by future research.

Continuing with the analysis of the variable 'innovation radicalness' another aspect of this variable that still is not clear is whether the radical innovation comes as a consequence of

creation or if creation comes as a consequence of radical innovation? A good way to address this question is to recall the definition of 'opportunity creation' which tells us that opportunities are created by social entrepreneurs when they start an iterative process of action and reaction. Therefore, if we consider that a social entrepreneur who creates opportunities starts a process of action and reaction until the opportunity is formed, it might be supposed that while the social entrepreneur is acting, he or she might create a radical innovation but not before he or she starts acting. This way, innovation radicalness could come as a consequence of the creation of the opportunity or even more, by definition it might be present in the process of opportunity creation, but not before the opportunity has been created. Nevertheless, there is the need of further research on this subject to have a deeper understanding of the presence of radical innovations in the process of opportunity creation in social entrepreneurship.

Finally, the Hypotheses 6: "A high number of blind or myopic variations started by social entrepreneurs is positively related to opportunity creation" cannot be confirmed since the results show that the variable is not reliable and the two-stage least squares regression coefficient indicates that it is not statistically significant.

A general observation related to the development of the items is that they were validated by professors from the EGADE Business School who are experts in the construction of scales and questionnaires, but now I consider that the items should be also validated by a group of social entrepreneurs as a way to test the wording and comprehension of the statements. Moreover, related to the sample size, the scales can also be improved by administering the questionnaire to a larger sample of social entrepreneurs ( $n > 100$ ) (DeVellis, 2003; Fowler, 2002; Hair et al., 2010).

The Table 5.15 shows a summary of the confirmation and not confirmation of the hypotheses.

**Table 5.15. Results on the hypotheses.**

<b>Theoretical framework</b>	<b>Contributors (in chronological order)</b>	<b>Research Hypothesis</b>	<b>Results</b>
Opportunity discovery/ entrepreneurial alertness: information search related to preexisting solutions	Kirzner (1973); Kaish and Gilad (1991); Busenitz (1996); Gaglio and Katz (2001); Ardichvili et al. (2003); Eckhardt and Shane (2003); Sarasvathy et al. (2003); Shane (2003); Gartner et al. (2003); Alvarez and Barney (2007)	H <sub>1</sub>	<b>Confirmation of H<sub>1</sub>:</b> There is a positive relationship between the high search of information related to preexisting entrepreneurial solutions and opportunity discovery.
Opportunity discovery/ entrepreneurial alertness: accurate perception of the environment	Kirzner (1973); Kaish and Gilad (1991); Busenitz (1996); Gaglio and Katz (2001); Ardichvili et al. (2003); Eckhardt and Shane (2003); Sarasvathy et al. (2003); Shane (2003); Gartner et al. (2003); Alvarez and Barney (2007)	H <sub>2</sub>	<b>No confirmation of H<sub>2</sub>:</b> There is a positive relationship between social entrepreneurs' accurate perception of the environment and opportunity discovery.
Opportunity discovery/ entrepreneurial alertness: weak ties of social networks	Granovetter (1973); Kaish and Gilad (1991); Burt (1992); Hills et al. (1997); Singh (2000), Ardichvili et al. (2003); De Koning (2003).	H <sub>3a</sub>	<b>No confirmation of H<sub>3a</sub>:</b> There is a positive relationship between the high number of weak ties of the social entrepreneurs' network of weak ties and opportunity discovery.
Opportunity discovery/ entrepreneurial alertness: Diversity of social networks	Singh (2000); De Koning (2003); Shane (2003)	H <sub>3b</sub>	<b>No confirmation of H<sub>3b</sub>:</b> There is a positive relationship between the high diversity of social entrepreneurs' social networks of weak ties and opportunity discovery.
Opportunity creation/ bricolage capabilities: social entrepreneurs' low fear of failure	Lévi-Strauss (1966); Weick (1979); Sarasvathy (2001); Garud and Karnoe (2003); Baker and Nelson (2005)	H <sub>4a</sub>	<b>No confirmation of H<sub>4a</sub>:</b> There is a positive relationship between social entrepreneurs' low fear of failure and opportunity creation.
Opportunity creation/ bricolage capabilities: social entrepreneurs' combination and use of resources at hand to solve social problems	Lévi-Strauss (1966); Weick (1979); Sarasvathy (2001); Garud and Karnoe (2003); Baker and Nelson (2005)	H <sub>4b</sub>	<b>No confirmation of H<sub>4b</sub>:</b> There is a positive relationship between the social entrepreneurs' high ability to combine and use the resources at hand to solve social problems and opportunity creation.

Opportunity creation; innovation radicalness	Rogers (1995); Leifer et al. (2000); Dahlin and Behrens (2005); Marvel and Lumpkin (2007); Zahra et al. (2008)	H <sub>5</sub>	<b>No confirmation of H<sub>5</sub>:</b> There is a positive relationship between the high innovation radicalness of social entrepreneurs' solutions and opportunity creation.
Opportunity creation: blind or myopic variations	Baker and Nelson (2005); Alvarez and Barney (2007).	H <sub>6</sub>	<b>No confirmation of H<sub>6</sub>:</b> There is a positive relationship between the high number of blind or myopic variations started by social entrepreneurs and opportunity creation.

### 5.3. Qualitative and quantitative data analyses

We can find interesting results from the comparison of the qualitative and quantitative data analyses. I compared the tendency to identify opportunities showed by each entrepreneur in the qualitative study, grouped by field of impact, with the tendency showed in the quantitative study, specifically the way each observation spread in the Chart 5.1, presented in a previous section in this chapter. The results showed that there are coincidences in the 50% of the observations. This means that 31 social entrepreneurs from the sample showed the same tendency to discover or create opportunities in both analyses. For example, the social entrepreneurs labeled S18, Y24, P41, and G58 showed a tendency to discover in the qualitative and quantitative analyses.

The results by field of impact showed that in the field of human rights, which has 16 social entrepreneurs, there are ten coincidences, which represent the 62.5% of the total of the observations in that field. This means that the tendency to create or discover of the ten social entrepreneurs in the quantitative analysis, was confirmed by the qualitative analysis. However, the remaining six observations must be analyzed case by case. For example, the social entrepreneur labeled as B2 in the quantitative analysis showed a mixture of discovery and creation with a tendency to create, while in the qualitative analysis, based on the social



entrepreneur's answer to the open question of the questionnaire, there is a clear tendency to discover because this person developed a proposal of a solution from different models or methodologies he found in other places in the world. Another example is the entrepreneur labeled V47 who showed a tendency to discover in the quantitative analysis and in the qualitative analysis she showed a tendency to create, and again, based on the analysis of the social entrepreneur's answer, it is clear the innovation in the creation of the methodology she proposed.

In the field of economic development, two out of twelve observations are coinciding, which represents the 1.7% of the total observations in that field. In the field of education, five out of eight observations coincide, which represent the 62.5% of the total observations in that field.

In the field of environment, four out of seven observations coincide, which represent the 57.14% of the total observations in that field. In the field of civic engagement, three out of seven observations coincide, which represent the 42.9% of the total observations in that field. I have to mention that in this field I did not include one observation since I could not complete the qualitative analysis for this entrepreneur because there were insufficient elements in the entrepreneur's response to identify a tendency to create or discover opportunities. In the field of health, seven out of eleven observations coincide, which represent the 63.6% of the observations in that field. In summary, from 61 observations, there are 31 coincidences, which represent the 50.8% of the 61 observations.

Considering the quantitative and qualitative analyses by gender and field of impact, in general terms women are more oriented to address problems related to human rights, and the opportunity identification process with the highest recurrence is opportunity discovery. On the other hand, men are more oriented to address problems related to economic development, and the opportunity identification process with the highest recurrence is also opportunity discovery.

For the larger group of male social entrepreneurs, in the ages from 31 to 40 years old working in the fields of impact of economic development and civic engagement, there is only one coincidence in the opportunity identification process which is discovery. On the other hand, from the larger group of female social entrepreneurs, in the ages from 51 to 60 years old

working in the fields of impact of economic development and health, there were three coincidences in the opportunity identification process which is also discovery.

I can observe that in those cases where there is not a match in the results of both analyses, the social entrepreneurs were not completely clear on the open question because they answered in one way to this question and there were different answers in the Likert scale items. It might be possible that some social entrepreneurs are confused between identifying an opportunity and developing it. On the other hand, these results might be also associated with an error in the procedure of administering the questionnaire to those social entrepreneurs since I did not clarify the question nor I guided the respondent to answer what was being asked. I do not mean that the respondent should answer what I wanted to hear, but to ask them the precise questions so they could identify the how and when about the starting of their social project.

The quantitative analysis of the cross-tabulation by gender and age, and the analysis of the spreading of the ordered pairs of opportunity discovery and opportunity creation in the Chart 5.1 show that in the category 'young social entrepreneurs' (ages between 20 and 40 years old), which is formed by 14 men and three women, seven men have a tendency to discover, three women have a tendency to discover, and seven men have a tendency to create.

In the category 'middle-aged social entrepreneurs' (ages between 41 and 60 years old), which is formed by 15 men and 17 women, nine men have a tendency to discover, eight women have a tendency to discover, six men have a tendency to create and nine women have a tendency to create.

In the last category, 'old social entrepreneurs' (more than 60 years old), which is formed by seven men and six women, 6 men have a tendency to discover, four women have a tendency to discover, one man has a tendency to create, and two women have a tendency to create.

When we compare these results with the results in the qualitative analysis, we can observe that there are not important differences in the opportunity identification process between men and women, which can be interpreted that, in general terms, there are not differences in the opportunity identification process by age and gender. Moreover, the results of the two-stage

least square estimation show that the regression coefficient for the variable 'gender' is not statistically significant which tell us that the gender is not a predictor of discovery or creation. However, these results need to be confirmed using a larger sample of social entrepreneurs.

Another interesting finding when we compare these analyses is the presence of at least two phases in the process of developing a methodology or solution proposal for a social or environmental problem: the opportunity identification with tendency to discover or create, and the opportunity development in which also might be present the processes of discovery and creation. The social entrepreneurs identified with the labels S18 and F57 are examples of entrepreneurs who discovered an opportunity by finding a solution in other places of the world but at the moment to replicate it, they had to innovate or create new means to adapt the model or methodology to serve the people locally.

Finally, these analyses also shed light on two interesting aspects of opportunity identification in social entrepreneurship. One refers to the individual differences that exist in cofounders while they are approaching to an opportunity, and the second refers to collective creation of social opportunities.

Related to the differences among cofounders when identifying opportunities, I interviewed two pairs of cofounders for the study and the results showed that in both cases the cofounders have a different tendency in the process of opportunity identification. It is important to mention that in both cases I interviewed the cofounder individually. The first pair of cofounders was identified with the labels H7 and M12. While the social entrepreneur H7 positioned his project in the field of impact of economic development and showed a clear tendency to discover in both analyses quantitative and qualitative, the social entrepreneur M12 allocated his project in the field of impact of environment and showed two different results in the analyses of the tendency of the opportunity identification process; through the quantitative analysis he showed a tendency of central response with a higher value of the variable creation, and through the qualitative analysis he showed a tendency to discover. I could infer by these results that the first social entrepreneur has more clarity about how he got to the solution to the problem or he understood the questionnaire better than the second one, who showed a tendency of central response. However, this last entrepreneur was interviewed by telephone and I have to consider that there might be a bias for the mode of the interview.

The second pair of cofounders was identified with the labels T19 and U20. The social entrepreneur T19 allocated his project in the field of impact of health and in the quantitative analysis he showed a tendency of central response with a higher value in the variable creation, and through the qualitative analysis he showed a tendency to discover. In the same way, the social entrepreneur U20 also allocated his project in the field of impact of health and in the quantitative analysis he showed a mixture of discovery and creation with a tendency to discover which matches with the result of the qualitative analysis in which he showed a tendency to discover. These two social entrepreneurs were interviewed individually using the same mode of interview.

These results confirm in some extent the nexus between the individual and the opportunity proposed by Shane (2003). Even though the existence of this nexus, it does not mean that some opportunities cannot be identified collectively. Indeed, each social entrepreneur has his or her own approach to the opportunity he or she has identified, but together can form the solution. In this sense, the collective identification of opportunities has been gaining strength in the literature (e.g. Peredo and Chrisman, 2006) and this study contributes to this theory since the results show that some opportunities are not the outcome of individual creation. That is the case of the social entrepreneur identified with the label I34 who formed the opportunity through the collective thinking. She is convinced that the solution was not her own creation. Since the collectiveness will give more chances to share creative ideas to address a social or environmental problem, I believe that the collective identification of opportunities might be more present in scenarios of opportunity creation. I would name it as 'collective creation' within the opportunity identification process and it would be considered a subject of future research.

In the next chapter I discuss the contributions of this study to the current literature.

## 6. Discussion

In this chapter I present the contributions of this study in light of the literature in social and commercial entrepreneurship.

As I previously stated in Chapter 2, research on opportunity identification in social entrepreneurship is in a nascent stage and the few empirical studies conducted (e.g. Corner and Ho, 2010; Perrini et al., 2010) are based mainly in qualitative methodologies such as case study and grounded theory. This situation has not permitted progress in the development of the theory in social entrepreneurship.

This study contributes by establishing theoretical propositions by applying the theories of discovery and creation developed in commercial entrepreneurship and proposing a conceptual framework that contributes to the language of the field. Within the conceptual framework I introduced new definitions for the concepts “social opportunity”, and “social value creation”.

The definition for ‘social opportunity’ I proposed in the Chapter 2 was: “the conjunction of factors that lead to the discovery or creation of a business solution to address a social problem. This solution is revealed to potentially create social value which will have a positive impact in a group or groups of people in disadvantage or to the environment, and that will endure in the short and/or long terms.” However, the results show that opportunities can also be the result of a combination of discovery and creation. Consequently, the previous definition must be adjusted to: “the conjunction of factors that lead to the discovery and/or creation of a business solution to address a social problem. This solution is revealed to potentially create social value which will have a positive impact in a group or groups of people in disadvantage or to the environment, and that will endure in the short and/or long terms.” The definition for social value creation I propose in this study is “the production of goods, services or means that benefit society in a holistic and positive way considering and respecting the environment and culture of each group of individuals”.

This definition advances the literature since the current definitions for ‘social opportunity’ are broad and do not attain to differentiate between ‘commercial’ and ‘social’ opportunities (e.g. Austin et al., 2006; Corner and Ho, 2010; Guclu et al., 2002; Perrini and Vurro, 2006;

Robinson, 2003). This definition also adds to the debate on whether social opportunities are different from commercial opportunities. The findings in this study provide empirical evidence that gives support to consider social opportunities different from commercial opportunities since the way they are formed to the way they are identified.

The advantages of this definition are that it provides a detailed description of the construct that can permit to distinguish social ventures from other social projects that are not within the boundaries of social entrepreneurship. In this sense, it contributes to delimit the boundaries of the field, differentiating it from philanthropy or public policy. It also helps to differentiate between commercial and social opportunities by considering the social aspect of the value created through the identification, development and exploitation of opportunities in social entrepreneurship. The term “business solution” I used in the definition of social opportunity refers to an entrepreneurial solution which can be for-profit, not-for-profit or a combination of both. I define the term “entrepreneurial or business solution” considering Drucker (1985) who sustained that entrepreneurship consisted in more than just starting a new business to create profits but to apply management concepts and management techniques to standardize the processes and to use the resources efficiently using innovative means. In this sense, ‘business solution’ refers to a “business model based on management concepts and techniques to implement innovative methodologies, products or services to attend social problems or needs”. One characteristic of this type of solutions is the professionalization it implies. To discover or create a business solution to attend social issues requires the application of specialized knowledge. This might explain in an extent the large number of social entrepreneurs with higher education from the sample.

Another advantage of this definition is that it applies to both individual and collective social entrepreneurs. By this I mean that either a social entrepreneur or a group of social entrepreneurs could be discovering and/or creating business solutions to address social needs or problems; this is not limited to the individual sphere.

This definition has several implications in current literature and future research. In one hand, it implies that researchers should consider that opportunities are something more than ideas or conjectures just as some authors have suggested in their research. Short et al. (2010:55), for example, sustain that opportunities are “potentially lucrative ideas” or more recently,

Eckhardt and Shane (2013:163) have sustained that “entrepreneurs discover or create business ideas/conjectures [...], which are called “opportunities”.” The results of this study have proven that opportunities are something more than just ideas or conjectures.

On the other hand, researchers in social entrepreneurship should include in their empirical studies those initiatives that fulfill the entrepreneurial aspect of social entrepreneurship and not only the social aspect. This way, initiatives of philanthropy or welfare that are not innovative models to attend social issues should not be considered as social entrepreneurship.

### **6.1. Opportunity discovery and opportunity creation: Two different dimensions**

Several studies have been done in the field of commercial entrepreneurship that have shed light on the nature of opportunities and the ways they are identified by entrepreneurs. However, there is still a debate whether opportunities are objective or subjective phenomena and if they can be discovered, created or both.

Within the debate on opportunity identification it has been considered whether discovery and creation are part of a continuum within the same construct or dimension or if they are two different constructs.

In the field of commercial entrepreneurship, the dominant point of view by scholars has been the discovery of entrepreneurial opportunities (e.g., Busenizt, 1996; Casson and Wadeson, 2007; Kirzner, 1973; Klein, 2008; Shane and Venkataraman, 2000; Shane 2012). For this reason, few years ago the term ‘recognition’ was associated to the identification of opportunities. More recently, some scholars have stated that opportunities can also be created (e.g. Sarasvathy, 2001; Alvarez and Barney, 2007) which has lead to change the term ‘opportunity recognition’ by ‘opportunity identification’ (e.g. Alvarez and Barney, 2007; Ardichvili et al., 2003; Vaghely and Pi erre-Andr e, 2010).

A good argument provided by Alvarez and Barney (2007) to use the term ‘opportunity identification’ is that it can be understood as the entrepreneur’s awareness of the existence of an opportunity once it has been created or discovered. In this sense, they are the first

researchers who have clearly described the processes of discovery and creation theoretically. Furthermore, they have conceived them as two independent processes to identify opportunities. In this sense, the theory developed in this study is partially based on the theoretical propositions by Alvarez and Barney (2007), specifically in considering opportunity discovery and creation as two independent processes present within the social entrepreneurship phenomenon.

In social entrepreneurship, the few scholars doing research on opportunity identification in social entrepreneurship continue using the term “opportunity recognition” instead of “opportunity identification” (e.g., Corner and Ho, 2010; Mair and Noboa, 2006; Perrini and Vurro, 2006; Robinson, 2006). This is understood in part because they have taken as a reference for their works the paper by Shane and Venkataraman (2000) who conceive opportunities as objective phenomena that have to be found.

Corner and Ho (2010) are the first researchers who try to develop theory on opportunity identification in social entrepreneurship. They sustain that the entrepreneurial phases of identification, development, and exploitation of opportunities are not present in social entrepreneurship. Instead they refer only to the development of the opportunity that occurs along a spectrum or continuum where creation is at one end and discovery is at the other. However, the results of the present study give empirical evidence that confirms that discovery and creation are two independent constructs and not two elements of a single construct that could be called ‘opportunity identification’. This study also advances the literature by providing qualitative and quantitative empirical evidence that proves that opportunity identification is a different process from opportunity development and exploitation.

In the first place, the results show that the scales developed to measure the constructs ‘opportunity discovery’ and ‘opportunity creation’ are reliable and present construct-validity. In second place, the ‘predictor endogenous variable creation’ and the ‘predictor endogenous variable discovery’ for both dependent variables ‘discovery’ and ‘creation’ in the two simultaneous regression equations are not statistically significant which proves the non-interdependency of discovery and creation<sup>14</sup>.

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<sup>14</sup> For a full description of the procedure used to prove the independency of both variables see Chapter 5.



Finally, the results show that both processes can be present in the same entrepreneur, which implies that some social opportunities are the outcome of a combination of the processes of discovery and creation. This finding is consistent with that of Corner and Ho (2010) who found that opportunities are "neither purely created nor purely discovered." (Corner and Ho, 2010: 645). This means that even though discovery and creation are different dimensions, social entrepreneurs can use both dimensions to form an opportunity. For example, in this study there are some social entrepreneurs who searched for information to find a business solution and afterwards they innovated to transform and adapt it to serve a community locally.

While the results show that observations in the sample present a mixture of discovery and creation, they also show that the majority of social entrepreneurs have a tendency either to create or discover and just few of them present equilibrium between both processes. Moreover, the results in the qualitative and quantitative analyses show that within the combination of discovery and creation, the majority of social entrepreneurs showed a tendency to discover. This can be understood if we recall the definition of opportunity discovery as "finding preexisted business solutions to address social problems or needs".

It seems that would be easier for the majority of social entrepreneurs to search for solutions that already exist in other places in the world and innovate to adapt them locally than to start a process to create an opportunity from zero. It is possible that opportunity creation might involve a greater creative process than opportunity discovery. This assumption needs further research to be confirmed.

Some important implications derive from these results. In social entrepreneurship, researchers could consider the combination of discovery and creation in opportunity identification to continue developing theory in this field of knowledge.

On the other hand, in commercial entrepreneurship several scholars assume that entrepreneurs can either discover or create opportunities (e.g. Alvarez and Barney, 2007, Alvarez and Barney, 2013; Ventakaraman et al., 2012) and they do not take into account that some entrepreneurs identify opportunities using both processes. Alvarez and Barney (2007), for example, consider two different types of entrepreneurs: the discovery entrepreneur and the creation entrepreneur. In discovery theory opportunities are formed by exogenous shocks

in the market and entrepreneurs who discover are alert to those changes in the market or industry to see opportunities. On the contrary, in creation theory entrepreneurs' actions are the source to form opportunities and they do not 'see' opportunities, they 'build' opportunities.

The results of this study show that even though discovery and creation are two different dimensions, both can be present in the same entrepreneur. We would not be talking of two different types of entrepreneurs but one instead.

It might be supposed that the results of this study could apply only to social entrepreneurship since there is the assumption that social and commercial entrepreneurs are different; nevertheless, this result has implications for current research in commercial entrepreneurship by providing a path that could be explored by researchers in that field of knowledge.

Another implication of these findings is related to the studies that hold that opportunity identification is part of opportunity development. Researchers in social entrepreneurship could reconsider the different phases of the entrepreneurial process found in the literature in commercial entrepreneurship and develop new empirical studies with larger samples of social entrepreneurs to develop the social entrepreneurship theory and contribute to legitimate this field of knowledge. Additionally, those researchers in commercial entrepreneurship who use the term "forming opportunities" to comprise opportunity identification and opportunity development (i.e. Alvarez and Barney, 2007) could consider separating both processes to avoid confusion or continue doing empirical research that could confirm that opportunity identification and development are two different processes.

## **6.2. Factors of opportunity discovery and opportunity creation**

Related to the independent variables for opportunity discovery and opportunity creation, 'information search of preexisted business solutions' was confirmed as a predictor for opportunity discovery. The variable showed construct validity and the scale to measure it has an acceptable level of reliability. These results confirm that information search, as a key element of entrepreneurial alertness, is a factor that is present in the discovery of entrepreneurial opportunities (e.g., Kirzner, 1973; Kaish and Gilad, 1991; Busenitz, 1996; Gaglio and Katz, 2001; Eckhardt and Shane, 2003; Gartner et al., 2003; Shane, 2003; Sarasvathy et al., 2003) in social entrepreneurship.

The positive relationship between information search of preexisting business solutions and opportunity discovery was confirmed since the predictor variable 'information search' showed statistical significance in the regression model. This result adds to the debate about whether entrepreneurs start an active search of opportunities or if they find them by surprise (Chandler et al., 2003). In this sense, the results show that social entrepreneurs can do both things. They can either start an active search to find an entrepreneurial solution or they can find it without planning. These results have implications in the research in social entrepreneurship since the few studies conducted are basically qualitative approaches to the phenomenon and do not consider predictor variables to discover and/or create social opportunities. In this sense, researchers could consider this variable to be included in their models in future research and prove them with large samples using quantitative methods.

On the other hand, the independent variable 'innovation radicalness' showed statistical significance as a predictor for opportunity creation; however, even though the variable has construct validity, the scale to measure it is not reliable. Despite these results, I suggest not discarding this variable but to re-operationalize and re-test it with a larger sample since this variable has been identified by some scholars to be an important factor of opportunity creation (e.g. Baker and Nelson, 2005, Sarasvathy, 2001; Sarasvathy et al, 2003).

Related to the independent variables 'perception of the environment', 'social networks of weak ties', 'diversity of social networks of weak ties', 'fear of failure', 'use and combination of resources at hand', and 'blind or myopic variations', all of them have construct validity, but the scales showed poor reliability and the two-stage least squares estimated regression

coefficients were not significant. These results might be suggesting poor instrumentation of the variables more than an error in the theoretical propositions since the literature in both commercial and social entrepreneurship show evidence for each variable to be considered important elements within the opportunity identification process. I briefly describe the importance the literature in commercial entrepreneurship gives to these variables in the next paragraphs.

'Perception of the environment' has been considered as another element of entrepreneurial alertness. The literature in commercial entrepreneurship suggest that entrepreneurs who tend to discover opportunities are supposed to perceive reality more accurately than those who do not tend to discover (Gaglio and Katz, 2001; Sarasvathy et al., 2003; Shane, 2003; Alvarez and Barney, 2007; Casson and Wadeson, 2007). There are some empirical studies that provides evidence to consider 'perception of the environment' as an important predictor of opportunity identification (e.g. Kaish and Gilad, 1991; Busenitz, 1996)

Some scholars have considered social networks as important sources of information that could lead entrepreneurs to discover opportunities (Ardichvili et al., 2003; Baker and Nelson, 2005; Hills et al., 1997; Shane, 2003; Singh, 2000). There are some empirical studies in literature in commercial entrepreneurship that give evidence of the importance of weak ties and diversity of entrepreneur's social networks (e.g., Hills et al., 1997; Kaish and Gilad, 1991; Singh, 2000).

Related to the variables 'fear of failure' and 'use and combination of resources at hand', literature shows that they are key elements of the construct 'bricolage capabilities' (e.g., Baker and Nelson, 2005; Phillips and Tracey, 2007; Sarasvathy, 2001). While Weick (1979) suggest that people who have low fear of failure will continue forward, Baker and Nelson (2005) give empirical evidence that show that entrepreneurs would try to create opportunities using and combining the available resources they have at hand instead of looking for new resources.

In the case of 'blind or myopic variations', literature in commercial entrepreneurship shows that in 'creation', entrepreneurs act to test the ideas they have to attend a market (Alvarez

and Barney, 2007). Alvarez and Barney (2007) founded their assumptions of the creation theory in the evolutionary theories of entrepreneurial action proposed by Aldrich and Ruef (2006), Campbell (1960), and Weick (1979). In social entrepreneurship, Corner and Ho (2010) give some evidence that social entrepreneurs test their ideas by what they called “a process of experimentation” (Corner and Ho, 2010: 646). In this process, social entrepreneurs act to implement their ideas and observe the “feedback from the environment relative to what has been implemented and may try something different if the initial action did not work.” (Corner and Ho, 2010: 646).

Even though the majority of the independent variables in this study were insignificant in the regression equations, I firmly hold that this non-significance is generated by deficiencies in the instrumentation of the variables and the size of the sample more than misconception of theory. Therefore, there is the need of further research to re-operationalize and re-test these variables since previous literature in commercial entrepreneurship gives theoretical and empirical evidence that show that they might be important variables in the opportunity identification process in social entrepreneurship.

### **6.3. Opportunity identification by gender and age**

Literature related to gender differences in opportunity identification is scarce in commercial entrepreneurship (e.g., DeTienne and Chandler, 2007; Gonzalez and Husted, 2011) and is practically non-existent in social entrepreneurship.

DeTienne and Chandler (2007) are the first to study gender differences in opportunity identification in commercial entrepreneurship. These authors approached to the study of opportunity identification through a cognitive theory called 'human capital' which comprises entrepreneur's knowledge and skills.

Gonzalez and Husted (2011) built on the previous work developed by DeTienne and Chandler (2007) related to gender differences in opportunity identification in commercial entrepreneurship. Both works use cognitive theories to approach to the phenomenon without considering the processes of discovery and creation of opportunities, which are fundamental theories in the study of opportunity identification since the most cited authors in the literature

in entrepreneurship recognize the presence of any of both processes (e.g. Baker and Nelson, 2005; Casson and Wadeson, 2007; Shane, 2003; Shane and Venkataraman, 2000) or both processes (e.g., Alvarez and Barney, 2007; Alvarez and Barney, 2013; Ardichvili et al., 2003; Sarasvathy, 2001; Sarasvathy et al., 2003; Venkataraman et al., 2012) in opportunity identification.

The results of the research done by DeTienne and Chandler (2007) showed gender differences between the ways entrepreneurs identify opportunities even when women and men arrive to similar outcomes. Contrary to those results, the quantitative and qualitative analyses in this study show that there are no gender differences in the opportunity identification process when men and women discover and/or create social opportunities.

Given that in the final sample there were more men than women, it could be possible to think that men would show relatively higher values of discovery or creation than women; however, it was not possible to identify a pattern of the opportunity identification process followed by men or women in the qualitative and quantitative analyses. Both genders showed similar results in the processes they followed to identify opportunities which might mean that women do not tend to create more opportunities than men or vice versa neither they tend to discover more opportunities than men or vice versa.

Moreover, the quantitative analysis showed that the estimated two-stage least square regression coefficient for the control variable 'gender' is not significant for both dependent variables 'opportunity discovery' and 'opportunity creation' which means that gender is neither a predictor for opportunity discovery nor for opportunity creation. Additionally, both analyses showed that discovery is the most frequent process of opportunity identification for both genders. These results might be suggesting that both genders have similar attitudes toward opportunity discovery and opportunity creation.

The differences in the results of the study of DeTienne and Chandler (2007) and the present study might be originated in part by the different approaches used to study opportunity identification and the differences in the subjects that constitute the final sample. While DeTienne and Chandler (2007) measure cognitive aspects of entrepreneurs, I used a Likert scale to measure social entrepreneurs' attitudes toward opportunity discovery and opportunity

creation. These results add to the debate on gender differences in opportunity identification by giving a new perspective to study the phenomenon. These results also advance the literature in social entrepreneurship by providing a starting point for the study of gender differences in this field of knowledge. Future research in this field could include cognitive variables to the study of gender differences in opportunity identification in social entrepreneurship.

The implications of these results in current research on gender in commercial entrepreneurship suggest that scholars could incorporate the constructs opportunity discovery and opportunity creation to improve and enhance the models they have built through cognitive theories. It would be interesting to know if there are changes in the results when the variables opportunity discovery and opportunity creation are added to their models.

On the other hand, while this study demonstrates that there are no gender differences when creating and/or discovering social opportunities, it contributes to the confirmation of gender differences by field of work in accordance to the work developed by Kalleberg and Leicht (1991). Kalleberg and Leicht (1991) found that the women of their sample were working more in the health industry than men. In the present study results show that female social entrepreneurs are working more in human rights than male social entrepreneurs. On the contrary, male social entrepreneurs are working more in economic development than female social entrepreneurs.

Related to the age, the results show that there are not significant differences between discovery and creation across the three different categories of age for both men and women. Actually, the results show that the majority of social entrepreneurs in the three categories 'young social entrepreneurs', 'middle-aged social entrepreneurs' and 'old social entrepreneurs' tend to discover opportunities.

These results advance the literature in social entrepreneurship since there are no previous conceptual or empirical studies that have addressed gender and age differences in opportunity identification in this field of knowledge.

#### **6.4. Individual nexus between social entrepreneurs and opportunities within the collective identification of opportunities**

Some researchers in commercial entrepreneurship have established the link between the individual entrepreneur and opportunities (e.g., Venkataraman, 1997; Shane and Venkataraman, 2000; Shane and Eckhardt, 2003; Shane, 2003). These authors argue that entrepreneurs have individual characteristics, attitudes and behaviors that might lead them to discover opportunities. Shane (2000; 2003) is the author who has developed more the theory of the individual nexus between entrepreneurs and opportunities.

According to Venkataraman (2003:xii), Shane “firmly believes that individuals, and not groups or firms, discover entrepreneurial opportunities. Since discovery is a cognitive process, it is meaningless to talk about a cognitive process as a collective act. The collective process is meaningful only in discussion of execution and exploitation, but not in the discovery process itself.” These assumptions suggest that opportunities are objective phenomena that exist independent to the entrepreneur and that opportunities cannot be identified collectively. More recently, Eckhardt and Shane (2013) have sustained that the individual nexus between entrepreneurs and opportunities also considers the existence of opportunities as subjective phenomena in the form of ideas and conjectures.

The present study adds to the debate of the nature of opportunities, the individual nexus between entrepreneurs and opportunities, and the collective identification of opportunities.

As I have stated in the previous sections of this chapter, the results of this study show that opportunities can be objective and subjective phenomena that can be discovered, created or both. The individual nexus between opportunities and entrepreneurs is confirmed by the results since each entrepreneur approaches different to each opportunity. However, this study has also demonstrated by qualitative evidence that opportunities can be the outcome of collective identification. This result is in accordance with other studies in the field of commercial entrepreneurship (Peredo and Chrisman, 2006) and social entrepreneurship (Corner and Ho, 2007) that give empirical evidence of collective opportunity identification.

The implications of these results to literature in social entrepreneurship and commercial entrepreneurship suggest that researchers could consider the inclusion of both the individual



nexus between entrepreneurs and opportunities and the collective opportunity identification in future research. These theories could be seen as complementary to each other. The Figure 6.1 illustrates the idea I have related to the collective opportunity identification based on the individual nexus between entrepreneurs and opportunities.

**Figure 6.1. The collective opportunity identification process based on the individual nexus between entrepreneurs and opportunities in social entrepreneurship.**



The description of the figure above is as follows: each social entrepreneur would have an individual nexus with the opportunity he or she is discovering or creating and an individual

nexus with the social problem or need he or she is interested to address. The individuals in the group of social entrepreneurs know each other and share their thoughts about the solution they have discovered or the thoughts they have in mind to create a solution to address the social problem or need. The arrows do not represent relationships of dependency or interdependency.

The one-way arrows represent the interrelationships between the individuals and the social problem or need. One arrow represents when the individual approaches to the problem or need, the other arrow represents the knowledge the individual obtains by getting information related to understand the problem. The two-way arrows between the individuals represent the communication they have each other. In this communication they share their thoughts about the discoveries of preexisted business solutions they have done or the ideas they have to act to contribute solving the need or problem (create the solution). This graphical model needs to be confirmed by future research.

### **6.5. General thoughts**

The lack of production of articles based on the previous theory developed has led to a lack of debate in the field of social entrepreneurship, specifically in the subjects related to the opportunity identification process. In this sense, I intend to foster the debate in the area of opportunity identification in social entrepreneurship. The results of this study confirm empirically that opportunities in social entrepreneurship are different in nature from those in commercial entrepreneurship and that discovery and creation are two different processes that can be addressed by the same entrepreneur. Since there is still a debate in commercial entrepreneurship to set that field of knowledge as independent from other fields such as strategic management (Shane, 2012), we can imagine the work that still needs to be done in research on social entrepreneurship to clarify whether this is an independent field of knowledge. In this sense, I invite researchers interested in this subject to enhance the theory and test the non-confirmed hypotheses that I propose in this study.

## 7. Conclusions

In this final chapter I provide an overview of this study, I mention the limitations of the study, the implications for social entrepreneurs and supporters, and I discuss possible directions for future research.

Social entrepreneurship has emerged as a new phenomenon that is helping to improve the living conditions of many people in the world. Within this phenomenon, social entrepreneurs have played a key role as catalytic agents who are aware of many complex social situations. They have developed innovative projects in different fields of action: economic development; human rights; holistic and inclusive development of communities that live in marginal conditions; health; preservation and protection of the environment -giving an emphasis in the carbon footprint and the global warming; private and public accountability and transparency; among many others. To some extent, social entrepreneurs have been able to turn their eyes and open their ears to see and hear those faces and voices that are claiming for help. They identify, develop and exploit opportunities that are positively impacting society and the environment.

This study sheds light on the opportunity identification process in social entrepreneurship through the application of the theories of opportunity discovery and opportunity creation developed in commercial entrepreneurship.

In the first part of the study I proposed a theoretical and conceptual framework for the opportunity identification process in social entrepreneurship. This framework includes some factors that scholars consider might be present in opportunity discovery and some factors that might be present in opportunity creation and that I believe are also present in the opportunity identification process in social entrepreneurship. These factors are: information search of preexisting business solutions; accurate perception of the environment; number and diversity of weak-ties of social entrepreneurs' social networks; bricolage capabilities; innovation radicalness; and, blind or myopic variations.

In this part of the study I conducted semi-structured interviews with social entrepreneurs to have a better understanding of the ways they identified the opportunity to start their social initiative. I analyzed the interviews through qualitative methods and I could identify a list of

words and terms related to the language used by social entrepreneurs when they referred to the social problem or need and to opportunities or the solution they found or created to address the problem.

In the second part of the study I operationalized the factors I previously identified and I generated a pool of items considering the list of words and terms I identified in the first part of the study. I did content validity of the items with experts in the construction of scales, and I developed the scales to measure each variable using a five-point Likert scale. With the validated items and the scales for each variable I built a questionnaire that I administered to a total sample of 62 social entrepreneurs who started social entrepreneurship projects in Mexico.

In the third part of the study I analyzed the data using qualitative methods such as open coding and code by list, and quantitative methods such as factor analysis and two-stage least squares estimator. The results show that opportunity discovery and opportunity creation are two different constructs that might be present in the same social entrepreneur to identify an opportunity.

This study presents several contributions to current research in social entrepreneurship. One important contribution is the development of a theoretical and conceptual framework for opportunity discovery and opportunity creation in social entrepreneurship. Within this framework I proposed several concepts that advance the literature in social entrepreneurship. It was also possible to partially prove the model proposed in this framework since I could confirm the mutual exclusivity of the constructs 'opportunity discovery' and 'opportunity creation' using valid and reliable items to measure these dependent variables.

The mixed designed used in this study is another interesting contribution since it was possible to apply the qualitative method of triangulation between-the-methods (Jonsen y Jehn, 2009) to compare and complement the results obtained in the quantitative and qualitative analyses to have a better understanding of the discovery and creation process in social entrepreneurship and to give robustness to the methodology and the results obtained.

Regarding the research questions proposed in this study, it was possible to answer the majority of them. The first and second questions 'what is social value?' and 'how can the term "social opportunities" be defined?' were addressed in the chapter three. The research questions 'which factors lead social entrepreneurs to discover social opportunities?' and 'which factors lead social entrepreneurs to create social opportunities?' were addressed in chapters three, four and five. The research questions 'is it possible that the same social entrepreneur sometimes discover social opportunities and some others create social opportunities?' and 'what will make the difference between one situation and the other?' were addressed in the chapter five and six. Finally, the research question 'is the context relevant in the discovery or creation of social opportunities?' was partially addressed in this study. The results in the qualitative analysis show that social entrepreneurs might be influenced by the context to discover or create social opportunities when, for example, they have access to resources, if they have traveled and lived abroad and also they can be influenced by the social structure in which they are embedded (Coleman, 1990). However, there is the need to conduct further research in the future to address this issue.

The research objectives of this study were achieved since it was possible to: conduct research in the field of social entrepreneurship to have a better understanding of the different factors involved in the identification of social opportunities through the perspective of the theories of discovery and creation of opportunities; transfer the main factors identified in the theories of opportunity discovery and creation in commercial entrepreneurship to the field of social entrepreneurship; develop a theoretical and conceptual framework of the factors that lead social entrepreneurs to discover or create social opportunities; and, construct an instrument to test the hypothesis proposed in this study using a sample of social entrepreneurs who founded their social projects in Mexico.

In summary, this study advances the literature in social entrepreneurship by contributing with vocabulary, concepts and theory that give support to the legitimacy of this field to be recognized as an independent field of knowledge.

## 7.1. Limitations

This study has some limitations that must be considered.

As a first limitation, even though the variables "perception of the environment", "fear of failure", "innovation radicalness" and "blind or myopic variations" showed construct validity, they had poor internal consistency. I believe that the low values of reliability are associated not with weaknesses in the theoretical propositions but with insufficiencies in the constructions of the items, the lack of validation by social entrepreneurs and the small size of the final sample (n=62). This way it was not possible to generate either powerful regression models or significant two-stage least squares estimated regression coefficients.

The items used to measure the variables in the paragraph above were validated by experts in the construction of scales and questionnaires, but they were not validated by a group of social entrepreneurs.

A second limitation refers to the sample size in this study. Due to limitations on the time to finish the present study and the availability of the social entrepreneurs of the population identified for this study, only 74 social entrepreneurs accepted to participate in the study. The final sample consisted of 62 social entrepreneurs which is a small number to get significant results. With this sample size it was not possible to use the Multiple Indicators, Multiple Causes (MIMIC) methodology which would be the best form to address the quantitative analysis since MIMIC try to explain the interrelationships among latent factors represented by multiple variables which in some cases show interdependency (Hair et al., 2010; Schumacker and Lomax, 2010). To apply MIMIC I would need a sample in the range of 100 to 400 observations to have the best confirmatory results (Hair et al., 2010:643).

Another important limitation that needs to be considered is the difficulty of knowing the exact number of social entrepreneurs that started a social project in Mexico. The population for this study was comprised by the social entrepreneurs from Ashoka Mexico, other social entrepreneurs that I could contact through the Tecnológico de Monterrey and by recommendation of some social entrepreneurs. Therefore, the sample in this study does not reflect the actual number of social entrepreneurs in Mexico.

A final limitation is related to the sampling method. Due to the difficulties I faced to contact the social entrepreneurs I used non-probabilistic sampling methods which does not make possible that the results can be projected to the population.

## **7.2. Implications for social entrepreneurs and supporters**

The results of this research have partial implications for social entrepreneurs since this is an exploratory study and the causal relationships among the variables are not still confirmed. However I could say to social entrepreneurs that this study gives some empirical evidence that some of the following behaviors might lead them to discover new opportunities in their fields of action: to look for information of preexisted entrepreneurial solutions to address a social problem or need; to have an accurate perception of the environment; and, to develop their social networks of acquaintances. On the other hand, the following behaviors might lead them to create new opportunities: to use and combine the resources at hand; to use creativeness to do radical innovations to address social or environmental difficult situations; to work on a basis of trial and error.

Another important implication for social entrepreneurs derived from this study is the collective opportunity identification. The results of this study give some evidence that show that the initial or primary opportunity of some long lasting social projects was identified collectively. It would be interesting and useful for social entrepreneurs to share their ideas and create synergies with other social entrepreneurs when identifying social opportunities. Actually, it would be also interesting for supporters to develop means by which social entrepreneurs working in the same area whether is health, environment, economic development, human rights, civic engagement or education could get together and talk about what they are doing, this way the supporter institution or organization could help promote success in social entrepreneurship, it would be a mechanism for them to accelerate the discovery or creation processes.

### 7.3. Future research

The agenda for future research derived from this study can split in two lines: immediate research and future avenues. Considering the immediate research, which should take no more than two years; it is necessary to improve the items of the variables that could not be confirmed in this study due to the insufficiencies in the construction of the items. The items must be validated by both experts in the construction of scales and social entrepreneurs. It is also necessary to gather more information of social entrepreneurs to expand the size of the population in order to use a random sampling that permit generalizing statistical results to the entire population. The size of the sample must be increased to be at least of 100 observations. Finally, it is recommended to reestimate the quantitative model through the use of the MIMIC methodology with a confirmatory approach.

Related to the future avenues, there are some interesting lines of research that could be addressed derived from the contributions of this study. In first place, it would be interesting to continue the research on the entrepreneurial process in social entrepreneurship, especially to the development and exploitation of social opportunities. In this sense, Alvarez and Barney (2007) suggest that the theories of discovery and creation can be applied to the development and exploitation stages. Moreover, the qualitative analysis in the second part of the present study shows that in some situations social entrepreneurs tend to discover or create new means to develop the opportunity.

A second line of research is related to radical innovations. In this sense, the causal relationship between innovation radicalness and opportunity creation was partially confirmed in this study but still there is the need of further research to know if innovation radicalness is a consequence of opportunity creation or vice versa. It will also be interesting to know how radical innovation is present in other phases of the entrepreneurial process such as the development and exploitation of social opportunities.

Another interesting line of research is related to the impact of social projects on the communities where these projects have been implemented. In this sense will be necessary to define the construct 'successful social entrepreneurship' and the indicators to measure the impact. There are interesting research questions to address the research on this topic: Are



organizations that support social entrepreneurs already measuring the impact of their projects? How are they doing this? What indicators have been developed? What would be the most adequate indicators to measure the impact of social ventures?

Other interesting line of research that could be explored in the future is related to collective opportunity identification. This study gives some empirical evidence that some opportunities might be created in a collective form. This might imply a process which does not involve just one social entrepreneur but several social entrepreneurs with a high level of cognition, creativeness, and self-awareness.

The influence of the context in the creation or discovery of social opportunities is another topic that can be addressed. As I previously mentioned, the results in the qualitative analysis show that social entrepreneurs might be influenced by the context to discover or create social opportunities; particularly, they can be influenced by the social structure in which they are embedded (Coleman, 1990). In this sense, there are some interesting questions that could address research on this topic: Will the context influence the entrepreneurs to create or discover opportunities? The social entrepreneurs who born in a context of political, economic and social power, will tend to create or discover? On the contrary, a social entrepreneur who born in a context of extreme impoverishment, will tend to create or discover? Is there a relationship between these variables? What elements of the context should be considered?

Finally, since the results of this study could not provide empirical evidence that showed gender differences in the discovery and creation of social opportunities, it would be interesting to conduct research on this topic to know more about the ways male social entrepreneurs and female social entrepreneurs identify opportunities since there are some studies in commercial entrepreneurship that prove empirically the existence of some gender differences in opportunity identification (e.g. DeTienne and Chandler, 2007; González and Husted, 2011).

As we can observe research on social entrepreneurship has several interesting routes that could be addressed by scholars in the future; and the results of future research could bring support to the legitimacy of this new field as an independent field of knowledge.

## References

- Aldrich, Howard E., and Ruef, Martin (2006), *Organizations Evolving*, 2<sup>nd</sup> Ed., Sage Publications, London, pp. 344.
- Alvarez, Sharon A., and Barney, Jay B. (2005), How Do Entrepreneurs Organize Firms Under Conditions of Uncertainty?, *Journal of Management*, Vol. 31, No. 5, pp. 776-793.
- \_\_\_\_\_ (2007), Discovery and creation: alternative theories of entrepreneurial action, *Strategic Entrepreneurship Journal*, Vol. 1, Issue 1-2, pp. 11-26.
- \_\_\_\_\_, (2011), Entrepreneurial alertness, *The Blackwell Encyclopedia of Management*, *Blackwell Reference Online*, available at [http://www.blackwellreference.com/public/tocnode?id=g9780631233176\\_chunk\\_g97814051165038\\_ss1-3](http://www.blackwellreference.com/public/tocnode?id=g9780631233176_chunk_g97814051165038_ss1-3), date of access, November 14<sup>th</sup>, 2011.
- Ardichvili, Alexander, Cardozo, Richard, and Ray, Sourav (2003), A theory of entrepreneurial opportunity identification and development, *Journal of Business Venturing*, Vol. 18, Issue 1, pp. 105-123.
- Austin, James E. (2006), Three Avenues for Social Entrepreneurship Reserch, In J. Mair, J. Robinson, and K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp. 22–33.
- \_\_\_\_\_; Stevenson, Howard; and, Wei-Skillern, Jane (2006), Social and Commercial Entrepreneurship: Same, Different, or Both?, *Entrepreneurship Theory and Practice*, Vol. 30, Issue 1, p. 1-22.
- Babbie, E. (2004), *The Practice of Social Research*, Thomson Wadsworth, USA, pp. 493.
- Bacq, Sophie, Hartog, Chantal, Hoogendoorn, Brigitte, and Lepoutre, Jan (2011), *Social and Commercial Entrepreneurship: Exploring Individual and Organizational Characteristics*, EIM Research Reports, Netherlands, pp. 49.

- Baker, Ted, and Nelson, Reed, E. (2005), Creating Something from Nothing: Resource Construction through Entrepreneurial Bricolage, *Administrative Science Quarterly*, Vol. 50, pp. 329-366.
- Baron, David P. (2005), Corporate Social Responsibility and Social Entrepreneurship, *Research Papers Series, Stanford Graduate School of Business, Stanford University*, Research Paper No. 1916, pp. 33.
- Beckert, Jens, and Zafirovski, Milan (2006), *International Encyclopedia of Economic Sociology*, Routledge, Oxon, GB, pp. 701-704.
- Borgatta, Edgar F., and Borgatta, Marie L. (1992), *Encyclopedia of Sociology*, Simon & Schuster and Prentice Hall International, Vol. 4, New York, p. 2222-2228.
- Bornstein, David (1998), Changing the World on a Shoestring, *Atlantic Monthly*, 281 (1), p. 34-39. Available in: <http://www.theatlantic.com/past/issues/98jan/ashoka.htm>
- \_\_\_\_\_ (2007), *How to change the world, Social entrepreneurs and the power of new ideas*, Oxford University Press, pp. 358.
- Brickson, Shelley L. (2007), Organizational Identity Orientation: The Genesis of the Role of the Firm and Distinct forms of social value, *Academy of Management Review*, Vol. 32, No. 3, pp. 864-888.
- Bryman, Alan, and Cramer, Duncan (2011), *Quantitative Data Analysis with IBM SPSS 17, 18, and 19: A Guide for Social Scientists*, Psychology Press, Routledge, East Sussex, UK, pp. 377.
- Burt, Ronald S. (1992), *Structural Holes: The Social Structure of Competition*, Harvard University Press, pp. 325.

- Busenitz, Lowell W. (1996), Research on Entrepreneurial Alertness, Sampling, Measurement, and Theoretical Issues, *Journal of Small Business Management*, Vol. 34, No. 4, pp. 35-44.
- Campbell, Donald T. (1960), Blind variation and selective retentions in creative thought as in other knowledge processes, *Psychological Review*, Vol. 67, No. 6, pp. 380-400.
- Casson, Mark, and Wadeson, Nigel (2007), The Discovery of Opportunities: Extending the Economic Theory of the Entrepreneur, *Small Business Economics*, Vol. 28, pp. 285-300.
- Chan, Lilian, Chen, Tai-Yuan, Janakiraman, Surya, and Radhakrishnan, Suresh (2012), Reexamining the Relationship between Audit and Nonaudit Fees: Dealing with Weak Instruments in Two-Stage Least Squares Estimation, *Journal of Accounting, Auditing & Finance*, Vol. 27, No. 3, pp. 299-324.
- Chandler, Gaylen N., DeTienne, Dawn, and Lyon, Douglas W. (2003), Outcome implications of opportunity creation / discovery processes, *Frontiers of Entrepreneurship Research*, Babson College, pp. 398-409.
- Christie, Michael J., and Honig, Benson (2006), Social entrepreneurship: new research findings, *Journal of World Business*, Vol. 41, No. 1, pp. 1-5.
- Cho, Albert Hyunbe (2006), Politics, Values and Social Entrepreneurship: A Critical Appraisal, In J. Mair, J. Robinson, and K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp. 34–56.
- Coleman, James S. (1990), *Foundations of Social Theory*, The Belknap Press of Harvard University Press, Cambridge, Massachusetts, pp. 1014.

Corner, Patricia Doyle; and Ho, Marcus (2010), How Opportunities Develop in Social Entrepreneurship, *Entrepreneurship Theory and Practice*, Vol. 34, Issue 4, pp. 635-659.

CONEVAL, Consejo Nacional de Evaluación de la Política de Desarrollo Social, (2012), *Informe de Pobreza en México: el país, los estados y sus municipios*, CONEVAL, Mexico, pp. 164. Available on line at: <http://www.coneval.gob.mx>. Date of access: March 16, 2013.

Cummings, Thomas G. (2007), Quest for and engaged Academy, *Academy of Management Review*, Vol. 32, No. 2, pp. 355-360.

Dahlin, Kristina B., and Behrens, Dean M. (2005), When is an invention really radical? Defining and measuring technological radicalness, *Research Policy*, No. 34, pp. 717-737.

Darren, George, and Mallery, Paul (2007), *SPSS for Windows step by step: a simple guide and reference: 14.0 update*, Pearson Education, pp. 386.

Davidsson, Per, Low, Murray B., and Wright, Mike (2001), Editor's Introduction: Low and MacMillan ten Years On: Achievements and Future Directions for Entrepreneurship Research, *Entrepreneurship Theory and Practice*, Vol. 25, Issue 4, pp. 5-15.

Datta-Chaudhuri, Mrinal (1990), Market Failure and Government Failure, *Journal of Economic Perspectives*, Vol. 4, No. 3, pp. 25-39.

De Koning, Alice (2003), Opportunity Development: A Socio-Cognitive Perspective, in Jerome A. Katz and Dean A. Shepherd [Ed.], *Cognitive Approaches to Entrepreneurship Research, Advances in Entrepreneurship, Firm Emergence and Growth*, Emerald Group Publishing Limited, Vol. 6, pp.265-314. Available on line at: <http://www.emeraldinsight.com/books.htm?chapterid=1760498>.

- Dees, J. Gregory (1998), *The meaning of "social entrepreneurship"*, Stanford University: Draft Report for the Kauffman Center for Entrepreneurial Leadership, pp. 6. Available on line at: [http://www.caseatduke.org/documents/dees\\_sedef.pdf](http://www.caseatduke.org/documents/dees_sedef.pdf). Date of access: June 15<sup>th</sup>, 2010.
- DeTienne, Dawn R., and Chandler, Gaylen N. (2007), The Role of Gender in Opportunity Identification, *Entrepreneurship Theory and Practice*, Vol. 31, No. 3, pp. 365-386.
- DeVellis, Robert F. (2003), *Scale Development, Theory and Applications*, 2<sup>nd</sup> Ed., SAGE Publications, Thousand Oaks, California, pp. 171.
- DOF (2002), *Diario Oficial de la Federación*, Poder Ejecutivo, Secretaría de Desarrollo Social, Primera Sección, pp. 9-14.
- DOF (2009), *Diario Oficial de la Federación*, Poder Ejecutivo, Secretaría de Desarrollo Social, Novena Sección, pp. 1-48.
- Dorado, Silvia (2006), Social Entrepreneurial Ventures: Different Values So Different Process of Creation, No?, *Journal of Developmental Entrepreneurship*, Vol. 11, No. 4, pp. 319-343.
- Drayton, William (2002), The Citizen Sector: Becoming as Entrepreneurial and Competitive as Business, *California Management Review*, Vol. 44, No. 3, pp. 120-132.
- Drucker, Peter F. (1985), *Innovation and Entrepreneurship*, HarperCollins Publisher, NY, pp. 277.
- Eckhardt, Jonathan T., and Shane, Scott A. (2003), Opportunities and entrepreneurship, *Journal of Management*; 2003 Vol. 29 Issue 3, pp.17
- \_\_\_\_\_ (2013), Response to the Commentaries: The Individual-Opportunity (IO) Nexus Integrates Objective and Subjective Aspects of Entrepreneurship, *Academy of Management Review*, Vol. 38, No. 1, pp. 160-163.

Esterberg, Kristin G. (2002), *Qualitative Methods in Social Research*, McGraw-Hill, USA, pp. 256.

Fowler, Floyd J., Jr. (1995), *Improving Survey Questions: Design and Evaluation*, SAGE Publications, Thousand Oaks, pp. 190.

\_\_\_\_\_, (2002), *Survey Research Methods*, SAGE Publications, Thousand Oaks, pp. 178.

Gaglio, Connie M., and Katz, Jerome A. (2001), The psychological basis of opportunity identification: Entrepreneurial alertness, *Small Business Economics*, Vol. 16, No. 2, pp. 95-111.

Gartner, William B., Carter, Nancy M., and Hills, Gerald E. (2003), The language of opportunity, in *New Movements in Entrepreneurship*, Chris Steyaert and Daniel Hjorth [Eds.], Edward Elgar, pp. 103-125.

Garud, Raghu, and Karnoe, Peter (2003), Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship, *Research Policy*, Vol. 32, pp. 277-300.

González, María D., and Husted, Bryan W. (2011), Gender, human capital, and opportunity identification in Mexico, *International Journal of Gender and Entrepreneurship*, Vol. 3, No. 3, 2011, pp. 236-253.

Granovetter, Mark S. (1973), The Strength of Weak Ties, *American Journal of Sociology*, Vol. 78, Issue 6, pp. 1360-1380.

Guclu, Ayse, Dees J. Gregory, and Anderson, Beth B. (2002), *The Process of Social Entrepreneurship: Creating Opportunities Worthy of Serious Pursuit*, Center for the Advancement of Social Entrepreneurship, Duke— The Fuqua School of Business, pp. 15. Available on line at:

<http://www.labforculture.org/fr/content/download/96115/731607/file/The%20process%20of%20social%20entrepreneurship.pdf>.

Hair, Joseph F., Jr., Black, William C., Babin, Barry J., and Anderson, Rolph E. (2010), *Multivariate Data Analysis*, 7<sup>th</sup> Edition, Prentice Hall by Pearson Education, New Jersey, pp. 785.

Hart, Stuart L. (2007), *Capitalism at the crossroads*, Wharton School Publishing, pp. 260.

Hills, Gerald E., Lumpkin, G. T., and Singh, Robert P. (1997), Opportunity Recognition: Perceptions and Behaviors of Entrepreneurs, *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA, pp. 203-218. Available online at: <http://fusionmx.babson.edu/entrep/fer/papers97/hills/hill1.htm>

Hodder, Ian (2003), The Interpretation of Documents and Material Culture, in Denzin, N. and Lincoln, Y. (2003) [Eds.], *Collecting and Interpreting Qualitative Materials*, Sage Publications, USA, pp. 155-175.

INEGI, Instituto Nacional de Estadística Geografía e Informática (2011), *Principales resultados del Censo de Población y Vivienda 2010*, INEGI, Available on line at: <http://www.inegi.org.mx/sistemas/productos/> , Date of access: March 16, 2013.

\_\_\_\_\_, *Panorama Sociodemográfico de México*, Instituto Nacional de Estadística y Geografía , Aguascalientes, México, pp. 53.

Johnson, Richard A., and Wichern, Dean W. (1992), *Applied Multivariate Statistical Analysis*, 3<sup>rd</sup> Edition, Prentice Hall, New Jersey, pp. 642.

Jonsen, Karsten, and Jehn, Karen A. (2009), Using triangulation to validate themes in qualitative studies, *Qualitative Research in Organizations and Management: An International Journal*, Vol. 4, No. 2, pp. 123-150.



- Kaish, Stanley, and Benjamin Gilad (1991), Characteristics of Opportunities Search of Entrepreneurs Versus Executives: Sources, Interests, General Alertness, *Journal of Business Venturing*, Vol. 6, Issue 1, pp. 5-61.
- Kalleberg, Arne L., and Leicht, Kevin T. (1991), *Gender and Organizational Performance: Determinants of Small Business Survival and Success*, *Academy of Management Journal*, Vol. 34, No. 1, pp. 136-161.
- Karl-Heinz, Hillman (2001), *Diccionario enciclopédico de Sociología*, Herder, Barcelona, pp. 1046.
- Karnani, Aneel (2006), Misfortune at the Bottom of the Pyramid, *Greener Management International*, Issue 51, p. 99-110.
- \_\_\_\_\_ (2011), "Doing Well by Doing Good": The Grand Illusion, *California Management Review*, Vol. 53, No. 2, pp. 69-86.
- Kerlinger, Fred N., and Lee, Howard, B. (2000), *Foundations of Behavioral Research*, Cengage Learning, 4<sup>th</sup> Edition, USA, pp. 890.
- Kirzner, Israel M. (1973), *Competition and Entrepreneurship*, University of Chicago Press, Chicago, p. 256.
- \_\_\_\_\_ (1997), Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach, *Journal of Economic Literature*, Vol. XXXV, pp. 60-85.
- Klein, Peter G. (2008), Opportunity Discovery, Entrepreneurial Action, and Economic Organization, *Strategic Entrepreneurship Journal*, Vol. 2, pp. 175-190.
- Lasprogata, G., and Cotton, M. (2003), Contemplating 'enterprise': the business and legal challenges of social entrepreneurship, *American Business Law Journal*, Issue 41, No. 1, pp. 67-114.

- Leedy, Paul D., y Ormrod, Jeanne E. (2005), *Practical Research: Planning and Design*, 8<sup>th</sup> Ed., Pearson Education, pp. 319.
- Leguizamón, Francisco (2003), SEKN. Social Enterprise Knowledge Network, Red de Conocimientos sobre emprendimientos sociales, *Academia, Revista Latinoamericana de Administración*, segundo semestre, número 031, Universidad de los Andes, Bogotá, pp. 15-22.
- Leifer, Richard, McDermott, Christopher M., Colarelli O'Connor, Gina, Peters, Lois S., Rice, Mark P., and Veryzer, Robert W. (2000), *Radical innovation: How mature companies can outsmart upstarts*, Harvard Business School Press, Boston Massachusetts, pp. 261.
- Lévi-Strauss, Claude (1966), *The Savage Mind, The Nature of Human Society Series*, Julian Pitt-Rivers and Ernest Gellner [Ed.], The University of Chicago Press, Chicago, pp. 310.
- Lewis, Timothy M. (2007), Impact of globalization on the construction sector in developing countries, *Construction Management and Economics*, Vol. 25, pp. 7-23.
- Marr, Bernard, Schiuma, Giovanni, and Neely, Andy (2004), The dynamics of value creation: mapping your intellectual performance drivers, *Journal of Intellectual Capital*, Vol. 5, No. 2, pp. 312-325.
- Mair, Johanna. (2006), Introduction to part II: Exploring the intentions and opportunities behind social entrepreneurship, In J. Mair, J. Robinson, and K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp. 89–94.
- \_\_\_\_\_, and Martí, Ignasi (2006), Social entrepreneurship research: A source of explanation, prediction, and delight, *Journal of World Business*, Vol. 41, Issue 1, p36-44.

- \_\_\_\_\_, and Noboa, Ernesto (2006), Social Entrepreneurship: How intentions to Create a Social Venture are Formed, In J. Mair, J. Robinson, and K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp. 121-135.
- Marvel, Matthew (2012), Knowledge Acquisition Asymmetries and Innovation Radicalness, *Journal of Small Business Management*, Vol. 50, No. 3, pp. 447-468.
- \_\_\_\_\_, and Lumpkin, G.T. (2007), Technology Entrepreneurs' Human Capital and its Effects on Innovation Radicalness, *Entrepreneurship Theory and Practice*, November, pp. 807-828.
- Morgan, G. and Smircich, L. (1980), The case for qualitative research, *The Academy of Management Review*, Vol. 5, No. 4, pp. 491- 500.
- Mort Sullivan, Gillian, Weerawardena, Jay, and Carnegie, Kashonia (2003), Social entrepreneurship: Towards conceptualisation, *International Journal of Nonprofit and Voluntary Sector Marketing*, Volume 8, Number 1, pp. 76-88.
- Mulgan Geoff (2010), Measuring Social Value, *Stanford Social Innovation Review*, Stanford Graduate School of Business, Stanford University, Summer, pp.38-43.
- Murphy, Patrick J., and Coombes, Susan M. (2009), A Model of Social Entrepreneurial Discovery, *Journal of Business Ethics*, Vol. 87, pp. 325-336.
- OECD, Organisation for Economic Cooperation and Development (2011), Education at a Glance 2011, OECD Indicators, OECD Publishing, pp. 495. Available at: <http://dx.doi.org/10.1787/eag-2011-en> or <http://www.oecd.org/dataoecd/61/2/48631582.pdf> . Date of access: December 7, 2011.
- Ostrander, Susan A. (2007), The Growth of Donor Control: Revisiting the Social Relations of Philanthropy, *Nonprofit and Voluntary Sector Quarterly*, Vol. 36, No. 2, pp. 356-372.

Peredo Ana María, and Chrisman, James J. (2006), Toward a Theory of Community-Based Enterprise, *Academy of Management Review*, Vol. 31, No. 2, pp. 309-328.

\_\_\_\_\_, and McLean, Murdith (2006), Social entrepreneurship: A critical review of the concept, *Journal of World Business*, Issue 41, pp. 56-65.

Perrini, Francesco, and Vurro, Clodia (2006), Social Entrepreneurship: Innovation and Social Change Across Theory and Practice, In J. Mair, J. Robinson, & K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp. 57-85.

\_\_\_\_\_, Vurro, Clodia, and Costanzo, Laura A. (2010), A process-based view of social entrepreneurship: From opportunity identification to scaling-up social change in the case of San Patrignano, *Entrepreneurship & Regional Development*; Vol. 22, Issue 6, pp. 515-534.

Pett, Marjorie A., Lackey, Nancy R., and Sullivan, John J. (2003), *Making Sense of Factor Analysis: The use of factor analysis for instrument development in health care research*, Sage Publications, Inc., Thousand Oaks, pp. 368.

Phillips, Nelson, and Tracey, Paul (2007), Opportunity recognition, entrepreneurial capabilities and bricolage: connecting institutional theory and entrepreneurship in strategic organization, *Strategic Organization*, Vol. 5, No. 3, pp. 313-320.

Pindyck, Robert, S., and Rubinfeld (2000), *Econometric Models and Economic Forecasts*, 4<sup>th</sup> Edition, McGraw-Hill Higher Education, pp. 654.

Prahalad, C.K. (2005), *The fortune at the bottom of the pyramid*, Wharton School Publishing, pp. 450.

\_\_\_\_\_, and Hart, Stuart L. (2002), "The Fortune at the Bottom of the Pyramid", *Strategy+Business*, January, pp. 54-67.

Available on: <http://www.strategy-business.com/article/11518?pg=all>

- Pomerantz, Mark (2003), The Business of Social Entrepreneurship in a "Down Economy", In Business, March-April, pp. 25-28.
- Ramanathan, Ramu (1993), *Statistical Methods in Econometrics*, Academic Press, San Diego, California, pp. 405.
- Robinson, J. (2006), *Navigating social and institutional barriers to markets: How social entrepreneurs identify and evaluate opportunities*, In J. Mair, J. Robinson, & K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp.95–120.
- Rogers, Everett M. (1995), *Diffusion of Innovations*, The Free Press, 4<sup>th</sup>. Ed., New York, pp.519.
- Rowlinson, Michael (2004), Historical Analysis of Company Documents, in Cassell, C. and Symond, G. [Eds.], *Essential Guide to Qualitative Methods in Organizational Research*, Sage Publications, London, pp. 301-311.
- Sachs, Jeffrey D. (2005), *The end of poverty*, The Penguin Press, New York, pp. 396.
- Sarasvathy, Saras D. (2001), Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency, *Academy of Management Review*, Vol. 26, No. 2, pp. 243-263.
- \_\_\_\_\_, Dew, N., Velarumi, R., and Venktaraman, S. (2003), Three views of entrepreneurial opportunity, *In Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*, Acs, Z.J. and Audretsch, D.B. (Eds.), Kluwer: Boston, pp. 141-160.
- Schumacker, Randall E., and Lomax, Richard G. (2010), *A Beginner's Guide to Structural Equation Modeling*, 3<sup>rd</sup> Edition, Routledge by Taylor and Francis Group, LCC, New York, pp. 536.

- Schumpeter, Joseph A. (1983), *The theory of Economic Development*, Transaction Publishers, New Jersey, pp. 255.
- Seelos, Christian, and Mair, Johanna (2005), Social entrepreneurship: creating new business models to serve the poor, *Business Horizons*, 48, 241-246.
- \_\_\_\_\_, Ganly, Kate, and Mair, Johanna (2006), Social Entrepreneurs Directly Contribute to Global Development Goals, In J. Mair, J. Robinson, & K. Hockerts (Eds.), *Social entrepreneurship*, New York: Palgrave Macmillan, pp. 235–275.
- Shane, Scott (2003), *A General Theory of Entrepreneurship. The Individual-Opportunity Nexus*, Cheltenham: Edward Elgar, pp.315.
- \_\_\_\_\_, and Venkataraman, S. (2000), The promise of entrepreneurship as a field of research, *Academy of Management Review*, Vol. 25, No. 1, pp. 217-226.
- Shank, Gary, and Vilella, Orlando (2004), Building on New Foundations: Core Principles and New Directions for Qualitative Research, *Journal of Educational Research*, Vol. 98, No. 1, pp. 46-55.
- Shaw, E.; and Carter, S. (2007), Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes, *Journal of Small Business and Enterprise Development*, Vol. 14, No. 3, pp. 418-434.
- Short, Jeremy C.; Ketchen Jr., David J.; Shook, Christopher L.; and Ireland, R. Duane (2010), The Concept of "Opportunity" in Entrepreneurship Research: Past Accomplishments and Future Challenges, *Journal of Management*, Vol. 36, No. 1, pp. 40-65.
- \_\_\_\_\_; Moss, Todd W.; and Lumpkin, G.T. (2009), Research in social entrepreneurship: past contributions and future opportunities, *Strategic Entrepreneurship Journal*, Vol. 3, pp. 161-194.

- Singh, Robert (2000), *Entrepreneurial opportunity recognition through social networks*, Garland Publishing Inc., New York, pp.195.
- Thompson, John (2002), The world of the social entrepreneur, *The International Journal of Public Sector Management*, Vol. 15, No. 4/5, pp. 412-431.
- \_\_\_\_\_, Alvy, Geoff, and Lees, Ann (2000), Social entrepreneurship: a new look at the people and the potential, *Management Decision*, London, Vol. 38, Issue 5, pp. 328-338
- United Nations (UN) (2009), *Rethinking poverty, Report on the World Social Situation 2010*, Department of Economic and Social Affairs, pp. 186.
- United Nations (UN) (2010), *The Millennium Development Goals Report*, Department of Economic and Social Affairs, pp. 78.  
Available on: <http://www.un.org/millenniumgoals/>
- United Nations Development Programme (UNDP) (2010), *Human Development Report 2010, 20<sup>th</sup> Anniversary Edition, The Real Wealth of Nations: Pathways to Human Development*, UNDP, Palgrave Macmillan, New York, pp. 238.
- Vaghely, Ivan P., and Julien, Pierre-André (2010), Are opportunities recognized or constructed? An information perspective on entrepreneurial opportunity identification, *Journal of Business Venturing*, Vol. 25, pp. 73-86.
- Valdez Medina, José Luis (2004), *Las redes semánticas naturales, uso y aplicaciones en psicología social*, 4<sup>a</sup> Edición, Universidad Autónoma del Estado de México, Toluca, México, pp. 175.
- Venkataraman, Sankaran (1997), The Distinctive Domain of Entrepreneurship Research: an editor's perspective, *Advances in entrepreneurship, firm emergence, and growth*, J. Katz and R. Brockhaus (Eds.), Greenwich, CT: JAI Press; Vol. 3, pp. 119-138.  
Available on:

<http://pcbfaculty.ou.edu/classfiles/MGT%206973%20Entrepreneurship%20Seminar/Week%201/Venkataraman%201997.pdf>, visited on June 23<sup>rd</sup>, 2010.

\_\_\_\_\_ (2003), Foreword, In S. Shane, *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*, Edward Elgar, Northampton, MA, pp. xi-xii.

\_\_\_\_\_, Sarasvathy, Saras D., Dew, Nicholas, Forster, William R. (2012), Reflections on the 2010 AMR Decade Award: Whither the promise? Moving Forward with Entrepreneurship as a Science of the Artificial, *Academy of Management Review*, Vol. 37, No. 1, pp. 21-33.

Waddock, Sandra A., and Post, James E. (1991), Social Entrepreneurs and Catalytic Change, *Public Administration Review*, Vol. 51, No. 5, pp. 393-401.

Wallace, Sherri Leronda (1999), Social entrepreneurship: The role of social purpose enterprises in facilitating community economic development, *Journal of Developmental Entrepreneurship*, Vol. 4, No. 2, pp. 153-174.

Watson, Patrick K., and Teelucksingh, Sonja S. (2002), *A practical introduction to econometric methods: classical and modern*, The University of the West Indies Press, pp. 315.

*Webster's Encyclopedic Unabridged Dictionary of the English Language* (1989), Gramercy Books, Random House, New Jersey, pp. 1854.

Weerawardena, Jay, and Mort, Gillian S. (2006), Investigating social entrepreneurship: A multidimensional model, *Journal of World Business*, Vol. 41, No. 1, pp. 21-35.

Weick, Karl E. (1979), *The social psychology of organizing*, Addison-Wesley Publishing Company, Inc, Menlo Park, CA, pp. 294.

\_\_\_\_\_ (1988), Enacted sensemaking in crisis situations, *Journal of Management Studies*, Vol. 25, Issue 4, pp. 305- 317.



Wooldridge, Jeffrey M. (2000), *Introductory Econometrics: A Modern Approach*, South-Western College Publishing, pp. 824.

Yunus, Muhammad, and Weber, Karl (2007), *Creating a world without poverty: social business and the future of capitalism*, New York, N.Y.: PublicAffairs, pp 296.

Zadek, Simon, and Thake, Stephen (1997), Send in the social entrepreneurs, *New Stateman*, Vol. 126, Issue 4339.

Zahra, Shaker A., Rawhouser, Hans N., Bhawe, Nachiket, Neubaum, Donald O., and Hayton, James C. (2008), "Globalization of Social Entrepreneurship Opportunities", *Strategic Entrepreneurship Journal*, Vol. 2, Issue 2, pp. 117-131.

## **Appendix 1**

**List of codes of the interviews of the exploratory stage  
of the study  
(In Spanish)**

**List of codes of the interviews with the social entrepreneurs of the first stage of the study**

No. of Theme	Theme	No. of Code	Type of Code	Code	No. of interview	Page and margin (by row in the Word file)
1	Actuar	1	By list	Hacer cosas	01	5,13
2	Buscar	2	By list	Búsqueda de información sobre la solución	01	2,10
					01	4,14
					01	5,15
					01	5,16
					01	5,19
					01	6,8
					01	7,4
					01	7,17
					01	12,8
					02	4,13
					02	8,19
					02	9,4
					04	8,1
					04	8,19
					05	6,14
					05	7,4
					05	7,13
					06	1,12
					06	2,9
					06	3,1
					06A	1,12
					07	1,9
08	5,8					
08	6,21					
09	3,19					
09	5,6					
09	10,7					
11	1,15					

					12	10,16
					12	10,20
		3	By list	Buscar información y aprender (generar conocimientos)	10	3,20
					10	4,3
					11	2,18
					11	12,5
					12	5,2
					12	11,15
		4	By list	Buscar solución	10	8,1
					10	12,1
					11	12,2
		5	Open	Parte búsqueda y parte azar	10	9,9
		3	Características del emprendedor	6	Open	Amor profundo por la humanidad
7	Open			Antecedentes Familiares	02	5,1
					04	1,3
					05	1,11
					07	1,11
					07	6,6
					09	3,22 / 4,3
8	Open			Antecedentes Laborales	02	5,13
					04	2,14
					04	2,19
					04	6,20
					06	1,5
					06	4,22
					07	1,4
					10	1,6
					10	1,10
9	Open			Asertividad	04	9,14
10	Open	Buen humor	10	12,22		
11	Open	Buscar problemas	02	9,4		

		12	Open	Buscar soluciones	02	9,4
		13	Open	Circunstancias personales	02	4,21
					02	5,19
					04	7,17
					05	3,12
					06	4,22
					07	1,5
					07	1,15
					07	2,19
					07	4,21
					07	5,14
		14	Open	Claridad de objetivos	04	8,2
					06	3,19
					06	5,8
		15	Open	Compromiso social	07	2,12
					08	10,1
					08	10,3
		16	Open	Conciliar	02	9,2
		17	Open	Confianza en la idea	10	12,22
		18	Open	Confianza en las personas	01	11,2
		19	Open	Confianza en uno mismo	11	13,22
		20	Open	Conocerse a sí mismo	10	13,2
		21	Open	Conocimientos	10	3,7
					11	13,22
		22	Open	Creatividad	01	11,11
					03	5,11
					03	5,12
					04	9,14
					05	15,10
					06	4,5

				07	5,14	
				08	10,11	
				09	4,5	
		23	Open	Cuestionar	09	2,22
				10	3,19	
		24	Open	Dedicación	04	10,7
		25	Open	Determinación	05	13,16
		26	Open	Dinamismo	05	15,7
		27	Open	Disciplina	04	8,17
				10	9,16	
		28	Open	Diversión	10	4,18
		29	Open	Docencia	06	2,12
		30	Open	Empatía	02	9,6
		31	Open	Entusiasmo	03	4,3
				05	15,8	
		32	Open	Experiencia	10	1,9
		33	Open	Fácil de llevar	06	4,1
		34	Open	Formación	03	2,8
				07	5,14	
		35	Open	Formación académica	03	2,2
				04	1,9	
				04	1,20	
				04	1,22	
				04	6,8	
				06	1,3	
				06	1,4	
				06	1,7	
				06A	1,9	
				07	1,4	
				07	1,15	
				07	1,22	
				07	2,19	
				08	1,4	
				08	1,4	

				09	1,15	
				09	1,17	
				10	3,3	
				12	3,2	
		36	Open	Fortaleza interna	05	13,5
					05	15,7
		37	Open	Habilidades físicas	05	1,10
		38	Open	Idealista	01	11,1
		39	Open	Influencia de la familia	03	1,15
		40	Open	Influencia de otros grupos sociales	03	2,10
		41	Open	Innovador	05	15,10
					02	1,5
					02	1,6
					02	1,13
					04	2,1
					04	6,8
					04	8,19
					05	11,22
					06	1,5
					06	1,7
					06	2,8
		42	Open	Intereses personales	06	5,13
					06	5,14
					06	5,16
					07	1,7
					07	1,7
					07	1,9
					07	1,15
					07	2,6
					08	2,20
					09	1,17
					10	1,16
					10	2,13
		43	Open	Intuición	10	1,6
		44	Open	Interés por las Ciencias Sociales	03	2,15

		45	Open	Liderazgo	10	12,22
		46	Open	Logros	05	9,19
		47	Open	Misión en la vida	02	1,11
					02	8,2
					04	4,10
					05	16,11
		48	Open	Necedad	10	4,14
					11	13,21
		49	Open	Observador	02	4,22
					02	9,7
					02	10,22
		50	Open	Ofrecimientos laborales	05	8,1
					05	8,3
					05	8,22
					05	9,4
					05	9,6
		51	Open	Orientación al logro	02	10,3
					02	10,10
					02	11,1
					04	8,12
					04	8,12
					04	8,14
					05	5,2
					05	13,16
					05	14,2
					05	15,18
					06	3,19
					08	10,13
		10	1,18			
		52	Open	Pasión por lo que hace	10	4,4
					12	19,6
		53	Open	Percepciones	06	1,8
					06	2,2
					06	2,3
					06	2,4
					07	5,13



					09	1,15
					01	11,15
					03	5,19
					05	4,20
		54	Open	Perseverancia	05	13,16
					05	15,18
					06	3,20
					08	10,10
					08	10,21
		55	Open	Proactividad	05	16,11
					12	19,5
		56	Open	Entrar en un proceso reflexivo	03	5,8
					03	5,9
		57	Open	Rebeldia	07	6,7
					07	6,5
					09	1,19 / 2,20
		58	Open	Resiliencia	04	8,20
		59	Open	Salir de lo ordinario	08	9,21
		60	Open	Seguir aprendiendo	05	16,3
		61	Open	Sensibilidad social	02	5,15
					03	1,4
		62	Open	Sueños/ Deseos	02	1,9
					05	4,14
					06	1,6
					06	1,7
		63	Open	Trabajo personal (en uno mismo)	05	14,2
		64	Open	Tenacidad	07	6,7
		65	Open	Valores personales	03	5,3
					06	5,13
					06	5,14
					10	3,3
					12	1,10
4	Características del modelo de negocio/ proyecto social	66	Open	Autosustentable	01	5,16
		67	Open	Características del modelo de negocio/ proyecto social	01	6,8
					01	8,9
					01	12,1

					01	13,2
					01	13,8
					01	13,16
					02	3,14
					02	4,1
					03	3,10
					04	2,8
					04	2,10
					04	2,21
					04	3,6
					04	3,11
					04	3,19
					04	7,1
					04	7,5
					04	7,9
					04	10,5
					05	1,22
					05	2,7
					05	2,11
					05	2,13
					05	2,20
					05	3,1
					05	3,6
					05	5,11
					05	7,10
					05	7,13
					05	9,9
					05	10,14
					05	11,5
					05	12,6
					05	12,16
					05	12,18
					05	12,21
					05	13,3
					05	15,1
					06	1,20

					06	3,11
					06	3,11
					06	3,17
					06A	2,2
					06A	2,2
					06A	2,5
					06A	2,7
					07	3,3
					07	3,5
					07	3,7
					07	3,17
					07	3,21
					07	4,17
					07	5,18
					08	2,5 y 2,12
					08	3,18
					08	3,20
					08	4,12
					09	1,22
					09	2,15
					09	2,20
					09	3,1
					09	7,4
					10	2,11
5	Casualidad	68	Open	Casualidad	02	5,15
					02	5,19
					06	1,7
6	Circunstancias de la vida	69	Open	Circunstancias de la vida	12	8,15
					12	8,19
					12	9,4
7	Conjunción de factores	70	Open	Origen del proyecto social	06	5,2
					06	5,3
					07	2,12
					10	1,5
					11	5,17

8	Construir sobre lo ya creado	71	By List	Construir sobre lo ya creado	01	7,7
					07	5,18
9	Corazonada	72	Open	Corazonada	06	1,7
					06	2,19
					06A	1,9
10	Cosas que están ahí	73	Open	Cosas que están ahí	01	5,20
11	Creación	74	By List	Crear	01	7,17
					01	11,11
					01	13,18
					04	8,1
					04	9,20
					05	1,17
		75	By List	Creación de la oportunidad/solución	02	2,15
					02	3,2
					02	6,6
					02	7,9
					04	9,20
					07	4,12
					07	4,17
					07	5,4
					07	5,13
					09	4,15
					09	4,20
					09	7,10
					10	3,19
					10	6,17
		10	12,3			
		10	12,5			
		11	4,14			
		11	5,1			
		11	6,6			
		76	By List	Creación de una oportunidad sobre lo ya creado	07	5,2
08	9,15					
12	18,8					
77	By List	Ensayo y error	10	3,20		
78	By List	Afrontar el miedo	10	6,21		

		79	By List	Determinación para actuar	10	8,11
		80	By List	Saber lo que quieres hacer	10	12,9
12	Creación del modelo de negocio	81	Open	Creación del modelo de negocio	01	4,20
					01	6,20
					01	7,15
					02	2,6
					02	4,7
					03	3,10
					05	7,1
					06	1,20
13	Decisiones tomadas por circunstancias específicas	82	Open	Decisiones tomadas por circunstancias específicas	02	3,6
14	Desarrollo de la oportunidad	83	By List	Desarrollo de la oportunidad	07	4,22
15	Descubrimiento	84	By List	Descubrimiento de una solución	01	2,18
					01	3,14
					01	4,14
					01	5,16
					01	5,19
					01	5,20
					01	12,3
					02	4,13
					03	3,1
					03	3,13
					03	4,5
					03	4,11
					04	3,4
					04	3,22
					04	4,7
					04	6,16
					04	8,2
					04	8,4
					04	9,5
					05	1,20
					05	1,21

					05	4,14
					05	4,16
					05	5,4
					05	5,14
					05	6,2
					05	6,13
					05	10,13
					05	10,14
					05	10,21
					05	11,20
					05	12,2
					05	12,10
					05	12,15
					05	13,14
					05	13,16
					05	14,8
					05	14,13
					05	14,20
					06	2,2
					06	2,4
					06	4,6
					06A	1,9
					06A	1,15
					07	2,1
					11	3,20
					12	16,8
					12	16,21
		85	Open	Por invitación de alguien	08	1,12
		86	Open	Modelos a seguir	08	7,1
		87	Open	Ahi estaba	08	7,4
					08	7,12
					08	8,6
		88	By List	Darse cuenta/ Caer en cuenta (alertness)	02	1,20
					02	2,8
					02	3,11
					02	5,2

					02	5,6
					02	5,15
					02	8,13
					04	1,4
					04	2,15
					05	1,15
					05	1,20
					05	5,1
					05	9,21
					06	1,6
					06	1,13
					06	3,3
					06	3,6
					09	5,17
					09	6,19
					10	10,10
		89	By List	La experiencia en identificar problemas y soluciones, como factor para descubrir una oportunidad.	10	2,7
		90	By List	Proceso para descubrir soluciones.	10	2,22
					10	5,2
		91	By List	Descubrir por sorpresa	10	7,1
					10	7,2
					12	9,18
					12	10,7
					11	3,15
					11	8,4
					11	9,6
					11	9,10
				12	10,10	
		92	By List	Encontrar	01	3,1
					01	3,14
					01	5,12
					01	5,14
					01	7,5
					01	10,7

					01	12,8
					05	12,13
16	Detectar	93	By List	Detectar	06	5,1
17	Enterarse	94	By List	Enterarse	06A	1,9
18	Emprendimiento Social	95	Open	Emprendimiento Social	01	5,8
					01	2,4
					01	2,12
					01	3,20
					02	1,4
					02	1,5
					02	1,7
					02	1,22
					02	3,16
					02	4,4
					02	5,13
					02	8,13
					02	9,7
					02	9,20
					03	1,16
19	Identificación de oportunidad	96	Open	Generación de ideas	03	2,10
					03	3,1
					03	3,4
					03	3,8
					03	4,4
					03	4,11
					03	5,3
					04	2,1
					04	2,8
					04	3,2
					04	3,21
					04	4,10
					04	6,16
					04	7,17
					04	8,1
					04	8,8



					04	9,5
					04	9,13
					05	1,5
					05	1,17
					05	1,20
					05	4,14
					05	4,16
					05	4,18
					05	5,1
					05	5,4
					05	5,14
					05	5,22
					05	8,1
					05	8,3
					05	8,22
					05	9,4
					05	9,6
					05	9,9
					05	10,3
					05	10,21
					05	11,20
					05	12,12
					05	12,15
					05	14,13
					06	1,16
					06	2,14
					06	2,19
					06	3,3
					06A	1,14
		97	By List	Identificación de una solución	07	2,1
					07	2,13
					07	2,14
					07	2,18
					07	5,5
		98	By List	Crear la oportunidad	07	4,21

		99	By List	Descubrimiento de una oportunidad/solución	08	1,5 /1,6 / 5,10
		100	By List	Solución a una problemática	08	9,9
		101	By List	Creación a partir de conocimientos del emprendedor	09	1,18
		102	By List	Dar solución a un problema	09	3,13
		103	By List	Ver la oportunidad	09	4,8
					09	4,10
		104	By List	Identificar problemas y crear una solución	10	1,18
		105	By List	Dentro del problema está la solución y la descubres	10	5,5
		106	Open	Proceso de identificación de oportunidades	10	6,14
					10	11,20
20	Identificación de problema	107	Open	Identificación del problema	01	9,15
					03	3,8
					04	4,19
					04	4,21
					04	5,2
					05	1,18
					05	1,19
					05	3,20
					05	3,22
					05	6,16
					05	6,17
					05	9,21
					05	16,9
					06	1,6
					06	1,11
					06	1,13
					06	1,14
					06	2,3
06	2,18					
06A	1,13					
06A	1,21					
06A	1,23					
06A	1,24					

					07	1,9
					07	1,18
					07	1,20
					07	1,21
					07	2,8
					07	2,10
					07	2,17
					07	4,22
					07	5,1
					07	5,3
					08	1,15
					08	4,1
					08	4,5
					09	3,2
					09	3,8
					09	3,11
					10	5,21
21	Innovador	108	By List	Innovar	01	7,4
					01	7,15
22	Inventar	109	By List	Inventar	01	3,19
23	Investigar	110	Open	Investigaciones orientadas a grupos de estudio / Investigaciones académicas	01	2,9
					01	3,6
					01	3,8
					01	4,9
					04	2,12
					04	2,14
					07	1,9
					07	2,7
					07	2,17
		111	By List	Investigar	06	1,12
					06	3,1
					06A	1,12
24	Modelo de negocio	112	Open	Modelo de negocio	01	5,6
					01	6,16

					01	6,20
					01	7,7
25	Motivación para hacer el proyecto social	113	Open	Motivación para hacer el proyecto social	01	2,6
26	No planeación para iniciar el proyecto social	114	Open	No planeación para iniciar el proyecto social	01	6,5
27	Objetivos del proyecto social	115	Open	Objetivos del proyecto social	01	11,5
					05	7,17
					06	1,20
					06A	1,16
28	Observar	116	By List	Observar	01	4,5
					01	5,20
					01	6,22
					01	7,3
					02	4,22
					02	9,2
					02	9,7
					02	10,22
					05	6,13
					05	6,13
		117	By List	Ver	01	6,22
					01	4,5
					01	5,20
					01	6,22
					01	7,3
					05	3,20
					05	4,14
					05	10,13
					05	12,2
					05	13,14
118	By List	Voltear a ver la problemática	02	5,10		
			05	1,14		

		119	By List	Voltear alrededor para la solución	01	7,3
29	Oportunidad	120	Open	Definición de oportunidad	01	10,18
					01	13,18
					01	9,6
					01	10,1
					01	10,4
					01	10,15
					02	8,19
					03	4,1
					03	4,2
					04	7,21
					04	8,1
					05	14,12
					06	2,18
					07	5,15
					08	7,19
					09	1,10
					09	1,13
					09	2,17
					09	3,16
		09	7,4			
		09	8,7			
10	6,2					
10	8,20					
11	11,16					
11	11,17					
		121	Open	La oportunidad se presenta	08	8,3
		122	Open	Origen de la oportunidad	09	1,9
30	Origen de la idea	123	Open	Origen de la idea	04	4,4
					04	4,5
					04	4,7
					05	5,2
					05	8,18
					05	10,12
					06	1,16

					06	5,8
					09	5,15
					12	11,1
31	Origen del modelo de negocio / proyecto social	124	Open	Origen del modelo de negocio / proyecto social	01	6,6
					01	6,20
					02	7,9
					03	1,8
					03	3,8
					04	2,2
					04	2,5
					04	6,13
					05	1,21
					05	5,8
					05	5,11
					05	5,16
					05	5,21
					06	1,16
					07	3,1
					07	4,5
					08	1,9
					08	3,4
					10	3,10
					10	3,15
10	6,11					
10	7,10					
11	12,11					
12	12,4					
32	Pregunta inicial	125	Open	Pregunta inicial	01	3,20
33	Recursos	126	Open	Generación de recursos propios	01	5,15
					06	3,11
		127	Open	Obtención de recursos	06	3,4
					06	3,11
128	By List	Buscar los recursos	06	3,17		
			10	13,6		

34	Redes Sociales	129	Open	Red de amistades o conocidos o personas con influencia para dar viabilidad a la oportunidad	02	2,10
		130	Open	Gente que ayuda	02	2,13
					02	5,16
					03	2,10
					03	3,4
					03	3,8
					04	1,13
					04	2,10
					04	2,20
					04	3,6
					04	8,13
					05	4,16
					05	6,2
					05	6,13
					05	7,1
		05	7,4			
		05	7,13			
		05	12,10			
		06	3,1			
		06	4,22			
		131	Open	Personas que influyen en el pensamiento del emprendedor	07	1,14
					07	1,22
					07	2,19
					07	2,22
		132	Open	Invitación a trabajar	07	3,1
					07	4,22
					08	1,8
08	4,7					
133	Open	Obtención de información a través de personas	09	4,16		
			10	3,22		
134	By List	Buscar personas relacionadas con el tema de interés.	10	4,5		
			10	4,9		
					10	4,9

					10	5,9
					10	5,13
					10	6,19
					11	3,2
					11	4,1
					11	8,21
					12	4,21
35	Resultados del Modelo de Negocio / Proyecto social	135	Open	Resultados del Modelo de Negocio / Proyecto social	01	8,11
					01	13,17
					02	4,9
					02	6,1
					05	2,4
					05	3,4
					05	8,1
					05	10,14
					06A	2,11
					07	3,9
					07	3,16
					07	3,22
					07	4,14
					07	5,6
					08	3,16
					08	5,20
08	5,21					
08	8,22					
36	Solución	136	Open	Respuesta pregunta inicial	01	3,21
		137	Open	Identificación de una solución	01	7,5
					01	7,7
					01	9,18
					01	9,21
					01	10,5
					01	12,8
					02	5,19
					02	6,20
					02	7,1
02	7,9					



					03	3,8
					03	3,10
					04	2,21
					04	3,4
					04	3,11
					04	3,19
					04	4,7
					04	5,1
					06	2,4
		138	By List	Creación de una solución	04	6,13
					05	1,17
					05	4,14
					05	6,22
					05	9,22
					05	11,3
					05	13,15
					05	14,22
					06	2,14
					06A	1,15
					07	2,1
					07	2,13
					07	2,14
					07	2,18
			07	5,4		
		139	By List	Descubrimiento de una solución	08	1,17
		140	Open	Otros ya habían hecho esa solución	08	2,22
					08	6,10
					08	6,12
					08	6,16
		141	Open	Llega al enfocar correctamente el problema	10	2,21
					10	7,8
					10	7,9
		142	By List	Buscar cómo hacerlo	10	7,12
37	Surgimiento ONG's	143	Open	Surgimiento ONG's	01	5,8

## **Appendix 2**

**Final version of the questionnaire**

**(In Spanish)**

**Instituto Tecnológico y de Estudios Superiores de Monterrey  
Campus Ciudad de México**

**“Cuestionario sobre factores que llevan a los emprendedores sociales a crear o descubrir  
oportunidades”**

Como parte de mi investigación doctoral en el Tecnológico de Monterrey, Campus Ciudad de México, he diseñado este cuestionario con el fin de conocer algunos factores que pueden influir en el éxito de un proyecto de emprendimiento social. De antemano le agradezco las respuestas que proporcione para cada pregunta. **Los datos que usted proporcione son confidenciales y serán usados únicamente con fines académicos.**

Qualquier información adicional puede solicitarla escribiendo a la M. en A. Mónica Félix González, al correo electrónico: mofel\_glez@prodigy.net.mx

Fecha: \_\_\_\_\_

Parte 1

Instrucciones:

Para contestar las siguientes preguntas le pido tenga en mente el momento en que decidió solucionar el problema social o ambiental en el que usted está interesado(a) y por el(la) que ha sido reconocido(a) como emprendedor social.

1. Describa brevemente el problema social o ambiental en el que usted se ha interesado y la manera en la que ha ayudado a solucionarlo.

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2. Aproximadamente, ¿en qué año se le ocurrió la idea para comenzar a solucionar el problema?

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3. A continuación se muestra una lista de áreas de trabajo en las que su proyecto puede estar impactando. Le pido ordene las áreas de impacto escribiendo el número 1 a la que más impactaría y 6 a la que menos impactaría.

- Derechos Humanos \_\_\_\_\_
- Desarrollo Económico \_\_\_\_\_
- Educación \_\_\_\_\_
- Medio ambiente \_\_\_\_\_
- Participación Ciudadana \_\_\_\_\_
- Salud \_\_\_\_\_

Parte 2

Instrucciones:

Para responder esta sección le pedimos recuerde el momento en que usted se interesó en el problema social o ambiental y la forma en qué se le ocurrió la solución para ese problema.

A continuación se muestran algunas afirmaciones sobre la percepción que tuvo respecto de la solución que usted ha propuesto para el problema. Con estas afirmaciones se busca saber si usted considera que la solución ya existía de antemano y/o si usted la ha ido creando. Puede ser que algunas afirmaciones le parezcan repetitivas pero es importante que dé su opinión para cada una de ellas.

Por favor marque con una X dentro del cuadro que usted considere que más se acerca a su opinión. Considere que: 1= Totalmente en desacuerdo, 2= En desacuerdo, 3= Ni de acuerdo ni en desacuerdo, 4= De acuerdo, 5= Totalmente de acuerdo.

Coloque la X en el cuadro que mejor describa su opinión **para cada una** de las afirmaciones siguientes:

No.	Afirmación	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni de acuerdo ni en desacuerdo	4 De acuerdo	5 Totalmente de acuerdo
1.	Descubrí una solución para el problema.					
2.	Creé una solución para el problema.					
3.	Esta solución ya existía, yo únicamente la encontré.					

No.	Afirmación	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni de acuerdo ni en desacuerdo	4 De acuerdo	5 Totalmente de acuerdo
4.	Hice una solución para el problema.					
5.	Me di cuenta de una solución.					
6.	Desarrollé una respuesta para el problema.					
7.	Encontré una solución para el problema.					
8.	Esta solución no existía, yo la he ido creando.					

### Parte 3

#### Instrucciones:

A continuación se muestran algunas afirmaciones relacionadas con acciones que usted posiblemente hizo en el momento de querer solucionar el problema. Puede ser que algunas afirmaciones le parezcan repetitivas pero es importante que dé su opinión para cada una de ellas.

Coloque la X en el cuadro que mejor describa su opinión **para cada una** de las afirmaciones siguientes:

No.	Afirmación	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni de acuerdo ni en desacuerdo	4 De acuerdo	5 Totalmente de acuerdo
1.	Busqué información sobre soluciones para el problema.					
2.	Pregunté a conocidos sobre alguna solución para el problema.					
3.	Busqué una solución que ya hubiera sido hecha en otro lado.					
4.	Me parecía que esta solución tenía futuro en México.					

No.	Afirmación	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni de acuerdo ni en desacuerdo	4 De acuerdo	5 Totalmente de acuerdo
6.	Conoci personas que estaban trabajando en una solución para resolver el problema que me interesaba.					
7.	Creo que mi percepción del problema fue correcta.					
8.	Conozco personas de diversos ámbitos lo que me permitió conseguir información para encontrar una solución para el problema.					
9.	Busqué quién más estuviera trabajando en un problema similar.					
10.	Mi percepción del problema me llevó a encontrar una solución.					
11.	Busqué información sobre una solución a través de otras asociaciones civiles.					
12.	Tome una solución de uno o varios modelos que encontré.					
13.	Pregunté a otras personas cómo habían resuelto un problema similar al que yo identifiqué.					
14.	Observé otros trabajos que se estaban haciendo relacionados con algunas soluciones para el problema que yo identifiqué.					
15.	Tengo una red de contactos muy grande lo que me permitió tener acceso a más información para encontrar una solución para el problema.					

Instrucciones:

A continuación se muestran algunas afirmaciones relacionadas con otras acciones, sentimientos o pensamientos que usted tuvo en el momento de intentar solucionar el problema.

Coloque la X en el cuadro que mejor describa su opinión **para cada una** de las afirmaciones siguientes:

No.	Afirmación	1 Totalmente en desacuerdo	2 En desacuerdo	3 Ni de acuerdo ni en desacuerdo	4 De acuerdo	5 Totalmente de acuerdo
1.	No tuve miedo de fallar mientras actuaba para tratar de solucionar el problema.					
2.	Hice una nueva forma de hacer las cosas para intentar solucionar el problema.					
3.	Consideré que se requería una mayor innovación para solucionar el problema.					
4.	Actué y después vi cómo mis acciones impactaban en el problema.					
5.	He vencido todos los obstáculos para ir creando una solución para el problema.					
6.	Reutilicé los recursos que tenía a la mano para crear una solución para el problema.					
7.	La solución que yo he desarrollado es única.					
8.	Después de ver cómo impactaban mis acciones en el problema, decidí hacer algunos cambios para mejorar la solución.					
9.	He ido creando una propuesta de solución de principio a fin.					
10.	La propuesta de solución que yo he ido creando ha generado un cambio positivo de gran impacto.					
11.	No tenía claro cómo lo iba a hacer pero empecé a crear una propuesta de solución para el problema.					
12.	Combiné los recursos que tenía a la mano para crear una propuesta de solución para el problema.					

Parte 4

Instrucciones:

Para poder conocer un poco más de las características de los emprendedores sociales en México le pedimos por favor conteste las siguientes preguntas.

Nombre:

\_\_\_\_\_

Nombre del proyecto social que usted fundó o dirige: \_\_\_\_\_

Teléfono: \_\_\_\_\_

E-mail: \_\_\_\_\_

Por favor marque con una "X" sobre la línea que corresponda:

Sexo:

Masculino \_\_\_\_\_

Femenino \_\_\_\_\_

Edad:

De 20 a 30 años \_\_\_\_\_

De 31 a 40 años \_\_\_\_\_

De 41 a 50 años \_\_\_\_\_

De 51 a 60 años \_\_\_\_\_

Más de 60 años \_\_\_\_\_



Último nivel de estudios:

Sn estudios \_\_\_\_\_

Primaria \_\_\_\_\_

Secundaria \_\_\_\_\_

Bachillerato o  
Carrera técnica \_\_\_\_\_

Licenciatura \_\_\_\_\_

Maestría \_\_\_\_\_

Doctorado \_\_\_\_\_

Otro \_\_\_\_\_ Especifique: \_\_\_\_\_

¡Gracias por su participación!

**Appendix 3**  
**Qualitative Analysis**  
**(In Spanish)**

## Field of impact: Human Rights<sup>15</sup>

Social Entrepreneur Label	No. Questionnaire	Mode of administration	Interview recorded?	Analysis	Opport. Ident. process derived from the qualitative analysis	Position in the Chart 5.1.	Match
B2	002	Teléfono	No	Fui escribiendo las respuestas del emprendedor mientras él me platicaba su experiencia. El emprendedor habla de una solución que está en proceso, no es una solución acabada. La solución se ha ido formando a través de las metodologías exitosas que el emprendedor ha ido encontrado en otras partes del mundo. Se observa claramente una tendencia hacia un descubrimiento de una oportunidad.	Tendencia a descubrir	Cuadrante de Descubrimiento/Creación con tendencia a crear.	No hay coincidencia
G6	006	Teléfono	No	Fui escribiendo las respuestas del emprendedor mientras me platicaba su experiencia. *Aunque no lo menciona en la entrevista, se puede deducir que ya conocía el trabajo que venía realizando. Por esto puedo deducir que el emprendedor tuvo una tendencia al descubrimiento de la oportunidad.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a descubrir.	DESCUBRIMIENTO
I8	008	Personal	No	La entrevista no fue grabada y fui escribiendo las respuestas del emprendedor mientras me platicaba su experiencia. El emprendedor tenía conocimiento de las diferentes técnicas para dar terapia a sus pacientes. En el momento en que avanza el trabajo surgen nuevas problemáticas y es cuando se convierte su orientación hacia un fin más social. Es ahí cuando el emprendedor "se da cuenta" de que requiere un equipo multidisciplinario de atención integral. Se puede observar que existe una tendencia hacia el descubrimiento.	Tendencia a Descubrir	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
K10	010	Teléfono	No	La entrevista no fue grabada y fui escribiendo las respuestas del emprendedor mientras él me platicaba su experiencia. El emprendedor concibe la solución como un conjunto de personas y no de manera individual. Si bien el emprendedor no menciona con claridad la forma en la que llegó a la solución, existen palabras como "empezar a trabajar" que llevan a pensar en una tendencia a la creación, aunque también existen elementos de descubrimiento pues el emprendedor "se da cuenta" de que su formación le permite crear un modelo innovador de atención a sus pacientes. Faltó pericia de mi parte para guiar al entrevistador hacia que contestara cómo es que llega a plantear la solución.	Mezcla de Descubrimiento y Creación con una tendencia a la Creación.	Cuadrante de Creación.	CREACIÓN

<sup>15</sup> Note: To protect the identity of the social entrepreneurs who participated in this study, I decided to present all of them as male entrepreneurs in this appendix.

S18	020	Skype	Si	El emprendedor claramente menciona que se inspiró en un programa extranjero para desarrollar su metodología en México. El proyecto ha sido enriquecido y personalizado para las necesidades identificadas en cada comunidad.	Tendencia a Descubrir	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
B27	029	Teléfono	No	Si bien en esta parte de la entrevista el emprendedor no menciona cómo es que desarrolló las diferentes estrategias de atención a la problemática, más adelante, en las preguntas cerradas del cuestionario se observa que las estrategias no las creo él y puedo deducir que posiblemente fueron tomadas de otras partes; sin embargo, la última metodología que él desarrolló ha sido el producto de su propia creación. Existe una mezcla de descubrimiento y creación.	Mezcla de Descubrimiento y Creación con una tendencia a la Creación.	Cuadrante de Descubrimiento.	No hay coincidencia
G32	34	Teléfono	No	El emprendedor no menciona con claridad si el proyecto surgió a partir de otro trabajo que ya se estuviera haciendo por alguien más o si él lo creo, pero en las respuestas en la parte dos del cuestionario él menciona que no existía el proyecto y que lo fue creando.	Tendencia a Crear.	Cuadrante de Descubrimiento/Creación con tendencia a crear.	CREACIÓN
N39	041	Mail	No	Después de leer la respuesta del emprendedor y de analizarla junto con las respuestas de la parte 2 y 3 del cuestionario observo que se posiblemente se trate de una mezcla de descubrimiento y creación pues el emprendedor se dio cuenta de la problemática a través de una búsqueda de información. Sin embargo, no está claro si el emprendedor buscó algún otro proyecto que ya se estuviera realizando enfocado en investigar y documentar la violación a los derechos humanos en su área de especialidad.	Mezcla de Descubrimiento y Creación con una tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
O40	042	Personal	Si	El emprendedor comenta que realizaron una búsqueda en México para saber si existía algún organismo que hubiese estado trabajando en el tema de defensa de derechos humanos en el área de su especialidad y al no encontrarlo, él, junto con su equipo de trabajo, empieza a tomar los casos de defensa de los derechos humanos por su propia cuenta. En la entrevista él deja ver que fue un proyecto que ella ha ido creando.	Tendencia a Crear.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	CREACIÓN
P41	043	Teléfono	No	El emprendedor menciona que durante los trabajos que ha ido realizando a lo largo de los años, él ha ido encontrando diferentes propuestas de atención a los problemas sociales en los que se ha interesado. La palabra "encontrando" me lleva a pensar que el emprendedor ha ido descubriendo las soluciones a las diferentes problemáticas.	Tendencia a Descubrir	Cuadrante de Descubrimiento.	DESCUBRIMIENTO

R43	045	Mail y Teléfono	No	Claramente se observa que el emprendedor tuvo una tendencia a descubrir una oportunidad pues cuando conoce a una persona que venía trabajando con esa metodología es que el emprendedor encuentra esa herramienta para la defensa de los derechos humanos en el área de su especialidad.	Tendencia a Descubrir	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a descubrir.	DESCUBRIMIENTO
V47	049	Personal	Si	Observo que el emprendedor llega a la solución de manera fortuita. Si bien una de las principales herramientas que utiliza en su modelo ya existía, la implementación de ésta para hacer la metodología de atención es una creación. El emprendedor no hizo ninguna búsqueda sobre alguna solución sino que él creó la metodología cuando se le ocurrió la idea de cómo hacer su metodología al ver la herramienta en algún lado. Es claramente una tendencia a crear.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
W48	050	Skype	Si	El emprendedor muestra una creación pues llega a una propuesta de solución para crear una metodología en la que transmite información. No emprende una búsqueda de la metodología sino que la crea de una forma muy novedosa.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
X49	051	Mail	No	El modelo del emprendedor es innovador porque a él se le ocurrió esta idea cuando no existía otro modelo similar en México. Si bien el emprendedor encontró por separado los elementos que constituyen el modelo, la manera en que los conjuntó e implementó es donde está la innovación.	Tendencia a Crear	Cuadrante de Descubrimiento.	No hay coincidencia
Y50	052	Skype	Si	El emprendedor conocía las herramientas del modelo, fue un descubrimiento el que él hizo porque ya sabía que otras personas venían trabajando el tema en otras partes del mundo.	Tendencia a Descubrir	Cuadrante de Descubrimiento/Creación con tendencia a descubrir.	DESCUBRIMIENTO
G58	060	Personal	Si	El emprendedor presenta una clara tendencia a descubrir pues la solución que él propuso era una que ya existía en algunas otras partes del mundo. Él lanza en México una organización enfocada en trabajar específicamente en el área de su especialidad para lograr el cambio social.	Tendencia a Descubrir	Cuadrante de Descubrimiento.	DESCUBRIMIENTO

## Field of impact: Economic Development

Social Entrepreneur Label	No. Questionnaire	Mode of administration	Interview recorded?	Analysis	Opport. Ident. process derived from the qualitative analysis	Position in the Chart 5.1.	Match
D4	004	Personal	Si	El emprendedor menciona que se les ocurrió la idea por observar otros esfuerzos que se venían haciendo en su área de especialidad. Entonces ellos decidieron hacer un modelo similar a los que había observado.	Tendencia a descubrir	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
H7	007	Personal	No	Se observa claramente que el emprendedor hizo un descubrimiento pues el producto en el que se basa su modelo ya existía y él sólo hizo algunas mejoras para incorporarlo al modelo.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a descubrir.	DESCUBRIMIENTO
P15	016	Personal	Si	El emprendedor es una persona muy innovadora, él ha generado ideas muy creativas. Presenta una clara tendencia a la creación.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
R17	018	Personal	Si	Observo que el emprendedor se ha capacitado en diferentes áreas y al unirlos con las experiencias de vida que ha tenido y sus intereses personales, él ha podido ir descubriendo diferentes oportunidades.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a crear.	No hay coincidencia
V21	023	Personal	Si	Observo que el emprendedor tuvo las ideas que lo fueron llevando al desarrollo del proyecto y no porque él lo estuviera buscando, sino que la solución la fue creando a partir de un primer esfuerzo. De ahí se derivaron las siguientes ideas que llevaron al desarrollo de una propuesta de atención.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia

Z25	027	Teléfono	No	Durante la entrevista, el emprendedor me dijo que él no había buscado resolver ninguna problemática sino que él había llegado a la empresa social porque lo habían contratado para trabajar ahí proponiendo soluciones. Lo novedoso de su propuesta son las soluciones que él desarrolla, algunas él las busca en otro lado y otras él las inventa por lo que se observa una mezcla entre Descubrir y Crear con una tendencia a Descubrir.	Mezcla entre Descubrir y Crear con tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a crear.	No hay coincidencia
C28	030	Teléfono	No	Si bien el emprendedor no menciona claramente la forma en la que desarrolló la metodología, al hacer una búsqueda en Internet sobre cómo se hizo el proyecto encontré que el emprendedor observó trabajos de otras partes del mundo y dentro de la misma República Mexicana, lo que sugiere que él tuvo una tendencia a descubrir.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
D29	031	Skype/Teléfono	Si	El emprendedor llega a la propuesta de solución porque ya conocía un antecedente que se había hecho en una comunidad en México. De ahí establece su proyecto que con el tiempo se ha ido transformando en una metodología innovadora.	Tendencia a Descubrir.	Cuadrante de Creación.	No hay coincidencia
I34	036	Teléfono	No	El emprendedor junto con otras personas recibieron capacitación y asesoría para ir dando forma a la propuesta de atención. Se observa que si bien la idea y el liderazgo para llevar a cabo este proyecto es individual, también está presente la participación de un equipo de trabajo para dar forma a la metodología. El emprendedor mencionó que buscó algún proyecto similar y al no encontrarlo fue que lanzó la idea a un grupo de personas y en conjunto se creó la metodología. Se observa un trabajo de creación colectiva.	Tendencia a Crear. (En colectivo).	Cuadrante de Descubrimiento.	No hay coincidencia
D55	057	Teléfono	No	En el caso de este emprendedor se observa claramente un descubrimiento de una oportunidad pues él ya venía trabajando en una empresa social con un modelo similar al que propuso. Él ya había observado trabajos similares y por eso sabía que podía hacer este proyecto.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a crear.	No hay coincidencia
F57	059	Teléfono	No	El emprendedor menciona que observaron otros trabajos que se venían haciendo en otras ramas de la economía nacional y también otros trabajos a nivel internacional y así es como inician su propuesta de atención. Se observa una clara tendencia al descubrimiento.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a descubrir.	DESCUBRIMIENTO

K62	064	Teléfono	No	El emprendedor obtuvo herramientas para trabajar con proyectos de emprendurismo y así es como descubre la propuesta de atención. Era algo que otras personas ya venían haciendo pero él conjunta los elementos para que la capacitación y transferencia de conocimiento hacia las personas que desean abrir sus micronegocios sea más eficaz.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a crear.	No hay coincidencia
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### Field of impact: Education

Social Entrepreneur Label	No. Questionnaire	Mode of administration	Interview recorded?	Analysis	Opport. Ident. process derived from the qualitative analysis	Position in the Chart 5.1.	Match
C3	003	Personal	Si	El emprendedor realiza una búsqueda para saber qué se está haciendo en otras partes del mundo y de ahí toma algunas ideas para desarrollar su propio modelo o metodología.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a descubrir.	DESCUBRIMIENTO
A26	028	E-mail	No	El emprendedor me mandó su cuestionario contestado y como me quedaron dudas respecto a la forma en la que se le había ocurrido la idea para la solución, hice una búsqueda en internet para encontrar información al respecto y encontré una entrevista que le hicieron el 4 de octubre de 2010. En esa entrevista el emprendedor menciona que la idea se le ocurrió por un proyecto que él conoció. Se puede observar un descubrimiento de una oportunidad.	Tendencia a Descubrir.	Cuadrante de Descubrimiento/Creación con tendencia a descubrir.	DESCUBRIMIENTO
E30	032	Teléfono	No	El emprendedor utiliza los conocimientos y experiencia que tenía de trabajar en temas similares y en el momento de observar la problemática, él fue creando una propuesta de atención.	Tendencia a Crear.	Cuadrante de Descubrimiento/Creación con tendencia a crear.	CREACION
J35	037	Teléfono	No	El emprendedor tuvo oportunidad de trabajar en una organización en la que vio de cerca el trabajo que se hacía en el área de su interés. Esa experiencia junto con sus conocimientos sobre planeación estratégica le llevaron a descubrir una oportunidad pues el modelo que propone es tomado de modelos que ya se venían aplicando.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia



K36	038	Skype	Si	El emprendedor menciona que la idea no se le ocurrió a él sino a un colectivo. Después mencionó que es en el acomodo de las ideas en dónde requirió de creatividad y de ahí surgieron las estrategias. El discurso que maneja el emprendedor me lleva a pensar que fue una tendencia a crear la que él tuvo junto con las personas que estaban trabajando en ese mismo proyecto.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
Q42	044	Skype	Si	Observo que el emprendedor es una persona muy creativa y con mucha energía. Él, junto con otras personas, desarrollaron un modelo con una estructura piramidal. El emprendedor no menciona si hizo alguna búsqueda o si se basó en alguna otra solución para proponer ésta. Considero que con los elementos presentados en la respuesta, el emprendedor tiene una tendencia a descubrir mezclada con algunos elementos de creación.	Mezcla entre Descubrir y Crear con tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
H59	061	Skype	Si	El emprendedor es una persona muy preparada y con características y habilidades que lo llevan a desarrollar proyectos comunitarios de relevancia. Su modelo ha sido innovador en todos los sentidos. Se observa en él una clara tendencia a crear.	Tendencia a Crear.	Cuadrante de Creación.	CREACION
J61	063	Skype	Si	El emprendedor comenta durante la entrevista que él hizo una búsqueda para saber qué se estaba haciendo sobre el tema de derechos humanos en el área de su especialidad en otros lados. Entiendo por lo que él me platicó en la entrevista, que él tomo ideas de otros modelos que después integró con las suyas para poder desarrollar su propuesta de atención. Al observar otros trabajos, él supo que existían algunas propuestas de atención y pudo haber estado influenciado por esas propuestas para crear la suya. Se observa una tendencia a descubrir.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia

### Field of impact: Environment

Social Entrepreneur Label	No. Questionnaire	Mode of administration	Interview recorded?	Analysis	Opport. Ident. process derived from the qualitative analysis	Position in the Chart 5.1.	Match
J9	009	Teléfono	No	En el momento de responder esta pregunta, identifiqué que el emprendedor utiliza palabras como "me doy cuenta", que en la fase 1 de esta investigación, en el estudio cualitativo, se definió esta frase como relacionada con el descubrimiento de oportunidades, proceso que se ve remarcado por el mismo emprendedor cuando más adelante, en la entrevista, él menciona que la metodología ha sido un proceso de investigar y buscar, por lo que se observa una tendencia a descubrir. Una de las razones por las que se encuentra en el cuadrante inferior izquierdo es que tiene un gran número de respuestas en el valor central. Mientras en su plática se observa una tendencia a descubrir, en los reactivos cerrados no se define en su postura y se va hacia el valor central.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a descubrir.	DESCUBRIMIENTO
L11	011	E-mail	No	Se observa claramente en la respuesta del emprendedor una tendencia al descubrimiento pues él indica que realizó una búsqueda de una solución y así es como llega al su propuesta de atención.	Tendencia a Descubrir.	Cuadrante de Creación.	No hay coincidencia
M12	013	Teléfono	No	El emprendedor claramente menciona que ellos se han dedicado a buscar soluciones o modelos en otras partes y con eso han podido dar forma a su modelo.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
Y24	026	Teléfono	No	El emprendedor menciona en la entrevista que él no tenía conocimiento sobre cómo abordar la problemática y decide hacer una investigación y así es como da con varias soluciones que ella utiliza para integrar su propia metodología.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO

L37	039	Personal	Si	El emprendedor usa un lenguaje en el que hay elementos del descubrimiento, como las palabras "darse cuenta". Él mismo menciona que fue un descubrimiento el que hizo pues las herramientas que usa ya se venían usando en otras organizaciones y el tomó la solución de lo que había visto.	Tendencia a Descubrir.	Cuadrante de descubrimiento/creación con tendencia a descubrir.	DESCUBRIMIENTO
M38	040	Teléfono	No	De la entrevista con el emprendedor se observa que es un proceso mezclado de descubrimiento y creación. El emprendedor menciona que no encontraban quién estuviera trabajando en lo que ellos requerían y por esa razón ellos empiezan a desarrollar su propia metodología.	Mezcla de Descubrimiento/Creación con tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
I60	062	Skype	Si	El emprendedor tiene claro que ellos no tenían idea de cómo comenzar con la solución y que ha sido una metodología que han ido creando a lo largo de los años y con base en experiencias de ensayo y error. También menciona que al principio hicieron una búsqueda para saber qué se estaba haciendo en otras partes pero al final la metodología ha sido una creación.	Mezcla de Descubrimiento/Creación con tendencia a Crear.	Cuadrante de Creación.	CREACIÓN

### Field of impact: Civic Engagement

Social Entrepreneur Label	No. Questionnaire	Mode of administration	Interview recorded?	Analysis	Opport. Ident. process derived from the qualitative analysis	Position in the Chart 5.1.	Match
A1	001	Personal	No	De la entrevista que tuve con el emprendedor rescato que él comenzó el proyecto sin hacer una búsqueda de información sobre otras soluciones, sino que él simplemente se dedicó a trabajar en lo que traía en mente y así es como generó el proyecto.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
F5	005	Teléfono	No	El emprendedor menciona claramente que la propuesta de atención surgió a través de un descubrimiento que hizo en un poblado de México.	Tendencia a Descubrir.	Cuadrante de descubrimiento/creación con tendencia a descubrir.	DESCUBRIMIENTO

N13	014	Personal	Si	El emprendedor ha podido desarrollar un modelo muy innovador de participación ciudadana y la lucha de los derechos humanos. Su metodología ha sido una creación propia y por eso ha sido reconocido internacionalmente.	Tendencia a Crear.	Cuadrante de Descubrimiento.	No hay coincidencia
O14	015	Personal	Si	En la entrevista observé que no está muy claro para el emprendedor el cómo ha llegado a desarrollar una propuesta de solución pues él considera que el tema que está atendiendo es muy complejo y tiene muchas aristas. Quizá a eso se debe el que él esté en el cuadrante de la izquierda, abajo en la gráfica de dispersión, porque no hay una claridad para el emprendedor sobre cómo abordar el tema y sigue en construcción. Para él las soluciones en cuanto a participación ciudadana se construyen en el día a día y hay una influencia de la experiencia y conocimiento previo y la creatividad. Nuevamente, me viene a la mente la influencia del contexto para que el emprendedor social pueda identificar oportunidades y desarrollarlas.	Mezcla Descubrir/Crear con tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
X23	025	Skype	Si	El emprendedor descubrió la propuesta de atención pues dentro del lenguaje que él emplea utiliza palabras relacionadas con el descubrimiento y por la misma historia de vida del emprendedor se observa claramente que se trata de una tendencia a descubrir, aunque posteriormente, durante el desarrollo se presente una tendencia a crear.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
U46	048	E-mail	No	El emprendedor realmente no respondió a la pregunta de interés pues no se centra en contestar cómo es que llega a la propuesta de solución sino sólo lo que han hecho como propuestas. Es muy difícil saber por lo que él contestó si existe una tendencia a crear o descubrir. No hay claridad al respecto. Esto explica por qué se encuentra ubicado en el cuadrante inferior izquierdo de la gráfica de dispersión. Al observar las respuestas que dio a los reactivos cerrados, observo una tendencia hacia el valor central tanto en descubrimiento como en creación, lo que podría traducirse como una falta de claridad en cuanto al cuestionario, no entendió muy bien el instrumento.	Poca comprensión de los reactivos del instrumento y el objetivo de la investigación.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	Sin elementos para hacer la comparación.
C54	056	Teléfono	No	Se observa una clara tendencia a descubrir pues el proyecto surgió por un trabajo que el emprendedor realizó en un momento determinado de su vida.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO

E56	058	Teléfono	No	El emprendedor menciona que él piensa que muchas ideas ya existen y están afuera del emprendedor. Sería un proceso de descubrimiento pues a lo largo de la entrevista se hacen varias referencias a situaciones en las que buscaron soluciones o propuestas de atención para la problemática, en otros modelos que ya existían.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
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### Field of impact: Health

Social Entrepreneur Label	No. Questionnaire	Mode of administration	Interview recorded?	Analysis	Opport. Ident. process derived from the qualitative analysis	Position in the Chart 5.1.	Match
Q16	017	Teléfono	No	El emprendedor claramente menciona que él observó otros trabajos en otros países y por eso surgió en él la idea de hacer un proyecto similar en México.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
T19	021	Personal	Si	El emprendedor menciona claramente que hicieron una investigación y encontraron modelos que adaptaron para México.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
U20	022	Personal	Si	El emprendedor claramente menciona que él observó otros modelos en otros países y sobre todo un modelo que le gustó mucho y que utilizaron para adaptarlo en México.	Tendencia a Descubrir.	Cuadrante de descubrimiento/creación con tendencia a descubrir.	DESCUBRIMIENTO

W22	024	Skype	Si	El emprendedor constantemente menciona durante la entrevista que él no fue en lo individual quien generó la propuesta de atención sino que fue en colectivo. Él menciona que fue una creación del modelo. Le preguntaron a las personas que iban a atender qué era lo que ellos querían de sus vidas. Después se va conformando el modelo que aún ahora sigue desarrollándose. Fue una retroalimentación entre las personas objeto de atención y los que querían atenderlos. Fue una mezcla de descubrimiento con creación. Descubrimiento porque él pregunta a los usuarios qué quieren y ahí encuentra respuestas y líneas de atención y creación por la manera como fue integrando las herramientas con las que ellos contaban y las ideas que se les iban ocurriendo para atender las necesidades, también muchas veces generadas por experiencias que han tenido u otros trabajos que han ido observando, hasta llegar al modelo que están manejando ahora y que siguen desarrollando.	Mezcla de Descubrimiento/Creación con tendencia a descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
F31	033	Skype	No	El emprendedor creó un modelo de atención a la salud en comunidades indígenas. De acuerdo a lo que el emprendedor me platicó, observó que esta fue una creación de él pues utilizó sus conocimientos para poder crear el modelo. No buscó lo que se estuviera haciendo en otro lado sino que él simplemente comenzó a trabajar.	Tendencia a Crear.	Cuadrante de descubrimiento/creación con tendencia a descubrir.	No hay coincidencia
H33	035	Teléfono	No	Claramente observo que el emprendedor hizo un descubrimiento tanto de la problemática como de una propuesta de atención, pues él no conocía de la problemática hasta que tiene una experiencia personal que lo impactó y descubrió el modelo en otro país. Es ahí cuando decide replicar el modelo en México.	Tendencia a Descubrir.	Cuadrante de Creación.	No hay coincidencia
S44	046	Teléfono	No	El emprendedor menciona que fundó la organización por toda la experiencia que tuvo en su vida, no menciona si observó otros trabajos que se estuvieran haciendo relacionados con la problemática que identificó. Por lo que me comentó alcanzo a inferir que él desarrolló su metodología o modelo a través de descubrimientos que fue haciendo a lo largo de su vida profesional y por las respuestas que dio a los reactivos cerrados se observa más una tendencia a descubrir.	Tendencia a Descubrir.	Cuadrante de Respuesta con tendencia hacia el valor central con cierta inclinación hacia la tendencia a crear.	No hay coincidencia
T45	047	Teléfono	No	El emprendedor menciona con claridad que su metodología se basa en modelos que ellos conocían o encontraron.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO

Z51	053	Teléfono	No	El emprendedor menciona que fue cuando vivió de cerca la situación que pasaban las personas en necesidad es que él se da cuenta de la problemática que enfrentaban estas personas. Después conoce un programa que se estaba aplicando en otro país y busca replicarlo en México.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO
A52	054	Teléfono	No	El emprendedor es un emprendedor innato y al analizar la entrevista que tuve con él observo que al encontrarse con la problemática muy de cerca pues lo vive en persona, es que busca crear una solución. Si bien él hizo una búsqueda, al no encontrar a nadie es que toma la iniciativa de crear sus productos.	Tendencia a Crear.	Cuadrante de Creación.	CREACIÓN.
B53	055	Skype	Si	El emprendedor menciona con claridad que fueron un grupo de personas las que fueron descubriendo las diferentes formas de atención a la problemática que ellos identificaron. Es un modelo desarrollado a partir de otras soluciones que ellos fueron encontrando.	Tendencia a Descubrir.	Cuadrante de Descubrimiento.	DESCUBRIMIENTO

## **Appendix 4**

**Ordered pairs for the dependent variables opportunity discovery  
and opportunity creation**



**Ordered pairs for the dependent variables opportunity discovery and opportunity creation**

No.	Social entrepreneur label	X Axis	Y Axis
		Opportunity Discovery	Opportunity Creation
1	A1	1.35	-1.30
2	B2	0.13	1.21
3	C3	1.35	1.21
4	D4	-0.51	-0.04
5	F5	1.35	1.21
6	G6	1.35	1.21
7	H7	1.35	1.21
8	I8	-1.16	-0.04
9	J9	-0.53	-1.30
10	K10	-1.12	0.60
11	L11	-0.49	0.60
12	M12	-1.75	-0.04
13	N13	0.11	-0.04
14	O14	-2.39	-1.34
15	P15	0.74	-2.51
16	Q16	0.72	-1.30
17	R17	0.11	0.60
18	S18	0.11	-0.04
19	T19	-0.51	-0.04
20	U20	0.74	0.56
21	V21	0.11	-0.04
22	W22	0.11	-0.04
23	X23	-1.12	-0.04
24	Y24	1.35	-2.51

25	Z25	0.74	1.21
26	A26	0.74	0.60
27	B27	0.11	-1.94
28	C28	-1.75	-0.04
29	D29	-0.49	0.56
30	E30	0.11	0.60
31	F31	1.35	1.21
32	G32	0.13	1.21
33	H33	-1.14	1.21
34	I34	0.11	-0.04
35	J35	-1.14	-0.09
36	K36	0.74	-0.04
37	L37	1.35	0.60
38	M38	0.11	-1.30
39	N39	0.11	-0.04
40	O40	-1.14	-0.04
41	P41	0.11	-0.65
42	Q42	1.35	-0.04
43	R43	-1.14	-1.94
44	S44	-1.14	-0.04
45	T 45	0.11	-0.04
46	U46	-1.77	-1.30
47	V47	0.74	-0.61
48	W48	0.74	-0.002
49	X49	0.09	-1.30
50	Y50	1.35	1.21
51	Z51	0.11	-0.69
52	A52	-1.16	0.60
53	B53	0.11	-0.04
54	C54	0.11	-1.90
55	D55	0.74	1.21

56	E56	0.11	-0.04
57	F57	0.74	0.60
58	G58	1.35	-0.04
59	H59	-1.12	1.21
60	I60	-2.39	1.21
61	J61	-0.51	-0.04
62	K62	0.11	1.21