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### Article

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## **Micro enterprises, self-efficacy and knowledge acquisition: Evidence from Greece and Spain**

### **Abstract**

**Purpose** – The purpose of this exploratory study is to investigate the significance of self-efficacy and knowledge acquisition among micro businesses operating in challenging economic environments. The study employs social cognitive theory (SCT) and the knowledge-based theory of the firm (KBTF), and proposes a refinement of these theoretical frameworks in the context of the study.

**Design/methodology/approach** – A case method was chosen, and face-to-face interviews with 14 owners of firms in island and rural regions of Greece and Spain were conducted.

**Findings** – Content analysis identified the importance of self-efficacy, primarily illustrated by entrepreneurs' determination and self-motivation, propensity to take risks, and anticipating consequences of their actions. Acquisition and accumulation of explicit knowledge, particularly through generational or mentoring processes, and subsequent wealth of tacit knowledge, also emerged as very significant in preparing and guiding entrepreneurs. Various links between the adopted theories and the findings emerged, particularly regarding forethought, vicarious learning (SCT) and specialisation in knowledge acquisition (KBTF).

**Originality/value** – The proposed theoretical refinement based on the SCT and KBTF paradigms allows for more rigorous, in-depth reflection on the links between cognitive elements present in the participating micro entrepreneurs and knowledge-based attributes on their ability to increase organisational resilience. The study also makes a contribution to the micro business literature and addresses a knowledge gap, particularly in that contemporary research has not explored entrepreneurial motivations among small firm entrepreneurs. Finally, the practical implications emerging from the findings provide a platform for various stakeholders (associations, government agencies) to appreciate and support entrepreneurs' needs, notably, of acquiring, increasing and sharing knowledge.

**Keywords:** Social cognitive theory, knowledge-based view of the firm, micro firms, self-efficacy, knowledge acquisition.

### **Introduction**

For many years, various European Union (EU) countries have experienced significant socioeconomic hardships, compounded by the 2008 global financial crisis (GFC). For instance, despite adopting strict fiscal austerity measures, the economies of two Southern European nations, Greece and Spain, have continued to weaken (Karanikolos et al. 2013). In the case of Spain, the GFC considerably affected various sectors, including the tourism real estate (Hadjimichalis 2011), resulting in increased unemployment, and reducing gross domestic product (GDP) (Royo 2009). Similarly, Greece has faced a significant public deficit (12.7% of GDP), and a public debt close to 300 billion Euros, nearly 113 percent of its GDP (Hadjimichalis 2011).

The aftermath of the GFC has also been severe for entrepreneurs. In Greece and Spain, labour markets and productive structures were dependent on the performing levels of small and medium enterprises (SMEs), as well as on specialised agriculture, diffused industrialisation, and cultural tourism (Hadjimichalis 2011). However, the crisis had a strong impact on SMEs, slowing down their production due to lack of working capital, liquidity drains, and

deceleration of economic growth (Pagoulatos and Triantopoulos 2009). Greece's business community has been particularly hit, with reduced activity and financial liquidity (Pagoulatos and Triantopoulos 2009).

Unsurprisingly, entrepreneurial initiatives have also become much more cautious. Hadjimichalis (2011) explains that younger generations of Southern European citizens do not foresee becoming involved in the family business. Instead, these individuals have a strong desire for higher education or being employed in service or similar types of jobs, seeking to avoid unstable work, long hours, and lower pay that are common in many small firms (Hadjimichalis 2011).

Studies suggest (e.g., Izquierdo and Buelens 2011; Pihie and Akmaliah 2009; Zhao, Seibert, and Hills, 2005) that involvement in entrepreneurial activities is related to motivational factors, such as self-efficacy, or efficacy beliefs. At the core of self-efficacy is the notion that, unless individuals believe that through their actions they can obtain desired outcomes and anticipate negative outcomes, they will have limited incentives to persevere or act when facing difficulties (Bandura, 2001). Similarly, while other factors may act as motivators or guides, individuals have the power to achieve their objectives (Bandura, 2001). In essence, self-efficacy underlines confidence in one's abilities (Kumar and Uz Kurt, 2010). Thus, efficacy beliefs can be instrumental "in shaping the courses lives take by influencing the types of activities and environments people choose to get into" (Bandura, 2001, p. 10).

While entrepreneurial self-efficacy is a critical predictor of firm performance, research considering the moderating variables of founder-firm relationships has been limited (Hmieleski and Baron, 2008). Moreover, small business research has ignored the area of entrepreneurial motivations (Carsrud and Brännback, 2011). These knowledge gaps are more evident in the case of micro businesses, a group of vital importance. For example, in the EU, 99 percent of existing firms are SMEs, and 90 percent of these are micro enterprises, or those employing less than 10 people (European Parliament, 2016).

Individuals' involvement in entrepreneurial activities is also strongly associated with their knowledge, including knowledge acquisition (learning) and/or sharing. Managing knowledge is a key capability, and organisational knowledge is a salient resource for SMEs, namely, in terms of access, availability and depth (Desouza and Awazu, 2006). Research by Wee and Chua (2013) found that SME owners are the key creators, drivers, and sources of knowledge management processes. Knowledge creation among SME owners is reflected in various ways, including in "innovative customized solutions to meet customers' needs" (Wee and Chua, 2013, p. 958). At the same time, SMEs experience "very strong needs" (Chen et al., 2006, p. 6), both for inter-organisational knowledge transfer and external knowledge. Despite such needs, research on "knowledge management issues at the inter-organizational level of SMEs" (Chen et al., 2006, p. 6) is practically inexistent. This knowledge gap is reinforced by more recent research (Durst and Edvardsson, 2012), which contends that, in the context of SMEs, the body of knowledge concerning knowledge utilisation, storage/retention, or identification is poor.

The main objective of this study is to contribute to the entrepreneurship and micro business literature in various ways. First, the study explores the significance of self-efficacy and knowledge acquisition for entrepreneurial activities of owners of micro enterprises operating in a challenging socioeconomic environment. In doing so, the study seeks to narrow some

gaps acknowledged in the academic literature (e.g., Chen et al., 2006; Carsrud and Brännback, 2011; Hmieleski and Baron, 2008).

Interviews conducted with owners of micro businesses in Greek and Spanish rural and island regions will examine the following research questions (RQs):

RQ1: How important is self-efficacy for micro firm entrepreneurs?

RQ1a: How is self-efficacy manifested among participants?

RQ2: How important is knowledge acquisition for entrepreneurs?

RQ2a: How is knowledge acquisition operationalised?

By addressing these questions, the study makes a second contribution through new knowledge, which sheds light on entrepreneurial resilience and achievement. This knowledge could, for instance, be considered by future entrepreneurs, by industry associations, as well as by the academic community (researchers, students). Finally, the study makes a third contribution, adopting and refining social cognitive theory and the knowledge-based theory of the firm (KBTF) in the context of micro entrepreneurs.

## **Literature Review**

### *Social cognitive theory*

The nature of the present study, which examines the importance of self-efficacy and how it is manifested in the participating entrepreneurs (RQ1) justifies the adoption of social cognitive theory (SCT). This theory is grounded on the notion that cognitive processes, or emerging brain activities, can decisively influence individuals (Bandura, 2001).

SCT emphasises the role of five central human capabilities or capacities:

*Symbolizing*: This capability allows individuals to understand their environment and to create and manage environmental conditions that will affect many aspects of their lives, giving continuity, meaning, and structure (Bandura, 2003).

*Forethought*, or future time perspective (Bandura 2003), can be manifested in various ways. Individuals can anticipate likely consequences of probable actions, may set goals or plan course of action likely to deliver desired outcomes. By exercising forethought, they can guide their actions and motivate themselves anticipatorily (Bandura, 1989a, 2003).

*Vicarious learning*: An event “in which new responses are acquired... as a function of observing the behavior of others and its reinforcing consequences, without the modeled response being overtly performed by the viewer during the exposure period” (Bandura, 1965, p. 3). Among other processes, the vicarious learning capability involves motivational, retention and attentional (Manz and Sims, 1981).

*Self-reflection*: Through this capability, individuals can measure their values, motivation, “and the meaning of their life pursuits” (Bandura, 2001, p. 10). Further, they can measure whether their strategies, goals, or time frame for the achievement of goals are realistic; based on their evaluations, individuals can then make adjustments (Malone, 2002).

*Self-reactiveness*: Agents not only need to be forethinkers and planners, but also self-regulators and motivators (Bandura, 2001). Once they adopt the intention and action plans, they need to take specific course of action, regulating and motivating the execution of such

plans (Bandura, 2001), whereby individuals can “exercise control over their lives” (Malone, 2002, p. 11). Such multidimensional self-directedness can operate “through self-regulatory processes that link thought to action” (Bandura, 2001, p. 8).

In acknowledging earlier contributions (Bandura, 1997; Maddux, 1995; Schwarzer, 1992), Bandura (2001) posits that efficacy beliefs can affect change and adaptation. These beliefs can also exert influences on ways in which people think (optimistically or pessimistically), and can be self-hindering or self-enhancing (Bandura, 2001).

Efficacy expectations can define the level of effort individuals are prepared to commit, and the amount of time they will persist when facing adverse situations and obstacles: “the stronger the perceived self-efficacy, the more active the efforts” (Bandura, 1977, p. 194). The role efficacy beliefs play in individuals’ self-regulating of motivation through outcome expectations or goal challenges is therefore essential (Bandura, 2001). Moreover, outcome expectations persuade individuals to perform certain tasks that can result in more benefits, (Hung et al., 2011). Goals can have an impact on individuals, influencing their persistence, or ‘activating’ them; goals are also energising and directive (Carsrud and Brännback, 2011). At the same time, the level of individuals’ activation is based on their motivations. In fact, weak levels of motivation will not translate into actual action, particularly if the task is perceived to be difficult, not desirable or feasible (Carsrud and Brännback, 2011).

Partly due to efficacy beliefs, individuals make conscious choices about the challenges they undertake, the amount of effort they invest, how long they are to persevere in light of failures or obstacles, and whether failures are demoralising or motivating (Bandura, 2001). Thus, outcome expectation and self-efficacy are two critical constructs that affect cognitive behaviour (Hung et al., 2011). In addition, Bandura (1990) refers to resilient self-efficacy to emphasise the importance of, for instance, applying skills in high-risk situations through corrective feedback. Moreover, by assessing previous situations when they experienced failure, individuals can determine ways to perform better, notably, changing strategy or looking for assistance (McPherson and McCormick, 2006). Developing resilient self-efficacy requires experience and perseverance (Bandura, 1989a), and a strong feeling of coping efficacy can reduce perceived vulnerability to stress in challenging situations, and increase resilience to adversity (Bandura, 2001). Importantly, individuals exhibiting resilient self-efficacy can bounce back quickly from adversities and move on (McPherson and McCormick, 2006). As these individuals have confidence in their capabilities, they will approach difficult challenges or tasks not “as threats to be avoided” (Bandura, 1989b, p. 731), but instead “as challenges to be mastered” (p. 731).

#### *Knowledge-based theory of the firm (KBTF)*

The significance of knowledge acquisition among participants in this research (RQ2) warrants the choice of adopting the knowledge-based theory of the firm (KBTF). The seminal research by Nickerson and Zenger (2004) underlines that knowledge formation and problem solving are at the core of the theory. Moreover, possessing unique firm practices helps some businesses to outperform competitors, thus, representing the key foundation of sustainable competitive advantage (Alegre, Sengupta, and Lapedra, 2013). Managers’ fundamental knowledge-based goal is to maintain their firms’ profits by constantly discovering new solutions or knowledge that are created through “unique combinations of existing knowledge” (Nickerson and Zenger, 2004, p. 618).

According to Zahra, Neubaum and Naldi (2007), proponents of the theory (e.g., Nickerson and Zenger, 2004; Szulanski, 1996) agree that firms' competitive advantage is based on their ability to acquire, integrate, accumulate and utilise knowledge. Usually, this knowledge is illustrated in relational, technological, or the human resources firms possess (Zahra et al., 2007). Firms' knowledge can be improved by taking in knowledge external to firms, or through the development of new knowledge, whereby firms identify a new problem and discover valuable solutions (Nickerson and Zenger, 2004). In this context, identifying "a valuable problem" (Nickerson and Zenger, 2004, p. 619), followed by conducting "an efficient solution search" (p. 619) can deliver value, either through savings in cost of delivery/production, or through development/enhancements of a service or product.

Grant (1996) explains that the literature emphasising the management and analysis of knowledge identifies various characteristics concerning the use of knowledge within firms to generate value:

*Transferability* is crucial, even more within the firm as opposed to within firms (Grant, 1996). A distinction is made between 'knowing how', which relates to tacit knowledge, and 'knowing about' which is associated with explicit knowledge (Grant, 1996). Tacit knowledge is unarticulated and linked to intuition, physical experiences, senses, or implied rules of thumb, including knowledge of crafting a violin or wine tasting (Nonaka and von Krogh, 2009). In contrast, explicit knowledge can be captured in writing or drawings, for instance, the solution to differential equations (Nonaka and von Krogh, 2009). Explicit knowledge can be communicated, suggesting its transferability, while tacit knowledge is illustrated in its applicability (Grant, 1996).

*Capacity for aggregation*: Earlier research indicates that previous knowledge helps increase "the ability to put new knowledge into memory... and... recall and use it" (Cohen and Levinthal, 1990, p. 129), thus, suggesting the potential for aggregation. Efficiencies of knowledge aggregation can be enhanced when knowledge can be conveyed in a common language. For instance, statistics represents a language which is useful, both for aggregating and transferring various forms of explicit knowledge (Grant, 1996).

*Appropriability*: As a resource, knowledge "is subject to uniquely complex problems of appropriability" (Grant, 1996, p. 111); this limitation applies to both tacit and explicit knowledge. Moreover, the lack of evident property rights creates ambiguity over who the owner of knowledge is (Grant, 1996).

*Specialisation in knowledge acquisition*: The efficiency in producing knowledge, namely, creating new knowledge, acquiring existing knowledge, and storing knowledge, demands specialisation in precise areas of knowledge (Grant, 1996). Individuals may need to sacrifice breadth to attain depth of knowledge (Grant and Baden-Fuller, 1995).

*The knowledge requirements of production*: According to the KBTF, knowledge represents the key input in production, and the main source of value (Grant, 1996). Production entails transforming inputs into output and requires application of many forms of specialised knowledge (Grant and Baden-Fuller, 1995).

The notion of external versus internal learning is also crucial in the context of knowledge acquisition and accumulation. External knowledge, or learning from external sources such as

from the industry, other firms in a network, or from alliance partners (Bapuji and Crossan, 2004), underscores firms' ability in reconfiguring practices by transforming knowledge (Alegre et al., 2013). Finally, internal learning competencies highlight new knowledge which is generated by firms' own cumulative experiences, employing their own resources (Alegre et al., 2013). This way of learning can be primarily developed by implementing best business practices, or "through research and development (R&D) activities" (Alegre et al., 2013, p. 458).

The study by Reihlen and Ringberg (2013) makes an important contribution, revealing the strong links between SCT and KBTF. They emphasise the value of 'the socio-cognitive theory of the firm' to underscore the significance of knowledge as the foundation of a firm's competitive advantage. Furthermore, they explain that such advantage is based on the management of the firm's ability to align their knowledge internally (within the enterprise), and externally among their stakeholders. In the latter case, alignment can be achieved "through the individual sense-making of feedback from other individuals" (Reihlen and Ringberg, 2013, p. 706), where knowledge can be gathered and appropriate judgments can be made.

#### *Geographic context of the study*

The present study was conducted in two separate Southern European regions: La Palma Island (Canary Islands, Spain) and Elias regional unit (Greece). La Palma Island's population totals 82,346 residents (Canary Institute of Statistics, CIS, 2016); in the second quarter of 2016, 21,744 individuals were employed (Rodríguez González, 2016). The services sector was the main source of employment (78.8%), followed by agriculture (9%); within the services sector, tourism employed nearly four thousand people (Rodríguez González, 2016). In addition, 23.5 percent of jobs were in the private sector, with just over five thousand people being self-employed (Rodríguez González, 2016). In November of 2016, the unemployment rate in La Palma was 26.95 percent, slightly over that of the archipelago's (26.01%) (Gobierno de Canarias, 2016). However, unemployment rate was as high as 51.42 percent among La Palma residents aged below 25 years (Gobierno de Canarias, 2016).

Elias regional unit is located in Western Peloponnese (Greece) and is one of the three administrative units of Western Greece. Elias's area has a population of 159,300 residents (Hellenic Statistical Authority, 2011a), with 49,571 officially registered as employed (Hellenic Statistical Authority, 2011b). Agricultural and forestry activities are the main sources of employment (32%), followed by wholesale and retail trade (13.8%), as well as public administration and social work sector (7.8%) (Hellenic Statistical Authority, 2011b). No figures were available regarding self-employment, or number of independent firms. Unemployment has significantly increased in the Western Greece region from 6.4 percent in 2011 (Hellenic Statistical Authority, 2011c) to almost 30 percent in 2016 (Hellenic Statistical Authority, 2016), the second highest unemployment rate in Greece (Hellenic Statistical Authority, 2016).

#### **Methods**

This exploratory study contributes to the micro and small business entrepreneurship literature in several forms. The study first examines the importance of knowledge acquisition and self-efficacy among owners of firms operating in a challenging socioeconomic business environment. Further, and as previously suggested, the study addresses several knowledge gaps identified in the academic literature. Indeed, there is an almost complete lack of studies

focusing on knowledge management within the inter-organizational environment of SMEs (Chen et al., 2006), as well as regarding entrepreneurial motivations among small businesses (Carsrud and Brännback, 2011). Limited research is particularly evident among micro businesses; thus, a decision was made to only consider this group of firms to explore self-efficacy and knowledge acquisition.

The present research is based on a case study method, “a strategy which focuses on understanding the dynamics present within single settings” (Eisenhardt, 1989, p. 534). In fact, one key feature of case studies is the “intense focus on a single phenomenon within its real-life context” (Yin, 1999, p. 1211). Similarly, qualitative case study has been referred to as an approach “that facilitates exploration of a phenomenon within its context” (Baxter and Jack, 2008, p. 544) and making use of various data sources. While many case studies fall under the ‘exploratory’ category, a good case study should include an operational framework (Yin, 1999).

In line with this notion, and following the literature review, the study proposes a framework incorporating various tenets of SCT and the KBTF (Figure 1). First, the roles played by the central human capabilities (Bandura, 2003) are associated with efficacy beliefs. Resilient self-efficacy is based on individuals’ experience and perseverance (Bandura, 1989a). The importance of motivation is also acknowledged, in triggering activation, task completion or action (Carsrud and Brännback, 2011), in increasing resilience to adversity (Bandura, 2001), with impacts on the firm and the entrepreneur. Second, the framework illustrates that the two forms of knowledge (explicit, tacit) are linked to the characteristics of knowledge firms use to generate value (Grant, 1996). These characteristics are also related to internal and external learning (Alegre et al., 2013; Bapuji and Crossan, 2004), and, as the case of SCT, have impacts on the firm and the entrepreneur.

Figure 1 Here

To conduct the study, firms from two different European regions, namely, La Palma Island (Spain), and Elias regional unit (Greece), were chosen. The decision to choose these regions is first based on existing key local contacts, which helped identify various model firms. Importantly, however, the severe economic crisis affecting these, clearly illustrated in the very high unemployment rates, provided an environment to examine the extent to which self-efficacy and knowledge acquisition contribute to firms’ resilience and survival.

Several academic contributions were considered in the process of developing the research questions. For example, research on the impact of self-efficacy on innovativeness (Kumar and Uz Kurt, 2010), and on the effect of individuals’ knowledge management in the organisation on self-efficacy (Kelly and Kumar, 2009) was integrated. Similarly, studies focusing on a discussion of KBTF and SMEs (Gassmann and Keupp, 2007), and on knowledge management on SME innovation (Alegre et al., 2013) were also incorporated.

In June of 2016, all the identified businesses, seven on La Palma Island and seven on Elias regional unit, were contacted via email correspondence. The message sent to the owners provided a summary of the study’s aims and asked for their participation. Firm owners were then contacted by telephone to arrange a meeting to conduct the face-to-face interviews and on-site observations of the firms. In July of 2016, the researchers travelled to both regions. 14 detailed face-to-face interviews were conducted; these interviews lasted on average 90



minutes and were complemented by on-site observations of the operations. These forms of learning and gathering evidence are aligned with Yin (1999), who posits that direct field observations, for instance, in addition to surveys, can contribute to stronger case study evidence. Yin (1999) suggests physical artifacts, documentation, archival records, interviews, direct observations, and participant-observation as key sources of evidence in case study; in the present research, evidence was gathered from the last three sources.

Although the total number of participants is limited compared to the numerous existing micro enterprises, for instance, in La Palma (Rodríguez González, 2016), it provides important insights to better inform various micro firm stakeholders, or guide future studies. To analyse the data, qualitative content analysis, “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh and Shannon, 2005, p. 1278) was employed. According to Drisko and Maschi (2015), this form of analysis may be applied when researchers explore new topics, describe complex phenomena or test theories. Regarding this last point, the adopted framework (Figure 1), which incorporates the SCT and KBTF, and the proposed refinement in the context of the study (Figure 2), represent a contribution to theory building. To support the data analysis, NVivo Version 9, a qualitative data management software, was used. The following sections will include a list of verbatim comments from different interviewees; these comments are identified through abbreviations (e.g., P1: Participant 1; P2: Participant 2).

#### *Demographic characteristics of participants and their firms*

Table 1 shows basic demographic characteristics of participants and their firms. All of the firms have less than 10 full-time employees and fall under the European Parliament’s (2017) category of micro businesses. One prevalent feature among participants is the number of years of their accumulated work and learning experience, with 12 (85.7%) indicating at least 10 years. A second predominant characteristic is that 13 (92.9%) are involved in food production, particularly artisan production, and sales. Also, the majority of firms (9, 64.3%) have existed prior to the 2008 GFC.

Table 1 Here

## **Results**

### *RQ1: The importance and manifestation of self-efficacy*

While earlier research (Bradley and Roberts, 2004) suggests that self-efficacy can be “a predictor of career choice” (p. 41), particularly of self-employment, and is positively related to job satisfaction (Bradley and Roberts, 2004; Judge and Bono, 2001), the results of this study point at other key outcomes and characteristics. Moreover, the comments below strongly relate to Forbes’s (2005) argument that entrepreneurial self-efficacy can have an impact on “individuals’ decisions to create new ventures” (p. 599), as well as “influence the effectiveness with which individuals manage their ventures once they have founded them” (p. 599). The comments are also aligned with research by Chen, Green, and Crick (1998), who compared business founders and non-founders, and found that members of the first group exhibited more entrepreneurial self-efficacy, especially in the form of more risk-taking and innovation.

Table 2 Here

Indeed, performing qualitative content analysis contributed to the identification of self-efficacy among participants in different ways; these ways are summarised in Table 2. First, determination in light of challenges was evident in some of the verbatim comments. After working for decades in the restaurant industry, and looking to make a radical change in his life, and become an entrepreneur, P1, for instance, referred to the existing negative perceptions of opening a new business in 2012, and also to his level of self-efficacy:

*I was working [in the island of Gran Canaria] and was living very comfortably. One day, we decided to make a new start and try becoming independent. ...when we arrived [in La Palma] four years ago [2012]... this area was completely abandoned... People said we would only survive 2 months here... I however, was determined to give it a go...*

Years later, P1 reflected on the achievement of various goals:

*... I made decisions to develop the business in certain ways no one else perceived. We have gone through very difficult times, but also we have enjoyed wonderful moments, for instance, the recent award [for best Tapas bar in the Canary Islands, 2015]... Since we won the award we have been busier, and we had to hire a few people...*

Despite the existing cultural and geographic differences between the two participant groups, various similarities in responses were noticed. For example, similar to P1's case, and despite the challenging environment, P14 was also determined to fulfil a long-time dream and become an entrepreneur:

*... I always wanted to create something that will have my personal footprint, be the main decision maker and the driving force of the project... The restaurant started its operation during the economic crisis... but slowly people embraced our project. The positive response was such that we were mostly fully-booked and had to turn down guests...*

After learning valuable skills for 15 years, and identifying an opportunity now that her mentor and employer had retired, P2 opened a butchery and ready-to-go meal business, fulfilling a life-long dream: *"Having this business was always my dream. Originally, my mum and I wanted to run a business together. She died 5 years ago, but she always supported me and motivated me... Yesterday was my first day off in the last 12 months... one year without a day off; it has been very hard..."* P8's case was similar in terms of the level of commitment and sacrifice: *"The business started... [in order] to have a profession and continue the [family] tradition... when you work for 18 hours per day you surely try the best for the business. You want to see the business grow and improve, as it is a significant part of your life."*

Further, as the following comments underline, experimentation, and self-efficacy through self-belief, determination, and self-motivation, were crucial elements for the establishment and survival of micro businesses:

*P4: I started with a small oven; I used to mix the doughs by hand, all by hand. Then I started buying equipment... I built this business on my own. Subsidies and*

*other types of support for new businesses were excluded for me because I was an individual entrepreneur.*

*P13: I started the business as an alternative career option and a desire for creativity, and expression... producing soaps in my kitchen, and everything happened so quickly... Today, my products are available in the majority of Greek islands targeting luxury tourists.*

#### *RQ2: The importance and operationalisation of knowledge*

The use of qualitative content analysis also illuminated the research, helping identify the significance of knowledge and the way it was operationalised (Table 3). As with self-efficacy, similarities again arose between both Greek and Spanish interviewees. First, in emphasising the critical value and significance of knowledge, P6 pointed out, “*When someone wants to create a business, he/she has to have a foundation of knowledge...*” This notion was strongly supported by P9, whose comments clearly illustrated both an eagerness to accumulate and share knowledge, particularly among end consumers:

*Being informed is a pre-requisite for our[beekeeping] profession. I read farming journals, newspapers related to agriculture, and participate in various blogs. I try to be informed of the latest trends [in bee keeping]... However, it is equally important to educate consumers and highlight the value of our products. I attend various events, forums, and try to share my knowledge, experience... I explain the nutritional benefits of quality honey and try to make the public understand the value of investing extra money to buy quality products.*

Table 3 Here

Coming from the very different professional background of administrative, P5 reflected on the influence that her father-in-law had on her decision to become a cheese-making entrepreneur: “*My father in law taught me old-school cheese making; the industry now has developed and considers the temperature, blends to obtain different textures. You make the cheeses as you learn.*” The learning lessons provided by P5’s father-in-law illustrate the conversion of explicit into tacit knowledge (Nonaka and Takeuchi, 1995), namely, when knowledge is verbalised, absorbed, and internalised by those involved in this process (Tsoukas, 2005). Now the sole person running the business, P5 has in the meantime further deepened her knowledge and expertise, taking on other challenges for her business to grow and flourish:

*I have successfully competed against cheese-makers from other islands or mainland Spain. These events also provide opportunities to mingle and talk to other cheese-makers... you also exchange information about ways to look after the goats, and learn about new forms of running the business. I like to listen and learn everyday...*

P5’s experience is associated with research by Boyd and Vizikis (1994), who discuss the various ways of strengthening self-efficacy proposed by Bandura (1982) and Wood and Bandura (1989), namely, mastery experiences, observational learning, social persuasion, and judgments of people’s physiological states. First, Boyd and Vizikis (1994) explain that, “by comparing themselves to others” (p. 67), individuals can develop judgments of their capabilities. Second, they also contend that observational learning can help individuals to estimate the appropriate behaviour and skills “used by a role model in performing the task”

(p. 67). Mastery experiences and observational learning are also clearly illustrated in other cases:

P1: *“I was fortunate to work in several top hotels... I noticed that, after working four years, some 60 chefs had come and gone... I was the only employee who accepted these conditions... I could learn a lot from different chefs... So, it was a very harsh, yet productive learning time...”*

P10: *... we have the advantage of conducting our own chemical analyses, tests, and experimentation before moving to the production stage. Having official and reliable data helps us to inform our decisions and set the boundaries for any financial investment. We try to use this ability as a competitive advantage [achieving higher quality in our products].*

These comments also align with ‘tacit skills’, a term Ambrosini and Bowman (2001) extend from tacit knowledge when they discuss its relationship with firms’ resource-based competitive advantage. Essentially, tacit knowledge is practical, and therefore tacit skills refer to action, or ‘doing’; moreover, according to Ambrosini and Bowman (2001), there is a claim that tacit skills play a key role in developing competitive advantage.

In another case (P4), failure was perceived as a challenge that required gradual learning: *Practising and learning from mistakes is essential to succeed in this profession. At the beginning, nothing worked for me... Progressively, my baking improved...* Regarding this comment, Boyd and Vizikis (1994) posit that performance setbacks can teach individuals the significance of continuous effort as a key to achieve success. Finally, for P7, operationalising knowledge through the implementation of a new business idea represented a key challenge demanding extra motivation and determination:

*The [business] idea started in my house. I was testing and found that the [banana by-] products had a good taste. I then started distributing the finished products in various outlets, and then I fully focused on this activity... Unfortunately, no one lends you a hand; all what you see here I created with my own effort... one has to believe in success, and this belief helps you move on.*

## **Discussion**

Employing the SCT and the KBTF contributed to a deeper understanding of the importance of self-efficacy and knowledge in the context of micro entrepreneurs operating in regions experiencing socioeconomic challenges. First, the following sections discuss associations between the five central human capabilities (e.g., Bandura, 2003), as summarised in Figure 1, and the study’s findings:

*Symbolizing*: While passion was at the core of some participants’ decision to establish or further develop their business, in various instances, and in line with Bandura (2003), their understanding and ability to manage their environment clearly emerged. P5’s acknowledgment of learning from her father-in-law, and then further updating and adjusting the knowledge to address new demands was one example. Similarly, P11 indicated inheriting the family business and, in facing challenges has taken the path of internationalisation, which has contributed to product and service quality improvements.

*Forethought:* Various responses highlighted the significance of perspectives of one's firm, anticipating, and guiding actions and their consequences, as well as self-motivating. Among others, P2 had a desire to be independent, fill a niche, and provide superior service than what she had witnessed in her previous working experience: *"Very few local businesses treat customers the way they should be treated... thanks to my customers one day I will be able to afford what I want."* P12's case also illustrates an anticipation of the immediate future of the family firm; the ownership's actions to make significant investments had positive consequences in terms of quality improvements.

*Vicarious learning:* This capability is also demonstrated in the findings, in that observing and learning from others (e.g., P1, P2, P5, P8, P11, or P14) has had implications in the form of accumulation of explicit knowledge, and conversion into tacit knowledge. In fact, learning and observing has enhanced participants' attentional and retention processes, and contributed to more confidence and motivation in achieving goals or reaching milestones (e.g., P2, P5, P8, P10, P11). P10's case is aligned with these notions, in that a learning process contributed to the acquisition of skills and knowledge to establish another venture: *"Before the economic crisis, our family business was in the construction sector... this sector shrunk and an alternative profession had to be found. We decided to open our own business; at least, we would work for ourselves and build our own future."*

*Self-reflection:* Together, determination, self-motivation, tacit/explicit knowledge and business acumen has helped participants' businesses to thrive in challenging economic environments. In their reflections, they acknowledged their goals and aspirations that, although entailing risks (P1, P7), and/or substantial investments (P8, P9, P12), nevertheless reflected their motivations, aspirations, and life pursuits (Bandura, 2001) of creating, or further developing a sustainable and successful business.

*Self-reactiveness:* The view that, apart from planners and forthinkers, agents need to be motivators and self-regulators (Bandura, 2001) is also demonstrated in the findings. Overall, by having confidence in their abilities (Kumar and Uz Kurt, 2010), participants' actions underline their intention to be in control of, or shaping their entrepreneurial lives or destiny (Bandura, 2001). In some cases, however, the increasingly challenging environment in which participants operated, exerted additional pressures requiring higher levels of self-efficacy. P6 reflected on the immediate future of his sector, and the importance of self-motivation and determination to further thrive and survive: *"In the last 20 years, the price of honey has stayed pretty much the same. Many beekeepers have retired... Other people have given up because of the work involved and the diseases... I lost 70 beehives out of 220 I had before... If you become demoralised by these problems, it will be difficult to get back on track."*

Associations between the characteristics of the KBTF (Grant, 1996) and the findings were also observed; these are discussed in the following paragraphs:

*Transferability:* The lessons learned by some entrepreneurs, including by absorbing explicit knowledge shared by family members (P5, P6, P8), and other individuals (P2, P14) underscores the potential for knowledge transferability. Over time, entrepreneurs also develop tacit knowledge, which although unarticulated, intuitive, or related to physical experiences or rules of thumb (Nonaka and von Krogh, 2009), can be applied through specific actions (P4, P9).

*Capacity for aggregation:* As various responses demonstrate (P5, P9), the accumulation of learning experiences and acquisition of knowledge allows for the storage of new knowledge into entrepreneurs' memory for later recall or use (Cohen and Levinthal, 1990). While Grant (1996) referred to statistics as an example of 'common language', which can be transferred or aggregated, other elements related to explicit knowledge in the context of this study, such as production processes, recipes, or financial investments also represent a common language that could be used within the firm.

*Appropriability:* While this characteristic is associated with complexity, for instance, in regards to knowledge ownership (Grant, 1996), or with incentives to produce knowledge through market power and intellectual property rights (Antonelli, 1999), its significance only marginally emerged in the context of the present research. Instead, and as suggested by Nickerson and Zenger (2004), problem-solving, including through knowledge formation was a key emerging element. The case of P5 demonstrates that lack of knowledge appropriability is preferred among some micro firms. Indeed, the participant acknowledged the importance of communication with other entrepreneurs in her sector, which contributed to sharing- instead of appropriating- knowledge of production and other processes.

*Specialisation in knowledge acquisition, knowledge requirements of production:* These characteristics emerged as the most obvious and the most relevant. First, while diversification through innovative ideas and product variation represented a key strategy (P7), it was nevertheless within the confines of the firm's sector and core focus. Overall, participants were eager and concerned with further specialising and exploiting knowledge acquisition within their sector to increase product (P5, P10, P13, P14), or both product/service quality (P2), fulfil production requirements, and become more competitive. The following comments further strengthen the significance of these characteristics:

*P1: This business is like a wheel: you need to be focused on day-to-day managing, control of shortages, control of taxes... the administrative part of the business can be quite difficult, and there are times it can be overwhelming...*

*P11: We need to evolve and offer products of higher quality based on the current trends of the market, as well as on our experience and expertise.*

*P13: I have studied chemistry, while I currently study a Waste Management master's course...*

## **Conclusions**

Earlier research has emphasised the significance of both self-efficacy, including entrepreneurial self-efficacy, and that of acquiring or managing knowledge, as vital for organisations' performance and survival (e.g., Desouza and Awazu, 2006; Hmieleski and Baron, 2008; Wee and Chua, 2013). However, various knowledge gaps concerning these key elements have been recognised, especially in small business research (e.g., Chen et al., 2006; Carsrud and Brännback, 2011). In examining the importance and operationalisation of self-efficacy and knowledge acquisition from the perspective of micro firm entrepreneurs, the present research made several contributions. First, it helped narrow knowledge gaps concerning the impact of self-efficacy and knowledge acquisition among a group of firms which represents the vast majority of firms in the EU. Second, the findings provide several practical insights to be considered by micro firm entrepreneurs, their industry, business associations, government agencies and the academic community. Third, the adoption of two

theoretical frameworks provides a structure and a better understanding of the impact of self-efficacy and knowledge acquisition among micro entrepreneurs.

Despite operating in a very challenging socioeconomic environment, entrepreneurs were strongly committed to developing a new venture, or extending the life of an existing family firm. Self-efficacy was demonstrated in several ways. For example, passion for the industry participants were involved in, need for independence, innovative, problem-solving ideas, or continuing an existing tradition contributed to their self-motivation and acceptance of risks. Also critical was the dimension of knowledge acquisition. Moreover, accumulation of explicit knowledge and development of tacit knowledge, through years of experience and continuous learning strongly complemented self-efficacy, equipping entrepreneurs with key resources to gain competitiveness and add value to their enterprises.

The adopted theories helped facilitate understanding and provided structure in the analysis of self-efficacy and knowledge acquisition from the perspective of micro firm entrepreneurs. In particular, strong associations emerged between the findings, forethought, vicarious learning (SCT), specialisation in knowledge acquisition and knowledge requirements of production (KTBT). Appropriability, on the other hand, did not emerge as a significant characteristic.

### **Implications**

Despite the significant different geographic and cultural differences between the two chosen regions, several commonalities between the two groups of participants emerged, with practical implications. For example, regardless of the region, the findings identified strong passion, determination to succeed alongside a risk-taking attitude, pride or the extra motivation as key elements that help to extend the life of the firm, and enhance its competitive advantage. These key attributes are indicative of key elements needed for micro firms to become more resilient, and be better equipped to withstand the challenging socioeconomic environment in which they operate. Accordingly, these implications cascade down into various stakeholder groups, including future entrepreneurs, business and industry associations. These salient characteristics, coupled with knowledge-related elements, can be essential for the success (P4, P5, P7) and long-term sustainability of the business. Indeed, the significance of specialisation of knowledge acquisition, knowledge requirements of production, or transferability of knowledge were found to have a positive impact in shaping entrepreneurs' character.

Overall, the findings have strong practical, policy and societal implications that are supported by the academic literature. For instance, research conducted in New Zealand (McGregor and Tweed, 2002), where nearly 90 percent of businesses employ five or fewer individuals, indicates that policy-makers are increasingly recognising the employment potential of small businesses. In the EU, there is evidence that “smaller firms contribute on a larger scale towards job creation than do larger firms” (de Wit and de Kok, 2014, p. 283). In a rural context, Steiner and Atterton's (2014) qualitative study revealed the fundamental role played by micro businesses in helping enhance the quality of life of rural locations, particularly by contributing to their environmental and social resilience.

This study's findings and the above complementary literature strongly suggest the need for stakeholders such as government agencies or industry associations to increase their level of support to assist those currently owning or planning to set up micro firms. Given current financial constraints, such support may not be through tangible or monetary means, it could

nevertheless be intangible, namely, in the form of encouraging the acquisition, development, and sharing of knowledge. This encouragement could be manifested through knowledge transfer activities that would progressively build the foundation for businesses to become innovative and resilient.

An illustration is provided in Hewitt-Dundas's (2012) study focusing on UK university-industry collaborations. This author identified that low research intensive universities (36.2%) tended to support SMEs through technology development and innovation more than did high research intensive universities (10%). Thus, low research intensive institutions appeared to focus more on the regional economy (Hewitt-Dundas, 2012). In contrast, 80 percent of high research intensive institutions conducted research in collaboration with industry as opposed to 15.5 percent of low research intensive ones. Hewitt-Dundas (2012) concludes that one of the challenges for national policy is to introduce "appropriate policy programs and supports to maximize the economic contribution of universities" (p. 273).

The implications above are however not only limited to the present research. Indeed, part of the academic literature unequivocally underlines commonalities across the board- and across geographic boundaries- concerning the challenges micro and small enterprises must face. For example, Sen's (2011) study of micro enterprises operating in an urban environment (Buffalo, USA) identified viability or profitability, and non-controllable factors such as the economy conditions of the city.

Thus, there is a strong argument for policy-makers to maintain or increase their engagement with this key business group. Mattare, Monahan and Shah's (2011) study on the revival of micro enterprises in Maryland, USA, further reinforces the above implications regarding the need for stakeholder engagement. They explain that, if the conditions for nurturing are appropriate, such as those based on the enactment of policies or incentives, micro firms can grow, create more jobs, and overall have a direct impact on revitalising regional economies.

The value that the sharing and transfer of knowledge can have on firms further reiterates the importance in undertaking these activities to enhance innovation and with it firms' resilience. Indeed, more engagement by and with local associations and government agencies, alongside assimilation into policy frameworks would provide a highly useful platform to boost the performance of micro enterprises.

Research by Wacker (1998) also underscores the usefulness of theory-building (p. 361), in providing "a framework for analysis", in facilitating "the efficient development of the field", and as necessary "for the applicability to practical real world problems." From a theoretical perspective, the adoption of the SCT and KBTF has important implications, especially in terms of their potential usefulness to study and increase understanding of micro firm entrepreneurs, self-efficacy, knowledge acquisition, and firm resilience. First, the framework presented (Figure 1) provides a structured yet deeper and more rigorous visualisation of central human capabilities/capacities, as well as characteristics of using knowledge to generate firm value. Second, the associations between the findings and the two theories clearly identify the applicability of both SCT and the KBTF to examine the impact of self-efficacy and knowledge acquisition among micro firm entrepreneurs. Together, both frameworks represent a road-map that could be referred to or adopted in future research.

## **Limitations and Future Research**



The study presents various limitations. First, only 14 micro businesses participated in the study. Second, these businesses represented only one region in Greece and Spain, respectively. Future studies could however offset some of these limitations, including by:

- Identifying more model firms, from Greek, Spanish, other EU regions/countries, or even from other parts of the world. Concerning this last point, and as a matter of illustration, research conducted in the United States (Mattare et al., 2011; Sen, 2011) identifies similar issues that require entrepreneurs to develop adaptive strategies, including those based on knowledge, as well as develop their resilient self-efficacy. Hence, there is significant merit in expanding this research avenue.
- Collecting data at more than one point in time during the year, or even in two separate years.

Addressing these limitations could result in richer data from a wide range of respondents, as well as data that provide comparative results across regions or countries based on the above characteristics. In addition, achieving a larger sample of participants and a broader geographic and industry focus could help in strengthening the generalisability of the findings, and the development of theoretical frameworks to understand the dimensions under study (e.g., knowledge acquisition, self-efficacy).

Similarly, future studies could be conducted in non- EU countries, which could also yield important practical comparisons, as well as practical and theoretical insights.

Furthermore, the study predominantly examined entrepreneurs involved in food production. Future studies could also extend the scope to investigate self-efficacy and knowledge acquisition among micro or small businesses operating in other industries. This avenue of research could be extended further to also explore specific ways or triggers of resilience. Identifying these factors would provide vital information to future entrepreneurs, chambers of commerce, government and industry stakeholders, for instance, in equipping established and new micro and small businesses with knowledge related tools. In doing so, researchers could be able to pinpoint specific triggers of resilience that could be found across the board (e.g., across different industries), or even those that might differ and may be more industry related.

Regarding theory refinement and development, the present exploration confirmed the usefulness of the SCT and KBTF to study micro firm entrepreneurs operating in very challenging socioeconomic environments. Future research could further test the usefulness of these theories, confirm and disconfirm their contribution to a greater understanding of self-efficacy, knowledge acquisition, and their implications, or even consider the incorporation of additional theoretical frameworks and constructs.

## References

- Alegre, J., Sengupta, K. and Lapiedra, R. (2013), "Knowledge management and innovation performance in a high-tech SMEs industry", *International Small Business Journal*, Vol. 31 No. 4, pp. 454-470.
- Ambrosini, V. and Bowman, C. (2001), "Tacit knowledge: Some suggestions for Operationalization", *Journal of Management Studies*, Vol. 38 No. 6, pp. 811-829.
- Antonelli, C. (1999), "The evolution of the industrial organisation of the production of knowledge" *Cambridge Journal of Economics*, Vol. 23 No. 2, pp. 243-260.
- Bandura, A. (1965), Vicarious processes: A case of no trial learning, In L. Berkowitz (ed.),

- Advances in experimental social psychology* (Vol. 2, pp. 1-55), New York: Academic Press.
- Bandura, A. (1977), "Self-efficacy: toward a unifying theory of behavioral change", *Psychological Review*, Vol. 84 No. 2, pp. 191-215.
- Bandura, A. (1982), "Self-efficacy mechanism in human agency", *American Psychologist*, Vol. 37 No. 2, pp. 122-147.
- Bandura, A. (1989a), "Human agency in social cognitive theory. *American Psychologist*, Vol. 44 No. 9, pp. 1175-1184.
- Bandura, A. (1989b), "Regulation of cognitive process through perceived self-efficacy", *Developmental Psychology*, Vol. 25 No. 5, pp. 729-735.
- Bandura, A. (1990), "Perceived self-efficacy in the exercise of control over AIDS infection", *Evaluation and Program Planning*, Vol. 13 No. 1, pp. 9-17.
- Bandura, A. (1997), *Self-Efficacy: The exercise of control*, New York: Freeman.
- Bandura, A. (2001), Social cognitive theory: An agentic perspective, *Annual Review of Psychology*, Vol. 52 No. 1, pp. 1-26.
- Bandura, A. (2003), "On the psychosocial impact and mechanisms of spiritual modelling", *The International Journal for the Psychology of Religion*, Vol. 13 No. 3, 167-173.
- Bapuji, H. and Crossan, M. (2004), "From raising questions to providing answers: Reviewing organizational learning research", *Management Learning*, Vol. 35 No. 4, pp. 397-417.
- Baxter, P. and Jack, S. (2008), "Qualitative case study methodology: Study design and implementation for novice researchers", *The Qualitative Report*, Vol. 13 No. 4, pp. 544-559.
- Boyd, N. and Vozikis, G. (1994), "The influence of self-efficacy on the development of entrepreneurial intentions and actions", *Entrepreneurship Theory and Practice*, Vol. 18 No. 4, pp. 63-77.
- Bradley, D.E. and Roberts, J.A. (2004), "Self-employment and job satisfaction: investigating the role of self-efficacy, depression, and seniority", *Journal of Small Business Management*, Vol. 42 No. 1, pp. 37-58.
- Carsrud, A. and Brännback, M. (2011), "Entrepreneurial motivations: what do we still need to know?", *Journal of Small Business Management*, Vol. 49 No. 1, pp. 9-26.
- Chen, S., Duan, Y., Edwards, J.S. and Lehaney, B. (2006), "Toward understanding inter-organizational knowledge transfer needs in SMEs: insight from a UK investigation", *Journal of Knowledge Management*, Vol. 10 No. 3, pp. 6-23.
- Chen, C.C., Greene, P.G. and Crick, A. (1998), "Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?", *Journal of Business Venturing*, Vol. 13 No. 4, pp. 295-316.
- CIS (2016), Men and women in the Canary Islands (Hombres y mujeres en Canarias)", available at:  
[http://www.gobiernodecanarias.org/istac/temas\\_estadisticos/sintesis/operacion\\_C0005\\_5A.html](http://www.gobiernodecanarias.org/istac/temas_estadisticos/sintesis/operacion_C0005_5A.html)
- Cohen, W.M. and Levinthal, D.A. (1990), "Absorptive capacity: A new perspective on learning and innovation", *Administrative Science Quarterly*, Vol. 35 No. 1, pp. 128-152.
- Desouza, K. C. and Awazu, Y. (2006), Knowledge management at SMEs: five peculiarities", *Journal of Knowledge Management*, Vol. 10 No. 1, pp. 32-43.
- De Wit, G. and De Kok, J. (2014), "Do small businesses create more jobs? New evidence for Europe", *Small Business Economics*, Vol. 42 No. 2, pp. 283-295.

- Drisko, J. and Maschi, T. (2015), *Content analysis*, New York, Oxford University Press.
- Durst, S. and Runar Edvardsson, I. (2012), “Knowledge management in SMEs: a literature review”, *Journal of Knowledge Management*, Vol. 16 No. 6, pp. 879-903.
- Eisenhardt, K.M. (1989), “Theories from case study research”, *The Academy of Management Review*, Vol. 14 No. 4, pp. 532-550.
- European Parliament (2016), “Small and medium-sized enterprises”, available at: [http://www.europarl.europa.eu/ftu/pdf/en/FTU\\_5.9.2.pdf](http://www.europarl.europa.eu/ftu/pdf/en/FTU_5.9.2.pdf)
- Forbes, D.P. (2005), “The effects of strategic decision making on entrepreneurial self-efficacy”, *Entrepreneurship Theory and Practice*, Vol. 29 No. 5, pp. 599-626.
- Gassmann, O. and Keupp, M.M. (2007), “The competitive advantage of early and rapidly internationalising SMEs in the biotechnology industry: A knowledge-based view”, *Journal of World Business*, Vol. 42 No. 3, pp. 350-366.
- Gobierno de Canarias (2016), “Unemployment figures (Estadísticas de desempleo)”, available at: <http://www3.gobiernodecanarias.org/empleo/portal/observatorio>
- Grant, R. M. (1996), “Toward a knowledge-based theory of the firm”, *Strategic Management Journal*, Vol. 17 No. 2, pp. 109-122.
- Grant, R.M. and Baden-Fuller, C. (2005), “A knowledge accessing theory of strategic alliances”, *Journal of Management Studies*, Vol. 41 No. 1, pp. 61-84.
- Hadjimichalis, C. (2011), “Uneven geographical development and socio-spatial justice and solidarity: European regions after the 2009 financial crisis”, *European Urban and Regional Studies*, Vol. 18 No. 3, pp. 254-274.
- Hellenic Statistical Authority (2016), “Labour force survey: Third quarter, 2016”, available at: <https://www.statistics.gr/statistics/-/publication/SJO01/>
- Hellenic Statistical Authority (2011a), “Resident population by birth place: Population and housing census in 2011”, available at: <http://www.statistics.gr/el/statistics/-/publication/SAM03/>
- Hellenic Statistical Authority (2011b), “Employed per occupation sector: Population and housing census in 2011”, available at: <http://www.statistics.gr/el/statistics/-/publication/SAM04/>
- Hellenic Statistical Authority (2011c), “Unemployed by occupation and region: Population and housing census in 2011”, Available at: <http://www.statistics.gr/el/statistics/-/publication/SAM04/>
- Hewitt-Dundas, N. (2012) “Research intensity and knowledge transfer activity in UK universities”, *Research Policy*, Vol. 41 No. 2, pp. 262-275.
- Hmieleski, K.M. and Baron, R. A. (2008), “When does entrepreneurial self-efficacy enhance versus reduce firm performance?”, *Strategic Entrepreneurship Journal*, Vol 2 No. 1, pp. 57-72.
- Hsieh, H.F. and Shannon, S.E. (2005), “Three approaches to qualitative content analysis”, *Qualitative Health Research*, Vol. 15 No. 9, pp. 1277-1288.
- Hung, W.H., Chang, L.M., Yen, D.C., Ho, C.T. and Chiang, M.C. (2011), “ERP success in the SMEs: The perspectives of service quality and social cognitive theory”, *Asia Pacific Management Review*, Vol 16 No. 4, pp. 503-519.
- Izquierdo, E. and Buelens, M. (2011), “Competing models of entrepreneurial intentions: the influence of entrepreneurial self-efficacy and attitudes”, *International Journal of Entrepreneurship and Small Business*, Vol. 13 No. 1, pp. 75-91.
- Judge, T.A. and Bono, J.E. (2001), “Relationship of core self-evaluations traits—self-esteem,

- generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis”, *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 80-92.
- Karanikolos, M., Mladovsky, P., Cylus, J., Thomson, S., Basu, S., Stuckler, D., Mackenbach, J.P. and McKee, M. (2013), “Financial crisis, austerity, and health in Europe”, *The Lancet*, Vol. 381 No. 9874, pp. 1323-1331.
- Kelly, L. and Kumar, R. (2009), “Impact of knowledge management on the self-efficacy of entrepreneurs: Mexican SME context”, *International Journal of Management and Decision Making*, Vol. 10 No. 1-2, pp. 111-124.
- Kumar, R. and Uz Kurt, C. (2010), “Investigating the effects of self-efficacy on innovativeness and the moderating impact of cultural dimensions”, *Journal of International Business and Cultural Studies*, Vol. 4 No. 1, pp. 1-15.
- Maddux JE. (1995), *Self-efficacy, adaptation, and adjustment: Theory, research, and application*, New York: Plenum.
- Malone, Y. (2002), “Social cognitive theory and choice theory: A compatibility analysis”, *International Journal of Reality Therapy*, Vol. 22 No. 1, pp. 10-13.
- Manz, C.C. and Sims, H.P. (1981), “Vicarious learning: The influence of modeling on organizational behavior”, *Academy of Management Review*, Vol. 6 No. 1, pp. 105-113.
- Mattare, M., Monahan, M. and Shah, A. (2011). “A profile of micro-entrepreneurship in western Maryland: How demographic variables affect these nascent engines of opportunity”, *Journal of Marketing Development and Competitiveness*, Vol. 5, No. 3, 127-138.
- McGregor, J. and Tweed, D. (2002), “Profiling a new generation of female small business owners in New Zealand: Networking, mentoring and growth”, *Gender, Work and Organization*, Vol. 9 No. 4, pp. 420-438.
- McPherson, G.E. and McCormick, J. (2006), “Self-efficacy and music performance”, *Psychology of Music*, Vol. 34 No. 3, pp. 322-336.
- Nickerson, J.A. and Zenger, T. R. (2004), “A knowledge-based theory of the firm—The problem-solving perspective”, *Organization Science*, Vol. 15 No. 6, pp. 617-632.
- Nonaka, I. and Von Krogh, G. (2009), “Perspective-tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory”, *Organization Science*, Vol. 20 No. 3, pp. 635-652.
- Pagoulatos, G. and Triantopoulos, C. (2009), “The return of the Greek patient: Greece and the 2008 global financial crisis”, *South European Society and Politics*, Vol. 14 No. 1, pp. 35-54.
- Pihie, Z.A.L. and Akmaliah, Z. (2009), “Entrepreneurship as a career choice: An analysis of entrepreneurial self-efficacy and intention of university students”, *European Journal of Social Sciences*, Vol. 9 No. 2, pp. 338-349.
- Reihlen, M. and Ringberg, T. (2013) “Uncertainty, pluralism, and the knowledge-based theory of the firm: From J.-C. Spender’s contribution to a socio-cognitive approach”, *European Management Journal*, Vol. 31 No. 6, pp. 706-716.
- Rodríguez González, P., Hernández Martín, R., Rodríguez, Y. and Baute Díaz, N. (2016), “The pillars of La Palma’s economy (Los pilares de la economía de La Palma)”, University of La Laguna, Spain. Available at: <http://www.asdetur.com/files/pilares-economia-la-palma-def.pdf>
- Royo, S. (2009), “After the fiesta: The Spanish economy meets the global financial crisis”, *South European Society and Politics*, Vol. 14 No. 1, pp. 19-34.
- Schwarzer, R. (1992), *Self-efficacy: Thought control of action*, Washington, DC,

Hemisphere.

- Sen, A.K. (2011), "Micro enterprises in inner-city communities: Current challenges and viability", *Journal of Business Case Studies*, Vol. 7 No. 3, pp. 55-62.
- Steiner, A. and Atterton, J. (2014) "The contribution of rural businesses to community resilience", *Local Economy*, Vol. 29 No. 3, pp. 228-244.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(1), 27-43.
- Tsoukas, H. (2005), Do we really understand tacit knowledge?, In M. Easterby-Smith and M. Lyles (Eds.), *The Blackwell Handbook of Organizational Learning and Knowledge Management* (pp. 410-427), Oxford, UK, Blackwell.
- Wacker, J.G. (1998), "A definition of theory: research guidelines for different theory-building research methods in operations management", *Journal of Operations Management*, Vol. 16 No. 4, pp. 361-385.
- Wee, J.C.N. and Chua, A.Y.K. (2013), "The peculiarities of knowledge management processes in SMEs: the case of Singapore", *Journal of Knowledge Management*, Vol. 17 No. 6, pp. 958-972.
- Wood, R. and Bandura, A. (1989), "Social cognitive theory of organizational management", *Academy of Management Review*, Vol. 14 No. 3, pp. 361-384.
- Yin, R.K. (1999), "Enhancing the quality of case studies in health services research", *Health Services Research*, Vol. 5, No. 2, pp. 1209-1224.
- Zhao, H., Seibert, S.E. and Hills, G.E. (2005), "The mediating role of self-efficacy in the development of entrepreneurial intentions", *Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1265-1272.
- Zahra, S.A., Neubaum, D.O. and Naldi, L. (2007), "The effects of ownership and governance on SMEs' international knowledge-based resources", *Small Business Economics*, Vol. 29 No. 3, pp. 309-327.