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The Importance of Empowerment in Entrepreneurship and its Effects
on Business Performance in Developing Countries

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There aren't things that are impossible, but people that aren't ready to achieve them.

Beatriz Alicia Zapata

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Abstract

The concept of empowerment has gained considerable attention in the field of international development. Institutions such as the World Bank and the United Nations invest considerable funds and efforts trying to facilitate empowerment in developing countries. This is because empowerment is seen as a positive phenomenon that can positively impact on people and their environment.

Empowerment provides an implemental mindset that makes people look for the means to action and be ready to move forward toward their goals. Thus, empowerment becomes important when people need to take action and be innovative in overcoming scarcity and fighting against poverty. Research shows the positive effects of empowerment on entrepreneurship-related behavior and outcomes such as proactive behavior, goal achievement, and innovation. Yet, there is a dearth of research addressing the phenomenon of empowerment in entrepreneurship. This dissertation aims to contribute to the understanding of the role of empowerment in entrepreneurship and its effects. Particularly, this dissertation targets the interplay between empowerment and entrepreneurship in the context of developing countries.

Chapter 1 provides a general overview of the different topics of this dissertation. Chapter 2, introduces the construct of psychological empowerment at work as the theoretical foundation to advocate for the importance of empowerment in entrepreneurship. The chapter takes initial steps in drawing the rationale and identifying empirical evidence for the relationship between empowerment and entrepreneurial behavior and outcomes. Specifically, the chapter links the components of psychological empowerment to concrete action characteristics in entrepreneurship such as effectuation and experimentation. Chapter 3 establishes a first empirical link between empowerment and entrepreneurship. The chapter provides the construct of entrepreneurial empowerment and develops a multidimensional measure to measure its dimensions. By means of a nomological network, the chapter reveals the relations of entrepreneurial empowerment with relevant constructs and outcomes derived from entrepreneurship and empowerment research such as innovation, self-reliance, and decision-making. Chapter 4 posits entrepreneurship training, particularly personal initiative training and business literacy training, as effective means to facilitate entrepreneurial empowerment and its effect on business performance. The chapter uncovers the mechanisms accounting for the relationship between entrepreneurship training and entrepreneurial empowerment. Chapter 5 provides general theoretical and practical contributions and finishes with a general conclusion.

This dissertation contributes to the understanding of empowerment in entrepreneurship and its effects on business performance in the context of developing countries. The studies embedded in this dissertation can serve to further the development of theory and research that advances groundwork of empowerment in entrepreneurship. The construct of entrepreneurial empowerment can stimulate the use of more accurate indicators when conceptualizing and investigating the process and consequences of empowerment in entrepreneurship and international development.

Zusammenfassung

Das Konzept des „Empowerments“ hat im Bereich der internationalen Entwicklungsarbeit weitreichende Beachtung gefunden. Institutionen wie die Weltbank und die Vereinten Nationen investieren beträchtliche Mittel um „Empowerment“ in Entwicklungsländern zu fördern. Zu tun dies, da „Empowerment“ als positives Phänomen gesehen wird, das sich positiv auf Menschen und ihre Umwelt auswirken kann.

„Empowerment“ bringt Menschen dazu nach Mitteln zu suchen um handeln zu können und bereit zu sein ihre Ziele zu erreichen. „Empowerment“ ist daher besonders wichtig, wenn Menschen aktiv und innovativ sein müssen um die Knappheit ihrer Ressourcen zu überwinden und gegen ihre Armut anzukämpfen. Forschungsarbeiten zeigen die positiven Auswirkungen von „Empowerment“ auf unternehmerisches Verhalten und weitere Ergebnisse wie proaktives, zielgerichtetes und innovatives Verhalten. Es gibt jedoch einen Mangel an Forschungsergebnissen, die sich mit dem Phänomen des „Empowerments“ im Bereich des Unternehmertums befasst. Diese Dissertation soll zum Verständnis der Rolle von „Empowerment“ im Bereich des Unternehmertums und dessen Auswirkungen beitragen. Im Speziellen zielt diese Dissertation auf das Zusammenspiel von „Empowerment“ und Unternehmertum in Entwicklungsländern ab.

Kapitel 1 gibt einen allgemeinen Überblick über die verschiedenen Themen dieser Dissertation. Kapitel 2 stellt das Konstrukt des psychologischen „Empowerments“ bei der Arbeit als theoretische Grundlage für die Bedeutung von „Empowerment“ im Unternehmertum vor. In diesem Kapitel werden erste Schritte unternommen um die empirischen Belege für die Beziehung zwischen „Empowerment“ und unternehmerischem Verhalten und Erfolgen zu finden. Konkret verbindet das Kapitel die Komponenten des psychologischen „Empowerments“ mit konkreten Handlungsmerkmalen des Bereichs Unternehmertum wie „Effectuation“ und Experimentieren. Kapitel 3 stellt eine erste empirische Verbindung zwischen „Empowerment“ und Unternehmertum her. Das Kapitel stellt das Konstrukt des unternehmerischen „Empowerments“ dar und entwickelt ein multidimensionales Maß zur Messung seiner Dimensionen. Anhand eines nomologischen Netzwerks werden in dem Kapitel die Beziehungen zwischen unternehmerischem „Empowerment“ und relevanten Konstrukten und Ergebnissen (Innovation, Eigenständigkeit und Entscheidungsfindung) aus der Unternehmertum- und „Empowerment“-Forschung aufgezeigt. In Kapitel 4 wird das Unternehmertum-Training, insbesondere das „Personal Initiative Training“ und das „Business-Literacy-Training“ als wirksame Mittel zur Erleichterung des unternehmerischen „Empowerments“ und dessen Auswirkungen auf den Unternehmenserfolg vorgestellt. Das Kapitel deckt die Mechanismen auf, die für die Beziehung zwischen Unternehmertum-Training und unternehmerischem „Empowerment“ verantwortlich sind. Kapitel 5 liefert allgemeine theoretische und praktische Beiträge und endet mit einer allgemeinen Schlussfolgerung.

Diese Dissertation trägt zum Verständnis von „Empowerment“ im Bereich des Unternehmertums und dessen Auswirkungen auf den Unternehmenserfolg in Entwicklungsländern bei. Die in dieser Dissertation eingebetteten Studien können dazu dienen, die Entwicklung von Theorien und Forschung voranzutreiben, die die Grundlagen für „Empowerment“ im Bereich Unternehmertum fördern. Das Konstrukt des „unternehmerischen Empowerments“ kann zur Verwendung besserer Indikatoren führen, die den Prozess und die Konsequenzen von „Empowerment“ im Bereich des Unternehmertums und der internationalen Entwicklungsarbeit konzeptualisieren und untersuchen.

Resumen

El concepto de empoderamiento ha ganado considerable atención en el campo del desarrollo internacional. Instituciones como el Banco Mundial y las Naciones Unidas invierten considerables fondos y esfuerzos para tratar de facilitar el empoderamiento en los países en desarrollo. Esto se debe a que el empoderamiento es concebido como un fenómeno que puede tener un impacto positivo en las personas y su entorno.

El empoderamiento proporciona un esquema mental que hace que las personas busquen los medios para actuar y estén listos para avanzar hacia sus metas. Por lo tanto, el empoderamiento cobra importancia en contextos en los que la gente necesita actuar e innovar para superar la escasez y luchar contra la pobreza. La investigación muestra efectos positivos del empoderamiento en el comportamiento emprendedor y los resultados relacionados con el mismo, como el comportamiento proactivo, el logro de objetivos y la innovación. Sin embargo, hay una escasez de investigaciones que aborden el fenómeno del empoderamiento en el emprendimiento. Esta disertación tiene como objetivo contribuir a la comprensión del papel del empoderamiento en el emprendimiento y sus efectos. En particular, esta disertación se centra en la interacción entre el empoderamiento y el emprendimiento en el contexto de los países en desarrollo.

El Capítulo 1 proporciona una descripción general de los temas objeto de estudio. El Capítulo 2, introduce el constructo de empoderamiento psicológico en el trabajo y lo utiliza como base teórica para abogar por la importancia del empoderamiento en el emprendimiento. El capítulo plantea el fundamento teórico y revisa la evidencia empírica de la relación entre el empoderamiento y el comportamiento emprendedor y sus efectos. Específicamente, el capítulo vincula los componentes del empoderamiento psicológico con las características de la acción en el emprendimiento, como la realización y la experimentación. El Capítulo 3 establece un primer vínculo empírico entre el empoderamiento y el emprendimiento. Este capítulo elabora y delimita el constructo de empoderamiento emprendedor y desarrolla una medida multidimensional para medir sus dimensiones. A través de una red nomológica, el capítulo revela las relaciones entre el empoderamiento emprendedor y otros constructos y resultados relevantes en la investigación del emprendimiento y el empoderamiento, como la innovación, la autosuficiencia y la toma de decisiones. El Capítulo 4 postula la capacitación en emprendimiento, particularmente la capacitación en iniciativa personal y la capacitación en alfabetización empresarial, como un medio eficaz para facilitar el empoderamiento emprendedor y su efecto en el desempeño empresarial. El capítulo revela los mecanismos que explican la relación entre la capacitación de emprendimiento y el empoderamiento emprendedor. El Capítulo 5 plantea y sintetiza las principales contribuciones teóricas y prácticas de la tesis y finaliza con las conclusiones alcanzadas en este trabajo.

Esta tesis contribuye a la comprensión del empoderamiento en el ámbito del emprendimiento, y sus efectos sobre el rendimiento empresarial en el contexto de los países en vías desarrollo. Los estudios incorporados en esta disertación pueden servir para promover el desarrollo de la teoría y la investigación que avance el trabajo básico de empoderamiento en el emprendimiento. El constructo del empoderamiento emprendedor puede estimular el uso de indicadores más precisos al conceptualizar e investigar el proceso y las consecuencias del empoderamiento en el emprendimiento y en el desarrollo económico y social.

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1 General Introduction

1.1 The Importance of Entrepreneurship in Developing Countries

Entrepreneurship refers to the discovery and exploitation of opportunities (Shane & Venkataraman, 2000). Entrepreneurship is seen as a positive phenomenon leading to social improvement (Ahl, 2006), and is considered as one of the most effective means to fight against poverty and promote economic growth in developing countries (Frese, Gielnik, & Mensmann, 2016). The act of discovery and exploration of opportunities fits nicely into the grand narrative of modernity in which development not only implies change but also implies economic progress. Entrepreneurship brings economic progress because it constitutes a vehicle for change and innovation (Carree & Thurik, 2003). Entrepreneurial ventures impact on a country's economy stimulating market competition and bringing up disruptive changes into the market (Carree & Thurik, 2008; Gries & Naudé, 2010; Van Praag & Versloot, 2007). From Joseph Schumpeter (1934) to date, entrepreneurs are seen as the change agents in the economy (Dees, 2001), the major vehicle of development (Anokhin, Grichnik, & Hisrich, 2008), and the engine of economic growth (Holcombe, 1998). Entrepreneurs create value. They find new and better ways to define unarticulated needs, and hence drive the “creative-destructive” process that shapes the economy and facilitates growth.

In the context of developing and emerging countries, micro and small scale entrepreneurs contribute more to productivity, growth, and employment creation than larger and established businesses (Thurik, Carree, Van Stel, & Audretsch, 2008). Particularly micro and small entrepreneurs constitute the main source of income (Gollin, 2002; McKenzie & Woodruff, 2013, 2016). Research efforts towards entrepreneurship promotion that target

micro and small entrepreneurs should contribute positively to their productivity, and in sum to fight against poverty and promote economic growth.

1.2 Empowerment as a Precursor of Entrepreneurship

Gretchen Spreitzer (1995) defined psychological empowerment as an intrinsic motivation that manifests meaning, competence, self-determination, and impact. Meaning relates to the “value” one gives to a given work activity. Competence refers to perceptions of efficacy (e.g., Bandura, 1997). Self-determination implies a sense of having choice in initiating and regulating actions (Deci & Ryan, 1987). Impact refers to perceptions about the capacity to influence the environment (Ashforth, 1989).

Theoretical and empirical research suggests that empowerment can contribute to entrepreneurial success (e.g., firm performance). Empowerment has been depicted as a key precursor of proactive behavior and innovation at work (Hemang, Shailendra, & Manish, 2017; Seibert, Wang, & Courtright, 2011; Sinha et al., 2016; Spreitzer, 1995, 2008; Spreitzer, De Janasz, & Quinn, 1999; Spreitzer, Kizilos, & Nason, 1997; Sun, Zhang, Qi, & Chen, 2012; Thomas & Velthouse, 1990). Empowerment becomes critical in situations where people need to work independently, where perseverance and hope are incumbent, and in contexts where people need to be proactive in making sense of the environment (e.g., entrepreneurship). Empowerment can become a key precursor of entrepreneurial action because it leads individuals to act independently in situations of risk and uncertainty, anticipate problems, and demonstrate persistence and resourcefulness (Spreitzer, 1995, 1996, 2008). The phenomenon of empowerment can also stimulate self-regulation in completing own tasks, contribute to taking action as opportunities arise, and preserve motivation towards goals (Thomas & Velthouse, 1990). Considerable research shows outcomes of empowerment such as task performance (Seibert, Silver, & Randolph, 2004; Seibert et al., 2011; Zare, Zarmehr, & Ashrafi-rizi, 2015), proactive behavior (e.g., Hemang et al., 2017; Spreitzer,

1995), and innovation (e.g., Odoardi, Montani, Boudrias, & Battistelli, 2015; Sinha et al., 2016), suggesting that empowerment can contribute positively to entrepreneurial success. However, to date, research has omitted the link between empowerment and entrepreneurship. Due to the active, persistent, and change-oriented behaviors related with empowerment (e.g., Spreitzer, 1995), this dissertation posits that empowerment can make positive contributions to entrepreneurship research. Thereby, the first goal of this dissertation is to contribute to the hitherto theoretically and empirically unexplored aspects of empowerment in entrepreneurship. First, I take initial steps in drawing the rationale and identifying empirical evidence about the relationship between empowerment and entrepreneurship. To that end, I link the components of psychological empowerment (Spreitzer, 1995) to characteristics of active performance in entrepreneurship (Frese, 2009; Frese & Gielnik, 2014). Second, I build upon the dimensions of psychological empowerment that suggest a link with entrepreneurial performance (e.g., goal achievement) and entrepreneurial behavior (e.g., innovation), to specify the nature of entrepreneurial empowerment and its dimensions (see definition and further elaboration in chapter 3). Third, I develop a multidimensional measure of entrepreneurial empowerment to measure its dimensions. I establish a nomological network to untangle the relationships between entrepreneurial empowerment and other psychological and performance-related constructs in entrepreneurship. These relationships serve to validate the multidimensional measure of entrepreneurial empowerment and so to test the assumptions regarding the interplay between empowerment and entrepreneurship. Altogether, these steps may encourage theory and research to make headway in the groundwork of empowerment in entrepreneurship.

1.3 Empowerment as an Outcome of Entrepreneurship

I posited above that empowerment should have an impact on entrepreneurship. However, the relationship between empowerment and entrepreneurship may be reciprocal. Entrepreneurship can also rise perceptions of empowerment over time. Entrepreneurship rises autonomy, feelings of independence and perceptions of control (e.g., Andersson, 2008; Benz & Frey, 2004; Blanchflower, 2004). People who establish entrepreneurial ventures define their own goals and make own decisions that affect meaningful outcomes (e.g., business growth) for them. The experience of success in business may also intensify feelings of empowerment. Success leads to positive emotions such as passion (Gielnik, Spitzmuller, Schmitt, Klemann, & Frese, 2015), satisfaction and fulfillment (Benz & Frey, 2004). Positive emotions bring attitudinal and behavioral manifestations of empowerment such as self-confidence, energy, and engagement (Diener & Biswas-Diener, 2005). Entrepreneurial success (e.g., firm growth) should affect individuals making see themselves as master of their fates, trusting their capacity to make an impact on the environment. Empowerment, in turn, may contribute to entrepreneurial success. Therefore, mutual reinforcement between empowerment and entrepreneurship can be expected.

There is a lack of research on the directionality of empowerment relationships (Boudrias, Morin, & Lajoie, 2014; Seibert et al., 2011; Spreitzer, 2008). Despite the assumption of reciprocity between empowerment and entrepreneurship, to date we have no evidence indicating its veracity. Longitudinal research can help to better determine causal directions of relationships inherent in empowerment theory (Seibert et al., 2011; Spreitzer, 2008). Accordingly, the second goal of this dissertation is to (partially) examine the directionality of empowerment relationships. To that end, I test the longitudinal effect of entrepreneurship training on empowerment (I will elaborate on this in section 1.5). Specifically, I untangle the mechanisms that underlie the relationship between

entrepreneurship training and empowerment, and the latter with entrepreneurial success. To do so, I pay particular attention to the sociostructural and psychological approaches to empowerment (e.g., Anna-Maija, 2015; Seibert et al., 2011; Spreitzer, 1996, 2008), as well as the psychological perspective towards entrepreneurship (e.g., Frese, 2009; Frese et al., 2016). The socio-structural and psychological approaches to empowerment have addressed contextual factors (e.g., social support, role modeling, work environment) as the prime facilitators of empowerment (Seibert et al., 2011), stating that empowerment rises from the interaction between the individual and its environment (Spreitzer, 1995; Thomas & Velthouse, 1990). The psychological perspective towards entrepreneurship emphasize the importance of agentic approaches (e.g., agentic entrepreneurship training approaches) based on action-regulation, self-regulation and active behavior, to facilitate effective entrepreneurship (Frese et al., 2016; Gielnik, Frese, et al., 2015; Glaub, Frese, Fischer, & Hoppe, 2014; Mensmann & Frese, 2016).

Building on the sociostructural and psychological approaches to empowerment and entrepreneurship, I am to explain how empowerment and entrepreneurial success can be fostered through entrepreneurship training in developing countries. I posit that entrepreneurship training approaches which provide social support and role modeling, and which draw attention to the agentic nature of entrepreneurship (i.e., the entrepreneur as an active influencer of the environment) act as enablers of empowerment and entrepreneurial success (e.g., firm survival).

1.4 Measuring Empowerment in Developing Countries

Empowerment is a phenomenon that can positively impact people and their environment (Christens & Perkins, 2008; Kabeer, 2001; Narayan-Parker, 2005; Seibert et al., 2011; Spreitzer, 2008; Thomas & Velthouse, 1990). In the context of international

development, empowerment commonly relates to enhancing people's capacity to make purposeful choices and to transform those choices into desired actions and outcomes (Alsop, Bertelsen, & Holland, 2006). The concept of empowerment has gained considerable attention in the field of international development (Alsop & Heinsohn, 2005; Grabe, 2012; Malhotra & Schuler, 2005). For example, the World Bank has pointed empowerment as one of the key elements for poverty reduction and as a primary development assistance goal (Malhotra, Schuler, & Boender, 2002). The ample interest on empowerment relates to its high potential to fight against poverty and facilitate sustainable economic growth. Yet, even that the importance of empowerment seems out of question, there is a dearth of empirical evidence on empowerment in the context of developing countries (Grabe, 2012; Ibrahim & Alkire, 2007; Mosedale, 2005; Narayan-Parker, 2005; Perkins, 1995; Perkins & Zimmerman, 1995). Empowerment interventions often struggle to specify the empowerment process and its direct impact (Grabe, 2012; Ibrahim & Alkire, 2007; Narayan-Parker, 2005; Samman & Santos, 2009; Sen, 1999; Zimmerman, 1990). For example, traditional development goals such as health or increased income are cited as evidence of empowerment (Mosedale, 2005). In such cases, it is not clear what is added by using the word empowerment. Consequently, the third goal of this dissertation is to bring into light sound measurements of empowerment that provide empirical evidence that show the empowerment process and its direct impact. First, I develop the multidimensional measure of entrepreneurial empowerment. The measure on entrepreneurial empowerment contributes to the call for a better understanding and measurement of empowerment in applied research (Alkire, 2005; Grabe, 2012; Ibrahim & Alkire, 2007; Malhotra, 2003), providing a domain-specific measure of empowerment in entrepreneurship. Individual empowerment indicators are significant for economic development and poverty reduction research and practice (Alkire, 2005; Mosedale, 2005). For example, the multidimensional measure of entrepreneurial empowerment allows for

comparison across countries and interventions, helps to establish a link with instrumental outcomes such as performance, provides assessment of the intrinsic value of empowerment (e.g., self-confidence), and allows tracking of the empowerment process. Second, by means of entrepreneurship training approaches, I make specific the procedure that we use to facilitate empowerment and its effects (i.e., entrepreneurial success). Specifically, I use a randomized controlled trial (RCT) to track the effect of entrepreneurship training approaches on empowerment, and the latter on entrepreneurial success. Randomized experiments are considered among the most credible and rigorous methods to assert impact. They occupy a special place in the hierarchy of evidence, namely at the very top (Imbens, 2010). RCTs free empirical investigation from implausible and arbitrary theoretical and statistical assumptions (Deaton & Cartwright, 2017). Therefore, RCTs constitute a sound method to uncover the empowerment process and its direct impact. In the following section, I elaborate on entrepreneurship training approaches and their potential towards empowerment and entrepreneurship facilitation.

1.5 Entrepreneurship Training as Effective Means for Empowerment Facilitation and Entrepreneurial Success

Empirical evidence shows that entrepreneurship can be effectively promoted by entrepreneurship training (Frese et al., 2016; Glaub & Frese, 2011; Glaub et al., 2014; Karlan & Valdivia, 2011; McKenzie & Woodruff, 2013). Entrepreneurship training encourage people to create new businesses or improve existing ones by providing basics skills and knowledge to succeed in entrepreneurship (Bischoff, Gielnik, & Frese, 2014). Building on the sociostructural and psychological approaches to empowerment (Anna-Maija, 2015; Seibert et al., 2011; Spreitzer, 1996, 2008), as well as the psychological approaches towards entrepreneurship (Frese, 2009; Frese et al., 2016), this dissertation argues that training

approaches which lead towards effective actions in entrepreneurship, that is training that rise mastery in entrepreneurship behavior, constitutes effective means towards empowerment and entrepreneurial success. Specifically, this dissertation focuses on two training approaches that constitute good examples of training towards effective actions in entrepreneurship: (1) the personal initiative training developed by Glaub and his colleagues (2014), and (2) the business literacy training described by Calderon, Cunha, and De Giorgi (2013). The personal initiative training is a psychological training based on self – and action-regulation that targets the agentic nature of entrepreneurs (Frese et al., 2016). Personal initiative refers to proactive behavior that reflects self-started, anticipatory, and persistent actions (Frese & Fay, 2001). Personal initiative training triggers people's agency (i.e., purposeful behavior) allowing them to carry out actions with personal initiative. Specifically self-started, anticipatory, and persist actions that include goal setting, development of knowledge about the environment, formation and execution of action plans, monitoring, and feedback seeking (Frese et al., 2016). The business literacy training facilitates business skills (e.g., bookkeeping), and provides support and guidance through role-modeling related to business activities (e.g., selling and negotiation). For example, the training helps people to improve their negotiation skills by showing examples and carrying out simulation exercises that foster effective negation in business.

The two training approaches constitute promising avenues to empower entrepreneurs and facilitate entrepreneurial success. Both training constitute promising paths to empower entrepreneurs because they allocate them as the main actors pursuing for their own goals. The two training approaches aim to facilitate entrepreneur's ability to complete tasks and reach outcomes successfully, which relates to increased *power within* the individual (e.g., improved self-confidence), and increased *power to affect* strategic outcomes in business. Also, both training represent an opportunity to gain autonomy and independence (e.g., by means of an

independent income), and relate to facilitation of economic improvement and welfare. The two training approaches constitute promising paths to facilitate entrepreneurial success because they increase entrepreneurs' ability to perform entrepreneurial tasks (e.g., develop business plans) and to reach entrepreneurial goals (e.g., business growth). Both training approaches have been proved to be effective for entrepreneurs in the context of developing countries (Calderon et al., 2013; Campos et al., 2017; Glaub et al., 2014), and have been shown as effective "bottom-up" solutions for poverty reduction and economic growth. Therefore, the training on personal initiative and business literacy constitute good examples of evidence-based entrepreneurship training and manifest high potential for empowerment facilitation and entrepreneurial success.

1.6 Entrepreneurship Training as Effective Means Towards Women's Empowerment in Developing Countries

In the previous section, I posited personal initiative training and business literacy training as effective means towards empowerment facilitation and entrepreneurial success. A considerable part of this dissertation relates to women and their empowerment in developing countries. In this section, I posit that the combination of the personal initiative training and the business literacy training can be particularly effective towards women's empowerment. First, I elaborate briefly on the importance on women's empowerment. Second, I explain why the two training approaches are particularly important towards women's empowerment in developing countries.

Women are the first to target when it comes to empowerment in developing countries. Several institutions such as the World Bank, United Nations, and non-governmental organizations are all striving to reach the millennium development goal 3 – to promote gender equality and women's empowerment. Women are particularly affected by poverty,

discrimination and exploitation (UN Women, 2018). They often have low education and welfare, and have an unequal position (i.e., gender inequality) that interferes with their economic development (Buvinić, 1997).

Among a wide array of solutions (e.g., women cooperatives, microcredits), entrepreneurship has been suggested as a powerful path to empower women in developing countries (Buvinic & O'Donnell, 2016; Carr, 2000; S. Johnson, 2000, 2005; Torri & Martinez, 2014). Entrepreneurship facilitates a sense of self-reliance, ownership, and economic security, and contributes to women's economic empowerment (Datta & Gailey, 2012). Entrepreneurial activities relate to income-generating activities, which usually grant greater control and autonomy, and hence contribute to women's empowerment (Carr, Chen, & Jhabvala, 1996; Donahoe, 1999; S. Johnson, 2005). However, women in developing countries often struggle to engage effectively in entrepreneurship. They usually have great difficulties to initiate, maintain, or grow their ventures (De Mel, McKenzie, & Woodruff, 2014; McKenzie & Puerto, 2017). Scarce access to training is one of the major reasons for the non-existence, failure and/or poor performance of women entrepreneurs (Azam Roomi & Harrison, 2010; Brown, Doyle, Lewis, Mallette, & Young, 2002; Brush & Hisrich, 1999; De Bruin, Brush, & Welter, 2006). Previous research shows that women in developing countries need both psychological (e.g., motivation, self-confidence), as well as managerial skills (e.g., bookkeeping), to succeed as entrepreneurs (e.g., Azam Roomi & Harrison, 2010; Calderon et al., 2013). Provision of training approaches, which target the psychological and managerial needs that women require to succeed in self-employment activities, become important to facilitate women's entrepreneurship, and in turn their empowerment in developing countries.

The training on personal initiative and business literacy target both the psychological and managerial skills that women need to effectively engage in entrepreneurship. Personal initiative training provides an entrepreneurial mindset that facilitates entrepreneurial

behavior. An entrepreneurial mindset means a focus on scanning and exploitation of opportunities, which leads to personal initiative behavior in entrepreneurship (Campos et al., 2017; Frese et al., 2016; Glaub et al., 2014; Mensmann & Frese, 2016). Personal initiative behavior refers to self-started, future-oriented, and persistent behaviors that overcome barriers (Frese, 2009; Frese & Fay, 2001; Frese, Fay, Hilburger, Leng, & Tag, 1997). The different modules within the personal initiative component are designed to instruct individuals on how to actively influence the environment, anticipate problems and opportunities, and persistently transform those opportunities into viable products or services (Frese et al., 2016). Thus, the training emphasizes the psychological and behavioral characteristics that people need to succeed in entrepreneurship (Frese et al., 2016; Mensmann & Frese, 2016). However, an entrepreneurial mindset and proactive behavior may be just not enough to facilitate effective entrepreneurship among women. There is considerable research showing that women entrepreneurs in developing countries lack both financial planning and management skills (Bloom & Van Reenen, 2007; Bruhn, Karlan, & Schoar, 2010; Brush & Hisrich, 1999; Buvinic & O'Donnell, 2016; Calderon et al., 2013; McKenzie & Puerto, 2017). The training on business literacy helps to overcome this gap by providing business knowledge and financial skills in entrepreneurship. Business literacy training facilitates formal accounting skills and promotes the use of business knowledge such as costs identification, sales recording, or pricing to maximize profit. The training on business literacy has been shown to increase business knowledge and management skills among women entrepreneurs (Calderon et al., 2013). Thus, the training on business literacy can cover the managerial needs that women require to succeed in entrepreneurship.

In addition, there are a number of reasons because the two training approaches can be particularly useful when aiming to facilitate women's empowerment. First, each training has been shown to contribute to women's economic development (e.g., opportunity to gain

independent income) and welfare (e.g., low poverty) (Calderon et al., 2013; Campos et al., 2017). Second, the two training approaches target both the intrinsic value (e.g., the power *within*) and the instrumental value (i.e., the power *to affect*) of women's empowerment (Ibrahim & Alkire, 2007; Mosedale, 2005; Samman & Santos, 2009), which makes women more likely to take control of strategic life decisions such as deciding to actively participate in the market or stick to household activities alone. Third, the two training approaches increase women's self-efficacy, the belief in their own ability to complete tasks and reach outcomes successfully. The core idea underlying empowerment is based on competence and self-efficacy (Bandura, 1989; Conger & Kanungo, 1988; Ozer & Bandura, 1990; Spreitzer, 1995; Thomas & Velthouse, 1990). Self-efficacy is important because it facilitates purposeful behavior (or agency) to achieve desirable goals, which is the target of empowerment facilitation (Malhotra, 2003). Fourth, several scholars have consistently remarked that in order to promote women's empowerment one should consider three key indivisible components – *resources, agency, and outcomes* (e.g., Datta & Gailey, 2012; Kabeer, 1999; Samman & Santos, 2009; Torri & Martinez, 2014). The two training approaches provide the resources (i.e., psychological and managerial skills), that trigger women's agency enabling women to transform such resources into desired outcomes (e.g., entrepreneurial success). This is particularly important, because in order to facilitate women's empowerment, women themselves are the ones to take action to transform resources into desirable results, otherwise it would not be considered empowerment (Ibrahim & Alkire, 2007; Kabeer, 2005).

1.7 Dissertation Structure

This dissertation comprises three manuscripts, each presented in a different chapter. Chapter 2, introduces “The Importance of Empowerment in Entrepreneurship”. Based on the active, persistent, and change-oriented behaviors associated with psychological

empowerment (Spreitzer, 1995, 2008; Spreitzer et al., 1999; Spreitzer et al., 1997), the chapter postulates that empowerment can contribute to entrepreneurship. The chapter discusses the dimensions of psychological empowerment (i.e., meaning, competence, self-determination, and impact) that suggest a theoretical and empirical link with entrepreneurial behaviors (e.g., proactive behavior and innovation). The chapter formulates several premises regarding the interaction between empowerment and entrepreneurship and describes paths to promote empowerment and entrepreneurship in applied context. The chapter concludes addressing future directions to advance research on empowerment in the field of entrepreneurship.

Chapter 3, “Entrepreneurial Empowerment: Measurement and Validation”, further explores the theoretical and empirical relationship between empowerment and entrepreneurship formulating a new concept and a multidimensional measure of entrepreneurial empowerment. The chapter describes the assumptions regarding the construct of entrepreneurial empowerment and presents an initial nomological network to specify the relationship with other constructs in entrepreneurship and empowerment research. The chapter concludes proposing the measure of entrepreneurial empowerment as an indicator of empowerment that can serve for international comparison allowing tracking of the empowerment process and identifying changes on its levels over time (Alkire, 2005; Grabe, 2012; Malhotra et al., 2002). Last, the chapter suggests promising avenues to advance research on the construct of entrepreneurial empowerment.

Chapter 4, “Empowering Women through Entrepreneurship Training: A Randomized Controlled Trial in Mexico”, extends the work of the first chapters by conducting a field study to analyze the relationship between entrepreneurship and empowerment. The chapter untangles the underlying mechanisms between entrepreneurship training and entrepreneurial empowerment, and provides evidence on the positive relationship between the later and

business performance. The chapter suggests that in order to promote entrepreneurial empowerment and business performance, policy makers should work toward enabling an opportunity structure (e.g., policies and incentives) that encourages women's access to training that facilitates effective entrepreneurship. The chapter concludes encouraging further research on the directionality of relationships between entrepreneurship and empowerment, as well as further studies including growth models that emphasize the evolution and fluctuation of entrepreneurial empowerment over time.

Chapter 5, closes with a general discussion of the three pieces of research reported in this dissertation. The chapter summarizes the key findings and contributions of this research and discusses important theoretical and practical implications for research and practice.

2 The Importance of Empowerment in Entrepreneurship¹

Abstract

Empowerment comes at a time when global competition and change require people to take initiative and be innovative. Based on the active, persistent, and change-oriented behaviors associated with psychological empowerment, the chapter states that empowerment can contribute to entrepreneurship. The dimensions of empowerment that suggest a theoretical and empirical link with entrepreneurial behavior are discussed. Several propositions regarding the interplay between empowerment and entrepreneurship are formulated. The chapter describes paths to promote empowerment and entrepreneurship in applied context and suggests future directions to advance research on empowerment in the field of entrepreneurship.

Keywords: empowerment, entrepreneurship, active performance.

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2.1 Introduction

Empowerment comes at a time when global competition and change require people to take initiative and be innovative (Lee & Koh, 2001; Spreitzer, 1995). Empowered people act independently in situations of risk and uncertainty, anticipate problems, and demonstrate persistence and resourcefulness when challenging conditions at work appear (Spreitzer, 1995, 1996, 2008). Empowerment appears to be particularly important in situations where people need to work independently, where perseverance and hope is necessary, and in contexts where people need to be more proactive in making sense of situations and determining the appropriate course of action. The potential outcomes of empowerment expand to individuals, organizations, and societies (e.g., Goodman et al., 2016; Seibert et al., 2004; Spreitzer, 2007). Outcomes of empowerment such task performance, proactive behavior, and innovation suggest that empowerment theory is relevant to broader contexts outside organizational settings. Despite the accumulating evidence on the positive effects of empowerment in diverse contexts, research has omitted the link between empowerment and entrepreneurship. Such caveat anticipates an attractive field of research. This chapter represents a first attempt to study the effects of empowerment in entrepreneurship. Because of the active, persistent, and change-oriented behaviors associated with psychological empowerment (Spreitzer, 1995), we argue that empowerment can contribute positively to entrepreneurship.

2.2 Entrepreneurship: Concept, features and measures

The role of the entrepreneur consist in discovery and exploitation of opportunities (Shane & Venkataraman, 2000). Such role usually requires making rapid decisions under uncertainty and with scarce resources, work harder than most employees, and have access to

a wide array of skills, knowledge, and abilities (e.g., management, marketing, innovation, and leadership) (Rauch & Frese, 2007; Shane, 2003; Yao, Farmer, & Kung-McIntyre, 2016).

Entrepreneurship is determined by a number of factors that include individual differences (e.g., personality, human capital), environmental economic factors (e.g., type of industry), and cultural and geographical factors (e.g. national culture, or the institutional environment). Outcomes of entrepreneurship relate to development of new products, services, strategies, processes, organizational forms, and new markets that did not exist. Entrepreneurship is typically measured in terms of business creation and business performance. The complexity of models of entrepreneurship (considering antecedent variables and outcomes as well as the connections between those variables) goes beyond the scope of this chapter.

Frese (2009) developed an entrepreneurship framework that account for the complex interaction between individual differences, environmental economic factors, and cultural and geographical factors (see figure 2.1). From the perspective of action theory (Frese & Zapf, 1994), the author elaborated on the effects of the entrepreneurs' personality traits, and their human capital on entrepreneurial success. According to the model, such relationships are mediated by action styles (or characteristics of active performance) such active goals and visions or active feedback seeking, among other ways of information processing and acting in the environment (see figure 2.1). The characteristics of active performance are at the center stage in all phases of entrepreneurship. Such characteristics are not mere actions, but rather ways of performing actions. According to Frese and Gielnik (2014), more active actions characteristics lead to actions that are more likely to be successful. They provide examples to support their hypotheses, such that active forms of learning (i.e., deliberate practice), or active network strategies are related to entrepreneurial success (Unger, Keith, Hilling, Gielnik, & Frese, 2009; X.-y. Zhao, Frese, & Giardini, 2010). Frese (2009) argues that the

typical facets of personal initiative – being self-started, future-oriented, and overcoming barriers – tend to lead to success when they affect the different action characteristics. Individual characteristics in interaction with the environmental ones affect entrepreneurial activities which in turn change the environment. The environment includes the development stage of the firm (life cycle), the frequency of change (dynamism), economic factors such as material or structural resources (hostility), and type of business (industry). Embedded in a specific geographic region and cultural context (national culture), the individual differences and the environment are also seen as moderators of the effect that characteristics of active performance have on all phases of entrepreneurial success: opportunity identification, refinement of business concept and resource acquisition, and survival and growth.

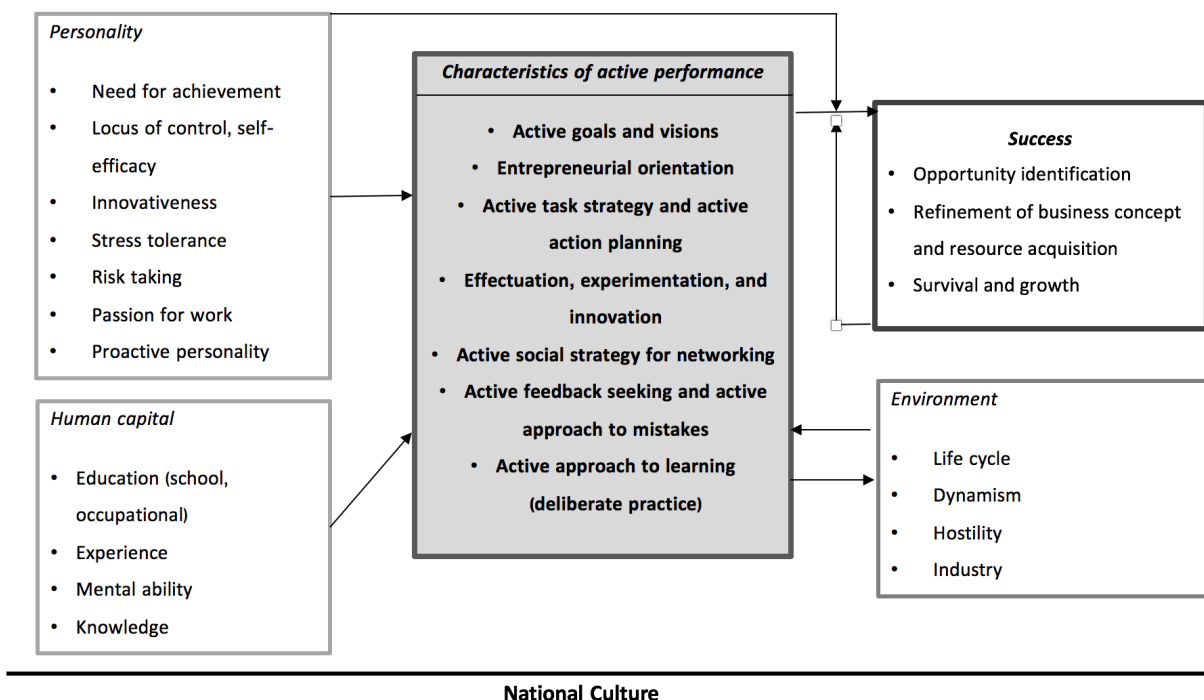


Figure 2.1. Example of a Complex Model of Entrepreneurship (adapted from, Frese, 2009, p. 461)

2.3 Empowerment: concept, antecedents and consequences

Spreitzer (1995) defined psychological empowerment as a motivational construct manifested in four cognitions: competence, self-determination, meaning, and impact. “Competence, or self-efficacy, is an individual’s belief in his or her ability to perform activities with skill”(Spreitzer, 1995). Self-determination refers to a sense of having choice in initiating and regulating actions (Deci & Ryan, 1987), reflecting autonomy at work. Meaning refers to a match between the demands of a work role and own beliefs, values, and behaviors (Hackman & Oldham, 1980). Impact is the extent to which an individual can influence strategic, administrative, or operational outcomes at work. Together, such dimensions reflect a sense of control at work and an active orientation through which individuals wish and feel able to shape their work role and context (see figure 2.2).

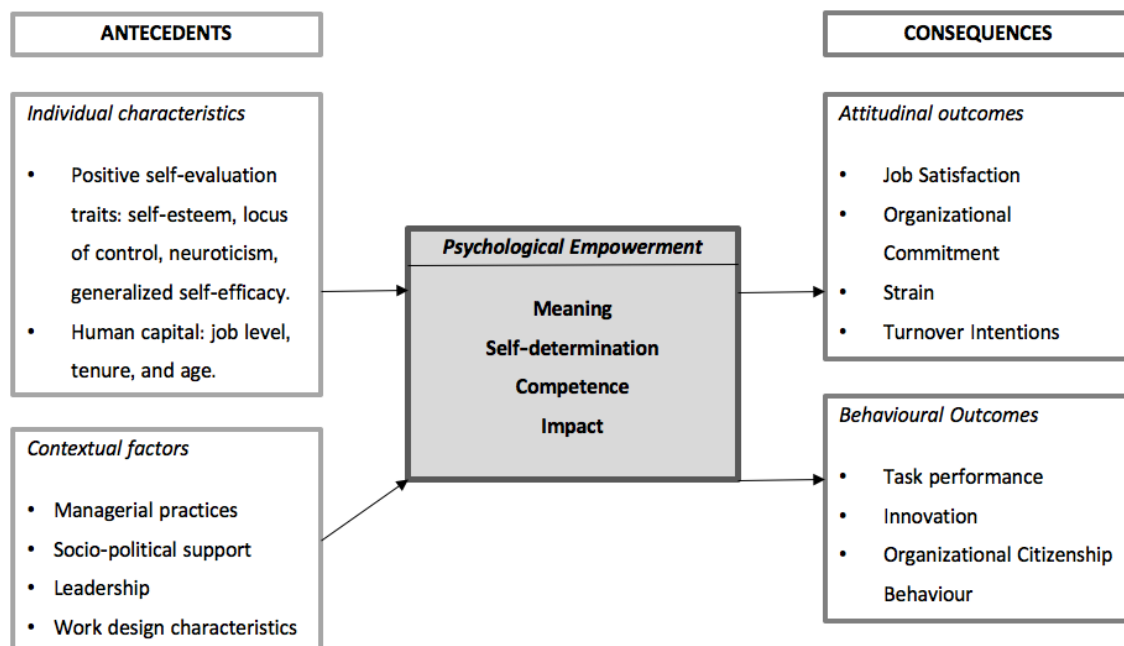


Figure 2.2. Individual Empowerment Framework (adapted from Seibert et al., 2011)

Psychological empowerment is influenced by several factors that involve individual characteristics (e.g. personality traits, human capital), and contextual factors (e.g. work

design characteristics). Outcomes of psychological empowerment refer to attitudinal (e.g. job satisfaction) and behavioral (e.g. innovation) consequences at work. Those attitudinal and behavioral outcomes are typically studied in organizational settings. Since entrepreneurs do not work for a given organization, we center our attention on the attitudes and behaviors more directly related to entrepreneurship. Specifically, we focus our attention on the effects of empowerment on goal achievement, proactive behavior, innovation and active performance.

2.3.1 Direct relationships between psychological empowerment and entrepreneurial behaviors.

Spreitzer (2008) argued that the essence of empowerment is the interplay between the four dimensions rather than just the isolated effects of each one. A combination involving high-perceived competence, self-determination, meaning, and impact predictably has more potential to contribute to entrepreneurship. As follows, we explain the direct effects of such combination on behaviors intrinsically related to entrepreneurship.

2.3.1.1 Goal achievement

Previous work, including meta-analytical and empirical studies, provides evidence showing a significant relationship of psychological empowerment and performance (e.g., Seibert et al., 2011; Spreitzer, 1995; Spreitzer et al., 1997; Zare et al., 2015). Spreitzer (1995, 1996, 2008) argued that psychologically empowered individuals act independently in situations of risk and uncertainty, anticipate problems, and demonstrate persistence and resourcefulness when challenging conditions at work appear. Empowerment describes beliefs suggesting that the person is confident of his (her) ability to accomplish goals; it includes an inner conviction of one's ability to control one's environment, the feeling that one can perform actions that impact. Previous research shows the positive effects of competence in terms of performance at work (e.g., Ozer & Bandura, 1990; Rauch & Frese, 2007; Speier &

Frese, 1997). Impact beliefs should increase effort and persistence towards goals because individuals who perceive high impact foresee the accomplishment of their goals and exert action to achieve them. Individuals who believe themselves as having an impact get their ideas heard and can influence the system on which they interact (Ashforth, 1989), and thus are more likely to perform better than those who perceive themselves as having little impact. Spreitzer et al (1997), examined the contribution of each of the four dimensions of psychological empowerment on two independent samples including (1) managers in a manufacturing organization, (2) and employees in the service sector, and found that both competence and impact were strongly related to managerial effectiveness (i.e., performance standards, peers' comparison, overall success, and performance as a role model at work). Empowered business owners should assert empowerment managerial practices among their employees such as the distribution of power, information and knowledge (Bowen & Lawler, 1995; W. Burke, 1986), which should increase the chances to achieve entrepreneurial goals. Self-determination may also contribute to goal achievement. Individuals who are able to choose how to do their jobs are higher performers than those with little autonomy (Spreitzer et al., 1997; Thomas & Tymon, 1994). People who are more self-determined in activities like developing strategies or setting performance appraisals, are more committed and motivated to attain their goals. Meaning towards one's job should result in increased motivation to accomplish goals. Thus, individuals with high perceptions of competence, self-determination, meaning, and impact are expected to manifest psychological states, behaviors, and skills that lead them towards accomplishment of goals. Empowerment translates into psychological and behavioral manifestations such self-confidence, self-regulation, flexible thinking, active engagement with the environment, leadership and dominance (Diener & Biswas-Diener, 2005). Such manifestations should increase chances for entrepreneurial success. For example, a self-confident entrepreneur would more likely feel competent to sell his (her) products or

services to clients. Self-regulatory ability can contribute to allocate time efficiently to different tasks such idea's generation for new products or development of formal sale records and distribute efforts accordingly. Flexible thinking and active engagement can be beneficial for identifying new opportunities and persevering in the achievement of business goals. Leadership and dominance should contribute to run firms and manage employees (e.g., guiding and motivating them), and strengthen a business position in the market. In this manner, psychologically empowered individuals are more likely to succeed in the pursue of entrepreneurial goals.

2.3.1.2 Proactive behavior

Empowerment unleashes the productive potential of individuals (Samman & Santos, 2009), and links their strengths and competencies with proactive behaviors and change (Hemang et al., 2017; Perkins & Zimmerman, 1995; Rappaport, 1987). Spreitzer (2008), argued that psychologically empowered individuals impact on the environment through proactive behaviors; they perform tasks in an active way (Spreitzer, 1995), manifest energy and desire to act, and evoke actions that are not mediated by others or dependent upon direct rewards. Such individuals are thought to work in the absence of close supervision, control their own task accomplishment, manifest resiliency and motivation in the face of problems or ambiguity, and initiate new tasks as opportunities arise (Thomas & Velthouse, 1990). Proactive behaviors are important because they refer to anticipatory, change oriented, and self-initiated behaviors (Frese, 2009; Frese & Gielnik, 2014), which are fundamental to entrepreneurial behavior (Rauch & Frese, 2007; Tornau & Frese, 2013). For example, personal initiative is a proactive behavior characterized by being self-starting and future-oriented that overcomes barriers (Frese & Fay, 2001), which predicts success in entrepreneurship (Frese, 2009; Glaub et al., 2014; Krauss, Frese, Friedrich, & Unger, 2005). Empowerment facilitates proactive behavior by inducing an implemental mindset (Keltner,

Gruenfeld, & Anderson, 2003), and increasing freedom of action and decreasing avoidant behavior (Ozer & Bandura, 1990). An implemental mindset refers to readiness to move ahead looking for the means to action. Individuals who feel psychologically empowered are more likely to act freely and independently in situations of risk and uncertainty, anticipate problems, and demonstrate persistence and resourcefulness when challenging conditions (e.g., high uncertainty) appear at work (Spreitzer, 1995, 1996, 2008). Such individuals mitigate the ambiguity that come from having less direction and make sense of “weak” or uncertain situations, determining the appropriate course of action and seeking feedback about their performance (Spreitzer, 2008). Such behaviors constitute a proactive approach that should increase the chances for entrepreneurial success.

2.3.1.3 Innovation

Psychological empowerment has been consistently linked to innovation at work (e.g., Lee & Koh, 2001; Odoardi et al., 2015; Pieterse, Van Knippenberg, Schippers, & Stam, 2010; Seibert et al., 2011; Sinha et al., 2016; Spreitzer, 1995; Sun et al., 2012). Kanter (1984), in her studies on entrepreneurial organizations, already stated that empowerment and innovation are intrinsically related. Thomas and Velthouse (1990), suggested a link between empowerment and flexibility which should contribute to innovation (Georgsdottir & Getz, 2004; Spreitzer, 1995). Ultimately, the dimensions that define psychological empowerment relate to intrinsic motivation (Thomas & Velthouse, 1990), which has been linked to innovative behaviors (Redmond, Mumford, & Teach, 1993). Also, empirical research has shown the association between psychological empowerment and innovation at work (Spreitzer, 1995). In a study examining the relationship between psychological empowerment and leadership on mid-level supervisors, Spreitzer et al (1999), found that supervisors who reported higher levels of empowerment were judged as more innovative by their subordinates. In this manner, both theory and research suggest that empowerment, should

have an impact on innovation. Empowerment creates a lower resistance to change and willingness to invest in the future (Kanter, 1984), and this in turn is thought to facilitate innovation. Motivators such as meaning, self-determination, competence and impact are likely to predispose individuals to implement new ideas and suggestions for change that represent innovation at work. Psychologically empowered individuals see themselves as competent, and thus tend to expect success and be innovative at work (Amabile, 1988; Redmond et al., 1993; Spreitzer, 1995); they perceive themselves as autonomous agents who have an impact, and therefore should feel less constrained than others by rules or technical aspects at work, making them more likely to be creative and innovative (Spreitzer, 1995). Entrepreneurship is characterized by innovative behaviors (Yan & Yan, 2016). Entrepreneurship and innovation are positively related to each other and interact to help a business flourish (F. Zhao, 2005). Innovation refers to implementation of new or substantially changed products, processes, or services adapted to current or future demands. Through innovation entrepreneurs exploit opportunities for products or services (Carayannis, Samara, & Bakouros, 2015). Innovation is vital to firm's success and sustainability in today's dynamic and changing environment (F. Zhao, 2005). Thus, any factor predisposing innovation should contribute to entrepreneurial success (e.g., business creation and business performance).

2.4 Dimensions of empowerment leading to active characteristics of active performance in entrepreneurship

2.4.1 Why should the dimensions of empowerment lead to active entrepreneurship?

Action is at center of entrepreneurship (Frese, 2009). Frese and Gielnik (2014) stated that more active ways of performing actions (rather than non-active), lead to actions that are more likely to be successful in entrepreneurship. The characteristics of active performance are at the center of all phases of entrepreneurship. From here, any mechanism predisposing

active actions (as opposed to reactive) should contribute to entrepreneurship. Empowerment reflects an active orientation towards the work role and context (Spreitzer, 1995, 2008). An active orientation towards work should result in more active actions, which in turn should make entrepreneurs more likely to succeed (Frese & Gielnik, 2014). Because of the active, persistent, and change-oriented behaviors associated with psychological empowerment (Spreitzer, 1995), the dimensions of empowerment – competence, self-determination, meaning, and impact – may lead to characteristic of active performance such as active feedback seeking or active resource search. In this sense, Spreitzer (2008), already suggested that empowerment may be an important mechanism accounting for *how* and *why* proactive individuals (i.e., individuals with proactive personality) manifest more personal initiative (Frese & Fay, 2001), and proactivity (Grant & Ashford, 2008). We argue that those entrepreneurs who have a strong perception of competence, self-determination, meaning, and impact, will predictably be more active and manifest more characteristics of active performance. Empowerment may contribute helping entrepreneurs to become master of their fates, trusting their capacity to influence their business and its environment. Based on research, we explain *why* and *how* the dimensions of empowerment can predict a more active approach to entrepreneurship and facilitate success.

2.4.2 Competence

Competence can contribute to characteristics of active performance in a wide range of business outcomes such survival, development, growth, and change (Bird, 1988). Spreitzer (1995) defined competence as self-efficacy. Competence can be understood as self-efficacy because it refers to the belief that one is able to competently perform actions (Bandura, 1997; Frese, 2009). Self-efficacy is related to successful performance of diverse entrepreneurial roles and tasks (C. C. Chen, Greene, & Crick, 1998), and, thus, should predispose characteristics of active performance in entrepreneurship.

Active goal and visions. Self-efficacy relates to the capacity to take purposeful action (Narayan, 2005). Individuals who perceive themselves as self-efficacious have confidence in their ability to accomplish goals (C. C. Chen et al., 1998); they are prone for searching challenges (e.g., cover a gap in the market) (Bandura, 1997), and associate challenging situations (e.g. hard work, or competition) with rewards such profit or psychological fulfilment (Hisrich, 1990). Self-efficacy influences an individual's goals level and assertion of effort and perseverance (Rauch & Frese, 2007). Thus, individuals who see themselves as competent should be more active in regards of their goals and visions, establishing challenging and purposeful goals by themselves (instead of given by others), that are future-oriented (e.g. associated with rewards in the future), and persistent (e.g. asserting more effort and persevering when problems occur).

Active task strategy and active action planning. Self-efficacy is related to proactive and elaborated plans (Frese, 2009). The perception of competence is useful to develop plans. Competence implies that one has more control over one's actions. More control relates to more *feasibility* and *desirability* to execute action; which are prerequisites of active planning (Frese, 2009). People that feel prepared to accomplish future goals mentally simulate the action sequence to reach such goals. The more mental simulations reach into the future, the more active is the approach towards planning (Frese, 2009). Moreover, self-efficacy predicts entrepreneurial intentions and the strength of entrepreneurial actions (Bird, 1988; C. C. Chen et al., 1998; Krueger & Brazeal, 1994; McGee, Peterson, Mueller, & Sequeira, 2009; H. Zhao, Seibert, & Hills, 2005). A plan is a bridge between goals (intentions) and actions (Miller, Galanter, & Pribram, 1986). People who feel competent should have higher entrepreneurial intentions and should plan more in order to materialize those intentions into actions. Individuals who see themselves as able to competently perform actions persevere when problems arise (Bandura, 1997), anticipate the action environment and action

parameters, and thus should develop plans actively (e.g., thinking about plan B if one plan does not work), and foresee strategies to implement them.

Effectuation, experimentation, and innovation. Self-efficacy is thought to influence one's level of effort and persistence on several behaviors related to entrepreneurship such as opportunity recognition, uncertainty and risk management, and innovation (Rauch & Frese, 2007). People who are confident on their ability to perform entrepreneurial roles and tasks perceive the environment as replete with opportunities and perceive a lower cost and risk to go for such opportunities (C. C. Chen et al., 1998; H. Zhao et al., 2005). Such individuals see themselves competent to deal with the environment and anticipate outcomes of success, perceiving a low possibility of failure and a high possibility to achieve business goals (C. C. Chen et al., 1998). Thus, people with high perceptions of competence would predictably be more confident to approach entrepreneurial tasks (McGee et al., 2009), such as putting in operation new services (i.e., effectuation and experimentation), and shape the environment with their ideas (e.g., innovation).

Active social strategy for networking. The belief that one is able to competently perform actions predicts the strength of intentions and actions related to entrepreneurship (Krueger & Brazeal, 1994). People high on perceptions of competence are confident to undertake tasks and roles in the entrepreneurial environment (C. C. Chen et al., 1998). As a part of their role, entrepreneurs should pursue, nurture, and broaden social networks. People who feel competent should have higher intentions and feel more confident to perform such role, and direct more effort and be persistent (Rauch & Frese, 2007), towards tasks such as making appointments with potential clients.

Active feedback seeking and active approach to mistakes. Self-efficacious individuals perceive the environment full of opportunities and perceive low cost and risk to invest effort in such opportunities (C. C. Chen et al., 1998); they search for challenges (Bandura, 1997)

and are perseverant (Bandura, 1997; Ozer & Bandura, 1990; Rauch & Frese, 2007). Therefore, such individuals should be eager to experiment across entrepreneurial settings rather than avoid errors (or negative feedback) in such environment.

Active approach to learning. Since people who see themselves as competent to perform tasks with skill search for challenges and persevere (Bandura, 1997), perceive the environment full of opportunities (C. C. Chen et al., 1998), and associate challenging situations (e.g., learning) with rewards (e.g., enhanced performance) and fulfilment (e.g., satisfaction) (Hisrich, 1990), they should invest more effort in activities aimed to improve their current performance level (i.e., deliberate practice).

2.4.3 Self-determination

Entrepreneurship builds on the independent spirit of people to further new ventures (Lumpkin & Dess, 1996). Self-determination should contribute to characteristics of active performance in entrepreneurship.

Active goals and visions. Entrepreneurs need to act independently in order to bring forth an idea (e.g., goals) and carry it through completion (Lumpkin & Dess, 1996). Empowered individuals are self-determined and independent, they establish their own goals and act upon them (Malhotra et al., 2002; Narayan-Parker, 2002). Individuals who are self-determined and autonomous prefer to make own decisions and set their own goals (Rauch & Frese, 2007). Since empowered individuals are mostly dependent on their own will and action, they should be more active, committed, and persistent in pursuing goals such as increasing sales or implementing more efficient processes into the market.

Active task strategy and active action planning. Empowered people are self-determined, they take control over resources (Narayan, 2005), control their own task accomplishment (Thomas & Velthouse, 1990), have ample knowledge and information about

their work (Spreitzer et al., 1997), and take actions towards work goals (Spreitzer, 1996; Spreitzer et al., 1999). Such individuals are in a better position to plan and schedule work, and to identify and manage obstacles to achieve optimal job performance (Spreitzer et al., 1997). Self-determined individuals plan by self-setting their goals and allocating time and place to accomplish them. Moreover, since self-determined individuals act autonomously they tend to plan contingent strategies to overcome possible failure on plans. Also, because they can choose ways, methods and processes to carry out their work they should anticipate what resources are needed and prepare to meet future demands. Thus, they are proactive in developing plans and strategies.

Effectuation, experimentation and innovation. Self-determined individuals have the independent spirit necessary to try out ideas and further innovations into markets. Having choice in initiation and regulation of actions leads to the perception of autonomy, which enables opportunity-seeking behaviors (e.g., effectuation and experimentation), and advantage-seeking behaviors (e.g., innovation) (Ireland, Hitt, & Sirmon, 2003). Perceived choice enhances flexibility and creativity (Deci & Ryan, 1987; Thomas & Velthouse, 1990), which should also facilitate experimentation and innovation (Georgsdottir & Getz, 2004; Spreitzer, 1995; Sun et al., 2012). Also, self-determination should facilitate experimentation and innovation in entrepreneurship by giving control and direction in situations characterized by low structure, scarce resources, and ambiguous information. Self-determined individuals experiment by trying out behaviors that they consider most effective to accomplish their tasks. Such individuals are self-started deciding *what* and *how* things should be done. Autonomous people act independently in spite of constraints (Frese, 2009). Therefore, self-determined individuals show characteristics of active effectuation, experimentation, and innovation.

Active social strategy for networking. Individuals who have a sense of choice regarding their work roles tend to initiate new tasks as opportunities arise (Thomas & Velthouse, 1990). Self-determined individuals act autonomously and perceive control over the environment. Therefore, they should act upon social opportunities for networking (e.g. reaching out a potential investor or partner), and perceive more control to maintain and increment their social network.

Active feedback seeking and active approach to mistakes. Perceived choice enhances initiative, resiliency and self-regulation (Deci & Ryan, 1987; Thomas & Velthouse, 1990). Self-determined individuals should take the initiative to try out their products or services (rather than avoid exposure), be resilient persevering when such try outs do not go well, and regulate themselves controlling the negative emotions that accompany errors. Hence, they should be more inclined to experiment and look for feedback actively.

Active approach to learning. Deliberate practice (i.e., active approach to learning) “consists of individualized self-regulated and effortful activities aimed at improving one’s current performance level” (Frese, 2009). It makes sense that those individuals who are more self-determined will assert more effort and approach learning opportunities more actively.

2.4.4 Meaning

Entrepreneurs assert purposeful action toward meaningful goals. Meaning should foster characteristics of active performance in entrepreneurship.

Active goals and visions. The perception of meaning serves to mobilize efforts towards goals. Meaningful implies that something deserves specific action, effort, attention, and high regard for consideration. Entrepreneurs elaborate on goals and visions and make purposeful actions towards ideas that are meaningful. Ultimately, meaning results in increased motivation (Bass, 1985; Benis & Nanus, 1985). The sense of meaning is what

energize and aligns behavior and expectations to the task at hand (Spreitzer et al., 1997). Such motivation should urge entrepreneurs to actively set goals, and maintain effort to carry them out.

Effectuation, experimentation and innovation. High levels of meaning are expected to result in high involvement and concentration of energy (Kanter, 1984; Spreitzer, 1995; Thomas & Velthouse, 1990). People who perceive an alignment between their ideas, and their values and beliefs, should be prone to take the risk to implement them (i.e., innovation), and sell them (i.e., experiment). Entrepreneurs that have a strong sense of meaning for what they do, should be actively involved in their businesses, investing more time in activities such exploring new ways to enhance their products or services, and concentrating more psychic and physical energy in discovering opportunities and implementing business ideas to exploit such opportunities.

Active social strategy for networking. Entrepreneurs who perceive their tasks, services or products as meaningful would predictably believe their business ideas are good enough to introduce them in social environments. Such perceptions should also encourage entrepreneurs to seek ways to distribute or increase the impact of their ideas. For example, by acknowledging the value (or meaning) of their products or services, entrepreneurs can feel more confident to actively approach potential investors or clients (instead of waiting for them to come), and to “bootstrap” their existing contacts to expand their network.

Active feedback seeking and active approach to mistakes. Feedback allows or detracts the sense of fulfillment in respect of one’s desired behavior and expectations at work. People that have high perceptions of meaning should constantly seek for feedback in order to maintain them; they should test whether the actions they perform keep fulfilling their desired work behaviors, beliefs, and values or not.

Active approach to learning. Meaning fosters a sense of identification and involvement at work (Seibert et al., 2011). Individuals who perceive their tasks and work roles as meaningful are likely to be more invested in their work (Spreitzer et al., 1997). Meaning can fuel motivation, increase willingness to work long hours, and enable persistence in the face of obstacles. Individuals tend to be actively involved and invest more time into activities that are meaningful to them. Thus, meaning should facilitate an active approach towards learning, increasing efforts towards improvement of one's performance level (i.e., deliberate practice).

2.4.5 Impact

People that see themselves having impact feel able to determine the environment and obtain desirable outcomes through their actions. Impact should facilitate characteristics of active performance in entrepreneurship.

Active task strategy and active action planning. Impact relates to perceived feasibility, which is prerequisite for active planning (Frese, 2009). It makes sense to be more proactive in planning if one feels more control over one's fate (Frese, 2009). Contrarily, it does not make sense to plan for things that one does not perceive as attainable. Impactful individuals do not just randomly try anything, but execute purposeful and goal oriented actions. Such individuals deliberately plan thinking about potential scenarios, anticipating action parameters and the action environment (e.g., evaluating potential risks), preparing to meet future demands (e.g., detecting signals indicating future difficulties and opportunities), and developing reasonable hypothesis regarding the effect of their actions.

Effectuation, experimentation and innovation. The perception of the ability to affect results is crucial to entrepreneurship (S. L. Mueller & Thomas, 2001), because the propensity to act upon an opportunity (e.g., experiment or innovate) depends on one's perception of control over the environment (Shapero, 1975). Individuals that are high on impact believe

they have an influence over outcomes through ability, effort, and skills. Such beliefs should increase attempts directed toward the accomplishment of goals. Impactful individuals should tend to be innovative because they feel able to shape their environment (Spreitzer, 2008), can affect strategic and operating outcomes related to their work (Spreitzer et al., 1997), and anticipate success.

Active social strategy for networking. Since impactful individuals see themselves as able to determine the outcomes on the environment, they should feel capable to manipulate the social environment in their interest. They should feel secure to approach new people and expand their social networks.

2.5 Direction of influence between empowerment and entrepreneurship

The directionality of empowerment relationships is not yet clear enough (Boudrias et al., 2014; Seibert et al., 2011; Spreitzer, 2008). The relationship between empowerment and entrepreneurship may not be unidirectional. Over time, entrepreneurship can also affect individuals' perception of empowerment. Entrepreneurship provides autonomy, independence, and a feeling of being in control of one's life (Andersson, 2008; Benz & Frey, 2004; Blanchflower, 2004). Blanchflower (2004), on his review of self-employment data from 70 countries, found that entrepreneurs were more likely to report "control over their lives" than people who were employed. Business activities often relate to the capacity to exercise autonomous action and purposeful behavior, which constitute empowerment manifestations (e.g., Datta & Gailey, 2012; Torri & Martinez, 2014; Wolf, Albinsson, & Becker, 2015). People with businesses often define self-interests and assert choice, and consider themselves competent enough to have an impact on meaningful goals to them. Also, the experience of success can generate feelings of empowerment (Diener & Biswas-Diener, 2005). Entrepreneurial success may lead to empowerment by heightening positive emotions

and attitudes such as fulfillment or satisfaction. Previous findings support this reasoning showing that entrepreneurs are more likely to report higher satisfaction with their lives in comparison to employed people (Blanchflower, 2004). Research suggests that positive emotions lead to attitudinal and behavioral characteristics manifesting empowerment such feelings of self-confidence, energy, engaged activity, and creativity (Diener & Biswas-Diener, 2005). Entrepreneurship may as well increase perceptions of competence, self-determination, meaning, and impact, because such dimensions endure with the work context (Bandura, 1997; Lee & Koh, 2001; Spreitzer, 1995). For example, bringing forth new business ideas and earning a living independently may lead to perceptions of self-determination and meaningfulness. Mutual reinforcement between empowerment and entrepreneurship can thus occur. Empowerment and entrepreneurship may interact in a reinforcing loop towards active performance (e.g., personal initiative behavior) and change. We mentioned that entrepreneurial success might lead to perceptions of competence, self-determination, meaning, and impact. Such perceptions may then be drawn upon to enable more active and innovative actions. Psychological empowerment and entrepreneurship are both constructs that describe active “bottom-up” processes towards changes in work settings. Therefore, it is possible to think that empowerment and entrepreneurship are complementary and reciprocally influence to each other. However, complementarity and reciprocity does not imply that both occur simultaneously, nor that they have equal effects, impact or strength. Further research should attempt to clarify the directionality and dynamics of the relationship between empowerment and entrepreneurship (e.g., Boudrias et al., 2014).

2.6 The role of empowerment in promoting entrepreneurial success.

As it has been pointed out, there is empirical evidence showing that the different components of empowerment are significant antecedents of the main characteristics of active

performance (see figure 2.3). Moreover, there is empirical evidence suggesting that both empowerment and active performance enhance entrepreneurial behavioral outcomes (goal achievement, proactive behavior and innovation) and then entrepreneurial success. Based on our previous review, it may be hypothesized that empowerment will display two avenues of influence on entrepreneurial behavioral outcomes. One avenue depicts a direct influence of empowerment on behavioral outcomes, while the other suggests the influence on these behavioral outcomes through the characteristics of active performance. As Frese (2009) pointed out, the characteristics of active performance are also significant antecedents of behavioral outcomes that, in turn contribute, to entrepreneurial success. Thus, according to our proposed model empowerment plays a significant role to promote relevant behavioral outcomes. Based on the theoretical models reviewed and the empirical evidence already existing we emphasize in our model the role of empowerment, and its core dimensions, as a significant antecedent of behaviors leading to entrepreneurial success. Moreover, in this process, active performance may in turn strengthen empowerment promoting a positive spiral that will increase the probabilities of entrepreneurial success. According to this model, empowerment can be an effective way to promote entrepreneurial behaviors and outcomes.

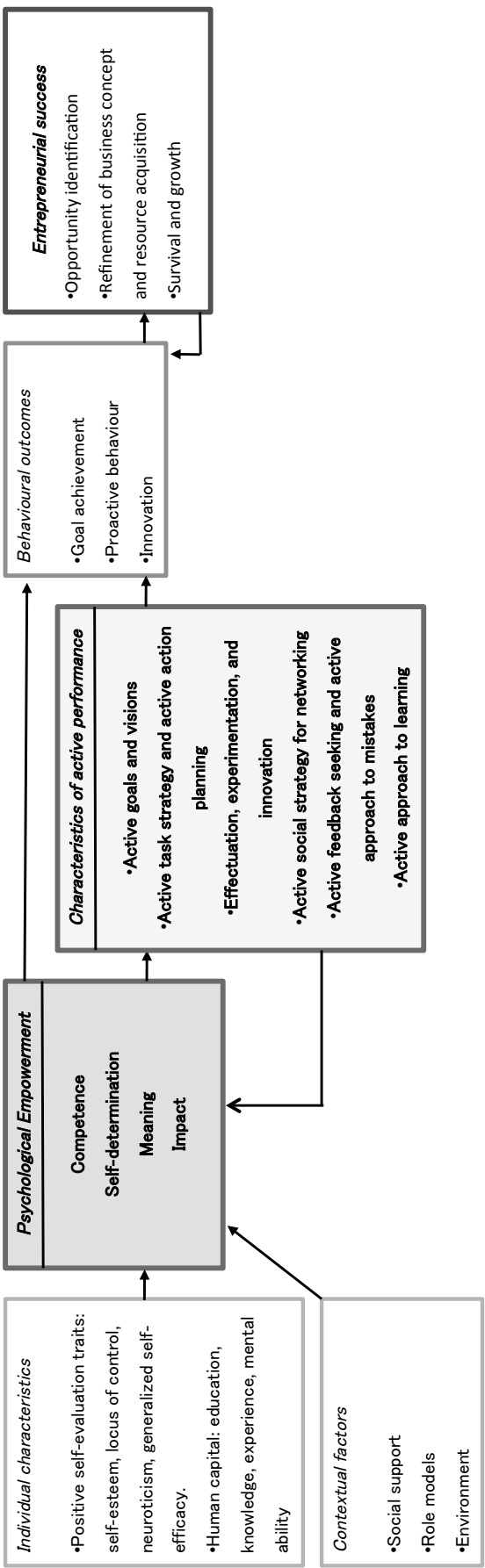


Figure 2.3. Empowerment in Entrepreneurship

2.7 Empowerment as a way to promote entrepreneurship

Both socio-structural and psychological approaches to empowerment have focused primary attention on contextual factors as facilitators of empowerment (Anna-Maija, 2015; Seibert et al., 2011; Spreitzer, 1996, 2008). Based on research, we integrate contextual elements and suggest interventions that have potential to facilitate and promote empowerment and entrepreneurship.

2.7.1 Empowering through mentoring

Transformational leaders (those who show consideration and inspire) generate more empowerment perceptions among their followers (Avolio, Zhu, Koh, & Bhatia, 2004; Spreitzer, 2008). Extensive research provides consistent results in regards of the relationship between transformational leadership and empowerment (e.g., Avolio et al., 2004; Fuller, Morrison, Jones, Bridger, & Brown, 1999; Kark, Shamir, & Chen, 2003). Mentors, as leaders, are usually experienced persons who train and counsel people into new work roles. Mentors who show consideration and inspire should also increase empowerment perceptions. Mentoring programs based on a trusting-supportive relationship (e.g., El Hallam & St-Jean, 2016) can serve to enhance empowerment perceptions and in turn contribute to an active approach towards entrepreneurship. Based on the psychological empowerment theory (Seibert et al., 2011; Spreitzer, 1995; Sun et al., 2012), mentors who encourage prospect entrepreneurs to set own goals and self-manage their tasks, who coach and inform, and who create practices that support empowerment (e.g., a supportive peer relationship) contribute to facilitate an active orientation towards work (i.e., psychological empowerment). Experienced entrepreneurs may help prospect entrepreneurs providing strategic information on how to get funding, giving feedback and guidance regarding goals, and serve to validate innovative

ideas. Altogether, such elements should contribute to increase empowerment and, thus, predispose active action characteristics of entrepreneurship.

2.7.2 Empowerment in entrepreneurship training

Entrepreneurship trainings encourage people to participate in the market by creating new businesses or improving existing ones. Such trainings provide basics skills and knowledge to succeed in entrepreneurship differing in content, length, and target groups (Bischoff et al., 2014). However, the results of entrepreneurship trainings are spurious. Even though some entrepreneurship trainings have proved to be effective (e.g., Gielnik, Frese, et al., 2015; Glaub et al., 2014), the overall conclusiveness of their effectiveness cannot be totally asserted (Glaub & Frese, 2011; McKenzie & Woodruff, 2013). Regardless of the current effectiveness of such programs, we posit that such trainings can be improved by introducing the socio-structural elements of empowerment that produce an active orientation towards work. In other words, without the elements that facilitate empowerment such programs would predictably fail in encouraging relevant components that facilitate an active approach to entrepreneurship (i.e., competence, self-determination, meaning, and impact), and therefore have lesser impact. Research shows positive results in the relationship between the different elements of socio-structural empowerment (e.g., social support) and the psychological experience of empowerment (Neal, 2014; Seibert et al., 2004; Seibert et al., 2011). According to the Job Characteristics theory (Hackman & Oldham, 1980), and the psychological empowerment theory (Spreitzer, 1995, 2008), a work environment design including elements such as extensive use of training, open information sharing, decentralization, participative decision-making, and contingent compensation serves to empower individuals. Previous research supports this hypothesis suggesting that the use of such practices does influence individual levels of psychological empowerment (Ai Noi & Youyan, 2017) and generate consequent outcomes such increased task performance (e.g.,

Avolio et al., 2004; Seibert et al., 2004; Seibert et al., 2011; Spreitzer, 2008). In order to increase effectiveness, entrepreneurship trainings should include a participative work climate, promote wider control span (e.g., ownership and economic independence), establish performance-based feedback (e.g., assigning tasks, setting goals, or developing business plans), and offer contingent compensation at completion of the course (e.g., access to resources such computers or consultancy). In any case, such strategies should accompany training on specific entrepreneurial skills that evoke perceptions of psychological empowerment. For example, modules that include development of goals that are self-set, in relation to the participants' businesses (or ideas), should contribute to generate a sense of competence, self-determination, meaning, and impact. After the training, such programs should also provide access to further information (e.g., websites), foster inclusion and participation in the market (e.g., giving microcredits to high potential entrepreneurs), and strengthen social accountability and build organizational capacity (e.g. fomenting meetings or mentoring between participants), to facilitate active engagement in entrepreneurship.

2.8 Further research

Further research should test the assumptions and relations between variables discussed along this chapter. A logical step to follow would be the generation of sound measurement instruments specifying indicators of competence, self-determination, meaning, and impact in entrepreneurship. The development of such instruments needs to take into account the distinctive features of empowerment in entrepreneurship (e.g., creating task-related indicators), their relational foundations (e.g., indicating predictive validity), and assure comparability across different settings and samples (e.g., testing hypotheses on entrepreneurs from different industries). Such measures should be suitable to assert direct impact and ideally identify changes over time. Establishing a nomological network

identifying antecedents and outcomes of empowerment in entrepreneurship can be useful for this purpose. Further research should also explore greater integration (or differentiation) between psychological empowerment theory and theories of proactive behavior in entrepreneurship. The strength of the theoretical relationships between psychological empowerment and various entrepreneurial attitudes and behaviors compares favorably with some of the most robust theories in the field of entrepreneurship (e.g., personal initiative theory, Frese & Fay, 2001). A number of interesting questions arise. For example, does empowerment explain why or how some people manifest more personal initiative in entrepreneurship? Does empowerment mediate the relationship between personal initiative and entrepreneurial performance? Answer to such kind of questions would help to integrate similar theories of proactivity, and might extend and clarify the range of processes and outcomes to which different theories apply. Last, efforts aiming to clarify the directionality of the relationship between empowerment and entrepreneurship may entail a fertile direction for research. To date, we do not know much about the directionality of the relationship between both constructs. Although theory and research suggest mutual interaction between empowerment and entrepreneurship, longitudinal studies and dynamic analyses of their relationships are still needed to clarify issues regarding directionality and reciprocal effects.

2.9 Conclusion

This chapter links the components of psychological empowerment to characteristics of active performance in entrepreneurship. Based on the active, persistent, and change-oriented behaviors associated with psychological empowerment, we argued that empowerment might contribute to entrepreneurship. We took initial steps in drawing the rationale and identifying empirical evidence about the relationship between empowerment

and entrepreneurial behavior. We hope such steps encourage further development of theory and research that advances groundwork of empowerment in entrepreneurship.

3 Entrepreneurial Empowerment: Measurement and Validation

Abstract

Empowerment enables people to take action and be innovative. A growing body of research shows the positive effects of empowerment on entrepreneurship-related behaviors and outcomes such as proactivity and innovation. Despite the accumulating evidence on the positive effects of empowerment, research has omitted the link between empowerment and entrepreneurship. The present study aims to develop and validate a multidimensional measure of entrepreneurial empowerment. Convergent and discriminant validity of the construct of entrepreneurial empowerment was established via exploratory and confirmatory factor analyses with a total of 359 women business owners. Correlation analyses were used to assess the nomological network of entrepreneurial empowerment, its antecedents and consequences. Results provide initial support for the construct validity of entrepreneurial empowerment. Implications and directions for further research are discussed.

Keywords: empowerment, entrepreneurship, proactive behavior.

3.1 Introduction

The purpose of the present study is to formulate a new concept and a multidimensional measure of entrepreneurial empowerment. Empowerment comes at a time when global competition and change demand entrepreneurs to take initiative and be innovative (Henao-Zapata & Peiró, 2017). Empowerment appears to be decisive in situations where people need to work independently, where perseverance and hope is necessary, and in contexts where people need to be more proactive in making sense of situations and determining the appropriate course of action. Empowerment can become a key driver of entrepreneurial action (Henao-Zapata & Peiró, 2017). Empowerment leads individuals to act independently in situations of risk and uncertainty, anticipate problems, and demonstrate persistence and resourcefulness (Spreitzer, 1995, 1996, 2008); it can foster self-regulation in completing own tasks, contribute to take action as opportunities arise, and maintain motivation towards goals (Thomas & Velthouse, 1990). Empowerment predisposes people to attain success by making them feel confident of their abilities (Diener & Biswas-Diener, 2005; Spreitzer et al., 1997), manifest energy and desire to act (Spreitzer, 1995), and setting-up an implemental mindset that makes people look for the means to action and be ready to move ahead toward their goals (Keltner et al., 2003). The potential outcomes of empowerment such as task performance (Seibert et al., 2011; Zare et al., 2015), proactive behavior (e.g., Spreitzer, 1995), and innovation (e.g., Odoardi et al., 2015; Sinha et al., 2016), suggest that empowerment theory is relevant to entrepreneurship research.

To the best of our knowledge, there is no coherent measure of empowerment in the field of entrepreneurship. This article is supposed to develop the construct of entrepreneurial empowerment and its measurement. We argue that empowerment should be focused on a specific context and activity domain. Empowerment for specific tasks and goals depends on a person's resources and skills in a specific area (Diener & Biswas-Diener, 2005). The more

task-specific one can make the measurement of empowerment, the better its predictive role to enhance outcomes such as entrepreneurship, profitability, and economic development.

Our study seeks to contribute to hitherto empirically unexplored aspects of empowerment in entrepreneurship. We specify the nature of entrepreneurial empowerment and its dimensions and untangle the relationships between entrepreneurial empowerment and other psychological and performance components in entrepreneurship. We develop an instrument that will enable rigorous research (i.e., consistency and comparability) on the motivational underpinnings of entrepreneurial empowerment in the future.

3.2 The concept of entrepreneurial empowerment

Because of the active, persistent, and change-oriented behaviors associated with empowerment (e.g., Spreitzer, 1995), we argue that empowerment can contribute positively to entrepreneurship. We refer to entrepreneurship as discovery and exploitation of opportunities (Shane & Venkataraman, 2000). Although we focus on empowerment applied to entrepreneurship (Henao-Zapata & Peiró, 2017), we integrate elements of empowerment from the existing literature (see Appendix I). We take special consideration of the contributions made by Thomas and Velthouse (1990), Spreitzer (1995), and Kabeer (1999).

Entrepreneurial empowerment is composed of a set of behavioral orientations manifesting entrepreneurial self-efficacy, entrepreneurial autonomy, and entrepreneurial significance towards business. Behavioral orientations refer to tendencies to act. Entrepreneurial self-efficacy is synonymous with agency beliefs (Kabeer, 1999), towards one's business; it relates to competence and the ability to negotiate and manage one's business venture.

Entrepreneurial autonomy represents the degree of freedom and independence in one's business. Entrepreneurial autonomy includes choice (Thomas & Velthouse, 1990); it

measures whether a person's behavior is perceived as self-determined or not, the freedom to initiate or regulate own actions. However, entrepreneurial autonomy adds the sense of having choice about methods, pace, and processes, and the perceived capacity to influence strategic, operating, or administrative outcomes in the business. To certain extent, entrepreneurial autonomy also encompasses the degree to which one's behavior is seen as having a causal effect – the perceived capability to attain desirable outcomes related to one's business (e.g., quality of service). In this manner entrepreneurial autonomy is similar to impact (Thomas & Velthouse, 1990), including perceptions of behavioral control (Krueger & Brazeal, 1994), and consequences in the environment.

Entrepreneurial significance is an individual assessment of the importance of one's business activities, work, and products and services. This dimension reflects perception of qualities of the business that motivate entrepreneurial action. This dimension is analogous to meaning (Spreitzer, 1995), in that it involves fit between one's expectations, values and behaviors and tasks requirements (Hackman & Oldham, 1976; Spreitzer, 1995). However, entrepreneurial significance is specific to one's business activities, clients, products and/or services.

3.3 Assumptions of entrepreneurial empowerment

There are four general assumptions about the definition of entrepreneurial empowerment. First, as most empowerment conceptualizations, entrepreneurial empowerment embraces freedom of choice and action (Narayan-Parker, 2002). Thus, the three dimensions of entrepreneurial empowerment primarily manifest intrinsic motivation (i.e., behaviors intrinsically rewarding) and autonomous action. Entrepreneurial empowerment requires individuals themselves to be the ones taking initiative to attain desired outcomes related to entrepreneurship; it captures individuals' capacities to act as agents,

making own decisions, acting upon their goals to influence their business and its environment.

Second, entrepreneurial empowerment, as any other kind of empowerment, involves a process (Kabeer, 2001; Malhotra, 2003; Rowlands, 1995). The process refers to a change (or evolution), from a reactive state to a proactive one through which people are capable to bring about improvement in their businesses. Reactive state is when the person only reacts on external demands (Frese, Kring, Soose, & Zempel, 1996). Disempowerment is seen as the inability to take action for oneself (Ibrahim & Alkire, 2007), and it demonstrates a reactive state. On the contrary, proactive state means that the person manifest anticipatory, change-oriented, and self-initiated actions (i.e., proactive behaviors) (Frese et al., 1997). The transition from a reactive (i.e., disempowerment) to a proactive state (i.e., empowerment) requires a deep acknowledgement of one's abilities (e.g., perceptions of efficacy), and autonomy to define goals (e.g., control over resources) and execute action upon them (e.g., formulation of strategic choices to attain business outcomes). The process of entrepreneurial empowerment implies rising credibility in respect of one's entrepreneurial behavior. Such credibility requires (a) desirability – perception of intrinsic and extrinsic outcomes as rewarding (i.e., significance), (b) feasibility – perceptions of behavioral control (i.e., self-efficacy), and (c) propensity to act (i.e., autonomy), which ultimately should boost one's energy, courage, and dedication to discover and exploit opportunities.

Third, the three dimensions of entrepreneurial empowerment can be considered additive and continuous. Empowerment is a latent construct (Alkire, 2005; Narayan, 2005). Additive means that the three dimensions are positively related with each other and reflect the overall underlying phenomenon of empowerment. Continuous means that between individuals may be differences in the level (or intensity) of empowerment rather than empowered or not empowered individuals (e.g., Spreitzer, 1995). Therefore, the three

dimensions specify different combinations of the three behavioral orientations explaining entrepreneurial empowerment.

Fourth, the dimensions of entrepreneurial empowerment are conceived as malleable orientations rather than stable predispositions towards entrepreneurship. Empowered individuals do not primarily act according to personality predispositions but rather based on behavioral motivations that rise from the interaction with the business environment. The entrepreneur's context together with his or her individual own orientations facilitate (or detriment) the strength of entrepreneurial empowerment dimensions.

As follows, we portray the nomological network for the construct of entrepreneurial empowerment, its antecedents and consequences, and formulate our hypotheses accordingly.

3.4 Nomological Network of entrepreneurial empowerment

The scheme of components concerning entrepreneurial empowerment serves to clarify its relation with other constructs in entrepreneurship and empowerment research. Figure 3.1 depicts an initial nomological network of entrepreneurial empowerment. The figure presented below accounts for the first steps in hypothesizing the relationship between antecedents and consequences related to entrepreneurial empowerment.

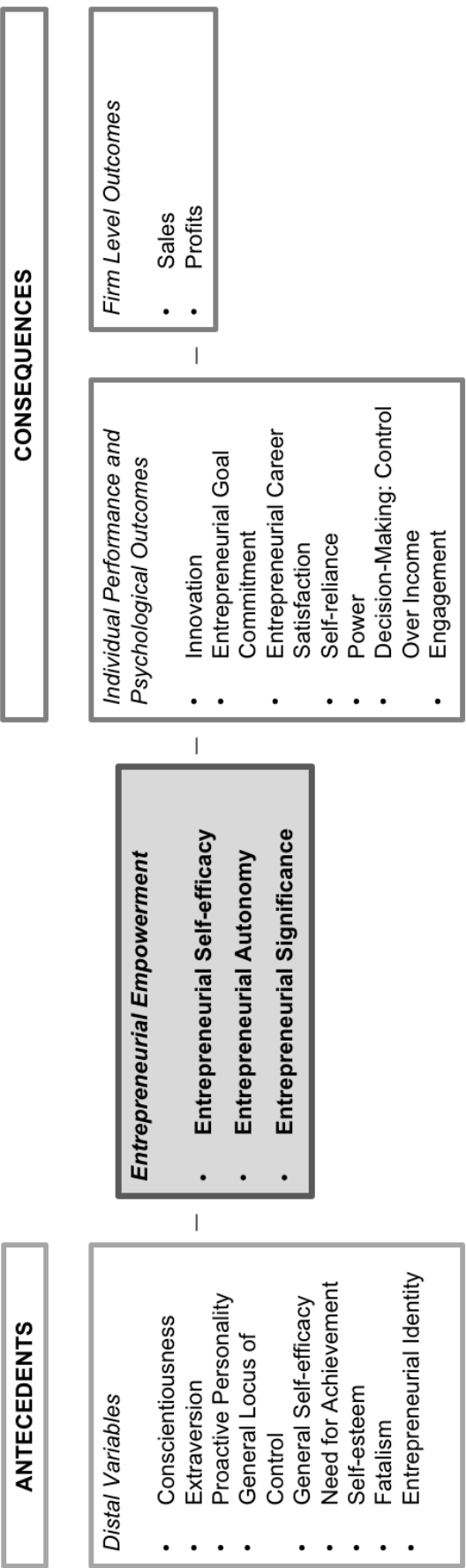


Figure 3.1. Nomological Network of Entrepreneurial Empowerment

Construct validation requires (1) specification of the domain under examination, (2) empirical determination of the extent of the construct, (3) and a connection with results that are predictable from theory (Hinkin, 1998). We have previously addressed the domain of entrepreneurial empowerment (i.e., entrepreneurship). In the present section, we focus on the empirical determination of the extent of the construct, and the connection with results that are predictable from theory. This will help us to assure that our scales possess content validity and internal consistency. Thus, each part of the process described below will contribute to increasing confidence in the construct validity of the measure of entrepreneurial empowerment.

The three dimensions of entrepreneurial empowerment should be related to reflect the latent construct. However, related does not imply equivalent to each other. In other words, the scales for each dimension should be reasonably independent (Hinkin, 1998). Also, the three independent dimensions of entrepreneurial empowerment should contribute to an overall meaning. Hypothesis 1a: there are three distinct dimensions of entrepreneurial empowerment. Hypothesis 1b: each dimension contributes to the overall construct of entrepreneurial empowerment.

As follows we develop a theoretical model for entrepreneurial empowerment. First, we present the distal antecedents of the construct. Second, we describe the outcomes (or consequences) of the aforementioned.

3.4.1 Antecedents of Entrepreneurial Empowerment

3.4.1.1 Distal Variables

Distal antecedents refer to personality factors and cognitive schemas (i.e., mental structures of preconceived ideas). Personality factors such as conscientiousness, extraversion, and proactive personality are pointed as antecedents of proactive behavior (Tornau & Frese,

2013). As mentioned before, we assume entrepreneurial empowerment manifests a proactive state. We hypothesize conscientiousness, extraversion, and proactive personality to be antecedents of entrepreneurial empowerment because such factors influence the way individuals see themselves in the entrepreneurial environment.

Conscientiousness and Extraversion. Conscientiousness and extraversion have been commonly linked with proactivity and entrepreneurship (Tornau & Frese, 2013). Individuals high in conscientiousness are ready to act, being responsible, planful and persistent. Such personality trait also relates to an individual's level of hard work and motivation in the achievement of goals, and perceived personal control over outcomes (Costa & McCrae, 1992), which should be related to empowerment. Extraverts are prone to be active, energetic, and enthusiastic (Costa & McCrae, 1992). Individuals high in extraversion are usually outgoing, cheerful, and dominant in social interactions, they take the lead in influencing people and the environment. Empowerment demands people to be active (i.e., self-started) agents of change (Ibrahim & Alkire, 2007; Kabeer, 2001). Because of the activeness, readiness, and persistence associated with conscientiousness and extraversion, we expect such variables to be positively related to entrepreneurial empowerment. Hypothesis 2a: conscientiousness is positively related to entrepreneurial empowerment. Hypothesis 2b: extraversion is positively related to entrepreneurial empowerment.

Proactive Personality. Proactive personality should have a relationship with entrepreneurial empowerment, because it refers to a tendency to initiate and maintain actions that directly alter the proximal environment (Bateman & Crant, 1993; Frese, 2009). Therefore, proactive personality should lead to empowerment manifestations. Similar to empowered individuals, people with proactive personality identify opportunities and act upon them; they show initiative, take action, and persist until they bring about meaningful change (Crant, 1996). Individuals with proactive personality should be confident about their self-

efficacy and autonomy to influence their business and its environment. Hypothesis 2c: proactive personality is positively related to entrepreneurial empowerment.

General Locus of Control. Locus of control refers to generalized expectancies for internal versus external control of reinforcements (Rotter, 1966). Similar to empowered individuals, people with high internal locus of control believe that they, rather than external forces, determine what happens in their lives (Rotter, 1966). Such individuals are more likely to feel capable of shaping their work and its environment, seeing themselves as causal agents, and hence to feel empowered (Spreitzer, 1995). They perceive themselves as active agents being masters of their fate and trust their own capability to influence their business and its environment (Boone, Brabander, & Witteloostuijn, 1996). In contrast, people characterized by a external locus of control believe that events in their lives are due to external forces, feeling that things they aim to achieve are dependent on faith, luck, chance, or other people (Boone et al., 1996). Hypothesis 2d: internal locus of control is positively related to entrepreneurial empowerment.

Generalized Self-Efficacy. Self-efficacy manifests individual expectancies to perform actions effectively (G. Chen, Gully, & Eden, 2001), and constitutes a central component of empowerment (Bandura, 1989; Grabe, 2012; Ibrahim & Alkire, 2007; Malhotra, 2003; Torri & Martinez, 2014). Similar to empowered individuals, people with high self-efficacy have a stronger sense of control and responsibility and are persistent when problems arise; they have stronger beliefs to mobilize the motivation, cognitive resources, and courses of action needed to meet situational demands. Such individuals feel more competent to deal with the entrepreneurial reality, anticipating different outcomes, believing in their ability to influence the achievement of business goals, associating challenging situations with rewards, perceiving a low possibility of failure (C. C. Chen et al., 1998), and searching for information

in an active way (Rauch & Frese, 2007). Hypothesis 2e: generalized self-efficacy is positively related with entrepreneurial empowerment.

Need for Achievement. Need for achievement is a person's motive to accomplish difficult tasks and be successful (McClelland, 1967). The qualities related with high need for achievement such as preference for challenge, personal responsibility for outcomes, and innovation (McClelland, 1987; S. L. Mueller & Thomas, 2001), suggest a theoretical link with empowerment. Similar to empowered individuals, people with high achievement motive tend to increase their aspiration level (Tornau & Frese, 2013), choosing tasks of moderate difficulty, and search for feedback on action's results. Hypothesis 2f: need for achievement is positively related to entrepreneurial empowerment.

Self-Esteem. Self-esteem refers to a general feeling of self-worth (Brockner, 1988; Spreitzer, 1995). Self-esteem is different of self-efficacy in that the former is the regard that a person has for oneself whereas the later relates to a person's belief in their ability to accomplish some specific goal or task. For example, a person may not know about entrepreneurship and may have a low self-efficacy for it, however this will not result in a low self-esteem if that person does not think of entrepreneurship being important in their life. Self-esteem has been previously posited to be related to empowerment (Spreitzer, 1995). Self-esteem is an encouraging factor of empowerment that influence a set of core values (e.g., self-confidence) that lead to changes such as expressing opinions, learning, analyzing and acting, organizing own time, and obtaining and controlling resources (Mosedale, 2005; Rowlands, 1997). In the realm of entrepreneurship, self-esteem should also play an important role since it encompasses beliefs of efficacy and significance, and emotional states such as triumph and shame. Hypothesis 2g: self-esteem is positively related to entrepreneurial empowerment.

Fatalism. Fatalism refers to a cognitive schema characterized by passive and submissive acceptance of an irremediable destiny governed by some natural force or god (Blanco & Díaz, 2007; Martín-Baró, Abarca, & Chomsky, 1998; Shen, Condit, & Wright, 2009). Individuals manifest fatalism with uncertainty, uncontrollability, passivity, lack of self-confidence, and conformity (Blanco & Díaz, 2007). Fatalism is opposed to beliefs of control (Martín-Baró, 2006). Individuals who manifest fatalism tend to associate outcomes of their own actions with luck or fate (Pick & Sirkin, 2010). Contrary to fatalism, empowered individuals perceive control and power to assert impact over the environment, being aware of their ability to complete tasks and achieve goals successfully. Thus, fatalism is considered an inhibiting factor of empowerment (Mosedale, 2005; Rowlands, 1997), and can be expected to be detrimental for entrepreneurship since it primarily represents a negative passive state. Hypothesis 2h: fatalism is negatively related to entrepreneurial empowerment.

Entrepreneurial Identity. Entrepreneurial identity refers to cognitive schemas of interpretations and behavioral prescriptions that allow individuals to understand what being an entrepreneur means (Hoang & Gimeno, 2010; Murnieks, Mosakowski, & Cardon, 2014; Shepherd & Haynie, 2009). Self-identity is important because it contributes to intention formation (Hagger & Chatzisarantis, 2006; Terry, Hogg, & White, 1999), and ultimately to action. People tend to display behaviors that help them to validate their self-identity (P. J. Burke & Reitzes, 1981). Entrepreneurial identities are likely to be composed of meanings and actions related to entrepreneurship (Shane & Venkataraman, 2000), such as the ability to negotiate and manage one's business and being able to influence strategic, operating or administrative outcomes. Hypothesis 2i: entrepreneurial identity is positively related to entrepreneurial empowerment.

3.4.2 Outcomes of Entrepreneurial Empowerment

3.4.2.1 Individual Performance and psychological outcomes

We examine performance and psychological outcomes of entrepreneurial empowerment in order to determine the extent to which our measure produces results that are predictable from theoretical hypothesis. We focus on innovation, goal commitment, career satisfaction, self-reliance, power, decision-making, and engagement as potential outcomes of entrepreneurial empowerment.

Innovation. Innovation refers to generation and implementation of new ideas (Tornau & Frese, 2013; West, 2002); it implies application of better solutions that meet new requirements, unarticulated needs, or existing market demands (Maranville, 1992). In the context of entrepreneurship, innovation is of particular interest because it relates to the process of turning an invention into a marketable product (S. L. Mueller & Thomas, 2001), often involving creation of something original and/or more effective that breaks into the market. Thus, innovation is an important tool for entrepreneurs, since it helps to exploit opportunities (Glaub et al., 2014; Krauss et al., 2005; Rauch & Frese, 2007), and attain success (Frese, 2009; Rooks, Sserwanga, & Frese, 2016). Empowered individuals change their environment through proactive behaviors (Spreitzer, 1995; Thomas & Velthouse, 1990). Proactive behaviors have been strongly linked to innovation (Tornau & Frese, 2013). Previous research has shown the link between empowerment and innovation (Kanter, 1984; Pieterse et al., 2010; Seibert et al., 2011; Sinha et al., 2016; Spreitzer, 1995). Empowered individuals see themselves as efficacious, and thus tend to expect success; they perceive themselves as autonomous agents who have an impact, and therefore should feel more encouraged than others to be creative and innovative. Hypothesis 3a: entrepreneurial empowerment is positively related to innovation.

Entrepreneurial Goal Commitment. Entrepreneurial goal commitment means being psychologically bond to work on entrepreneurial goals. People high on goal commitment take goals seriously, seeing them as realistic, feasible, and important for themselves (Hollenbeck, Klein, O'Leary, & Wright, 1989). Past research has shown a link between empowerment and commitment (Avolio et al., 2004; Spreitzer, 1995; Thomas & Velthouse, 1990). Empowerment is expected to affect commitment through significance. Significance represents the given importance to one's business activities, work, and products and services; it shows the qualities of one's business that motivate oneself to pursue entrepreneurial goals. Significance is particularly important to generate commitment because it represents the "fit" assessment between entrepreneurial demands (i.e., work and activities), and the values and expectations that individuals have regarding their business (e.g., products, services, and clients). When there is a positive fit, individuals should exert tacit effort and display commitment towards their goals. Also, feelings of efficacy and autonomy should allow individuals to express better their values and interests through their business. Moreover, having a business should be seen as something valuable and difficult to achieve, those individuals who see their businesses as significant are expected to exert effort and show interest in terms of commitment (e.g., intentions to maintain or grow their business). Hypothesis 3b: entrepreneurial empowerment is positively related to entrepreneurial goal commitment.

Career satisfaction. Career satisfaction is an internal evaluation of one's professional outcome (Greenhaus, Parasuraman, & Wormley, 1990). Career satisfaction occurs when one's occupational needs are fulfilled at work. Career satisfaction is important since it can reinforce productive behavior (e.g., work longer). Empowerment has been identified as a factor leading to satisfaction (e.g., Liden, Wayne, & Sparrowe, 2000; Seibert et al., 2004; Seibert et al., 2011; Spreitzer et al., 1997). Empowered individuals feel better about their jobs

and themselves (Hechanova, Regina, Alampay, & Franco, 2006); they tend to experience more intrinsic need for fulfilment through work, and hence report increased levels of satisfaction. The experience of significance and autonomy in one's business should fulfill important needs for growth that generate satisfaction with entrepreneurial tasks and roles. The degree to which one can do one's work from beginning to end, the degree to which individuals have control and discretion regarding the way they carry out their jobs, and the degree to which one's work is seen as important and significant, are central characteristics leading to job satisfaction (Hackman & Oldham, 1976). Hypothesis 3c: entrepreneurial empowerment is positively related to career satisfaction.

Self-reliance. Self-reliance means absence of excessive need for social validation, having a sense of personal control, and showing initiative (Greenberger, Josselson, Knerr, & Knerr, 1975). Self-reliance is important as a personal and as an instrumental value because it implies that one is in charge. Empowerment has been previously related to self-reliance (Jejeebhoy & Sathar, 2001; Kabeer, 2005). Empowered people ensure control being capable to influence their business and its environment. Empowered individuals feel efficacious and autonomous, and do not depend on other's approval to act. They act freely initiating and regulating their own actions, taking responsibility and perceiving their behavior as self-determined, and hence should tend to make own decisions instead of following others. Hypothesis 3d: entrepreneurial empowerment is positively related to self-reliance.

Power. Power refers to how people relate to authority (e.g., follow orders without asking questions), the extent to which individuals accept differences in power (e.g., find hard to disagree) (Sharma, 2010), and conform to other people wishes without hesitation (e.g., do not refuse requests from someone perceived as superior). Perception of power is important since it makes individuals hold up their goals seeing themselves able to claim rights and attain things important to achieve such goals. Empowerment implies a change in power

(Malena, 2003; Rowlands, 1997). Empowered people should be able to stand for themselves, disagree, or hesitate against other people believes and requests. Hypothesis 3e: entrepreneurial empowerment is positively related to power.

Decision-making. Decision-making has been addressed as a major indicator of empowerment (Ibrahim & Alkire, 2007; Malhotra et al., 2002). Participation in decision-making is crucial to empowerment because empowerment relates to people's ability to make strategic life choices (Kabeer, 2001). Entrepreneurial empowerment requires individuals to exercise choice, making own decisions and acting freely upon them. The experience of autonomy should reinforce the capacity to decide, because autonomy implies the feeling of having choice in regards of things that are important to oneself. Hypothesis 3f: entrepreneurial empowerment is positively related to decision-making.

Engagement. Engagement is defined as a fulfilling work-related state of mind that is characterized by vigor, dedication and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Vigor implies high level of energy and mental resilience during work, willingness to invest effort, and persistence in the face of difficulties. Dedication means being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge. Absorption implies being fully concentrated and happily engrossed at work, time passes rapidly and one has difficulties with detaching oneself from work. Relationships between proactive behavior and engagement have been previously reported (Salanova & Schaufeli, 2008). Self-efficacy is related to persistence in the face of adversity (Bandura, 1997). Autonomy requires high level of independence, energy, and willingness to push forward. Significance implies a high degree of importance and enthusiasm regarding one's business. Therefore, entrepreneurial empowerment should be related to engagement at work. Hypothesis 3g: entrepreneurial empowerment is positively related to work engagement.

3.4.2.2 Firm Level Outcomes of Entrepreneurial Empowerment

Two firm level performance indicators, sales and profit, are examined as outcomes of entrepreneurial empowerment. Sales and profit growth are direct indicators of how much money comes into the business. Sales growth highly correlates with financial development of a new firm (Brüderl & Preisendörfer, 1998), and is often suggested as a good indicator of entrepreneurial success (Davidsson & Wiklund, 2006; Weinzimmer, Nystrom, & Freeman, 1998). There is considerable research pointing empowerment as a predictor of performance (Pieterse et al., 2010; Seibert et al., 2004; Seibert et al., 2011). Empowerment has been suggested as an enabling factor for innovative behaviors (Kanter, 1984; Spreitzer, 1995). Innovative behaviors are by themselves change-oriented and since they evoke creation of new products, services, ideas, processes or procedures (Spreitzer, 1995; Woodman, Sawyer, & Griffin, 1993), demonstrate high performance by themselves which should be translated into sales and profits. People who believe themselves as competent to negotiate and manage their own business, that have the freedom to determine how and what is done, and who feel able to influence business outcomes, should make a higher impact in terms of sales and profits than those who do not. Hypothesis 3h: entrepreneurial empowerment is positively related to sales growth. Hypothesis 3i: entrepreneurial empowerment is positively related to profit growth.

3.5 Methods

3.5.1 Sample

We drew two samples. Sample 1 consisted of 259 women business owners randomly selected from an NGO which offers training in five different states in Mexico – State of Mexico, Mexico City, Queretaro, Guanajuato, and Aguascalientes. Sample 2 was composed of 100 women business owners. All participants in sample 2 were contacted in their

businesses. Similar to sample 1, sample 2 represented different type of businesses (i.e., trading, service, and industry) in two states in Mexico – State of Mexico and Mexico City. Participants in sample 1 and 2 did not present significant differences in age (sample 1: $M = 42.96$, $SD = 17.59$; sample 2: $M = 39.28$, $SD = 12.40$). Both samples were composed of Mexican women with ages ranging from 19 to 76 years. Some significant differences were present in education (sample 1: $M = 3.28$, $SD = 1.30$; sample 2: $M = 3.57$, $SD = 1.01$), and number of children (sample 1: $M = 2.89$, $SD = 1.39$; sample 2: $M = 2.41$, $SD = 1.28$). In sample 1, 10.8% of the women had completed education up to primary school, 21.2% secondary school, 16.6% high school, 30.5% university studies, and 20.1% had completed other studies. In sample 2, 5% of the women had completed education up to primary school, 13% secondary school, 12% high school, 59% university studies, and 10% had completed other studies. In sample 1, 21.6% of the women had no children, 14.3% had one child, 31.7% had two children, and 32.4% had 3 or more children. In sample 2, 31% of the women had no children, 25% had one child, 25% had two children, and 19% had 3 or more children. Despite individual differences all the female business owners in the two samples shared two essential characteristics. First, all participants had an established firm for a minimum period of 3 months. The 3-month period was set in order to assert that the sample was composed of experienced business owners and thus to obtain preliminary evidence of the validity of our approach with members of the target population (i.e., entrepreneurs). Second, each woman had to be owner and decision-maker in the business.

3.5.2 Data collection procedure

Different steps were taken for the development and assessment of the construct of entrepreneurial empowerment. First, we created a pool of 23 items applying a deductive method for item generation. A deductive method relies on previous theoretical foundations to generate an initial set of variables. This method helps to ensure content validity through

adequate construct definitions (Hinkin, 1998). All items included in our initial set described either a single behavior, or an affective or cognitive response. The statements were simple and short and contained familiar language to target respondents. Before administration, four subject matter experts (i.e., a professor on entrepreneurship, one entrepreneur, an experienced trainer on empowerment facilitation, and a qualitative data analyst) crosschecked the initial set to ensure the content captured the sense of empowerment on entrepreneurs. After revision, minor changes were introduced on the initial set (e.g., wording and length of items). Second, prior to the data collection process, we considered some strategies to minimize common method variance. Common method variance is a systematic error variance shared among variables measured with the same method and/or source (Richardson, Simmering, & Sturman, 2009). Common method variance is prone to bias interrelationships among the dimensions of higher order constructs (R. E. Johnson, Rosen, Djurdjevic, & Taing, 2012). Minimizing common method variance is of particular importance for our purpose because entrepreneurial empowerment involves self-evaluations that might raise attributional biases. Attending to Johnson et al (2012), we applied two remedies to minimize common method variance in our data collection process. We used (1) methodological and (2) temporal separation to reduce the communalities that our predictor (i.e. entrepreneurial empowerment) and our criterion variables (i.e. antecedents and consequences) shared. Methodological separation implies a change in the conditions in which respondents complete the measures (R. E. Johnson et al., 2012). Our methodological separation consisted in use of different scale response formats (i.e. Likert scale response format with different anchors), because scale anchor resemblance is considered a potential source of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Additionally, the scales that measure the antecedents and consequences in the nomological network were introduced between the focal dimensions of entrepreneurial empowerment to create proximal separation. According to Johnson and his

colleagues (2012), such strategies should minimize the likelihood that respondents will recall previous answers when responding. Temporal separation involves setting a time lag between measurements of focal variables. Half of all predictors, antecedents, and consequences in the nomological net were separated from a range period between five to seven days to the other half. Such procedure targets common method variance among the dimensions of entrepreneurial empowerment and between entrepreneurial empowerment and both its antecedents and consequences. Before administration of the questionnaires, all respondents were assured of confidentiality.

3.5.3 Measures

A separate scale was used to measure each of the three dimensions of entrepreneurial empowerment. To ensure that all measures adequately sampled our theoretical domain, all items composing the global scale were inspired or adapted on previous research. Selection of the appropriate scales was done according to the following criteria. First, each scale had to focus on a single dimension. Second, they had to focus either on individual perceptions related to entrepreneurial activities (e.g., entrepreneurial significance), or description of entrepreneurial tasks that might result in the underlying dimension (e.g. entrepreneurial self-efficacy). To ensure understanding and address the characteristics of the population at hand, all the measures had to be adapted to some extent. The final questionnaire was revised by three different subject matter experts to prevent confusing wording and to ensure adaptability to the entrepreneurial context. Additionally, since the study took place in Mexico, the scales were translated to Spanish. All the translated scales were back translated in order to ensure the original's content validity.

Entrepreneurial self-efficacy was adapted from Gielnik et al (2015) scale on entrepreneurial self-efficacy. We adapted the scale using a question format instead of declarative statements. The items asked during the last month how confident the participants

felt competent to manage, negotiate, keep track of financial affairs, and develop a business plan in relation to their business (see Appendix II). We created entrepreneurial autonomy integrating and adapting items from Parker and Axtell's (2001) scale on perspective taking, and Lumpkin and colleagues (2009) scale on job autonomy. We adapted the items to ensure matching with the entrepreneurial context (e.g., questions directed towards one's business instead of a work organization). The resulting scale measures how often during the last month participants thought of themselves as having freedom and independence to control and choose the way they carry out their business. We adapted entrepreneurial significance using the meaning dimension from Spreitzer's (1995) scale on psychological empowerment. We modified the original scale to ensure that the content reflected the business and its environment. The resulting scale measures how often during the last month the participants thought their work activities, products and services were meaningful for themselves and their clients. All the subscales of the construct of entrepreneurial empowerment had a Cronbach alpha above the cutoff for adequacy (see tables 3.3 and 3.4).

Most the of measures used to assess the antecedents in the nomological network were directly taken from studies which proved acceptable validity and reliability. All the measures had a Likert scale answer format. We measured conscientiousness and extraversion using two factors of the Big Five personality scale developed by Costa and McCrae (1992), with 12 and 11 items respectively. We measured proactive personality with a 7-item scale taken from Frese et al (1997). Generalized locus of control was measured with 10 items of the adaptation of Rotter's (1966) locus of control developed by Mueller and Thomas (2001). Generalized self-efficacy was measured using the 10-item scaled developed by Chen and colleagues (2001). Need for achievement was measured with 8-item subscale taken from Robinson et al (1991) scale on entrepreneurial attitude orientation. Self-esteem was measured with 12 items taken from Judge et al (2003) measure of core self-evaluations. Fatalism was measured with

11 items adapted from Shen's et al (2009) scale on fatalism. Entrepreneurial identity was measured using 2 items adapted from Hagger and Chatzisarantis (2006) scale on self-identity. Fatalism and entrepreneurial identity were adapted to the entrepreneurial context. Alpha coefficients for each scale and sample are shown in the tables 3.3 and 3.4.

The individual performance and psychological outcomes were also taken from previous research. All except one measure (i.e., decision-making) used a Likert answer format. Most of the scales were adapted to some extent in order to better address the entrepreneurial domain. Innovation was measured using the 5 item adaptation of the Jackson Personality Inventory (1994) developed by Mueller and Thomas (2001) . Entrepreneurial goal commitment was measured with 4 items adapted from Hollenbeck's et al (1989) scale on goal commitment. Entrepreneurial career satisfaction was measured with 4 items adapted from Greenhaus and colleagues (1990) scale on career outcomes. Self-reliance was measured with 2 items extracted from Greenberger et al (1975) measure of psychological maturity. Power was measured with 4 items taken from Sharma's (2010) scale on personal cultural orientations. Decision-making was measured with 1 item measuring control over income. The item was "who mainly decides how any money you earn will be used?", the single most widely used existing indicator of empowerment in international development (Ibrahim & Alkire, 2007). The question was anchored in three categories (1) self-control, (2) joint-control, (3) or other-person control over income. Decision-making is manifested when control over income is self-managed or managed *with* others, instead of managed *by* others. Engagement was measured with a 17-item questionnaire developed by Schaufeli et al (2006). Alpha coefficients for each scale and sample are shown in the tables 3.3 and 3.4.

The firm performance outcomes were taken from previous studies on organizational performance and entrepreneurship. Sales and profit growth was measured with 2 items asking for the increase in sales and profits during the last year.

3.5.4 Analyses

In order to crossvalidate our measurement model, we conducted a parallel analysis in the two samples. Sample 1 was used for the initial Exploratory Factor Analysis (EFA). Sample 2, was used for both a first order Confirmatory Factor Analysis (CFA) and a second-order Confirmatory Factor Analyses (CFA). Both sample groups were used to test Hypotheses 1a-3i.

3.5.4.1 Step 1: Exploratory Factor Analysis (EFA) and Scale Construction

First, we started to reduce items by means of Exploratory Factor Analysis (EFA). We used principal axis method instead of principal component analysis because we see entrepreneurial empowerment as a reflective multidimensional construct. Principal Component Analysis (PCA) provides a mathematical representation of the construct in terms of the measured variables without imposing the directionality of the effects from the construct to the items (Podsakoff, MacKenzie, Podsakoff, & Lee, 2003), whereas principal axis assumes that the responses to the indicators are caused by the latent construct (Jarvis, MacKenzie, & Podsakoff, 2003).

We started the item reduction process with a pool of 23 items. First, we run an EFA for each hypothesized dimension in order to reach unidimensionality in sample 1. After, we run a second EFA applying oblique rotation to all the underlying factors of entrepreneurial empowerment. We conducted the analysis applying oblique rotation assuming that the factors were to some extent related, and because this method does not force the factors to be uncorrelated (Lloret-Segura, Ferreres-Traver, Hernández-Baeza, & Tomás-Marco, 2014). When factors are correlated an oblique rotation better represents reality and produces an improved simple structure (Conway & Huffcutt, 2003; Osborne & Costello, 2009). We used Eigenvalues to determine the number of factors. Parallel tests were run with Monte Carlo Principal Component Analysis (PCA) to contrast the results from the factor structure

provided by the EFA in SPSS. Monte Carlo is a technique that aids researchers in determining the number of factors to retain in PCA and EFA (Ledesma & Valero-Mora, 2007). Finally, the items were retained according to the following criteria: (1) there had to be conceptual meaning for all the items loading on a factor (2) only items with higher loadings than .45 were retained (Ford, MacCallum, & Tait, 1986; Hinkin, 1998), (3) items crossloading in different factors were removed when the primary loading (i.e., the highest) was not at least twice larger than the other loadings, (4) factors with less than 3 items were deleted; a factor with less than three items is weak and unstable (Osborne & Costello, 2009). EFAs were carried out using SPSS version .23.

3.5.4.2 Step 2: Confirmatory Factor Analysis (CFA)

Statistical analyses were performed to examine the construct reliability and validity of the theory-driven measure of entrepreneurial empowerment. First, we tested Hypothesis 1a and 1b. According to hypothesis 1a and 1b, there are three dimensions of entrepreneurial empowerment and these dimensions compound the construct of entrepreneurial empowerment. These two hypotheses are critical to provide further evidence of the construct validity of entrepreneurial empowerment. For this purpose, first-order confirmatory factor analysis (CFA) were conducted on the second sample for all the items retained. The first-order factor structure of a CFA accounts for the relationship among the factors. In order to assess the content validity of our measure, we used the Maximum Shared Variance (MSV), and the Average Variance Extracted (AVE). On the one hand, we tested whether the observed variables correlated higher with the variables within their parent factor than with variables outside the parent factor. An MSV lower than the AVE (Alumran, Hou, Sun, Yousef, & Hurst, 2014), indicates that the observed variables correlate higher within their parent factor (i.e., dimension). On the other hand, we used the AVE to test whether the observed variables correlated well within their parent factor or not (Alumran et al., 2014;

Chakraborty & Sengupta, 2014; Hair, Ringle, & Sarstedt, 2011; Lim, Widdows, & Park, 2006). An AVE higher than .50 indicates that the latent factor is well explained by the observed variables (Chakraborty & Sengupta, 2014; Hair et al., 2011). Next, a second-order CFA was run to assess the contribution of the three dimensions to the overall meaning. A second-order CFA accounts for the relationship of the first-order factors (Spreitzer, 1995). The second-order factor structure confirms that the hypothesized model fits the data. CFAs models were evaluated using model fit indices recommended in the structural equation modeling literature (Bentler, 1990; Edwards, 2001; R. O. Mueller & Hancock, 2008; Suhr & Shay). We consider the chi-square test (as an historical reference), the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA) with its associated confidence interval, the comparative fit index (CFI), and the nonnormed fit index (NNFI). SRMR is an absolute index which evaluates the overall discrepancy between observed and implied covariance matrices (R. O. Mueller & Hancock, 2008). A value lower than .09 is considered to show appropriate fit (Hu & Bentler, 1999). RMSEA is a parsimonious index which estimates the discrepancy per degree of freedom between the original and reproduced covariance matrices in the population. Values up to .05 indicate close fit, and values up to .08 reflect reasonable errors of approximation in the population (Browne & Cudeck, 1993; Edwards, 2001; Hu & Bentler, 1999). The CFI indicates an increase in fit of the target model over a null model in which all variables are uncorrelated (Bentler, 1990). CFI values of .95 or higher indicate adequate fit (Edwards, 2001; Hu & Bentler, 1999). NNFI is an incremental index that indicates absolute or parsimonious fit relative to a baseline model (R. O. Mueller & Hancock, 2008). NNFI values of .90 or higher indicate adequate fit (Yang, 2005). Second, we assessed the internal consistency of our scale. Reliability of a measurement instrument is a necessary condition for validity (Hinkin, 1998). We used the maximal reliability (H), which is considered to be a robust measure of reliability (Li,

Rosenthal, & Rubin, 1996; McNeish, 2017), to test reliability of the entrepreneurial empowerment dimensions. Maximal reliability is better indicated to evaluate congeneric components (i.e., different items measuring the same latent variable) in behavioral research (Li et al., 1996; Penev & Raykov, 2006; Raykov, 1997). In addition to the former, we also tested reliability using composite reliability (Rho) and Cronbach Alpha. For these indicators, values higher than .70 manifest that the sampling domain has been captured. CFAs were estimated using AMOS software version .20.

3.5.4.3 Step 3: Establishing relationship with other constructs

Correlation analysis were carried out in order to provide evidence of validity based on relationships with other variables. The analyses included the hypothesis regarding the nomological network. We computed a total score for each subscale of entrepreneurial empowerment using the raw scores from each item. Then, we standardized the total score for each subscale. Last, we computed a total score for entrepreneurial empowerment using the standardized values from each subscale. Analyses were carried out using SPSS software version .23.

3.6 Results

3.6.1 Step 1: Exploratory Factor Analysis (EFA) and Scale Construction (Sample 1)

From the initial pool of 23 items we found a simple structure with 3 factors. The latent factors included entrepreneurial self-efficacy, entrepreneurial autonomy, and entrepreneurial significance. The simple structure explained 74.87% of the total variance with a total of 12 items retained for CFA.

3.6.2 Step 2: Confirmatory Factor Analysis (CFA)

A first-order CFA was used to assess the content validity and reliability of the entrepreneurial empowerment scale. The measurement model used for the first-order CFA is

shown in figure 3.2. In sample 2, the model fit the data adequately for all the fit indices except for the RMSEA. The raw χ^2 was 99.292 and χ^2/df was 1.947 with p-value < 0.05. The SRMR was .059. The RMSEA was .098, with a lower confidence interval of .069 and an upper confidence interval of .126, with a p-close of .005. The CFI was .955, and the NNFI (TLI) was .942. These results manifest that the proposed three-factor model satisfied the goodness of fit indices, except for the RMSEA. The results of the RMSEA may be due to small sample size (i.e., N=100). Models with small degrees of freedom and sample size can have artificially large values of the RMSEA (Kenny, 2014; Kenny, Kaniskan, & McCoach, 2015).

The measurement model for the second-order CFA is shown in figure 3.3. The model fit the data adequately for all the fit indices except for the RMSEA. The raw χ^2 was 99.292 and χ^2/df was 1.957 with p-value <0.05. The SRMR was .059. The RMSEA was .098, with a lower confidence interval of .069 and an upper confidence interval of .126, with a p-close of .005. The CFI was .955. The NNFI was .942. These results manifest that the proposed latent construct of entrepreneurial empowerment and its three dimensions satisfied the goodness of fit indices, except for the RMSEA. Once again, we believe that the results of the RMSEA may be due to small sample size (i.e., N=100). We tested the same model in sample 1 (N=259) and the RMSEA decreased to .044, with a lower confidence interval of .020 and an upper confidence interval of .063, with a p-close of .685.

In order to examine differences between models (i.e., first and second order models) and decide which one presents better fit, a modeling rationale was considered. Some criteria have been suggested in the literature to interpret differences in practical fit indices based on modeling rationale criteria. Differences not larger than .01 between NNFI and CFI values are considered as an indication of negligible practical differences (Cheung & Rensvold, 2002).

Similarly, differences not larger than .015 between RMSEA values serve to claim support for the more parsimonious model (F. F. Chen, 2007), in our case the second-order CFA model.

Tables 3.1 and 3.2 show the results related to hypotheses 1a, as well as maximal reliability (H), and composite reliability (Rho), for each sample. Cronbach Alpha (α) estimates across the two samples are shown in tables 3.3 and 3.4. As expected, in sample 2 the MSV values were lower than the AVE for each dimension of entrepreneurial empowerment. In other words, the observed variables correlated higher within their parent factor than with other variables outside their parent factor. As expected, the AVE values were higher than .50 for all dimensions suggesting that the indicators do correlate high enough with each other within their parent factor. These results suggest that there are three independent dimensions embedded in entrepreneurial empowerment (Hypothesis 1a and 1b). Reliability coefficients satisfied the 0.70 cutoff for acceptable reliability for all dimensions in both data sets as evidenced by the maximal reliability (H), composite reliability (Rho), and Cronbach Alpha (α) estimates (alphas in table 3.3 and 4.3).

Table 3.1

Validity Tests, Sample 1

	CR	AVE	MSV	MaxR(H)	EAU	ESE	ESI
EAU	.89	.60	.15	.95	(.78)		
ESE	.88	.66	.15	.96	.38	(.81)	
ESI	.88	.72	.04	.99	.03	.22	(.84)

Notes: CR: Composite Reliability; AVE: Average Variance Extracted; MSV: Maximum Shared Variance; MaxR(H): Maximal Reliability; in parenthesis, the Square Root of the AVE; ESE: Entrepreneurial self-efficacy; EAU: Entrepreneurial autonomy; ESI: Entrepreneurial significance.

Table 3.2

Validity Tests, Sample 2

	CR	AVE	MSV	MaxR(H)	EAU	ESE	ESI
EAU	.93	.70	.61	.96	(.84)		
ESE	.87	.63	.48	.97	.69	(.79)	
ESI	.93	.83	.61	.98	.78	.69	(.91)

Notes: CR: Composite Reliability; AVE: Average Variance Extracted; MSV: Maximum Shared Variance; MaxR(H): Maximal Reliability; in parenthesis, the Square Root of the AVE. ESE: Entrepreneurial self-efficacy; EAU: Entrepreneurial autonomy; ESI: Entrepreneurial significance.

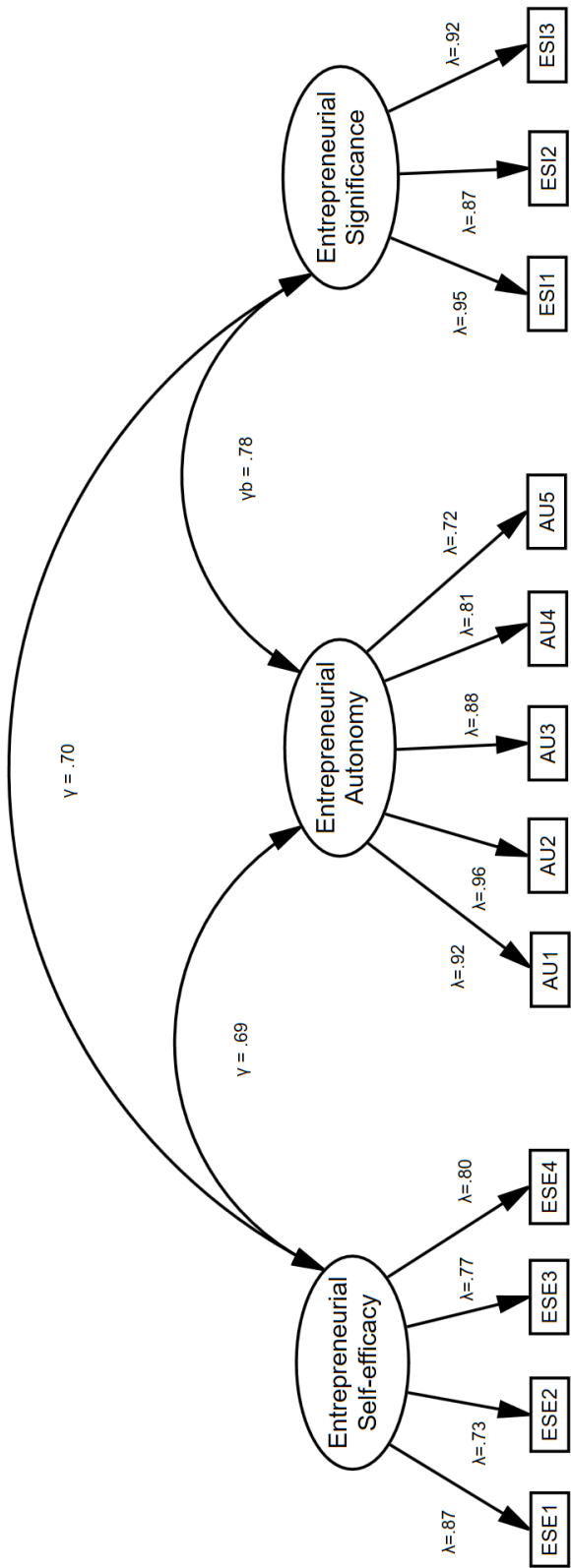


Figure 3.2. First-order CFA sample 2; SRMR = .059, RMSEA = .098, CFI = .955, NNFI = .942. Notes: λ = factor loadings; γ = interfactor correlations; ESE: Entrepreneurial self-efficacy; EAU: Entrepreneurial autonomy; ESI: Entrepreneurial significance.

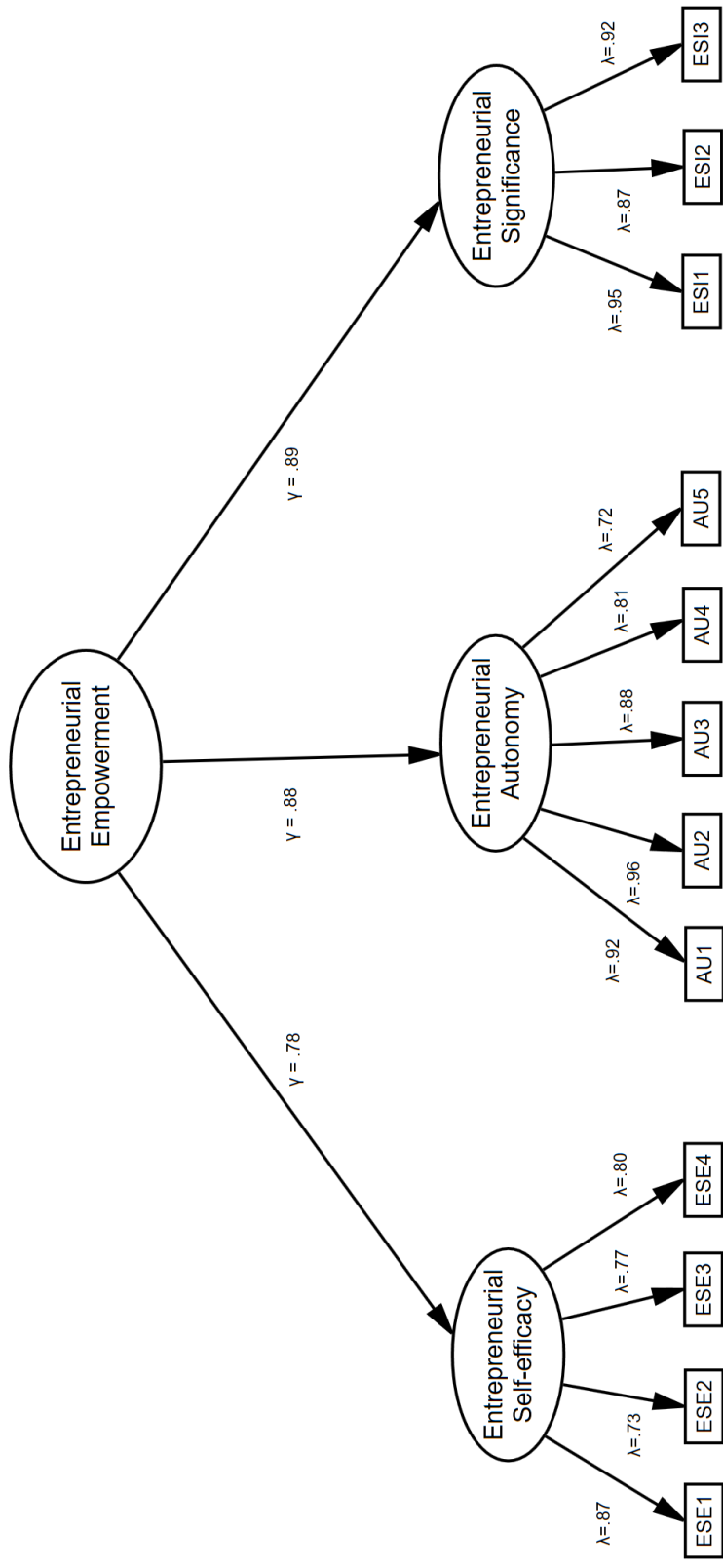


Figure 3.3. Second-order CFA sample 2 (b), SRMR = .059, RMSEA = .098, CFI = .955, NNFI = .942; Notes: λ = factor loadings; γ = interfactor correlations; ESE: Entrepreneurial self-efficacy; EAU: Entrepreneurial autonomy; ESI: Entrepreneurial significance.

3.6.3 Step 3: Establishing relationship with other constructs

Tables 3.3 and 3.4 show univariate statistics, reliability indices, and correlations of the entrepreneurial empowerment scale and the variables in the nomological net. In sample 1, the alpha reliability indices were satisfactory (i.e., $\alpha \geq .70$) for the entrepreneurial empowerment scale, its dimensions, and the other variables in the study (see table 3.3). In sample 2, the alpha reliability indices were satisfactory (i.e., $\alpha \geq .70$) for the entrepreneurial empowerment scale, its dimensions, and all the other variables in the study, except for the scales of extraversion ($\alpha = .53$), innovation ($\alpha = .41$), and self-reliance ($\alpha = .45$), (see table 3.4). Since the alpha coefficients for extraversion, innovation, and self-reliance were below the cutoff for adequate reliability (i.e., $\alpha < .70$), our results for such variables should not be reliable (i.e., low proportion of the variance in the sample is explained by the measures) in sample 1. Yet, recent research shows that alpha coefficients tend to underestimate the reliability of scales (McNeish, 2017). We report the results considering their limitations and recommend caution for interpretation.

The analyses included the variables needed to test the hypotheses regarding the nomological network (Hypothesis 2a-2i, and 3a-3i). As hypothesized, in respect of the antecedents for sample 1, the results of the correlation analyses revealed a significant positive relationship of entrepreneurial empowerment with conscientiousness ($r_{xy} = .47, p < 0.01$), extraversion ($r_{xy} = .28, p < 0.01$), proactive personality ($r_{xy} = .51, p < 0.01$), generalized locus of control ($r_{xy} = .22, p < 0.01$), generalized self-efficacy ($r_{xy} = .30, p < 0.01$), need for achievement ($r_{xy} = .45, p < 0.01$), self-esteem ($r_{xy} = .43, p < 0.01$), and entrepreneurial identity ($r_{xy} = .24, p < 0.01$), and a significant negative relationship with fatalism ($r_{xy} = -.22, p < 0.01$). As hypothesized, in respect of the consequences for sample 1, the results of the correlation analyses revealed a significant positive relation of entrepreneurial empowerment with innovation ($r_{xy} =$

.29, $p < 0.01$), entrepreneurial goal commitment ($r_{xy} = .23$, $p < 0.01$), entrepreneurial carrier satisfaction ($r_{xy} = .46$, $p < 0.01$), self-reliance ($r_{xy} = .19$, $p < 0.01$), power ($r_{xy} = .11$, $p < 0.05$), engagement ($r_{xy} = .33$, $p < 0.01$), increase in sales ($r_{xy} = .26$, $p < 0.01$), and increase in profit ($r_{xy} = .31$, $p < 0.01$). Different from our expectations, the results on decision-making did not show a positive correlation with self-control over income ($r_{xy} = .05$, $p > 0.05$), neither with joint control over income ($r_{xy} = .00$, $p > 0.05$), however the results show a negative significant correlation with “other person control over income” ($r_{xy} = -.18$, $p < 0.05$), which partially confirm our hypothesis.

As hypothesized, in respect of the antecedents for sample 2, the results of the correlation analyses revealed a significant positive relationship of entrepreneurial empowerment with conscientiousness ($r_{xy} = .86$, $p < 0.01$), extraversion ($r_{xy} = .74$, $p < 0.01$), proactive personality ($r_{xy} = .80$, $p < 0.01$), generalized locus of control ($r_{xy} = .78$, $p < 0.01$), generalized self-efficacy ($r_{xy} = .85$, $p < 0.01$), need for achievement ($r_{xy} = .87$, $p < 0.01$), self-esteem ($r_{xy} = .79$, $p < 0.01$), and entrepreneurial identity ($r_{xy} = .82$, $p < 0.01$), and a significant negative relationship with fatalism ($r_{xy} = -.78$, $p < 0.01$). As hypothesized, in respect of the consequences for sample 2, the results of the correlation analyses revealed a significant positive relation of entrepreneurial empowerment with innovation ($r_{xy} = .39$, $p < 0.01$), entrepreneurial goal commitment ($r_{xy} = .42$, $p < 0.01$), entrepreneurial carrier satisfaction ($r_{xy} = .81$, $p < 0.01$), self-reliance ($r_{xy} = .62$, $p < 0.01$), power ($r_{xy} = .61$, $p < 0.01$), decision-making ($r_{xy} = .59$, $p < 0.01$, for self-control over income; $r_{xy} = -.55$, $p < 0.01$, for joint control over income; $r_{xy} = -.13$, $p > 0.05$, for other person control over income), and engagement ($r_{xy} = .78$, $p < 0.01$). Contrary to our hypotheses, the correlation analyses did show a significant negative relationship of entrepreneurial empowerment with increase in sales ($r_{xy} = -.24$, $p < 0.05$), and did not reveal significant relationships with

increase in profit ($r_{xy} = -.09, p > 0.05$), in sample 2. These results provide partial evidence of the scale's validity in that they partially confirm the hypothesized relationships between entrepreneurial empowerment and other variables associated with empowerment and entrepreneurship in the literature.

Table 3.3

Univariate Statistics, Reliability Indices and Correlations Among the Nomological Network, Sample 1																											
Variables	Mean SD		Correlations																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
1. Conscientiousness	5.96	.63	(.91)																								
2. Extraversion	5.16	.65	.32	(.70)																							
3. Personal initiative	6.19	.68	.58	.38	(.94)																						
4. Generalized locus of control	5.93	.90	.33	.08	.27	(.90)																					
5. Generalized Self-efficacy	6.22	.77	.37	.39	.38	.22	(.95)																				
6. Need for achievement	6.45	.58	.51	.36	.57	.26	.35	(.97)																			
7. Self-esteem	5.46	.87	.51	.28	.47	.53	.35	.45	(.85)																		
8. Fatalism	1.71	.78	-.17	-.08	-.11	-.24	-.17	-.11	-.24	(.94)																	
9. Entrepreneurial identity	6.28	1.13	.20	.18	.30	.11	.26	.23	.10	-.02	(.92)																
10. Innovativeness	4.77	.59	.21	.23	.29	.13	.26	.17	.25	-.12	.15	(.70)															
11. Entrepreneurial goal commitment	5.69	1.23	.26	.13	.27	.37	.39	.22	.38	-.22	.16	.17	8.77)														
12. Entrepreneurial carrier satisfaction	5.79	1.18	.38	.19	.30	.090	.25	.34	.28	-.21	.16	.09	.12	(.93)													
13. Self-reliance	5.86	1.28	.29	.09	.23	.36	.05	.21	.31	-.16	.02	.01	.19	.14	(.74)												
14. Power	5.33	1.14	.23	.16	.14	.17	.11	.11	.20	-.20	.09	.13	.18	.13	.29	(.74)											
15. Self-control over income	0.75	.42	.03	.06	.06	.09	.04	.00	.10	-.04	.06	.09	.01	-.00	.13	.08	1										
16. Joint control over income	0.19	.39	-.02	-.05	-.01	-.01	-.02	.00	-.06	.05	-.04	-.10	.01	-.02	-.06	-.04	-.87	1									
17. Other-person control over income	.01	.12	-.01	-.01	-.06	-.14	-.05	-.01	-.05	-.01	-.17	-.05	-.06	-.00	-.03	-.01	-.22	-.06	1								
18. Engagement	6.16	.58	.34	.32	.38	.07	.36	.44	.26	-.08	.16	.29	.12	.26	.09	.17	-.06	.06	-.00	(.94)							
19. Increase in sales (last year)	3.28	1.48	.21	.26	.20	-.02	.12	.21	.17	-.12	.07	.13	.03	.34	.06	.19	.02	-.03	.06	.24	1						
20. Increase in profits (last year)	3.28	1.51	.23	.24	.22	.02	.08	.22	.16	-.12	.11	.09	-.02	.39	.08	.19	.05	-.04	.01	.20	.83	1					
21. Entrepreneurial self-efficacy	5.46	1.31	.40	.28	.47	.19	.23	.42	.42	-.15	.17	.24	.15	.41	.13	.04	.01	-.06	.29	.28	.36	(.87)					
22. Entrepreneurial autonomy	6.49	.80	.34	.30	.42	.25	.30	.40	.36	-.24	.25	.23	.20	.35	.29	.27	.15	-.08	-.18	.31	.22	.21	.34	(.88)			
23. Entrepreneurial significance	6.52	1.01	.23	-.00	.17	.02	.11	.10	.10	-.08	.10	.12	.12	.18	.00	-.01	-.01	.06	-.15	.09	.01	.03	.24	.04	(.94)		
24. Entrepreneurial empowerment	6.16	.73	.47	.28	.51	.22	.30	.45	.43	-.22	.24	.29	.23	.46	.19	.11	.05	.00	-.18	.33	.26	.31	.83	.59	.61		

Notes: Cronbach alpha reliabilities are provided in parentheses. Significance: $r's > .129, p < .05$; $r's > .160, p < .01$; Entrepreneurial self-efficacy was transformed from a 1-5 anchor scale into a 1-7 anchor scale.

Table 3.4

Univariate Statistics, Reliability Indices and Correlations Among the Nomological Network, Sample 2

Variables	Mean	SD	Correlations																							
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1. Conscientiousness	5.35	1.09	(.72)																							
2. Extraversion	4.90	.80	.73	(.53)																						
3. Personal initiative	5.59	1.25	.80	.65	(.79)																					
4. Generalized locus of control	5.35	1.22	.79	.62	.74	(.79)																				
5. Generalized Self-efficacy	5.54	1.24	.85	.73	.79	.69	(.91)																			
6. Need for achievement	5.87	1.22	.86	.73	.78	.79	.84	(.75)																		
7. Self-esteem	5.10	1.03	.78	.62	.73	.82	.70	.74	(.79)																	
8. Fatalism	2.35	1.25	-.80	-.64	-.74	-.78	-.74	-.80	-.70	(.81)																
9. Entrepreneurial identity	5.60	1.42	.85	.69	.73	.72	.82	.85	.69	-.78	(.70)															
10. Innovativeness	4.50	.62	.28	.20	.19	.22	.33	.56	.52	-.61	.40	(.41)														
11. Entrepreneurial goal commitment	5.04	1.34	.49	.47	.33	.46	.39	.35	.29	-.25	.37	.06	(.67)													
12. Entrepreneurial carrier satisfaction	5.44	1.38	.81	.64	.69	.70	.77	.37	.51	-.49	.78	.36	.41	(.89)												
13. Self-reliance	5.49	1.49	.63	.55	.52	.57	.57	.78	.71	-.70	.55	.09	.35	.56	(.45)											
14. Power	4.93	1.31	.68	.54	.60	.63	.66	.66	.66	-.63	.63	.13	.45	.58	.51	(.70)										
15. Self-control over income	.66	.47	.47	.48	.51	.52	.50	.59	.54	-.42	.44	.20	.21	.52	.29	.39	1									
16. Joint control over income	.30	.46	-.42	-.43	-.49	-.47	-.45	-.54	-.48	.37	-.41	-.18	-.13	-.49	-.23	-.37	-.91	1								
17. Other-person control over income	.04	.19	-.16	-.16	-.09	-.15	-.14	-.17	-.17	.14	-.12	-.05	-.20	-.12	-.15	-.08	-.28	-.13	1							
18. Engagement	5.48	1.11	.79	.67	.72	.67	.80	.83	.61	-.74	.78	.36	.38	.69	.56	.63	.43	-.39	-.12	(.79)						
19. Increase in sales (last year)	3.46	1.38	-.24	-.27	-.30	-.23	-.28	-.28	-.16	.22	-.28	-.00	-.05	-.21	-.15	-.06	-.27	.25	.08	-.23	1					
20. Increase in profits (last year)	3.36	1.36	-.08	-.10	-.17	-.08	-.09	-.13	-.03	.12	-.13	.03	-.02	-.07	-.03	.04	-.16	.15	.06	-.14	.88	1				
21. Entrepreneurial self-efficacy	5.14	1.36	.65	.62	.61	.57	.64	.63	.70	-.56	.56	.39	.34	.67	.45	.40	.44	-.45	.00	.54	-.01	.09	(.88)			
22. Entrepreneurial autonomy	5.63	1.39	.85	.70	.75	.77	.86	.87	.74	-.79	.83	.32	.41	.75	.59	.67	.58	-.54	-.14	.78	-.31	-.15	.61	(.93)		
23. Entrepreneurial significance	5.92	1.36	.77	.64	.76	.72	.74	.79	.65	-.71	.78	.31	.35	.71	.60	.54	.54	-.46	-.22	.72	-.32	-.19	.59	.76	(.86)	
24. Entrepreneurial empowerment	5.56	1.20	.86	.74	.80	.78	.85	.87	.79	-.78	.82	.39	.42	.81	.62	.61	.59	-.55	-.13	.78	-.24	-.09	.83	.90	.89	

Notes: Cronbach alpha reliabilities are provided in parentheses. Significance: r 's $> .200$, $p < .05$; r 's $> .276$, $p < .01$. Entrepreneurial self-efficacy was transformed from a 1-5 anchor scale into a 1-7 anchor scale.

Notes: Cronbach alpha reliabilities are provided in parentheses. Significance: $r's > .200$, $p < .05$; $r's > .276$, $p < .01$. Entrepreneurial self-efficacy was transformed from a 1-5 anchor scale into a 1-7 anchor scale.

3.7 Discussion

The aim of the present study was to formulate a new concept and a multidimensional measure of entrepreneurial empowerment. Results show evidence for the construct validity and the initial nomological network. Data on entrepreneurs in Mexico provided the evidence for content validity and reliability of the three-dimensional measure of entrepreneurial empowerment. The second-order factor analysis model suggests that each of the three dimensions contributes to an overall construct of empowerment and that the dimensions are not construct-equivalent. Partial support for the initial nomological network was found. Different from our expectations there were no positive correlations between entrepreneurial empowerment and decision-making in sample 1. There was no significant positive correlation between entrepreneurial empowerment and self-control over income, neither with joint-control over income. However, there was a significant negative correlation between entrepreneurial empowerment and control over income by other people in such sample. Contrary to our expectations there were no positive correlations between entrepreneurial empowerment and both increase in sales and profit in sample 2. One plausible explanation can be that in Mexico business owners are usually not willing to share their financial performance with interviewers due to security reasons. In sample 1, all women were interviewed through an NGO which was familiar to all participants, thus they were willing to share their financial performance without concern. However, in sample 2, women were directly approached in their business without previous contact. Overall, the nomological net indicates how personality and other psychological variables contribute to entrepreneurial empowerment as well as the former to individual and firm level outcomes.

3.7.1 Contributions

We consider that the present paper makes important contributions to both the empowerment and entrepreneurship literature. First, we introduce empowerment in the domain of entrepreneurship. This contributes to extend the knowledge in the empowerment literature by testing empowerment effects out of traditional organizational settings (Bowen & Lawler, 1995; W. Burke, 1986; Spreitzer, 1995; Spreitzer et al., 1997; Thomas & Velthouse, 1990). We go forward investigating and testing the effects that empowerment has on specific behaviors (Conger & Kanungo, 1988), such as entrepreneurship and innovation. Second, we respond to the research claim calling for more accurate conceptualization and investigation of empowerment in the field of international development (Christens & Perkins, 2008; Grabe, 2012; Mosedale, 2005; Narayan-Parker, 2005). We provide conceptualization and measurement of entrepreneurial empowerment that can serve as a rigorous indicator allowing (1) international comparison, (2) assessment of the instrumental (e.g., outcomes) and also the intrinsic value of empowerment (e.g., self-development), (3) and that can allow tracking of the process of empowerment identifying changes on its levels over time (Grabe, 2012; Ibrahim & Alkire, 2007; Malhotra et al., 2002). Third, this paper adds value to the literature in international development. The interest in the determinants and correlates of empowerment has grown with evidence pointing out empowerment as a key factor for economic development and poverty reduction (Mason & Smith, 2003). We found evidence indicating that entrepreneurial empowerment correlates positively with psychological outcomes such as decision-making and career satisfaction and, partial evidence (i.e., only in sample 1) showing positive correlations with economic outcomes such as profits and sales. Entrepreneurial empowerment can assist scientists, practitioners, and policy makers to address the underlying mechanisms that link empowerment interventions with positive effects.

3.7.2 Limitations

Despite the contributions listed above, this study has a number of limitations that should be addressed in further research. First, we only used self-reported measures from women business owners with small firms, which raises concerns of common method variance in our data and does not contribute to the generalizability of our results. Additional data (e.g., sales records) and other sources of information such as clients or employees could help to minimize common method variance and crossvalidate the results found in this study. Diverse sociodemographic samples (e.g. high-income, or high-tech entrepreneurs), men business owners, and/or different geographical and country contexts than Mexico, would contribute to generalize our results. Second, our study did not measure the evolution of entrepreneurial empowerment across time. Longitudinal studies should be conducted to see changes in the process of empowerment and its effects over time. This would also contribute to evaluate issues of causality, the direction of the relationships in the nomological net, as well as the strength and duration of entrepreneurial empowerment and its consequences. A further step could include reciprocal relationships embedded in the framework presented here (e.g., firm performance leading to more entrepreneurial empowerment). Third, our study did not go further specifying additional outcomes of entrepreneurial empowerment. Different outcomes of entrepreneurial empowerment should be examined. For instance, it would be interesting to see the counterproductive effects of entrepreneurial empowerment. “Over-empowerment” may lead to overconfidence and maladjustments making individuals persist in efforts that are actually strategic errors (Conger & Kanungo, 1988). Also, research on the spillover effects of empowerment in other spheres of life such as wellbeing may contribute to a better understanding of its implications (Ibrahim & Alkire, 2007).

3.8 Conclusion

The main contribution of this paper is the definition of the concept of entrepreneurial empowerment and the development of a multidimensional measure to measure its dimensions. We posited constructs that relate to both entrepreneurship (e.g., proactive personality) and empowerment (e.g., self-esteem) as antecedents of entrepreneurial empowerment. We also posited entrepreneurial empowerment to be related with positive effects at the individual level (e.g., self-reliance, innovation) and firm level (i.e., sales and profits). Entrepreneurial empowerment should enable an implemental mindset making people look for the means to action and be ready to move forward toward their goals. We hope entrepreneurial empowerment stimulates the use of more accurate indicators when conceptualizing and investigating the process and consequences of empowerment. The concept of entrepreneurial empowerment, when used precisely can help to focus thought, planning, and action in applied research.

4 Empowering Women Through Entrepreneurship Training: A Randomized Controlled Trial in Mexico

Abstract

Empowerment is becoming the centerpiece of interventions in developing countries. Institutions such as the World Bank and the United Nations invest considerable funds and efforts aiming to facilitate empowerment in developing countries. Entrepreneurship training is gaining popularity as effective means to empower the people. However, we are still short of understanding of the specific mechanisms that link entrepreneurship training and empowerment. The present study aims to elucidate the underlying mechanisms through which entrepreneurship training impact on entrepreneurial empowerment. A randomized controlled trial was conducted with a total of 1794 women entrepreneurs in Mexico. Structural equation modeling was used to assess the indirect effects of entrepreneurship training on entrepreneurial empowerment. Results provide support for personal initiative behavior and business knowledge as key variables accounting for this relationship. The results also show a positive significant relationship between entrepreneurial empowerment and business performance. Implications and directions for further research are discussed.

Keywords: entrepreneurial empowerment, women's empowerment, entrepreneurship training, international development.

4.1 Introduction

Empowerment is becoming the centerpiece of interventions in developing countries. The World Bank and the United Nations have pointed empowerment as one of the key elements for poverty reduction and as a primary development assistance goal (Clark, 2015; Malhotra & Schuler, 2005). This is because empowerment is assumed to promote growth and prosperity in developing countries (e.g., Christens & Perkins, 2008; Datta & Gailey, 2012; Perkins & Zimmerman, 1995).

Empowerment interventions typically focus on women (e.g., Ahmad & Muhammad Arif, 2015; Gonzales, Jain-Chandra, Kochhar, Newiak, & Zeinullayev, 2015; Valera, Romero, González, & Franquez, 2016). Women are disproportionately affected by poverty, discrimination and exploitation (United Nations, 2018). They usually have low education and welfare, and are entitled with an unequal position (e.g., unbalanced bulk of household work), that limit their economic opportunities. Investing in women's empowerment constitutes a direct path towards gender equality, poverty eradication and inclusive economic growth (Ahmad & Muhammad Arif, 2015; Bandiera et al., 2013; Banerjee, Karlan, & Zinman, 2015; Buvinic & O'Donnell, 2016; United Nations, 2018). A recent report shows that in an scenario in which women play an identical role in labor markets to that of men, as much as 28 trillion (or 26 percent) could be added to global GDP by 2025 (Woetzel, 2015).

Entrepreneurship has been suggested as a powerful path to empower women in developing countries (Azam Roomi & Harrison, 2010; Buvinic & O'Donnell, 2016; Cho & Honorati, 2014; Cho, Kalomba, Mobarak, & Orozco, 2013; Datta & Gailey, 2012; McKenzie & Puerto, 2017; Shankar, Onyura, & Alderman, 2015; Valdivia, 2015). Entrepreneurship refers to discovery and exploitation of opportunities (Shane & Venkataraman, 2000). Self-employment

initiatives can empower women because they promote their “ability to take action” (McNelly & Dunford, 1999, p. 63), and provide a sense of ownership, self-reliance, and economic security (Datta & Gailey, 2012). Increasing women’s opportunities to participate in the market contributes to overcome gender inequality and so to empower women through gained autonomy and independence (Jayachandran, 2015). Women who participate in self-employment activities usually have an increased ability to make strategic life choices in different ambits such as the household or community (Kabeer, 2005; Torri & Martinez, 2014).

Entrepreneurship can be effectively promoted by entrepreneurship education and training (De Mel et al., 2014; Friedrich, Glaub, Gramberg, & Frese, 2006; Glaub & Frese, 2011; Martin, McNally, & Kay, 2013). Women in developing countries, lack education, technical skills, and experience to develop entrepreneurial capacity and highly productive businesses (Bruhn et al., 2010; Datta & Gailey, 2012). Entrepreneurial training can help to overcome the challenges (e.g., low capacities) and the barriers (e.g., sociocultural norms) that women face. By means of entrepreneurial training women can engage in self-employment activities, take personal action to participate in the market, and become active agents in their process of empowerment (e.g., Calderon et al., 2013; Campos et al., 2017; Datta & Gailey, 2012; McKenzie & Woodruff, 2013).

Empowerment research has a shortfall of empirical evidence showing the processes underlying empowerment and their direct impact (Christens & Perkins, 2008; Grabe, 2012; Ibrahim & Alkire, 2007; Malhotra, 2003; Malhotra & Schuler, 2005; Mosedale, 2005; Narayan-Parker, 2005; Sen, 1999; Townsend, Porter, & Mawdsley, 2004). Despite the assumed benefits of entrepreneurial training towards empowerment, we still don’t know the mechanisms that account for the positive effects of entrepreneurial training on empowerment. In addition, commonly used indicators of empowerment such as increased income or performance lack

accuracy to determine whether empowerment has been achieved or not (Grabe, 2012; Mosedale, 2005).

The purpose of the present study is to examine the mechanisms through which a specific training executed in Mexico impacts on entrepreneurial empowerment. The specific training, to which we refer to, is known as Crea training. Crea training is an entrepreneurial training implemented by Crea, a Mexican NGO. The training was part of a governmental project aiming to facilitate women's entrepreneurship in Mexico. Crea training consists of two training components: one component on personal initiative and another in business literacy. We conducted a randomized controlled trial to show how the two different components relate to entrepreneurial empowerment, and businesses performance (see figure 4.1). We posit that Crea training leads to personal initiative behavior and business knowledge, and these in turn lead to entrepreneurial empowerment and business performance.

We aim to contribute to the literature providing a rigorous evaluation of an entrepreneurial training that shows the empowerment process and direct and lasting empowerment effects (Grabe, 2012; Ibrahim & Alkire, 2007). At a theoretical level, our research serves to clarify the paths that lead to entrepreneurial empowerment. At an empirical level, it provides support for the importance of empowerment in entrepreneurship (Henao-Zapata & Peiró, 2017), by showing its relationship with business performance. Also, we expect to contribute to practice by presenting two training components that create lasting effects on women's entrepreneurial empowerment and business performance.

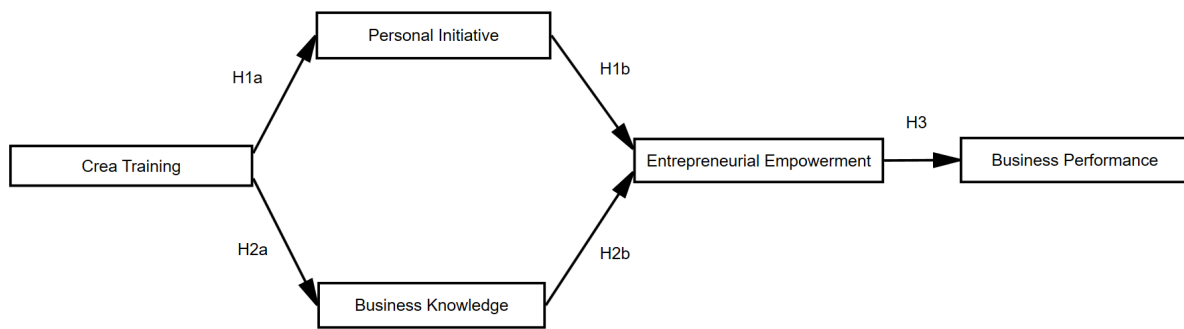


Figure 4.1. Path-analytic model. Personal initiative behavior and business knowledge as underlying mechanisms facilitating entrepreneurial empowerment, and the relationship of the later with business performance.

4.2 The concept of entrepreneurial empowerment

There is a common framework in all empowerment research that posits empowerment as a phenomenon that can positively impact on people and their environment (Boudrias et al., 2014; Christens & Perkins, 2008; Kabeer, 2001; Malhotra, 2003; Narayan-Parker, 2005; Odoardi et al., 2015; Seibert et al., 2011; Spreitzer, 2008; Thomas & Velthouse, 1990). Empowerment is relevant for entrepreneurship (Henao-Zapata & Peiró, 2017), because it enables an implemental mindset that makes people look for the means to action and be ready to move ahead toward their goals (Seibert et al., 2004; Spreitzer, 2008).

Building on previous empowerment research (Kabeer, 1999; Spreitzer, 1995; Thomas & Velthouse, 1990), Henao-Zapata, Frese, and Peiró (2018) defined entrepreneurial empowerment as a set of behavioral orientations manifesting entrepreneurial self-efficacy, entrepreneurial autonomy, and entrepreneurial significance towards business. Behavioral orientations refer to tendencies to act. Entrepreneurial self-efficacy refers to agency beliefs (e.g., Kabeer, 1999), the competence and the ability to negotiate and manage one's business venture. Entrepreneurial

autonomy represents the degree of freedom and independence in the business. It includes choice (Thomas & Velthouse, 1990), whether a person's behavior is perceived as self-determined (e.g., having choice about methods, pace, and processes), and the freedom to initiate and regulate actions towards desirable outcomes related to business (e.g., quality of products/services). Entrepreneurial significance is an assessment of the importance of business tasks, products, and services to the individual entrepreneur and the customers. This dimension manifests the motivation and purpose to run a business.

Among different factors, Henao-Zapata and Peiró (2017), highlighted entrepreneurial training as promising means to enable perceptions of empowerment in entrepreneurship. Entrepreneurial training foster entrepreneurial skills (e.g., goal setting), which usually evoke perceptions of empowerment in entrepreneurship (e.g., perceptions of efficacy). Uncovering the mechanisms that link entrepreneurial training with entrepreneurial empowerment becomes critical to the understanding and promotion of empowerment in entrepreneurship.

4.3 Personal initiative training, personal initiative behavior, and entrepreneurial empowerment

The model in figure 4.1 suggests that personal initiative behavior is one of the mediators in the relationship between Crea training and entrepreneurial empowerment. Crea training includes a component on personal initiative. Personal initiative training promotes an entrepreneurial mindset, a focus on scanning and exploitation of opportunities, that leads to personal initiative behavior in entrepreneurship (Campos et al., 2017; Frese et al., 2016; Glaub et al., 2014; Mensmann & Frese, 2016). Personal initiative behavior refers to self-started, future-oriented, and persistent behaviors that overcome barriers (Frese, 2009; Frese & Fay, 2001; Frese

et al., 1997). The different modules within the personal initiative component are designed to instruct individuals on how to actively influence the environment, anticipate problems and opportunities, and persistently transform those opportunities into viable products or services (Frese et al., 2016) (see further training description in the method section).

In the model in figure 4.1, we further argue that personal initiative behavior is related to entrepreneurial empowerment. Self-started, future-oriented, and persistent behaviors that overcome barriers in entrepreneurship, should be related to entrepreneurial empowerment.

Self-starting actions should be linked with entrepreneurial efficacy. Self-starting implies that individuals start actions themselves without waiting for given instructions or simply reacting toward work-role requirements (Frese & Fay, 2001; Mensmann & Frese, 2016). Repeated self-started behaviors towards entrepreneurial tasks and goals should increase confidence and perceptions of control about behaviors related to business. Confidence and perceptions of control relate to mastery experience, which results in perceptions of efficacy (Bandura, 1997). The self-starting facet of personal initiative should also affect entrepreneurial autonomy, because self-starting means that individuals act for themselves initiating and regulating actions on their own.

Future orientation should relate to entrepreneurial self-efficacy. The future-oriented facet of personal initiative involves consideration and preparation for future set-backs and opportunities (Frese & Fay, 2001). That is, a person foresees future opportunities and problems and prepare actions for the long-term. Anticipation of scenarios that picture success or failure relate to expectancies of performance towards a given task and situation. Also, people who show future-orientation should plan more and in more detail (Frese, 2009). They should elaborate on strategies and action plans, which should increase perceptions of control and competence to manage a business. Future orientation should also be linked with entrepreneurial autonomy.

Future orientation is associated with planning for goal achievement (Frese & Gielnik, 2014). Planning indicates that one can decide which actions, methods, and resources are taken to accomplish a task. Planning for goal achievement should strengthen the feeling of having choice about methods, pace, and processes to achieve a goal. Visualizing future opportunities should also impact entrepreneurial significance. Future opportunities are usually translated into desirable goals. Desirable goals represent things that are important for oneself. Desirable goals in entrepreneurship often involve products and services that are important to the entrepreneur and its customers.

Persistence should relate to entrepreneurial self-efficacy. Persistent behaviors to overcome barriers means that individuals do not give up when problems arise (Frese et al., 1997). Persistence implies repeated actions towards goal accomplishment. Continuous efforts to accomplish a goal lead to mastery, a comprehensive knowledge or skill in a particular subject or activity. Mastery experiences in entrepreneurship give rise to the belief that one is capable to successfully deal with the roles and tasks associated with entrepreneurship (C. C. Chen et al., 1998). Persistence should also relate to entrepreneurial autonomy, because persistence indicates that a person has the freedom to decide whether he or she continues or stops asserting efforts to accomplish a task. When facing difficulties, people high in persistence decide themselves to keep trying, they choose freely and independently what to pursue. Also, persistence should be linked with entrepreneurial significance. Persistence implies effort and dedication to continue in spite of adversity. Because of the effort, time, and energy invested, entrepreneurs who are persistent on trying to bring forward their products/services into the market, should develop commitment and high regards for consideration about those products/services.

Hypothesis 1a: personal initiative training increases personal initiative behavior.

Hypothesis 1b: personal initiative behavior is related to entrepreneurial empowerment.

4.4 Business literacy training, business knowledge, and entrepreneurial empowerment

An entrepreneurial mindset may be just not enough to facilitate entrepreneurial empowerment. There is considerable research showing that entrepreneurs in developing countries lack both financial planning and management skills (Bloom, Eifert, Mahajan, McKenzie, & Roberts, 2013; Bruhn et al., 2010; Brush & Hisrich, 1999; Buvinic & O'Donnell, 2016; Calderon et al., 2013; McKenzie & Woodruff, 2013).

The model in figure 4.1 suggests that business knowledge is the other mediator in the relationship between Crea training and entrepreneurial empowerment. The training component on business literacy facilitates formal accounting skills and promotes the use of business knowledge such as costs identification, sales recording, or pricing to maximize profit (see further training description in the methods section). The training on business literacy has been shown to increase entrepreneurs business knowledge and management skills (e.g., formal accounting techniques) (Calderon et al., 2013).

The model in figure 4.1, further shows that business knowledge is related to entrepreneurial empowerment. Business knowledge should particularly relate to entrepreneurial self-efficacy and entrepreneurial autonomy. Business knowledge should provide confidence on one's negotiation skills. For example, if one knows how to calculate cost and benefits for a product or service, one should feel in a better position and more confident to negotiate with others and set a corresponding price for those services and products. Also, having knowledge about business should be related to a person belief in its ability and competence to negotiate and

manage a business well, because business knowledge implies that one knows how to carry out tasks and roles in business. For example, knowledge on how to develop business plans or how to deal with taxes and regulations should allow competence to deal with financial affairs in business.

Business knowledge should also be linked to entrepreneurial autonomy. Knowing how to do things in business should increase individual perceptions of autonomy and independence towards business. For example, when a person knows how to perform well on tasks such as tax return, she or he does not feel the need for external support or approval to make own decisions and initiate or regulate actions to proceed with a tax declaration. Knowledge increases certainty to make decisions. People who have knowledge about business should feel confident to make autonomous decisions in business.

Business knowledge may also relate to entrepreneurial significance. People who have knowledge on how to perform well in business tasks such as identifying costs, book-keeping, or pricing, should be more inclined to give importance to those business tasks than those who do not.

Hypothesis 2a: business literacy training increases business knowledge.

Hypothesis 2b: business knowledge is related to entrepreneurial empowerment.

4.5 The relationship between entrepreneurial empowerment and business performance

The model in figure 4.1, suggests entrepreneurial empowerment is related to business performance. Entrepreneurial empowerment should help entrepreneurs to trust their capacity to

influence their business and its environment (Henao-Zapata et al., 2018). Perceptions of self-efficacy relate to successful performance of diverse entrepreneurial task and roles (C. C. Chen et al., 1998). Self-efficacy influences individuals' goals level (e.g., higher expectations) and assertion of effort and perseverance (Rauch & Frese, 2007). Individuals who have a strong sense of their entrepreneurial self-efficacy should be more active to achieve their goals, and therefore perform better in their businesses.

People who perceive themselves as empowered are self-determined (Spreitzer, 1995), they take control over resources (Narayan-Parker, 2005), control their own task accomplishment (Hemang et al., 2017; Thomas & Velthouse, 1990), and take actions towards work goals (Spreitzer, 1996; Spreitzer et al., 1999; Valsania, Moriano, & Molero, 2016). People high in entrepreneurial autonomy determine themselves how to approach business tasks. Since they can choose ways, methods and processes to carry out their work they should anticipate what resources are needed and prepare to meet future demands. Thus, people high in entrepreneurial autonomy should be likely to plan and schedule work, and so to identify and prevent obstacles to achieve high performance. Individuals who manifest high entrepreneurial autonomy mostly depend on their own will and action to succeed. These individuals should be more active, committed, and persistent in pursuing goals such as increasing sales or implementing more efficient processes into the market. Individuals who act autonomously have the independent spirit necessary to try out ideas and further innovations into markets (Lumpkin et al., 2009; Lumpkin & Dess, 1996). Therefore, individuals who show high entrepreneurial autonomy should perform better than those who do not.

Entrepreneurial significance should impact business performance. Entrepreneurial significance serves to mobilize efforts towards goals. Entrepreneurial significance implies that

business tasks, services, and products are considered meaningful. Meaningful indicates that something deserves specific action, effort, attention, and high regard for consideration. Entrepreneurial significance is synonymous with the concept of meaning at the work place (Spreitzer, 1995). Individuals who perceive their tasks and work roles as meaningful are likely to be more invested in their work (Spreitzer et al., 1997). Significance for one's business (i.e., tasks, services, and products) can fuel motivation, increase willingness to work long hours, and enable persistence in the face of obstacles. Entrepreneurs elaborate on goals and visions and make purposeful actions towards ideas that are significant for them. The sense of significance is what energize and aligns behavior and expectations to the entrepreneurial task at hand. For example, by acknowledging the value (i.e., significance) of their products or services, entrepreneurs can feel more confident to actively approach potential investors or clients (instead of waiting for them to come). Ultimately, significance (or meaning) results in increased motivation (Bass, 1985). Entrepreneurs who have a strong sense of significance for what they do, should be actively involved in their businesses, investing more time in activities such as exploring new ways to enhance their products or services, and concentrating more psychic and physical energy in discovering opportunities and implementing business ideas to exploit such opportunities (Henao-Zapata & Peiró, 2017). In sum, entrepreneurs who manifest entrepreneurial empowerment should perform better in business than those who do not.

Hypothesis 3: entrepreneurial empowerment is related to business performance.

4.6 Crea training and its effect on women's entrepreneurial empowerment in developing countries.

We argue that Crea training should be particularly useful for women entrepreneurs in developing countries. The training targets the barriers that make women entrepreneurs more likely to fail in developing countries. Women in developing countries often feel incapable to assert control over things, or are unwilling to undertake self-started actions (e.g., start a business), because they do not trust their abilities and own judgment (e.g., Blanco & Díaz, 2007; Martín-Baró et al., 1998; Shen et al., 2009). Oftentimes, women in developing countries also lack business and managerial skills to run a business (Bloom et al., 2013; Calderon et al., 2013; De Mel et al., 2014; McKenzie & Woodruff, 2016). The two training components embedded in Crea training target the barriers that women entrepreneurs face in developing countries. Personal initiative training and business literacy training should increase capacity to assert control over entrepreneurial activities. Specifically, personal initiative training should assist women fostering self-starting behavior. Business literacy knowledge provides knowledge and business skills, and therefore should increase women's trust in their ability to perform well in business. The two training components facilitate competences, autonomous action, and motivation and purpose to run a business, and therefore constitute promising avenues to facilitate entrepreneurial empowerment.

4.7 Method

The study described below was part of a governmental program to facilitate women entrepreneurship in Mexico. The project was called "Mujeres Moviendo México" (women moving Mexico). The project was carried out by three partner institutions – Crea, Leuphana

University, and the World Bank. Crea is an NGO that constitutes a network of venturing development, which offers access to resources, information, and consulting to women business owners in Mexico. Crea acted as the implementing partner of the project organizing the logistics and implementing the training. They were entirely responsible for the design and delivery of the component on business literacy. Leuphana University provided a research team to adapt and bring forth the personal initiative training. The World Bank, in cooperation with the Leuphana team, assisted Crea with the impact evaluation for the project. The three partners, to a different extent, participated in the development of the research study (e.g., data collection or analysis). In the following, the term “we” is used to refer to the three partner institutions.

4.7.1 Description of the training

The training consisted in two independent components. The first component was the personal initiative training. The second component was the business literacy training. Both training components have been proved to be effective for entrepreneurs in developing countries (Calderon et al., 2013; Campos et al., 2017; Glaub et al., 2014).

Personal Initiative Training. Personal initiative training is a proactivity training based on action regulation theory (Frese, 2009; Frese & Zapf, 1994). Action regulation theory describes the sequence of actions in goal oriented behaviors such as entrepreneurship. According to action regulation theory, there are five phases in the action process: goal setting, information search, planning, execution, and feedback (Mensmann & Frese, 2016). These phases can present a different sequence in practice, however all of them describe phases of entrepreneurial actions (e.g., launching new products). Personal initiative training facilitates entrepreneurial actions along the five phases of the action process. The training ultimate goal is to develop an effective action-oriented mental model. An effective action-oriented mental model implies that after

completion participants should actively influence the environment, scan for opportunities, develop opportunities into viable products/services, plan goal achievement in detail and with a long-term orientation, put ideas into effect, and actively search for feedback to keep ahead of competitors (Frese, 2009; Frese et al., 2016). Action orientation is relevant for entrepreneurs because only through actions business opportunities are identified and successfully implemented (Baum, Frese, Baron, & Katz, 2007; Bischoff et al., 2014).

Personal initiative training is based on action principles. Action principles are theory and research-based principles that teach practical knowledge (Frese, Beimeel, & Schoenborn, 2003; Glaub et al., 2014). They act as heuristic of behaviors or “rules of thumb” facilitating action (Frese, 2009; Frese & Zapf, 1994), and serve to apply the knowledge and skills learned back into the businesses (Bischoff et al., 2014; Frese, 2009). Simply stated, action principles provide concrete guidelines about how to deal with entrepreneurial tasks instead of focusing on abstract theoretical knowledge. During the training, participants learn by doing. Learning-by-doing means learning through action and it implies that participants actively perform and get feedback on target behaviors (e.g., opportunity identification) during the training sessions (Frese et al., 2016; Gielnik, Frese, et al., 2015; Mensmann & Frese, 2016). Learning by doing does not equate to trial and error behavior because action principles provide guidance and rough planning that become the target behavior.

Personal initiative training makes a strong emphasis on feedback for improvement. Provision of feedback is important because it helps trainees to change their behavior while correcting their actions on the way (Frese et al., 2003; Friedrich et al., 2006; Keith & Frese, 2005). Feedback shows either that the behavior is in accordance with the action principles taught in the training or that it needs to be modified. Personal initiative training strongly emphasizes

feedback by both the trainer and other trainees. Particularly useful is negative feedback since it reveals which behavior trainees need to change and provides a path on how to improve (Frese, 2009; Keith & Frese, 2005). Positive feedback is also useful to identify target behaviors (Frese & Zapf, 1994).

The training setup fosters participation and interaction. Entrepreneurs attending the training are encouraged to speak up and share their experiences regarding failures and errors with others. Mistakes and previous failures are taught to be seen and taken as opportunities for improvement. Learning to deal with failure is important because it contributes to entrepreneurial success (e.g., more sales) (Bischoff et al., 2014).

The personal initiative training lasted 18 hours and it was structured in seven modules. The first module offers a brief introduction to the construct of personal initiative in entrepreneurship. The second module remarks the difference between reactive and proactive behavior in entrepreneurship. The third focuses on identification of business opportunities and innovation. The fourth entails goal-setting. Participants establish tailored goals according to their current business. The fifth is based on planning elaboration. Goals are brought a step further and participants are encouraged to set time and place to implement and monitor their actions. The sixth deals with active search and use of feedback. Participants learn active strategies to evaluate their business (e.g. ask competitors' clients about own products or services) and their own behavior as business owners using different sources such as clients or competitors. The seventh covers overcoming barriers related to business. This module remarks the importance of perseverance to succeed in business. Participants are provided different scenarios in which different solutions should be elaborated to overcome a given problem (e.g., power cuts). Last, the training concludes with the development of a personal project. The participants make use of the

content taught and apply the three facets that characterize personal initiative behavior (i.e., self-starting, future orientation, and overcoming barriers) to develop a detailed project (e.g., specific actions to achieve goals) for their own business.

Business literacy training. Business literacy refers to basic knowledge and skills related to finance and business (e.g. identifying costs, book-keeping, or pricing). Business literacy has been extensively applied to promote business growth and profitability in developing countries (Bjorvatn & Tungodden, 2010; Bruhn & Zia, 2011; Drexler, Fischer, & Schoar, 2014; Giné & Mansuri, 2014; Karlan & Valdivia, 2011). Business literacy training is based on the assumption that small business owners in developing countries often do not run their business well (Bloom et al., 2013; Bloom & Van Reenen, 2007; Bruhn et al., 2010). For example, misallocation of capital and labor in the businesses is often seen on small businesses in developing countries (McKenzie & Woodruff, 2013). Business literacy training supplies business owners with business skills to overcome inefficient managing practices. The training aims to increase the use of formal accounting techniques promoting the use of knowledge and skills such as identification of costs, sales recording, or pricing to maximize profit. Formal accounting techniques and business skills have been proved to be beneficial in terms of higher revenues, lower business costs, more clients served, and an increase in formal accounting methods in the context of Mexico (Calderon et al., 2013). The training on business literacy focuses on the practical application of the skills and topics into the business. During the course, practical examples are provided and participants are encouraged to relate and apply them into their businesses. For each module, the participants obtain a short “text-book” which discusses (1) the importance of the concept, (2) its definition, (3) examples of how to compute or use the concept, (4) in-class exercises, and (5) exercises for homework. The training last 42 hours and contains seven main topics taught in separated

modules. The first module covers costs (e.g., the difference between unit, marginal, fixed, and total costs) and how they should be estimated. The second deals with prices and their optimal setting in relation with concepts such as demand and competition. The third module reviews basic legal Mexican rights and obligations of small business owners. The fourth starts with general business organization and production strategies (e.g. the choice of products to produce or sell). The fifth covers marketing as a strategy to gain competitive advantage. The sixth module implies a discussion on how to be an effective salesperson. The last module focuses on the creation of a business financial plan.

4.7.2 Sample

Between 2014 and 2017, we sampled 1794 women business owners in five different states in Mexico (State of Mexico, Mexico City, Queretaro, Guanajuato, and Aguascalientes). Prior to the study, all the women had founded and managed their firms, and had a small or middle-sized venture with an average of 1.41 employees ($SD = 1.45$), and a revenue of 17,237MXN ($SD = 6000$) per month (approx. 927USD). The sample included different type of businesses which were clustered in three categories: retail, service, or industry. From all the 1794, 748 worked in the retail sector (41,7%), 522 worked in the services sector (29,1%), and 524 women worked at the industry sector (29,2%). Businesses typically found in such categories include grocery shops, small restaurants, or outsourcing tailoring.

4.7.3 Study design and procedure

We had two groups in our study, an experimental group (i.e., the women who were invited to the training), and a control group (i.e., the women who were not invited to the training). Initially we had 2848 women business owners. However, from the 1424 women assigned to the experimental group, only 484 attended the training (i.e., attended at least 70% of

training sessions in the two training components). From the 1424 assigned to the control group, only 1310 decided to participate in the follow-up evaluations. Therefore, our final sample consisted of 1794 women business owners (484 for the experimental group and 1310 for the control group).

All women from both experimental and control groups came to Crea's training centers (in the five Mexican states). Either they had been previously informed about the training elsewhere (e.g., governmental institutions or women associations), or they came for the first time to ask for information and participation. Once a considerable group of women (i.e., 20-30) were registered in the same location (i.e., center), a randomization was conducted to assign the women into the training or control group. All the women were stratified by sector, and then grouped into couples according to baseline measures on cognitive skills, education, sales, and profits. Within each couple, the women were randomly assigned to either the training or the control group. All women in the control group were invited to participate in the training after the experiment was concluded. Initially, there were no significant differences on any measure among participants indicating that the randomization was done appropriately and thus all groups were equivalent. However, since we have a considerable dropout of participants at the end of the study, we run additional t-test to check whether the groups were still equal after dropout. We found significant differences for education ($M=9.75$, $SD=3.36$, for the experimental group; $M=10.35$, $SD=3.8$, for the control group) and weekly sales ($M=6504.60$, $SD=39747.68$, for the experimental group; $M=3788.01$, $SD=8049.67$, for the control group). Therefore, we controlled for those variables in our analysis (see analysis section).

A randomized controlled trial design was used to control for effects of maturation (e.g., biological changes), history (e.g., continued education) and testing (e.g., repeated testing).

Measurements were taken at three points in time, before the training (T1), 6 to 9 month after the training (T2), and 12 to 18 month after the training (T3), in both the experimental and control group. This design allowed us to test for the mid and long term effects for the intervention. The time frames (e.g., 6-9 month) were due to delay in data collection. Oftentimes when collecting the data women entrepreneurs were not at home nor in their business (e.g., vacation). Then, a different appointment had to be made to collect the data. The training was free of cost for all participants. The two training components were imparted by Crea. All the trainers had previous training experience and received a train-the-trainers training addressing the methodological approach for each of the two modules imparted.

After prior consent, the data was collected with structured interviews and questionnaires. Confidentiality was assured and participants were informed of the study purpose throughout the interviews. All the interviewers completed a comprehensive training including role plays to standardize practice and minimize bias. The interviewers ignored to which group the participants belonged. The interviews were recorded on electronic devices used to collect the data. Subsequently, verbal responses to open questions (i.e., questions on personal initiative) were transcribed into writing and posteriorly coded by eight independent subject matter experts divided in two teams (i.e., master trainers on personal initiative, and master students trained on coding of personal initiative). The coding was done on the basis of standardized rating guidelines and previous training². Close-ended questions (i.e., numeric, dichotomous, or Likert scales) were typed into data files to be posteriorly analyzed.

²Refer to Appendix III for the interview questions and complete protocol used to code the personal initiative variables.

4.7.4 Measures

Personal initiative. The personal initiative measure was presented to the participants at T2. Personal initiative was measured using structured open-ended questions designed to assess personal initiative behavior. This measure is based on validated interview questions (Frese & Fay, 2001; Frese et al., 1997; Glaub et al., 2014), which were adapted to the sample population in Mexico (i.e., language and terminology). The questions included measures for quantitative and qualitative personal initiative. The quantitative questions referred to the number of changes made in the business during the 6 month prior to the interview. Each change was coded as 1 when the changes were “small” or minor changes. Examples of these changes include “buying a microwave for my business”, or painting the local inside. The number of changes was coded as 2 when changes were “big” or substantial. Examples of these changes include hiring employees or expanding the business to another location. The qualitative questions consisted of five questions related to the development of the major change in the business indicated by the owner (i.e., change in which they were more active and involved). The questions asked: (1) how was the change implemented in the business; (2) who and how generated the idea (i.e., participants themselves or others); (3) whether the major change was previously implemented by other business owners or not (i.e., participants were asked whether their competitors had done the same or not); and in such case, (4) what was different from the change implemented by other business owners; and (5) what did the they do when others copied the change introduced in their business. The answers were coded by the raters assigning a quantitative and qualitative score. The raters counted the number of changes and their magnitude (i.e. small or big) to calculate the quantitative score. The raters coded qualitative initiative using a 5-point Likert scale with 1 (“low initiative”) when participants were passive (e.g., reacted to events instead of acting anticipating them), and 5 (“high initiative”) when participants behaved according to their own

ideas, were different from competitors in their business environment, and included new ways for carrying them out (e.g., introducing innovative products/services). Interclass correlation coefficients (ICC) showed good inter-rater reliabilities for both quantitative and qualitative initiative ($r = .91$, $r = .90$, respectively). The quantitative and qualitative measurements were combined to create a raw total score on personal initiative. When the business owners did not make any change the total score for personal initiative was 0. The correlation between quantitative and qualitative initiative was $.63$ ($p < .001$). To obtain the final score on personal initiative we used principal component analysis (Hotelling, 1933). Principal component analysis is a data reduction technique that serves to convert a set of observations of correlated variables into a simpler set of values, namely components. Principal component analysis is useful because it reveals the internal structure of the data in a way that best explains the variance in the sample (Jolliffe, 2002). The result was a composite score on personal initiative. We standardized the score to ease interpretation (see table 4.1).

Business knowledge. The business knowledge test was presented to the participants at T2. Business knowledge was measured using multiple-choice questions designed to assess the content taught in the business literacy training. Previous to administration, the questionnaire was piloted with 50 entrepreneurs to ensure understanding and adaptation to the women entrepreneurs. The measure consisted of 9 questions addressing key concepts in the business literacy training³. Specifically, the questions assessed knowledge on (1) how to calculate costs, (2) which elements are important to keep track of sales and profits, (3) which are the considerations that one has to take to establish prices of products and services, (4) how to assign

³Refer to Appendix IV for the business knowledge questions.

a price according to the quality of your product/service, (5) what procedures are necessary to register one's business brand and logo, (6) which analyses should be done before investing money to grow one's business, (7) what are the elements that ensure good quality and service, (8) what kind of clients should be targeted, (9) and for which purpose is a business plan useful. A sample question was: *"If you want to invest in your business, what actions should be taken to make this decision?"* Possible answers were shown on a card and participants were asked to choose the correct answer: "A: Do a market analysis, a projection of sales and a cost analysis", "B: Recognize the image of your products and the distribution channels", "C: Identify the cost of the products or services and the production process". The correct answers were counted and added up to a total score. Cronbach alpha for the measure on business knowledge was .60, which suggest the results for this measure should be interpreted with caution. We standardized the score to ease interpretation (see table 4.1).

Entrepreneurial empowerment. Entrepreneurial empowerment was measured at T3 using the scale developed by Henao-Zapata, Frese and Peiró (2018) on entrepreneurial empowerment. A separate scale was used to measure each of the three dimensions of entrepreneurial empowerment. Entrepreneurial self-efficacy had 4 items. The items asked during the last month how often the participants felt competent to manage, negotiate, keep track of financial affairs, and develop a business plan in relation to their business. Entrepreneurial autonomy had 5 items that measured how often during the last month participants thought of themselves as having freedom and independence to control and choose the way they carry out their business. Entrepreneurial significance had 3 items that measured how often during the last month the participants thought their work activities, products and services were meaningful for themselves and their clients. Cronbach alphas for the subscales were .86 for entrepreneurial self-efficacy, .80

for entrepreneurial autonomy, and .63 for entrepreneurial significance. The Cronbach alpha for entrepreneurial significance indicates low internal consistency, which suggest that the results for this dimension should be interpreted with caution. Because, “the three independent dimensions of entrepreneurial empowerment should contribute to an overall meaning” (Henao-Zapata et al., 2018, p.7), we computed a total score of entrepreneurial empowerment. We summed the average score for each dimension and divided the total sum into three. Cronbach alpha across the 12 items embedded in the total score was .85. As before, since the study took place in Mexico, all the scales were translated and back-translated in order to ensure content validity.

Business survival. At the end of field experiment we observed the number of ventures that remained open at T3. We used business survival as our indicator of performance. Business survival has been pointed as a good indicator of performance because the survival of a business mostly depends on its economic performance (Cooper, Gimeno-Gascon, & Woo, 1994; Gimeno, Folta, Cooper, & Woo, 1997), and because business close-down in most cases is the final manifestation of unsuccessful organizational performance.

4.7.5 Analyses

We carried the analyses attending to two major purposes. First, we wanted to test our mediation hypotheses regarding the relationship between Crea training and entrepreneurial empowerment (Hypotheses 1a-b, 2a-b). Second, we wanted to test the relationship between entrepreneurial empowerment as a predictor and business performance as an outcome (Hypothesis 3) (see figure 4.1).

We used structural equation modeling (SEM) as a method for testing our model. We used SEM because is generally considered as the preferred method to test mediation (Frazier, Tix, & Barron, 2004; Hoyle & Smith, 1994; Kenny, 2014). SEM can control for measurement error,

provides information about model fit, and is more flexible than regression since one can include multiple predictors, mediators, and outcomes simultaneously. Specifically, we performed path analysis using AMOS 23 to test our hypotheses and the overall model fit.

We operationalized Crea training as a dichotomous variable with two levels 0 and 1 (control group and experimental group respectively). We included education and weekly sales at T1 as control variables in our analysis. We covaried education and weekly sales with all exogenous variables in the model, and drew direct paths to the endogenous variables.

For our first purpose (i.e., testing the mediation hypotheses), we used the framework by MacKinnon et al (2002). Specifically, we used the product of coefficients method to calculate the indirect effect of the predictor on the outcome and its significance. We calculated the product of coefficients for both mediators independently, and used bootstrap confidence intervals to assert mediation.

For our second purpose, we included business performance in the model to test the relationship between entrepreneurial empowerment and the former (i.e., hypothesis 3). In relation to this hypothesis, both the predictor and the outcome were measured at the same time point (T3). Therefore, reverse causality (i.e., the effect on the independent variable may be caused by the dependent variable) may be at play (Antonakis, Bendahan, Jacquart, & Lalive, 2010). We conducted further analyses to control for reverse causality in our model (see detailed explanation in the additional analysis section below).

4.7.5.1 Comparison among nested models

Although our theoretical model is very straightforward, we compared our default model (i.e., model on figure 4.2) with two alternative models to observe which model fitted better the data. The first alternative model (hereafter direct effect model), differed with the default model

in that the indirect paths (i.e., paths involving the mediators) were constrained to 0. This model implies that there are no underlying mechanisms that account for the relationship between Crea training and entrepreneurial empowerment. The second alternative model (hereafter full mediation model), differed with the default model in that the direct path between Crea training and entrepreneurial empowerment was constrained to 0. This model implies that the relationship between Crea training and entrepreneurial empowerment is fully mediated by personal initiative behavior and business knowledge.

4.8 Results

4.8.1 Descriptive statistics

The means, standard deviations and bivariate correlations are shown in Table 4.1. Overall, all the women who participated in the study showed medium-high levels of personal initiative behavior, had medium levels of business knowledge, manifested medium levels of entrepreneurial self-efficacy, high levels of entrepreneurial autonomy and entrepreneurial significance, and medium-high levels of total entrepreneurial empowerment. Most of the businesses remained open at the end of the study.

4.8.2 Preliminary tests

We considered the chi-square test, the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA) with its associated confidence interval, and the comparative fit index (CFI) to assess the overall fit of our model. SRMR is an absolute index which evaluates the overall discrepancy between observed and implied covariance matrices (R. O. Mueller & Hancock, 2008). A value lower than .09 is considered to show appropriate fit (Hu & Bentler, 1999). RMSEA is a parsimonious index which estimates the

discrepancy per degree of freedom between the original and reproduced covariance matrices in the population. Values up to .05 indicate close fit, and values up to .08 reflect reasonable errors of approximation in the population (Browne & Cudeck, 1993; Edwards, 2001; Hu & Bentler, 1999; MacCallum, Browne, & Sugawara, 1996). The CFI indicates an increase in fit of the target model over a null model in which all variables are uncorrelated (Bentler, 1990). CFI values of .95 or higher indicate optimal fit (Edwards, 2001; Hu & Bentler, 1999). The model fit the data adequately for all the fit indices. The raw χ^2 was 29.253 and χ^2/df was 7.313 with p-value < 0.001. The SRMR was .024. The RMSEA was .059, with a lower confidence interval of .040 and an upper confidence interval of .080, and a p-close of .195. The CFI was .933.

4.8.3 Evaluating the proposed model

We hypothesized that personal initiative behavior and business knowledge mediated the relationship between Crea training and entrepreneurial empowerment (Hypotheses 1a-b, 2a-b). Table 4.2 shows the total direct and indirect effects. We used the procedures described by MacKinnon et al (2002) to determine whether the conditions for mediation were met. As expected, the direct effect of the predictor on the outcome without introducing the mediators (see Path c in Figure 4.2) was significant ($p = .018$). The maximum likelihood estimated equation accounted for a low percentage of the variance ($R^2 = .023$). As hypothesized, the direct effects of Crea training on both mediators (i.e., personal initiative behavior and business knowledge) were significant ($p = .002$, and $p < .001$, respectively), as well as the direct effects of both mediators on entrepreneurial empowerment ($p = .038$, and $p = .037$, respectively). The maximum likelihood estimated equations accounted for a low percentage of the variance ($R^2 = .006$; $R^2 = .013$; respectively). Further, the direct effect of Crea training on entrepreneurial empowerment was not significant ($p = .090$), after controlling for both mediators. The maximum likelihood

estimated equation accounted for a low percentage of the variance ($R^2 = .028$). We tested the significance of the indirect effects calculating the product of coefficients for both mediators independently. The product of coefficients for Path a_1*b_1 was significant ($p = .017$), with a lower bootstrap confidence interval of .001 and an upper confidence interval of .011. The product of coefficients for Path a_2*b_2 was significant ($p = .047$), with a lower bootstrap confidence interval of .001 and an upper confidence interval of .030. The results confirm our hypotheses regarding the mediating role of personal initiative behavior and business knowledge in the relationship between Crea training and entrepreneurial empowerment. In other words, the mediators account for the relation between Crea training and entrepreneurial empowerment.

We also hypothesized that entrepreneurial empowerment was related with business performance (Hypothesis 3). As hypothesized, the results show a positive significant relationship between entrepreneurial empowerment and business performance ($\beta = .113, p < .001$). The maximum likelihood estimated equation accounted for a low percentage of the variance ($R^2 = .013$).

Table 4.3 displays the fit indices and the comparison for the nested models. The model 1 (i.e., default model) imposed no constraints on the relationship among the variables. This model fitted the data very well and is the one we used as a best fit comparison model (see model 1). The second model (i.e., direct effect model), imposed the indirect paths to be 0. This model did not have adequate absolute goodness-of-fit (see model 2), and was not significantly better than the default model when comparing chi-square differences. The third model, imposed the direct path to be 0 (i.e., full mediation model). This model did have adequate absolute goodness-of-fit (see model 3), and was not significantly different than the default model when comparing chi-square differences. The results indicate support for the full mediation model. However, it is quite

unlikely that personal initiative behavior and business knowledge fully explain the relationship between Crea training and entrepreneurial empowerment. Empowerment is influenced by several environmental factors such as social support (Seibert et al., 2011), or the work environment (Spreitzer, 1996). Therefore, we considered the default model as the most accurate model since it represents better the theoretical relationships in our study.

Table 4.1. Univariate Statistics and Correlations

Variables	Mean	SD	Minimum	Maximum	Correlations								
					1	2	3	4	5	6	7	8	9
1. Education	10.18	3.67	0	18									
2. Weekly Sales	4518.36	21236.75	0	800000	.07*								
3. Crea Training	.27	.44	0	1	-.07*	.05*							
4. Personal Initiative Behavior	.00	1	-3.49	1.40	.02	.00	.07*						
5. Business Knowledge	.00	1	-3.03	1.66	.29**	.03	.19**	.08*					
6. Entrepreneurial Self-Efficacy	3.57	.97	1	5	.12**	.03	.06*	.04	.09*				
7. Entrepreneurial Autonomy	4.51	.68	1	5	.13**	.02	.00	.07*	.09*	.45**			
8. Entrepreneurial Significance	4.75	.53	1	5	.06*	.01	.04	.04	.04	.27**	.46**		
9. Entrepreneurial Empowerment	4.27	.56	1	5	.14**	.03	.05*	.06*	.10**	.83**	.80**	.65**	
10. Business Performance	.82	.38	0	1	-.01	.01	.06*	.07*	.05*	.05*	.11**	.11**	.11**

Notes: $N = 1794$; * = $p < .05$; ** = $p < .01$; Personal initiative behavior and business knowledge show standardized values.

Table 4.2. Total, Direct, and Indirect Effects of Crea Training on Entrepreneurial Empowerment

Direct effect of Crea training on entrepreneurial empowerment			
<i>B</i>	<i>SE</i>	<i>t</i>	<i>CI</i>
.125	.052	2.37	.018 .021-.229
Indirect effect of Crea training on entrepreneurial empowerment			
<i>B</i>	<i>SE</i>	<i>t</i>	<i>CI</i>
.091	.054	1.68	.090 -.015-.197
Indirect effect of personal initiative behavior on entrepreneurial empowerment			
<i>B</i>	<i>SE</i>	<i>p</i>	<i>CI</i>
.006	.003	.017	.001-.011
Indirect effect of business knowledge on entrepreneurial empowerment			
<i>B</i>	<i>SE</i>	<i>p</i>	<i>CI</i>
.016	.007	.047	.001-.030

Notes: *N* = 1794; *B* = Beta coefficient; *SE* = standard error; *p* = level of significance; *CI* = confidence interval; The number of bootstrap samples for confidence intervals was 2000; Level of confidence for all confidence intervals was 95 percent.

Table 4.3. Comparison of Nested Models: Data Model-fit and Chi-Square Difference Test

Model 1, Default Model				Model 2, Direct Effect Model				Model 3, Full Mediation Model			
$\chi^2(df, p)$	SRMR	RMSEA (CI)	CFI	$\chi^2(df, p)$	SRMR	RMSEA (CI)	CFI	$\chi^2(df, p)$	SRMR	RMSEA (CI)	CFI
29.253	.024	.059(.04,.08)	.933	140.801	.053	.096 (.083,.110)	.649	32.101	.026	.055 (.038,.074)	.928
(4, <.001)				(8, <.001)				(5, <.001)			
$\Delta\chi^2(1) = \chi^2_{M2} - \chi^2_{M1} = 111.557$ ($df = 4, p < .001$)				$\Delta\chi^2(1) = \chi^2_{M3} - \chi^2_{M1} = 2.884$ ($df = 1, p = .089$)							

Notes: χ^2 = Chi-square; df = degrees of freedom; p = significance level; SRMR = Standardized root mean square residual; RMSEA = root mean square error of approximation; CI = Confidence interval; CFI = comparative fit index; $\Delta\chi^2$ = Chi-square difference.

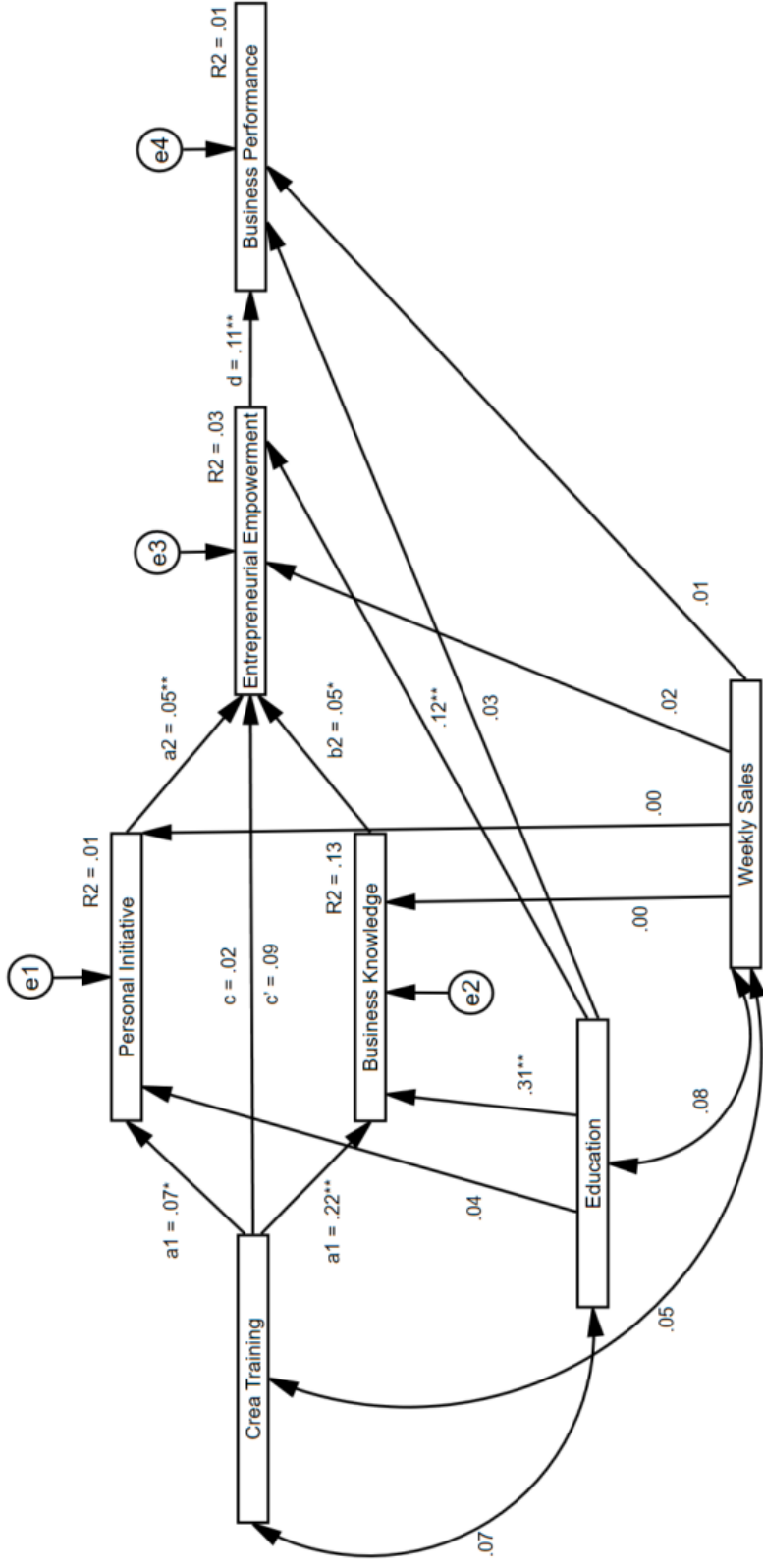


Figure 4.2. Path-analytic model. Notes: path coefficients are standardized; $N = 1794$; $* = p < .05$; $** = p < .01$; $a1$ - $a2$ = standardized coefficients for the relationship with personal initiative behavior; $b1$ - $b2$ = standardized coefficients for the relationships with business knowledge; c = standardized coefficient for the direct effect of Crea training on entrepreneurial empowerment; c' = standardized coefficient for the indirect effect of Crea training on entrepreneurial empowerment; d = standardized coefficient for the direct effect of entrepreneurial empowerment on business performance; R^2 = R-squared; $e1$ - $e4$ = error terms.

4.9 Additional Analyses

To test Hypothesis 3 (the relationship between entrepreneurial empowerment and business performance), we conducted a path analysis to examine the relationship between entrepreneurial empowerment at T3 and business performance at T3. As mentioned before, given that the predictor and the outcome were assessed at the same time, our results may suffer from endogeneity. Endogeneity occurs when an explanatory variable (e.g., entrepreneurial empowerment) is correlated with the error term in the regression equation. Endogeneity bias can be caused by common method variance, omitted variables, or reverse causality. In our case, the concern is reverse causality since one can argue that the predictor (i.e., entrepreneurial empowerment) can be potentially caused by the outcome (i.e., business performance) (Maxwell & Cole, 2007). That means, our predictor variable may be correlated with the error terms in the regression equation. Such correlation can imply that changes in the outcome may change the value of the predictor (i.e., reverse causality). In this situation, ordinary least squares produces biased and inconsistent estimates (Bullock, Green, & Ha, 2010). However, when an instrument is available, consistent estimates may still be obtained (e.g., Calderon, Iacovone, & Juarez, 2016; Jones & Olken, 2005).

Informally, when aiming to test the causal effect of a variable X on another Y , an instrument is a third variable Z which affects Y only through its effect on X (Angrist & Krueger, 2001). Instruments are variables that do not belong in the explanatory equation (i.e., exogenous sources of variance). Good instruments are those that show correlation with the endogenous variable, and which do not correlate with the error term in the explanatory equation (Angrist & Imbens, 1995). Thus, instruments allow for consistent estimation when the explanatory variables are correlated with the error terms in a regression model. A valid instrument induces changes in the explanatory variable but has no independent effect on the

dependent variable, allowing a researcher to uncover the causal effect of the explanatory variable on the dependent variable. For example, suppose a researcher wishes to estimate the causal effect of alcohol consume on depression. Correlation between alcohol consume and depression does not imply that alcohol consume causes depression. Other variables, such as success or failure in life, may affect both depression and alcohol consume. Depression may also affect alcohol consume. To uncover the true relationship (i.e., a consistent estimate), the researcher may attempt to test the causal effect of alcohol consume on depression using taxes for alcohol as an instrument for alcohol consume. Taxes for alcohol is a reasonable choice for an instrument because the researcher assumes that it can only be correlated with depression through its effect on alcohol consume. If the researcher then finds alcohol taxes and alcohol consume to be correlated, this may be used as evidence to argue that alcohol consume causes changes in depression.

Coming back to our model, we employed the two-stage least squares (2SLS) approach with Crea training and extraversion as instrumental variables to correct for endogeneity bias (Antonakis et al., 2010; Bascle, 2008). We used two instrumental variables to ensure that the number of instruments exceeded the number of endogenous variables, which is required to test the exogeneity and validity of instruments (Bascle, 2008). We selected Crea training as instrumental variable because manipulated variables represent perfect instruments (Antonakis et al., 2010). Manipulated variables are randomly assigned and therefore constitute a natural candidate for being a good instrument. We also included extraversion as instrumental variable because stable individual differences such as personality, constitute excellent instruments (Antonakis et al., 2010). Personality traits are stable individual differences that are (partly) genetically determined, that is, they are naturally exogenous. We assume that both Crea training and personality can only be related to business performance through attitudinal or behavioral changes (e.g., entrepreneurial empowerment).

First, we correlated the cross-equation disturbances of the endogenous variables in the SEM model (i.e., error terms of entrepreneurial empowerment and business performance). Second, we used the chi-square test in the simultaneous-equation models as an overidentification test and so to observe the overall fit. The chi-square test is a direct analogous of the Sargan (1958) test in the context of maximum likelihood estimation with structural equation modeling software (Antonakis et al., 2010). If it is significant, the model is not robust, end of story (one must change the model or find better instruments). In our case, the chi-square reached no significance ($\chi^2(1) = 1.13, p > .05$), indicating that our instruments were valid (i.e., exogenous) and the model is correctly identified. Third, we tested the strength of our instruments following the analytical procedure provided by Stock and Yogo (2002). Analyses showed significant results ($p < .001$), indicating that our instruments were sufficiently correlated with the endogenous variables. In other words, Crea training and extraversion did the trick as instruments because they captured unobserved sources of variance that predicted entrepreneurial empowerment without correlating with the error term in the regression equation. Last, we tested for endogeneity in the main regression model by performing the Durbin-Wu-Hausman test (Durbin, 1954; Hausman, 1978; Wu, 1973). The Durbin-Wu-Hausman test was not significant ($p = .06$), suggesting that our causal model did not suffer from endogeneity and thus provided unbiased coefficients. In other words, the explanatory variables were not correlated with the error terms in the ordinary regression model. Thus, for simplicity's sake, we reported the results of the SEM model presented above (see figure 4.2). Yet, to confirm the robustness of our results, we also checked the effect of entrepreneurial empowerment on business performance using the 2SLS approach. The 2SLS approach revealed that entrepreneurial empowerment had a significant positive relationship with business performance ($p < .05$). That is, the relationship remained significant also when controlling for endogeneity.

4.10 Discussion

Investing in women's empowerment constitutes a direct path towards gender equality, poverty eradication and inclusive economic growth (United Nations, 2018). Research shows women's economic empowerment brings poverty rates down and economic growth up (e.g., Ahmad & Muhammad Arif, 2015; Bandiera et al., 2013; Banerjee et al., 2015), which indicates that nations do better when women are economically empowered (Buvinic & O'Donnell, 2016).

Consistent with previous research, we suggested entrepreneurship as an effective path to facilitate women's empowerment (e.g., Buvinic & O'Donnell, 2016; Cho et al., 2013; Datta & Gailey, 2012; Shankar et al., 2015), and promote economic growth (e.g., Campos et al., 2017; Frese et al., 2016; Gielnik, Frese, et al., 2015; Mead & Liedholm, 1998). Specifically, we suggested entrepreneurial training as an effective means to facilitate entrepreneurship and entrepreneurial empowerment. Our main purpose was to unfold the underlying mechanisms through which a specific training executed in Mexico impact on women's entrepreneurial empowerment. As expected, we found that personal initiative behavior and business knowledge accounted for the relationship between Crea training and entrepreneurial empowerment. This goes in line with previous research suggesting that entrepreneurial training can be an effective way to empower women in developing countries (Azam Roomi & Harrison, 2010; McKenzie & Puerto, 2017; Shankar et al., 2015; Valdivia, 2015). However, we explain further by elucidating and testing empirically specific mechanisms that account for the positive effect of entrepreneurial training on entrepreneurial empowerment. Specifically, our results show that promotion of an action-oriented entrepreneurial mindset (i.e., personal initiative) in combination with financial and managerial skills (i.e., business literacy) are effective ways to facilitate entrepreneurial empowerment. As expected, we also found that entrepreneurial empowerment had a positive

relationship with business performance. This is consistent with previous research in that empowerment has positive effects on performance (Seibert et al., 2004; Seibert et al., 2011; Spreitzer, 1995, 2008). Yet, we go beyond traditional organizational settings (Seibert et al., 2011), showing that empowerment does have a positive relationship with entrepreneurial performance.

4.10.1 Contributions

Overall, we hope to contribute to the literature providing a rigorous evaluation of an empowerment intervention that shows the empowerment process and its direct effects (Grabe, 2012; Ibrahim & Alkire, 2007). Empowerment interventions often have difficulties to specify what they try to accomplish and to evaluate whether empowerment has been achieved or not (Christens & Perkins, 2008; Grabe, 2012; Malhotra, 2003; Malhotra & Schuler, 2005; Mosedale, 2005; Narayan-Parker, 2002, 2005; Sen, 1999; Townsend et al., 2004). Attending to Kabeer's (1999) model on empowerment facilitation, we made specific 'how' resources (i.e., Crea training), agentic manifestations (i.e., personal initiative behavior and business knowledge), and outcomes (i.e., business performance), interplayed to empower women in their businesses. At a theoretical level, our research clarifies the paths that lead to entrepreneurial empowerment. At an empirical level, our results confirm the importance of empowerment in entrepreneurship (Henao-Zapata & Peiró, 2017), by showing a positive relationship with business performance. Also, we go beyond a mere observation of an increase in women's entrepreneurial opportunities (e.g., Azam Roomi & Harrison, 2010; Datta & Gailey, 2012) and probe more deeply as to whether or not the women entrepreneurs believe and act upon a sense of empowerment (Calas, Smircich, & Bourne, 2009).

One practical implication of this study is the conclusion that Crea training is an effective approach to facilitate women's empowerment. Scarce access to training is one of the major reasons often pin-pointed to explain the non-existence, failure and/or poor

performance of women entrepreneurs (Azam Roomi & Harrison, 2010; Brown et al., 2002; Brush & Hisrich, 1999; De Bruin et al., 2006). Our results suggest that policy makers should work toward creating an enabling an opportunity structure (e.g., policies and incentives) that encourages women's access to training that facilitate (1) personal initiative behavior, and (2) business knowledge in entrepreneurship.

4.10.2 Limitations and further research

We should note the limitations of our study. First, one should be cautious in drawing general conclusions from our results. Our sample relates to Mexican women entrepreneurs, which limits the scope of our conclusions. In order to contribute to the generalizability of our results, further studies should replicate our model in different samples (e.g., including men and women entrepreneurs in the technological sector), and contexts (e.g., different countries). Second, our model explained a very low percentage of the variance in the investigated mediators (i.e., personal initiative behavior and business knowledge) and in the outcome variables (entrepreneurial empowerment and business performance). However, the variance explained should be interpreted attending to the following facts. There was a relatively long time lapse (up to 18 month) between the training intervention and the third measurement, which provides a conservative test of the investigated relationships, as outcomes of training decrease with time (Blume, Ford, Baldwin, & Huang, 2010). In addition, empowerment is a complex construct that is influenced by numerous contextual and individual factors such as social support (Seibert et al., 2011), the work context (Spreitzer, 1996), the institutional context (Alsop et al., 2006), cognitive elements (Thomas & Velthouse, 1990), or/and intrinsic motivation (Spreitzer, 1995). We consider the fact that we could find training impacts after 18 month as evidence for the effectiveness of Crea training to facilitate entrepreneurial empowerment and business performance. Third, we only considered the women who attended the training (and not those who were invited) as the experimental group. Because of

uncontrolled or omitted variables, one can argue then that the experimental group is no longer equivalent to the control group (e.g., De Mel, McKenzie, & Woodruff, 2009). However, from a psychological perspective, it does not make sense to assume that those who were invited and did not attend the training received the same treatment than those who attended the training, only because of the unique fact of being invited to participate. Further research can include those who do not participate in the training in order to compare results. Fourth, although we controlled for endogeneity in the analysis concerning the relationship between entrepreneurial empowerment and business performance, this part of our study is still cross-sectional rather than longitudinal. Further research should seek to provide stronger evidence of the causality among such variables. Fifth, our study only addressed the effect of entrepreneurial empowerment on business survival as an indicator of business performance. It would be interesting to examine fine-grained performance outcomes such as sales and profits per day, as well as to expand the quest to some wider sociopolitical outcomes involving women's empowerment such as household participation in decision-making, or political engagement. Sixth, we only gathered data on entrepreneurial empowerment at one point in time in our longitudinal design. Entrepreneurial empowerment should emerge from the interaction between the person and the business environment (Henao-Zapata et al., 2018). This interaction should manifest fluctuations overtime. Further studies should include growth models that can show the evolution and fluctuation of entrepreneurial empowerment across time. Last, we limited our scope to entrepreneurial empowerment as a sum of its dimensions. It would be interesting to see the effects that each dimension has on specific behaviors and outcomes related to entrepreneurship. For instance, further research can focus on the different effects of each dimension on behaviors such as innovation or persistence in entrepreneurship.

4.11 Conclusion

The results of this paper confirm that entrepreneurial training, which promote an entrepreneurial mindset and proactive behavior, and that facilitate formal accounting skills and the use of business knowledge, constitute an effective approach to empower women in relation to their business. Particularly, the results show that personal initiative behavior and business knowledge are key elements to generate entrepreneurial empowerment. At the same time, the findings of this paper confirm the importance of empowerment in entrepreneurship (Henao-Zapata & Peiró, 2017), by showing a positive relationship with business performance.

5 General Discussion

In this dissertation, I investigated the construct of empowerment in entrepreneurship. The three studies presented in this manuscript focused on factors that foster entrepreneurial empowerment and the effect of the latter on entrepreneurial success. I put emphasis on evidence-based entrepreneurship training as effective means towards entrepreneurial empowerment. The theoretical review and the empirical findings showed that empowerment in entrepreneurship is important for entrepreneurial success.

Chapter 2, based on the active, persistent, and change-oriented behaviors associated with psychological empowerment, argued that empowerment can contribute to entrepreneurship. The chapter presented the dimensions of psychological empowerment (Spreitzer, 1995), and elaborated on their theoretical and empirical relations with active characteristics of entrepreneurship (Frese, 2009). Moreover, the chapter stated that the relationship between empowerment and entrepreneurship should be reciprocal rather than unidirectional. Also, the chapter addressed mentoring and entrepreneurship training as promising paths to facilitate empowerment and success in entrepreneurship.

Chapter 3, provided a definition and a measure of entrepreneurial empowerment. The chapter demonstrated that entrepreneurial empowerment is related with constructs relevant to the empowerment and entrepreneurship research. The scale validation of entrepreneurial empowerment helps to uncover the underpinnings of entrepreneurial empowerment in future research. Consistent with previous research, the chapter suggested that empowerment should be focused on a specific context and activity domain, because empowerment for specific tasks and goals depends on a person's resources and skills in an specific area (Diener & Biswas-Diener, 2005).

Chapter 4, tested the effect of entrepreneurship training on entrepreneurial empowerment and showed that training components that target personal initiative and business literacy are important to facilitate entrepreneurial empowerment and entrepreneurial success. By taking a long-term perspective on the relationship between entrepreneurship and empowerment, the chapter shed light on the directionality of effects between the two constructs, as well as on the mechanisms that lead to lasting empowerment effects in developing countries (Alkire, 2005; Grabe, 2012). Also, the measurement of entrepreneurial empowerment in applied research contributed to further the validation of the construct of entrepreneurial empowerment.

5.1 General Theoretical Implications

This dissertation has a number of theoretical implications.

Chapter 2, contributes to extend the knowledge in the empowerment literature by studying empowerment out of traditional organizational settings (Bowen & Lawler, 1995; W. Burke, 1986; Seibert et al., 2004; Spreitzer, 1995; Thomas & Velthouse, 1990). The chapter provides theoretical insights that can serve to understand the precursors of active performance in entrepreneurship. The construct of empowerment in entrepreneurship can help to explain why and how some individuals show more active ways of performing actions in entrepreneurship (Frese & Gielnik, 2014).

Chapter 3, contributes to the hitherto empirically unexplored aspects of empowerment in entrepreneurship (Henao-Zapata & Peiró, 2017). By specifying the nature of entrepreneurial empowerment and its dimensions one can better understand the relationships between the construct of entrepreneurial empowerment and performance components in empowerment and entrepreneurship research. The construct of entrepreneurial empowerment can help to focus thought, planning, and action in entrepreneurship research.

Chapter 4, suggests that evidence-based entrepreneurial training, particularly training which promote entrepreneurial behavior and financial and management skills, serves to facilitate entrepreneurial empowerment and entrepreneurial success in developing countries. At a theoretical level, the results confirm the assumption suggesting entrepreneurship as a powerful approach to empower women in developing countries (e.g., Azam Roomi & Harrison, 2010; Datta & Gailey, 2012; Mair, Martí, & Ventresca, 2012; Torri & Martinez, 2014), and serves to clarify the paths (i.e., personal initiative behavior and business knowledge) that lead to entrepreneurial empowerment and entrepreneurial success. Chapter 4, also contributes to the empowerment theory by showing the positive relationship of entrepreneurial empowerment with business performance. Consistent with previous empowerment research, the chapter confirms the positive effects of empowerment on performance (Seibert et al., 2004; Seibert et al., 2011; Spreitzer, 1995, 2008), however, it goes beyond traditional work settings (Seibert et al., 2011), showing that empowerment has a positive effect on entrepreneurial performance. Further, Chapter 4 contributes to the literature on women's entrepreneurship by taking a power perspective (Ahl, 2006), and introducing a female-tested measuring instrument in entrepreneurship research (i.e., scale on entrepreneurial empowerment) (Moore, 1990). The chapter also contributes to the women's empowerment literature (e.g., Ibrahim & Alkire, 2007; Kabeer, 2005), by using sound methods that provide evidence on the effectiveness of empowerment interventions on women. The use of quantitative designs that show the process and the direct outcomes of empowerment interventions positively contribute to women's empowerment research and practice (Mason, 2005; Mason & Smith, 2003).

5.2 General Practical Implications

The results of this dissertation bring up important practical contributions.

Chapter 2, illustrates two concrete paths to facilitate empowerment and success in entrepreneurship, namely mentoring and entrepreneurship training. This can assist entrepreneurship and empowerment facilitation strengthening existing approaches. For example, existing entrepreneurship training approaches could add a component including mentoring and coaching at the end of the training to increase their impact. The mentoring and coaching should be carried out by experienced entrepreneurs. Experienced entrepreneurs can rise perceptions of empowerment in entrepreneurship and facilitate entrepreneurial success. The mentoring and coaching component should provide social support and use role modeling techniques to facilitate empowerment and effective entrepreneurship. Adding mentoring and coaching can help to ensure transfer of the training content to the context at hand, and to increase the effect of the training by provision of case-specific feedback to each participant (e.g., Campos et al., 2017). Also, an entrepreneurship training component could be added to strengthen microcredit programs for entrepreneurs. Microcredit programs typically provide entrepreneurs with small loans to fund a business idea or already established business (Chliova, Brinckmann, & Rosenbusch, 2015). Adding a training component that facilitate entrepreneurial skills and perceptions of empowerment in entrepreneurship can increase the chances for participants of microcredit programs to succeed.

Chapter 3, provides the definition and measurement of entrepreneurial empowerment. The definition of entrepreneurial empowerment can contribute to a more accurate conceptualization and investigation of empowerment in the field of international development (Christens & Perkins, 2008; Grabe, 2012; Mosedale, 2005; Narayan-Parker, 2005). For instance, interventions that aim to facilitate empowerment through entrepreneurship (e.g., McKenzie & Puerto, 2017; Shankar et al., 2015), can then specifically

conceptualize what they try to accomplish in terms of promotion of empowerment at the individual level (Grabe, 2012; Mosedale, 2005; Perkins & Zimmerman, 1995). Also the construct of entrepreneurial empowerment can assist scientists, practitioners, and policy makers to address the underlying mechanisms that link empowerment interventions with positive effects (e.g., capacity building with economic development) (Mason, 2005; Mason & Smith, 2003).

The measure of entrepreneurial empowerment is, to the best of our knowledge, the first coherent measure of empowerment in the field of entrepreneurship. By developing a task-specific measure of empowerment in entrepreneurship, Chapter 3 increases the predictive role of empowerment to enhance outcomes such as entrepreneurship, profitability, and economic development. The scale on entrepreneurial empowerment can serve as a rigorous indicator of empowerment allowing (1) international comparison, (2) assessment of the instrumental (e.g., outcomes) and also the intrinsic value of empowerment (e.g., self-confidence), (3) and can allow the tracking of the process of empowerment over time (Alkire, 2005; Malhotra et al., 2002).

Chapter 4, contributes to the practice providing a rigorous evaluation of an empowerment intervention that shows the empowerment process and its direct effects (Grabe, 2012; Ibrahim & Alkire, 2007). This eases replication and helps to further new effective empowerment interventions in developing countries. For example, researchers and practitioners can refer to the procedures described in chapter 4 to design, adapt, and implement similar projects in different countries.

Particularly relevant is that the findings of chapter 4 bring to light powerful avenues to empower women in developing countries. In developing countries, women lack education, technical skills, and experience to develop entrepreneurial capacity and highly productive businesses (Bruhn et al., 2010; Bruhn & Zia, 2011; Datta & Gailey, 2012). The chapter

shows two evidence-based training components that can help to overcome the challenges (e.g., lack of managerial capacities) and the barriers (e.g., lack of socio-structural support) that women face when pursuing their ventures. The results suggest that policy makers should work toward creating an opportunity structure (e.g., policies and incentives) that encourages women's access to training that facilitate proactive behavior and financial and managerial skills in entrepreneurship.

5.3 Further research

This dissertation takes initial steps in drawing the rationale and showing empirical evidence about the relationship between empowerment and entrepreneurship. Yet, there are a number of possibilities to expand the research of empowerment in entrepreneurship.

First, different sociodemographic samples (e.g., high-income, men and women) and/or different contexts than Mexico, would contribute to further validate the scale of entrepreneurial empowerment and so to generalize the results of this dissertation. In order to contribute to the generalizability of the results, further studies could replicate (or integrate) the models presented in this dissertation in different samples (e.g., youth men and women entrepreneurs), and contexts (e.g., different countries).

Second, further studies should seek for greater differentiation (or integration) between entrepreneurial empowerment and other constructs addressing proactive behavior in entrepreneurship. The theoretical and empirical relationships between entrepreneurial empowerment and various entrepreneurial attitudes and behaviors are similar with some of the most robust theories in the field of entrepreneurship (e.g., personal initiative theory; Frese & Fay, 2001). Even that this dissertation has shed some light on the relationship between entrepreneurial empowerment and proactive behavior in entrepreneurship (i.e., personal initiative behavior), a number of interesting questions are still pending. For example,

can entrepreneurial empowerment explain why or how some people manifest more personal initiative in entrepreneurship? Does entrepreneurial empowerment mediate the relationship between personal initiative and entrepreneurial performance? Answer to such kind of questions would contribute to differentiate (or integrate) similar constructs involving proactivity, and might expand and simplify the range of processes and outcomes to which different theories apply.

Third, attempts aiming to clarify further the directionality of the relationship between entrepreneurial empowerment and entrepreneurship may entail a promising direction for research. The findings of this dissertation only indicate a unidirectional relationship between entrepreneurial empowerment and entrepreneurship. Yet, there is much to know about the directionality of the relationship between both constructs. Although theory and research suggest mutual interaction between entrepreneurial empowerment and entrepreneurship, additional longitudinal studies and dynamic analyses of their relationships are still needed to clarify issues regarding directionality and reciprocal effects. Longitudinal studies could also examine the evolution of entrepreneurial empowerment across time. In its two empirical studies, this dissertation only gathered data on entrepreneurial empowerment at one point in time. Entrepreneurial empowerment should emerge from the interaction between the individual and the business environment (Henao-Zapata et al., 2018). This interaction should show fluctuations overtime. Further research could include growth models able to show the evolution and fluctuation of entrepreneurial empowerment across time.

Fourth, this dissertation limited the scope to entrepreneurial empowerment as a sum of its dimensions. Further studies could examine the effects that each dimension has on specific behaviors and outcomes related to entrepreneurship. For example, further research can focus on the different effects of each dimension on behaviors such as innovation or affective and emotional dimensions such as passion in entrepreneurship. Fine-grained

performance indicators such as sales, profits, number of employees, or number of working hours per day, would also be interesting to examine the different effect of each dimension. Besides performance outcomes, different outcomes of entrepreneurial empowerment could also be examined. For example, it would be interesting to study side effects of entrepreneurial empowerment. “Over-empowerment” may result in overconfidence and maladjustments making individuals persist in efforts that are actually strategic errors (Conger & Kanungo, 1988). Perhaps, entrepreneurs who manifest high entrepreneurial empowerment may be prone to make reckless decisions that could lead to counterproductive effects in business. Also, it would be interesting to extend the scope towards wider outcomes in international development including sociopolitical outcomes such as political involvement, women’s participation in the labor force, and/or poverty reduction.

5.4 General Conclusion

This dissertation reveals that taking entrepreneurial empowerment into account is important to develop a better understanding of the mechanisms underlying successful entrepreneurship. This is particularly important in the context of developing countries.

The chapters of this dissertation take initial steps in drawing the rationale and showing evidence of the relationship between empowerment and entrepreneurship. Altogether, the dissertation posits that empowerment relates to entrepreneurial success. The development of the construct of entrepreneurial empowerment and a multidimensional measure to measure its dimensions can help to build further studies on the interaction between empowerment and entrepreneurship. The dissertation provides concrete paths to promote empowerment and entrepreneurship in applied context and suggests future directions to advance research on empowerment in the field of entrepreneurship.

I hope this dissertation helps to guide practitioners when aiming to promote entrepreneurship and empowerment. Particularly, those who intend to facilitate women's empowerment in developing countries. I also hope this dissertation serves to stimulate the use of more accurate indicators when conceptualizing and investigating the process and consequences of empowerment in international development. Overall, this dissertation contributes to further the development of theory and research that advances groundwork of empowerment in entrepreneurship.

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7 Appendix

7.1 Appendix I: Definitions of Empowerment in The Literature

(Alkire, 2005)	Empowerment is an increase in certain kinds of agency that are deemed particularly instrumental to the situation at hand. Thus I am choosing to assume that empowerment is a subset of agency, and that increases in empowerment would be reflected in increased agency (but not necessarily vice versa).
(Alsop & Heinsohn, 2005)	Empowerment is defined as a person's capacity to make effective choices; that is, as the capacity to transform choices into desired actions and outcomes.
(Bartle, 2003)	Having the capacity to do things that community members want to do and going beyond political or legal permission to participate in the national political system (Alsop et al., 2006).
(Batliwala, 1994)	A spiral, changing consciousness, identifying areas to target for change, planning strategies, acting for change, and analyzing activities and outcomes (cited in, Mosedale, 2005).
(Burke, 1986)	To empower, implies the granting of power – delegation of authority (Burke, 1986, p. 51; as cited in Conger & Kanungo, 1988).
(Chambers, 1993)	Empowerment means that people, especially poorer people, are enabled to take more control over their lives, and secure a better livelihood with ownership and control of productive assets as one key element (cited in Ibrahim, & Alkire, 2007).
(Conger & Kanungo, 1988)	A process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques of providing efficacy information.
(Craig & Mayo, 1995)	Empowerment is about collective community, and ultimately class conscientisation, to critically understand reality in order to use the power which even the powerless do possess, so as to challenge the powerful and ultimately to transform the reality through conscious political struggles (cited in Ibrahim & Alkire, 2007).
(Goetz & Gupta, 1996)	Control over resources (cited in, (Alsop et al., 2006).
(Grootaert, 2005)	Expanding assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable

	institutions that affect their lives (cited in Alsop et al., 2006).
(Kabeer, 1999)	The process by which those who have been denied the ability to make strategic life choices acquire such an ability.
(Kroecker, 1995)	Reversing the process of alienation and disbelief in change and increasing access to resources and control over the conditions and decisions that affect one's personal life and environment (cited in Alsop et al., 2006).
(Malena, 2003)	To "empower" simply means to "enable" or "give power to".
(Malhotra et al., 2002)	The enhancement of assets and capabilities of diverse individuals and groups to engage, influence, and hold accountable the institutions that affect them.
(Mason & Smith, 2003)	Extent to which some categories of people are able to control their own destinies even when the interest are opposed by others with whom they interact (cited in Alsop et al., 2006).
(McMillan, Florin, Stevenson, Kerman, & Mitchell, 1995)	Gaining influence over events and outcomes of importance (cited in Alsop et al., 2006).
(McWhirter, 1991)	The process by which people, organizations or groups who are powerless (a) becomes aware of the power dynamics at work in their life context, (b) develop the skills and capacity for gaining some reasonable control over their lives, (c) exercise their control without infringing upon the right of others and (d) support the empowerment of others in the community (cited in, (Rowlands, 1997b).
(Narayan-Parker, 2002)	The expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives.
Oxfam (1995)	Empowerment involves challenging the forms of oppression which compel millions of people to play a part in their society on terms which are inequitable, or in ways which deny their human rights (cited in Ibrahim & Alkire, 2007, p. 381).
(Rappaport, 1987)	A process, a mechanism by which people, organizations, and communities gain mastery over their affairs.
(Rowlands, 1997)	A process; that it involves some degree of personal development, but that is not sufficient; and that it involves moving from insight to action.
(Spreitzer, 1995)	A motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact.
(Thomas & Velthouse, 1990)	Increased intrinsic task motivation... identifies four cognitions (task assessments)... sense of impact, competence,

	meaningfulness and choice.
UNIFEM (United Nations Development Fund for Women)	Having access and control over the means to make a living on a sustainable and long term basis, and receiving the material benefits of this access and control (cited in Mosedale, 2005).
Van Eyken (1991)	Empowerment is an intentional and ongoing dynamic process centered on the local community, involving mutual dignity, critical reflection, caring and group participation, through which people lacking a valid share of resources gain greater access to and control over those resources, though the exercise of an increased leverage of power (cited in Ibrahim & Alkire, 2007, p. 382).
World Development Report, 2000/1	Empowerment means enhancing the capacity of poor people to influence the state institutions that affect their lives, by strengthening their participation in political processes and local decision-making. And it means removing the barriers – political, legal, and social – that work against particular groups and building the assets of poor people to enable them to engage effectively in markets (Ibrahim & Alkire, 2007).

7.2 Appendix II. Measure of the Dimensions of Entrepreneurial Empowerment

Entrepreneurial Self-efficacy

	20%	40%	60%	80%	100%
<i>During the last month, as a business owner, how confident were you that you can...</i>					
1. negotiate with other businessmen well?	()	()	()	()	()
2. keep an overview of your financial affairs well?	()	()	()	()	()
3. manage your business well?	()	()	()	()	()
4. write a business plan?	()	()	()	()	()

Entrepreneurial Autonomy

	Never	Almost never. A few times a month or less	Rarely. Once a month or less	Sometimes. A few times a month	Often. Twice a week	Very often. A few times a week	Always. Every day
<i>During the last month, as a business owner, how often have you thought that...</i>							
5. you have considerable independence and freedom in how you carry out your business?	()	()	()	()	()	()	()
6. you decide how to go about getting things done in your business?	()	()	()	()	()	()	()
7. you can choose the methods to use in carrying out your business?	()	()	()	()	()	()	()
8. you can plan your own work?	()	()	()	()	()	()	()
9. you can control the quality of what you produce or the service you provide in your business?	()	()	()	()	()	()	()

Entrepreneurial Significance

	Never	Almost never. A few times a month or less	Rarely. Once a month or less	Sometimes. A few times a month	Often. Twice a week	Very often. A few times a week	Always. Every day
<i>During the last month, as a business owner, how often have you thought that...</i>							
10. the activities you do are personally meaningful to you?	()	()	()	()	()	()	()
11. the work you do in your business is very important to you?	()	()	()	()	()	()	()
12. the products or services you deliver are very important to your customers?	()	()	()	()	()	()	()

7.3 Appendix III: Personal Initiative Questions and Coding Manual

7.3.1 Personal Initiative Questions

Preguntas abiertas-comportamentales de Iniciativa Personal

ENUNCIADO: Piense en su negocio. A continuación le haré algunas preguntas con relación a los cambios que se han producido en su negocio en los últimos seis meses. Por favor escuche con atención y conteste a las siguientes preguntas.

6.1 ¿Qué CAMBIOS hizo usted en su negocio en los últimos SEIS MESES? Con CAMBIO me refiero a cualquier CAMBIO, incluso pequeño, que usted hizo para mejorar su negocio (ej.: comprar una caja registradora, pintar su local, contratar empleados, introducir nuevos productos o servicios en su negocio)

Nota; Liste todos los cambios que la emprendedora menciona. Si la emprendedora para de hablar o dice que no ha realizado ningún cambio en su negocio pregúntele lo siguiente: "Por favor piense otra vez, durante los últimos SEIS MESES si hizo usted un (otro) CAMBIO, incluso pequeño, para mejorar su negocio."

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

6.2 **NO LEA:** ¿La persona hizo al menos un cambio en su negocio?

SI 1
NO 2 →

PASE
A 6.10

6.3 De los cambios que usted mencionó (RESPUESTA(S) DE 6.1) ¿En qué cambio fue usted más ACTIVA? Con activa me refiero al cambio en el que usted estaba más INVOLUCRADA y en el que puso el mayor ESFUERZO y DEDICACIÓN.

A continuación le haré unas preguntas en relación al cambio que usted mencionó. Cuanto más específica y detallada sea su respuesta mejor.

6.4 ¿Que hizo usted exactamente y CÓMO se llevó a cabo este (CAMBIO INDICADO EN PREGUNTA 6.3)? Por favor, dígame cada detalle y cada PASO durante este (CAMBIO INDICADO EN PREGUNTA 6.3).

6.5 ¿Alguien le sugirió este cambio o fue su propia idea?

Propia 1 →
Alguien 2

PASE
A 6.5b

6.5a ¿Quién fue?

PASE
A 6.6

6.5b ¿Cómo se le ocurrió esta idea?								
6.6 ¿Sus competidores introdujeron este cambio también? NOTA: SI LA EMPRENDEDORA CONTESTA NO PASE A 6.10 (FUERA DE LA ESCALA DE INICIATIVA PERSONAL)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">SI</td> <td style="width: 10%; text-align: center;">1</td> <td rowspan="3" style="width: 10%; vertical-align: middle; text-align: center;"> PASE A 6.10 </td> </tr> <tr> <td>NO</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NO SABE</td> <td style="text-align: center;">9</td> </tr> </table>	SI	1	PASE A 6.10	NO	2	NO SABE	9
SI	1	PASE A 6.10						
NO	2							
NO SABE	9							
Me gustaría verificar junto con usted si he anotado correctamente todas sus respuestas. Lea a la emprendedora todas las respuestas en voz alta (de la 6.1 a la 6.6). Verifique que son consistentes, están completas, son legibles y reflejan las respuestas de la emprendedora.								
6.7 ¿Sus competidores introdujeron este cambio antes que usted?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">SI</td> <td style="width: 10%; text-align: center;">1</td> <td rowspan="3" style="width: 10%; vertical-align: middle; text-align: center;"> PASE A 6.9 </td> </tr> <tr> <td>NO</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NO SABE</td> <td style="text-align: center;">9</td> </tr> </table>	SI	1	PASE A 6.9	NO	2	NO SABE	9
SI	1	PASE A 6.9						
NO	2							
NO SABE	9							
6.8 ¿Cuál es la DIFERENCIA entre el cambio que usted introdujo y el cambio de su competidor? PASE A 6.10								
Me gustaría verificar junto con usted si he anotado correctamente todas sus respuestas. Lea a la emprendedora todas las respuestas en voz alta (6.7 y 6.8). Verifique que son consistentes, están completas, son legibles y reflejan las respuestas de la emprendedora.								
6.9 ¿Qué hizo después de que su competidor introdujo (el cambio de la respuesta 6.3)?								
Me gustaría verificar junto con usted si he anotado correctamente su respuesta. Lea a la emprendedora la respuesta en voz alta (6.9). Verifique que sea consistente, está completa, es legible y refleja la respuesta de la emprendedora.								

7.3.2 Personal Initiative Coding Manual

CODIFICACIÓN IP

GUÍA DEL CODIFICACIÓN DE COMPORTAMIENTO DE INICIATIVA PERSONAL
 INSTRUCCIONES GENERALES CODIFICACIÓN DIRECTIVAS ENCUESTADORES IP
 CODIFICACIÓN CUANTITATIVA DEL COMPORTAMIENTO DE LA EMPRENDEDORA
 CODIFICACIÓN CUALITATIVA DEL COMPORTAMIENTO DE LA EMPRENDEDORA

Preguntas de la entrevista

Codificación cuantitativa de Iniciativa Personal

Únicamente la pregunta “6.1” registra los datos cuantitativos. Así, La codificación cuantitativa se calcula con el número y tipo de cambios listados por la emprendedora en la pregunta “6.1”. La suma de las puntuaciones de todos los cambios es el valor cuantitativo de Iniciativa Personal. Para esto, de cada cambio listado por la emprendedora asignaremos un valor (1 ó 2) y luego sumaremos todos los valores asignados a cada cambio. Los valores 1 ó 2 se definen en relación al tipo de cambio observado. Para un cambio pequeño (o poco significativo) asignaremos el valor 1. Para un cambio grande (ó considerable) asignaremos el valor 2. En caso de que la emprendedora no liste (o mencione) ningún cambio se asignará el valor 0.

La	Descripción	Ejemplos
1	Cambio pequeño - No toma mucho tiempo ni esfuerzo - No es nada novedoso en ese contexto	- Cambio en la manera de recibir a los clientes - Comprar una TV - Construir un estante para mostrar productos
2	Gran cambio - Requiere mucho tiempo, esfuerzo o dinero - Es algo novedoso en el contexto de la emprendedora - Algo único, llamativo	- Comprar una maquina para transportar madera - Llevar a cabo una evaluación semanal del trabajo hecho - Traspaso/extensión del negocio a otra localidad

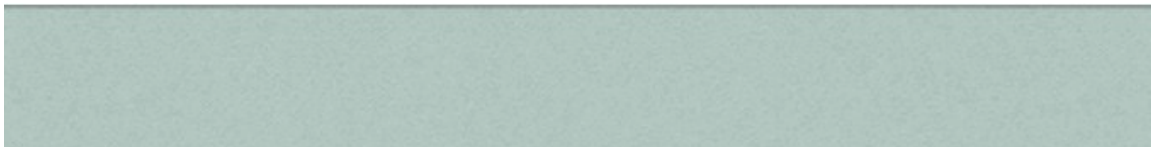
Hay que asegurarse de que los cambios mencionados por la emprendedora son realmente nuevos en la lista. Si un cambio es similar o parece el mismo que ya había mencionado la emprendedora este solo se contará como un cambio. Si dos cambios son similares y uno parece más grande que el otro cuente solo el cambio grande. En todo caso codifique primero el cambio cuantitativo antes de proceder con las preguntas cualitativas.

Ejemplos de cambios similares

→ **Ej1.** “Compré tres computadoras”, “compré tres estantes”, y “compré una memoria USB para mi negocio”. En este caso la emprendedora dió tres respuestas que son similares en cuanto a que todas son compras para mejorar su negocio. Todos son cambios pequeños. En este caso tomaremos solo el primer cambio (“compré tres computadoras”) Asignaríamos un 1 a este cambio y un 0 a los dos restantes (“compré tres estantes”, y “compré una memoria USB para mi negocio”).

→ **Ej2.** “Fui a visitar a mis clientes para mostrarles mis ofertas”, “Motive a mis clientes para venir a mi negocio”. En este caso la emprendedora menciona dos cambios muy similares. Al ser dos cambios pequeños que hablan de lo mismo tomaremos solo el primer cambio (“Fui a visitar a mis clientes para mostrarles mis ofertas”) asignándole un 1. A el segundo cambio nombrado le asignaremos un 0 (“Motive a mis clientes para venir a mi negocio”).

→ **Ej3.** “Utilicé publicidad boca-a-boca entre mis clientes”, “cada día llame al menos 20 clientes para que trajeran sus amigos a mi negocio”. Aquí la emprendedora primero menciona un cambio pequeño y luego añade un cambio grande ya que toma un gran esfuerzo el llamar cada día a 20 clientes y muestra que la emprendedora es *activa*. En este caso asignaríamos un 0 a el primer cambio y un 2 a el segundo.



CODIFICACIÓN IP

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 CODIFICACIÓN CUALITATIVA DEL COMPORTAMIENTO DE LA EMPRENDEDORA

Preguntas de la entrevista

Codificación cualitativa de Iniciativa Personal

La codificación de la parte cualitativa de Iniciativa Personal se basa en las preguntas “6.3-6.9”, las cuales preguntan por el cambio donde la emprendedora fue más *activa* en su manera de implementarlo, si este fue *idea suya*, y si es *diferente* a lo que sus *competidores* hacen (otros emprendedores en el mismo tipo de negocio). El cambio más activo es en el que la emprendedora puso más esfuerzo o utilizó más recursos (e.g. dinero, tiempo). En cualquier caso la emprendedora será la que nos indique que cambio fue el más significativo para ella.

A diferencia de la IP cuantitativa aquí todas las respuestas tendrán un **único valor**. Se asignará una puntuación de 0-5 de acuerdo a los baremos de la siguiente tabla.

Puntuación	Descripción
0	No menciona ningún cambio
1	Menciona cambio sin mostrar los siguientes componentes: - Emprendedora activa - - El cambio fue su propia idea - - El cambio es diferente a sus competidores -
2	Menciona cambio con UNO de los siguientes componentes: - Emprendedora activa + - El cambio fue su propia idea - - El cambio es diferente a sus competidores -
3	Menciona cambio con DOS de los siguientes componentes: - Emprendedora activa + - El cambio fue su propia idea + - El cambio es diferente a sus competidores -
4	Menciona cambio con TRES de los siguientes componentes: - Emprendedora activa + - El cambio fue su propia idea + - El cambio es diferente a sus competidores +
5	Menciona cambio con TRES de los siguientes componentes: - Emprendedora activa + - El cambio fue su propia idea + - El cambio es diferente a sus competidores + y... El cambio o la manera de introducir el cambio es muy novedoso, único y/o diferente. Algo Nuevo para México o que nunca habías visto o escuchado.

Explicación detallada de la tabla

Debemos evaluar la parte cualitativa de la escala de 0-5. Asignaremos un 0 solo si la emprendedora no ha nombrado ningún cambio en la pregunta “6.1 (“2” para la pregunta 6.2)”. Si la emprendedora da una respuesta a la pregunta “6.1” tendrá usted que asignar un valor entre 1-5. Para hacerlo primero debe responder a las siguientes tres preguntas sobre la parte cualitativa del comportamiento de IP.

(1) **¿Muestra la emprendedora un comportamiento activo para lograr el cambio?** → para evaluar si la emprendedora fue activa usted debe utilizar la respuesta de la **pregunta “6.4”** del archivo “ficha_codificación_IP”. En ella la emprendedora dice todas las actividades que ha llevado a cabo para implementar el cambio en su negocio. Esta pregunta debe evaluar si la emprendedora fue **activa** (o pro-activa) poniendo esfuerzo para lograr el cambio o si por lo contrario fue **reactiva**, es decir no llevo a cabo muchas actividades, fue más bien otra persona o las propias circunstancias las que llevaron al cambio.

(2) **¿Fue el cambio idea de la emprendedora u otra persona le sugirió que lo hiciera?** → para evaluar si la idea fue de la emprendedora o de otra persona debe utilizar la respuesta de la **pregunta “6.5”** del archivo “ficha_codificación_IP”. Estas respuestas dicen si la emprendedora tuvo la idea o si no fue así, y en caso de que fuera suya cómo tuvo esta idea. Si la emprendedora dice que la idea fue suya “propia” aparecerá en la “ficha_codificación” un “1”, en caso de que la idea no fuera suya “Alguien” aparecerá un “2”. **Advertencia:** hay casos en los que la emprendedora dice que fue idea suya pero al describir como tuvo la idea menciona explícita o implícitamente que la idea no fue suya. En este caso debe considerar que la idea no fue suya al codificar la respuesta.

(3) **¿Trata la emprendedora ser diferente de sus competidores?** → para evaluar si la emprendedora trata de manera activa ser diferente de sus competidores debe mirar a las **respuestas de las preguntas “6.6-6.9”** del archivo “ficha_codificación_IP”. Aquí es donde la emprendedora menciona si sus competidores han introducido también el cambio (**pregunta 6.6**), y si sus competidores introdujeron el cambio antes que ella (**pregunta 6.7**). Si la emprendedora dice que sus competidores han introducido el cambio antes que ella también se tendrá en cuenta la respuesta a la pregunta de “¿cual es la diferencia entre el cambio que usted introdujo y el que introdujo su competidor?” (**pregunta 6.8**). Si la emprendedora dice que sus competidores han introducido el cambio pero **NO** lo hicieron antes que ella, hay que revisar la pregunta de “¿qué hizo después de que su competidor introdujo (cambio respuesta 6.3)?” (**pregunta 6.9**). Para codificar la respuesta “¿Trata la emprendedora ser diferente de sus competidores?” usted codificará en la siguiente manera. (a) Usted codificará que la *emprendedora trató de ser diferente* de sus competidores: (I.) Si *no* hay competidores que trataran de introducir el mismo cambio (respuesta “2” a la pregunta “6.6” en la ficha_de_codificación_IP); ó (II.) si hay competidores que introdujeron el mismo cambio y lo hicieron antes que la emprendedora (“1” para la respuesta “6.6”, “1” ó “99” para la respuesta de la pregunta “6.7” en la “ficha_codificación_IP”) **PERO** hay una **diferencia** entre el cambio del competidor/es y el cambio que introdujo la emprendedora (6.8); ó (III.) si hay competidores que introdujeron el cambio pero **no** antes que la emprendedora (“1” en la respuesta “6.6” y “2” para la “6.7” en la “ficha_codificación_IP”) **y si** la emprendedora *hizo algo para diferenciar su cambio* del de su competidor/es (6.9). (b) Usted codificará que la emprendedora **no** trata de ser diferente a sus competidores: (I.) si la emprendedora no sabe si hay otros competidores que introdujeran el cambio (“99” para la respuesta “6.6” en la “ficha_codificación_IP”); (II.) si hay competidores que introdujeron el cambio y lo hicieron antes que ella (o no sabe si lo hicieron antes que ella: “1” para la respuesta “6.6” y “1” ó “98” para a respuesta “6.7”) y *no hay diferencia* entre el cambio que introdujo el competidor/es y el que hizo la emprendedora; ó por último (III.) si hay competidores que introdujeron el cambio pero no antes que la emprendedora (“1” respuesta “6.6” y “2” para la “6.7”) y la emprendedora *no hizo nada para diferenciar el cambio* que introdujo ella del de su competidor/es. **Solamente** si la emprendedora cumple todos los requisitos anteriores (1-3), es decir mecionó un cambio, fue activa, tuvo una idea por si misma, y trato de ser diferente de sus competidores entonces debe también hacerse la siguiente pregunta:

(4) **¿Es el cambio o la manera de actuar de la emprendedora muy innovadora o diferente en su contexto?** Para evaluar si el cambio o la manera de llevarlo a cabo de la emprendedora fue muy innovador usted debe revisar una vez más las **respuestas “6.3” y “6.4”** en el documento “ficha_codificación_IP” y juzgar si el cambio - o el modo de llevarlo a cabo - fue muy innovador (Ej. es algo totalmente nuevo en México o en la colonia/contexto de la emprendedora; ver ejemplos abajo).

Ejemplos de codificación. (a) Si la emprendedora mencionó un cambio y fue activa pero la idea del cambio provino de otra persona y sus competidores hicieron el mismo cambio sin diferencias asignaremos el número “2” en la hoja de registro (“codificación_sunombre”). (b) Si la emprendedora mencionó un cambio y fue activa, la idea del cambio provino de ella, pero no trata de ser diferente de sus competidores, usted registrará un “3” en la hoja de registro. (c) Si la emprendedora mencionó un cambio y fue activa, la idea del cambio provino de ella, y además trata activamente de ser diferente de sus competidores usted asignará un “4” en la hoja registro de la puntuación cualitativa. (d) En el caso de que lo anterior se cumpla y el cambio - o la manera de llevarlo a cabo - sea muy innovadora usted asignará un “5”.

Ejemplos negativos y positivos para evaluar el cambio de la emprendedora:

Pregunta	Respuesta +	Respuesta –
Comportamiento activo?	a. Después de tomar la capacitación pense que tenía que remodelar mi local. Invertí dinero en mi negocio, compré dos paquetes de cemento y contrate un obrero también contrate un carpintero para que hiciera unos estantes y unas mesas nuevas. También reutilicé materiales de desecho para reforzar y decorar mis estantes. (La emprendedora fue activa y puso esfuerzo para cambiar su negocio). b. Hice muchos sacrificios e incluso después de que los empleados se fueran trabajo hasta tarde en la mañana o pronto en la mañana antes de que los clientes llegaran. (La emprendedora fue activa, puso esfuerzo en su negocio). c. Encontré un mejor proveedor para mi negocio. Después de visitar a 6 proveedores diferentes y consultar sus referencias con otras emprendedoras, estabecí un contrato con el que me ofreció el mejor servicio, calidad y precio después de comparar. (Esfuerzo grande, emprendedora activa).	a. Pagué alguien para que limpiara a fondo mi negocio. b. Me levante un día por la mañana me encontré con algunos clientes potenciales y les ofrecí mis servicios. (No mucha acción, acciones espontáneas y con poca planificación). c. Tengo un amigo que me ofreció pintar mi local de un nuevo color con una pintura que le sobró en su negocio. El me pintó la entrada de mi local. (La acción más bien proviene de otra persona, la emprendedora no fue muy activa).
¿Idea propia ?	a. Fue mi propia idea el remodelar mi negocio. Nadie me dijo que lo hiciera ni tampoco era necesario pero pense que mejoraría el aspecto de mi local. (La idea fue de la emprendedora). b. Al ver que necesitaba adelantar trabajo y ahorrar dinero decide yo misma trabajar unas horas extra en vez de pagar más horas a mis empleados. (La idea fue de la emprendedora). c. Decidí buscar nuevos proveedores para ver si podía mejorar mis servicios	a. Un cliente me dijo que a mi negocio le hacía falta una limpieza y que así se vería mucho mejor. (La idea no fue de la emprendedora). b. Mi hermana me dijo que sería buena idea atraer nuevos clientes y un día me decidí a hacerlo. (No fue la idea de la emprendedora). c. Si fue mi propia idea. Mi amigo me ofreció pintar mi negocio y se me ocurrió que así podría mejorar su aspecto. (Aunque dijo que la idea era suya

	teniendo mejor calidad y siendo más económico. (La idea fue de la emprendedora).	realmente surgió de su amigo).
¿Diferente de los competidores ?	I. « 2 » para la pregunta « e » = sus competidores no hicieron el mismo cambio. II. « 1 » para la pregunta « e » y « 1 » para la pregunta « f » = la diferencia es el precio. En la pregunta « g » = el cambio fue introducido por sus competidores antes que la emprendedora pero de manera diferente. III. « 1 » para la pregunta « e » y « 2 » para la pregunta « f » = empecé a ofrecer jugos diferentes en mi negocio. En la pregunta « g », el cambio fue introducido por su competidores después de ella pero intento ser diferente introduciendo nuevos productos.	I. « 1 » para la pregunta « e » y « 1 » para la pregunta « f » = « Admito que no hay mucha diferencia » en la pregunta « g ». (El cambio no fue diferente al de sus competidores). II. « 1 » para la pregunta « e » y « 1 » para la pregunta « f » = « La diferencia es que el mio es mejor » para la pregunta « g ». (La diferencia no es clara, el cambio parece el mismo). III. « 1 » para la pregunta « e » y « 1 » para la pregunta « f » = « No sé si mis competidores hicieron el cambio » en la pregunta « g ». La emprendedora no sabe si sus competidores también hicieron lo mismo lo cual quiere decir que no busca activamente ser diferente. IV. « 1 » para la pregunta « e » y « 2 » para la pregunta « f ». « Nada hasta la fecha » en la pregunta « g ». El cambio fue copiado por sus competidores pero la emprendedora no hizo nada para tratar de ser diferente después de que le copiaran.
Si todos los criterios anteriores son positivos ¿El cambio, o la manera de llevar a cabo el cambio, es muy innovador ?	I. Introdujo la posibilidad de dar objetos como propinas o descuentos en otros establecimientos. (Nuevo sistema de propina para empleados llamando la atención de los clientes). II. Para adquirir maquinaria barata para su negocio fue a una subasta de embargos de la policía. (Nueva manera más económica y diferente de adquirir maquinaria).	I. Vendo mis productos a domicilio. (El cambio no es innovador). II. Tuve que negociar con el dueño del local de al lado para que me dejará hacer obras durante unos días. (No es nada innovador, procedimiento normal en cualquier tipo de cambio estructural en un establecimiento).

7.4 Appendix IV: Business Knowledge Questions

ENTREVISTADOR(A) SI SE APLICÓ LA SECCIÓN C, Y LA EMPRESARIA ASISTIÓ A LOS CURSOS DE CREA-MMM, APLIQUE SECCIÓN 5, 6, 7 Y TERMINAR ENTREVISTA, SI LA EMPRESARIA NO ASISTIÓ A LOS CURSOS CREA-MMM, APLIQUE LA SECCIÓN 5 Y 6, TERMINAR ENTREVISTA. EN SECCIÓN 6 ESTAS ENTREVISTAS, MENCIONAR "AHORA LE VOY A PREGUNTAR SI USTED REALIZO ALGUNA INNOVACIÓN EN SU NEGOCIO EN LOS ÚLTIMOS SEIS MESES ANTES DE CERRARLO.

Ahora le voy a preguntar sobre algunos conocimientos empresariales para lo cual le voy a apoyar con unas tarjetas.

5.1a Pilar vende tamales y los produce EN SU CASA, ¿qué recomendación le daría usted para calcular sus costos reales y evitar pérdidas? USAR TARJETA 1	Que separe la contabilidad de su negocio de la contabilidad de su casa 1 Que ponga un anuncio afuera de su casa 2 Que no se pague un sueldo a si misma 3 NO SABE / NO CONTESTA 9
5.1b ¿Cuál de los siguientes documentos puede usted utilizar para registrar cuánto dinero entra y cuánto dinero sale de su negocio? USAR TARJETA 2	Cheque 1 Factura 2 Libro de caja 3 NO SABE / NO CONTESTA 9
5.2a ¿Qué consideraciones debe tomar en cuenta para fijar el precio de su producto o servicio? USAR TARJETA 3	El precio del mercado (cuánto están dispuestos a pagar los clientes y consumidores y en cuánto vende la competencia) 1 El costo total de su producto o servicio 2 Las respuestas 1 y 2 3 NO SABE / NO CONTESTA 9
5.2b Si el producto o servicio que usted vende tiene MEJOR calidad que el de su competencia, ¿qué le conviene hacer con respecto a sus precios establecidos? USAR TARJETA 4	Fijar un precio un poco mayor que el competidor 1 No modificar el precio 2 Fijar un precio más barato que el competidor 3 NO SABE / NO CONTESTA 9
5.3 ¿Qué trámite le conviene realizar si quiere que nadie más pueda utilizar su marca, el nombre de su negocio, o su logo? USAR TARJETA 5	Inscripción al RFC (Registro Federal de Contribuyentes) 1 Inscripción IMSS (Instituto Mexicano del Seguro Social) 2 Registro ante el IMPI (Instituto Mexicano de la Propiedad Industrial) 3 NO SABE / NO CONTESTA 9
5.4 ¿Si desea invertir para hacer crecer su negocio, qué acciones debe de llevar a cabo para tomar esta decisión? USAR TARJETA 6	Hacer un análisis de mercado, una proyección de ventas y un análisis de costos 1 Reconocer la imagen de sus productos y los canales de distribución 2 Identificar el costo de los productos o servicios y el proceso de producción 3 NO SABE / NO CONTESTA 9

5.5 ¿A qué se debe que alguien ofrezca un buen servicio a sus clientes? USAR TARJETA 7	A que reconoce las necesidades de sus clientes y busca como satisfacerles 1 A que tiene un precio muy barato aunque su margen de ganancia sea muy bajo 2 A que sea poco receptiva y poco amable con los clientes, ya que eso les gusta 3 NO SABE / NO CONTESTA 9
5.6 ¿A quién se debe identificar para obtener mayores ventas en un negocio? USAR TARJETA 8	A cualquier cliente 1 A los clientes no interesados 2 A clientes potenciales 3 NO SABE / NO CONTESTA 9
5.7 ¿Para qué sirve un plan de negocios? USAR TARJETA 9	Para recordar todo lo que se aprende en la escuela . 1 Para analizar la posibilidad de hacer una inversión inteligente, planear lo que se quiere para el negocio, y analizar el proceso del mismo 2 Para trabajar sobre objetivos personales y de familia 3 NO SABE / NO CONTESTA 9