

Beyond entrepreneurial intentions: values and motivations in entrepreneurship

Alain Fayolle · Francisco Liñán · Juan A. Moriano

Published online: 2 March 2014

© Springer Science+Business Media New York 2014

Abstract The role of values and motivations in understanding the entrepreneurial cognitive process deserves closer attention. So far, the predominant approach has been studying the entrepreneurial intention. This has been a very fruitful avenue of research. However, there is still much to be known to fully understand how the decision to start a venture is formed, and how the individual acts to implement that decision. Values and motivations are closely related, since both of them are linked to the notion of goals. The higher the importance attached to a goal, the more likely the person will form action plans to achieve it. In this paper, we present some ideas on how values and motivations could be integrated into the predominant entrepreneurial intention model. Firstly, we propose that values may help to explain the formation of intention antecedents (e.g., attitudes), and also moderate their effect on the entrepreneurial intention. Secondly, we point to the possibility that values and motivations may also play a role in the intention–action link. In particular, they may be instrumental in overcoming the barriers and obstacles toward effective start-up. In addition, this paper is also an introduction to the special issue, and we present the four papers selected to be included and highlight some of the most interesting aspects of their contributions.

Keywords Entrepreneurial motivation · Personal values · Cultural values · Entrepreneurial intention

A. Fayolle

Department of Strategy and Organization, EMLYON Business School, 23, av. Guy de Collongue, 69134 Ecully, France

F. Liñán (✉)

Department of Applied Economics, University of Seville, Av. Ramón y Cajal, 1, 41018 Seville, Spain
e-mail: flinan@us.es

J. A. Moriano

Department of Social Psychology, UNED, C/Juan del Rosal, 10, 28040 Madrid, Spain

Introduction

A long time has passed since the seminal study conducted by McClelland (1961) on the need for achievement and entrepreneurship. This work originated a strong interest in the motivations leading entrepreneurs to start new businesses. For a time, it was thought that motivations, together with personal traits, would serve to predict who would be the future successful entrepreneur (Carsrud et al. 1989). Gartner (1989), in turn, argued that the entrepreneurial process was a more promising field of research, and the interest in motivations toward entrepreneurship rapidly declined during the 1990s. However, as entrepreneurship research on cognitive psychology is growing (Baron 1998), the entrepreneurial process is being recognized as highly complex (Baum and Locke 2004; Shaver and Scott 1991) and the role of motivations is again being considered (Carsrud and Brännback 2011; Edelman et al. 2010; Shane et al. 2003).

More recently, personal values have also been pointed out as playing a relevant role in entrepreneurship (Hemingway 2005). Specific actions may become more attractive to the extent that they promote attainment of valued goals (Feather 1995). Thus, an opportunity to attain one of these highly prioritized values will set off an automatic, positive, affective response to actions that will serve them (Schwartz 2006). Even in more complex decisions involving the need to develop careful plans, values play a relevant role (Jaén et al. 2013). More important goals induce a stronger motivation to plan thoroughly. The higher the priority given to a value, the more likely people will form action plans that can lead to its expression in behavior (Gollwitzer 1996).

On the other hand, the predominant perspective within the cognitive approach to entrepreneurship has so far been that of Entrepreneurial Intentions (Fayolle and Liñán 2014). Although different models have been proposed, the Theory of Planned Behavior (TPB, Ajzen 1991) continues to be the one most widely used and a generally confirmed theory to explain entrepreneurial intention. Nevertheless, new questions have emerged with respect to its specific configuration in the case of entrepreneurial behavior. There is a call by some researchers to advance our understanding of how the entrepreneurial intention model may be improved or modified to better reflect the full complexity of entrepreneurship processes (Krueger 2009).

In particular, values and motivations may play a role in explaining how entrepreneurial intentions are formed. Thus, it has been suggested that different motivations may lead to varying levels of personal attitude, subjective norm and perceived behavioral control and, through them, to distinct entrepreneurial intentions (Solesvik 2013). Additionally, some authors suggest that motivations may serve to activate the intention–action link (Carsrud and Brännback 2011). However, research on the specific role of values and motivation in entrepreneurship is still relatively scarce. As a consequence, there are a number of relevant gaps in knowledge concerning the role which they play in entrepreneurship. In particular, the articulation of values and motivations within the entrepreneurial process perspective and the widely-used entrepreneurial intention models could be very promising (Fayolle et al. 2008; Liñán et al. 2011a).

The aim of this paper is, then, to contribute to the identifying of elements of complementarity between both alternative approaches—values and motivations, on the one hand, and entrepreneurial intentions, on the other hand. The paper will also propose some lines of research to advance toward their integration into one articulated entrepreneurial-process cognitive model.

The entrepreneurial intention model

Several models have been used to explain entrepreneurial intention, such as Shapero's (1982) Entrepreneurial Event Model, the Model of Implementing Entrepreneurial Ideas (Bird 1988) or the Maximization of the Expected Utility Model (Douglas and Shepherd 2000). Nevertheless, none of them has been as influential as the TPB (Krueger et al. 2000; Liñán and Chen 2009; Moriano et al. 2012; van Gelderen et al. 2008). Unlike other models, the TPB offers a coherent and generally applicable theoretical framework which enables us to understand and predict entrepreneurial intentions by taking into account not only personal but also social factors (Krueger et al. 2000).

Three antecedents explain entrepreneurial intention, according to the TPB. Firstly, the personal attitude (PA) toward behavior, which is defined within the TPB as an individual's overall evaluation of the entrepreneurial behavior (Ajzen 1991). This is determined by the total set of accessible behavioral beliefs linking entrepreneurial behavior to various outcomes and other attributes. In addition, the strength of each belief is weighted by the evaluation of the outcomes (Ajzen 1991). The second component of the TPB is the subjective norm (SN), which is defined as the individual's perception of the social pressures to engage (or not to engage) in entrepreneurial behavior (Ajzen 1991). The subjective norm consists of two components: normative beliefs and the motivation to comply with these beliefs. The third TPB component, perceived behavioral control (PBC), refers to people's perceptions of their ability to perform that behavior. This concept is, therefore, very similar to self-efficacy (or even the same, see Bandura 1982). In fact, self-efficacy has replaced PBC in numerous studies on entrepreneurial intentions (Kolvereid and Isaksen 2006; Krueger et al. 2000; Moriano et al. 2012; van Gelderen et al. 2008).

More recently, however, a number of authors have stressed the need to go further away in research (Carsrud and Brännback 2009). Despite the ultimate interest in predicting entrepreneurial behavior, only very recently have longitudinal studies been carried out (Kautonen et al. 2013). With the publication of more and more studies using entrepreneurial intention as a framework, new applications, mismatches and specifications emerge (Carsrud and Brännback 2009, 2011; Krueger 2007, 2009; Krueger and Day 2010). Krueger (2009) considers entrepreneurial intentions to be dead and claims long live entrepreneurial intentions, calling for a deep rethinking of research on the matter. Fayolle and Liñán (2014) point out the existence of a number of research lines that would serve to expand and consolidate the usefulness and applicability of entrepreneurial intention models. In particular, the intention–action link deserves special consideration. There is a need to carry out longitudinal studies and pay attention to the effect of environmental variables in the transformation of intention into effective action (Fayolle and Liñán 2014). Similarly, Krueger (2009) strongly suggests considering a dynamic intention model, taking into account the temporal evolution of beliefs, perceptions and intention. Finally, there is also a substantial gap in the understanding of how intention antecedents are formed, and about the conditions moderating their effect on intention (Carsrud and Brännback 2011). The role of motivations and values may be substantial in these three areas of research.

Entrepreneurial motivations

Motivation has been defined as the purpose or psychological cause of an action (Schacter et al. 2011). The main theories of entrepreneurial motivation may be roughly grouped into two main categories: drive theories and incentive theories (Carsrud and Brännback 2011). Drive theories suggest that there is an internal need (e.g., achievement or autonomy) that has the power of motivating the individual to start a new venture in order to reduce the resulting tension. On the other hand, incentive theories suggest that people are motivated to do things because of external rewards. For example, entrepreneurs may be motivated by a combination of incentives such as flexibility, income, or prestige.

Traditionally, reasons for starting a firm (the entrepreneurial goal) have been considered to be mainly economic (Carsrud and Brännback 2009). Recent insights, however, have emerged in the area of social entrepreneurship pointing strongly to the existence of other motives for a person to create a venture. Here, the social gains are the primary motivators. It is also acknowledged that lifestyle entrepreneurs are driven by goals and motives. These may indeed be economic, but not necessarily to maximize economic gains (Carsrud and Brännback 2011).

Linking drive motivational theories to entrepreneurship, it may be argued that internal tension could lead to a higher entrepreneurial intention. This effect would result from motivations affecting the antecedents of intention (PA, SN and PBC), as suggested by Solesvik (2013). On the other hand, incentive motivational theories may be important in explaining the transformation of entrepreneurial intentions into actual behavior (starting up). In this respect, the intensity of the desired outcomes (goals) would explain the decision to take action (Edelman et al. 2010). Carsrud and Brännback (2011) suggest a linkage between intentions, motivation and action by presenting the ideas of implementation intentions and goal pursuit, based on the work of Gollwitzer and Brandstätter (1997). In this sense, the specific role of implementation intentions and commitment in the entrepreneurial process has been recently highlighted (Fayolle and Liñán 2014).

Values in entrepreneurship

Values are also connected to personal goals and, therefore, there is a close connection between motivations and values (Schwartz 2011). Personal value priorities serve as a guide for human decisions and action. Schwartz (1992) defined values as abstract beliefs about the desirable goals—ordered according to relative importance—which guide individuals as they evaluate events, people and actions. Individuals' value priorities relate systematically to their personality traits, attitudes, and behavior (Fischer and Schwartz 2011). Thus, values guide individual decision-making and motivate behavior that is congruent with them (Bardi and Schwartz 2003). In this sense, people facing a similar situation may form different decisions and take subsequent actions depending on their value priorities (Schwartz 2006). Thus, those valuing stimulation would be attracted to a challenging job offer, whereas those who value security might find the same offer threatening and unattractive (Jaén and Liñán 2013). However, personal values are influenced by socialization processes and are, therefore,

partly determined by the predominant cultural values in society (Fischer 2006). Nevertheless, research has shown that there is substantial variability of values across individuals and as a result the level of congruence between personal and cultural values may also be relevant (Fischer and Schwartz 2011).

In predicting entrepreneurial intention and behavior, it has to be acknowledged that the start-up decision is intrinsically personal, and personal values, attitudes and perceptions are not identical between subjects (Iakovleva et al. 2011; Krueger 2003; Liñán et al. 2013a). That is, the motivations leading people toward entrepreneurship, and the perceived rewards, are probably different for each person, depending on their personal values (Jaén and Liñán 2013; Moriano et al. 2007). Individualist values have been repeatedly associated with entrepreneurial intentions and behavior (Hayton et al. 2002). In countries with a similar level of development, a more individualistic culture is linked to a higher entrepreneurial activity (Liñán et al. 2013b; Pinillos and Reyes 2011). Similarly, at the personal level of analysis, people prioritizing individualist values tend to exhibit higher entrepreneurial intentions (Jaén et al. 2013).

Holland and Shepherd (2013) found personal values to moderate the influence of different attributes on the individual's decision to persist pursuing an entrepreneurial opportunity. More recently, Siu and Lo (2013) have confirmed that the relationship between SN and entrepreneurial intention is significantly stronger when the interdependent self-construal (collectivist values) is high. Nevertheless, this result is not confirmed when aggregated cultural values are considered (Moriano et al. 2012). Therefore, the effect of values seems to be different depending on the level of aggregation (cultural- or personal-level values).

In the case of culture and entrepreneurship, researchers have argued that a country's culture, values, beliefs and norms affect the entrepreneurial orientation of its residents (Busenitz and Lau 1996; Hechavarria and Reynolds 2009; Tiessen 1997). Thus, in developed countries, a higher cultural emphasis on individualist values is associated with higher entrepreneurial activity (Morris and Schindehutte 2005; Pinillos and Reyes 2011; Wdowiak et al. 2007). This influence may occur through social legitimation (Davidsson 1995; Davidsson and Wiklund 1997; Frederking 2004). That is, the entrepreneurial activity will be more valued and socially recognized in that culture, hence creating a favorable institutional environment (Liñán et al. 2011b). This will cause more people to try to start their ventures, irrespective of their personal beliefs and attitudes (Etzioni 1987). In contrast, when values relevant to economic innovation and personal success may conflict with traditional cultural values, entrepreneurship may be not approved of by society (Wdowiak et al. 2007). This result has been confirmed by Noseleit (2010).

The interplay of personal and cultural values in entrepreneurship

However, a considerable share of individuals with positive attitudes toward entrepreneurship prioritize alternative non-individualistic values (Douglas and Shepherd 2002). If these people are to attempt starting up, the decision will surely be taken for different motives, and their cognitive mechanisms will advance along substantially different paths. Since the individual value priorities do not necessarily match predominant societal cultural values, there is inevitably a variation between personal and cultural values (Fischer and Schwartz 2011). In this sense, it has been argued that the level of

value-congruence between the individuals and their culture is important in explaining entrepreneurial behavior (Noorderhaven et al. 2004). Thus, the “cultural dissatisfaction” of people not sharing predominant cultural values may be a source of entrepreneurial activity. The level of value-congruence between individuals and groups is bound to affect their perception of reality and, hence, their decisions and behavior (Posner and Schmidt 1993; Schwartz 2011). Nevertheless, very little is yet known about the full implications derived from the interplay between personal and cultural values.

Related to the “cultural dissatisfaction” hypothesis (Noorderhaven et al. 2004), recent work has considered the role of alternative satisfactory employment opportunities in the formation of entrepreneurial intentions. The lack of satisfactory employment alternatives may make people form their intention based more strongly on SN (Vinogradov et al. 2013). In this sense, people stressing more collectivist values than those of their local culture may feel there is not any satisfactory employee alternative. Therefore, they are likely to consider the opinion of significant others as highly relevant, and may intend to start a venture only if “relevant others” support this decision. In turn, they would not attach the same importance to their own personal preferences (Siu and Lo 2013). They will thus form their entrepreneurial intention based on SN, with very little concern for PA.

In contrast, people stressing more individualistic values than the average culture in their region will probably feel the local culture stresses the opinion of others too much. They would feel uncomfortable working in any established company, since it implies the need to give up too much individuality to follow company rules. The opinion of others may be considered as limiting their individual will, and they certainly will not expect others to support their decision, so SN should exert a weak influence on their entrepreneurial intention. In turn, they are likely to form their entrepreneurial intentions based more strongly on PA.

Therefore, there could be reasons to believe that the level of value-congruence between personal and cultural values may moderate the relationship between entrepreneurial intention and its antecedents (PA, SN and PBC).

Discussion

Much is yet to be known about the specific roles that values and motivations play in entrepreneurship. There is a need, firstly, to clarify both concepts. (Schwartz 1992) considers values to be relatively stable over time, of an abstract nature and acting as guiding principles for the person. Values also serve to motivate behavior (Bardi and Schwartz 2003). Motivations, in turn, are characterized by being more specific—psychologically closer to actual behavior (Schacter et al. 2011). It may be argued, therefore, that values are more general in nature, and serve as the basis to develop motivations toward specific behaviors, such as starting up a venture. Nevertheless, many different alternative approaches toward motivations have been considered in the past (Carsrud and Brännback 2011).

In our opinion, the concept of personal attitude (PA) deserves some attention. It is formed as the combination of beliefs about the likely consequences of becoming an entrepreneur, pondered by their corresponding desirability (Ajzen 1991; Jaén et al.

2013). Each of these “pondered beliefs” may be considered as an entrepreneurial motivation. That is, a specific desirable goal which causes the willingness to take action (Carsrud et al. 1989). Therefore, research on the role of values in forming each one of these salient beliefs (motivations) toward entrepreneurship may be of the highest interest. Some of the conflicting results about values and entrepreneurial behavior may be thus explained. For instance, in countries with different levels of income, the values associated with entrepreneurship are found to be different (Liñán et al. 2013b; Pinillos and Reyes 2011). It may be the case that people have different expectations about the consequences of starting up and, as a consequence, develop different motivations to do so. Hence, all potential entrepreneurs may exhibit high levels of PA and its effect on entrepreneurial intention may be universal. Yet the specific motives making up PA are most probably different for each person.

Besides, these different motivations may lead to alternative types of ventures, ways of overcoming barriers, enterprise culture, business performance, etc. As suggested by Carsrud and Brännback (2011), the specific response to the different obstacles in the path from intention to action may depend on the characteristics and strength of each person’s motivations.

Similarly, different ethnic groups and minorities often have different value priorities and expectations regarding the likely consequences of starting a venture. Values and motivations, together with the limited access some of these groups may have to the labor market (Levie 2007) could explain the differences observed in the likelihood of their actually starting a venture, the type of ventures they start, average firm size, etc.

Undoubtedly, the lines of research proposed in this paper involve delving into the psychological character of entrepreneurship. In this sense, we follow the call made by Shaver and Scott (1991) about the need for a truly psychological perspective combining the person, his/her representation of the environment, and the cognitive process leading eventually to entrepreneurial behavior. From this viewpoint, the entrepreneurial intention model may be expanded and improved if the role of values and motivations is introduced into the analysis.

We are confident that the four contributions included in this special issue are relevant in this respect. The paper by Chang, Peng and Tsai offers an integrated model of the process of becoming an entrepreneur, by combining TPB with motivation–opportunity–ability (MOA) theory. They survey adults participating in a basic entrepreneurship course, and find that motivation affects entrepreneurial intentions through personal attitude and perceived behavioral control. Ability, in turn, has both a direct effect on intention and an indirect one through PBC, in line with previous research (Liñán 2008). Therefore, in their paper, Chang et al. offer an enhanced understanding of the entrepreneurial cognitive process.

Padilla-Meléndez, Fernández-Gámez and Molina-Gómez have studied how changes in emotional competencies influence individual entrepreneurial intention in university students, specifically after participating in an outdoor training experience. They used quantitative and qualitative data from a sample of last-year Spanish university students who participated in an outdoor training experience, measuring their emotional competences and entrepreneurial orientation before and after that experience. They find that participating in the training helped develop participants’ emotional competences. These changes in emotional competences, such as self-management, social awareness, and relationship management, in turn positively affected their entrepreneurial orientation and intention.

The study carried out by Lin and Si examines the entrepreneurial intention of Chinese peasants based on an entrepreneurial behavior perspective and hypothesizes that self-efficacy positively moderates the relationship between the need for power and entrepreneurial intention. Their results support this idea, since the positive effect of the need for power on entrepreneurial intention is stronger when coupled with high perceived self-efficacy. In turn, the relationship between perceiving a favorable institutional environment and the entrepreneurial intention is negatively moderated by self-efficacy. This means that the effect of a favorable perceived environment is stronger for those with low self-efficacy.

Fernandez-Serrano and Romero, finally, address the role of cultural values in explaining how potential entrepreneurs respond to regulatory barriers to entrepreneurship. Using data from the Global Entrepreneurship Monitor (GEM) and the Schwartz's Value Survey (SVS), their study confirms that cultural values affect entrepreneurial activity differently, depending on the country's income level, as found elsewhere (Liñán et al. 2013b; Pinillos and Reyes 2011). Furthermore, the impact of regulatory barriers on entrepreneurship is found to be moderated by cultural values. Thus, the discouraging effect of the regulatory barriers on entrepreneurial activity is more important in those countries with a societal culture characterized by autonomy, egalitarianism and harmony values.

Conclusion

We hope we have been successful in heightening the interest of the entrepreneurship research community toward the role of values and motivations in the entrepreneurial-process cognitive model. The topic is relevant, since there is yet much to be known before we fully understand how the entrepreneurial decision is made and acted upon. In particular, this paper presents some reflections on the way this integration may take place. However, they are only proposals that should be tested and confirmed (or refuted) by future research.

The papers selected for inclusion in this special issue have provided some relevant insights into the possibilities for integrating these theories. Three of them have addressed the role of motivation in forming an entrepreneurial intention. Meanwhile, the fourth one has considered the role of values in overcoming regulatory barriers to starting up. We are grateful to all of them for their effort in submitting and revising these high quality manuscripts.

We would also like to thank all the reviewers, whose participation in the selection process for this special issue has been essential. Finally, we are also grateful to the editor (Prof. Salvador Roig), along with the publishers, for his advice and guidance throughout the whole process.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147.

- Bardi, A., & Schwartz, S. H. (2003). Values and behavior: strength and structure of relations. *Personality and Social Psychology Bulletin*, 29(10), 1207–1220.
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13, 275–294.
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587–598.
- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *Academy of Management Review*, 13, 442–453.
- Busenitz, L. W., & Lau, C. M. (1996). A cross-cultural cognitive model of new venture creation. *Entrepreneurship: Theory and Practice*, 20(4), 25–39.
- Carsrud, A. L., & Brännback, M. (Eds.). (2009). *Understanding the entrepreneurial mind*. New York: Springer.
- Carsrud, A. L., & Brännback, M. (2011). Entrepreneurial motivations: what do we still need to know? *Journal of Small Business Management*, 49(1), 9–26.
- Carsrud, A. L., Olm, K. W., & Thomas, J. B. (1989). Predicting entrepreneurial success; effects of multi-dimensional achievement motivation, levels of ownership, and cooperative relationships. *Entrepreneurship and Regional Development*, 1(3), 237–244.
- Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship and Regional Development*, 7(1), 41–62.
- Davidsson, P., & Wiklund, J. (1997). Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology*, 18(2–3), 179–199.
- Douglas, E. J., & Shepherd, D. A. (2000). Entrepreneurship as utility-maximizing response. *Journal of Business Venturing*, 15(3), 231–251.
- Douglas, E. J., & Shepherd, D. A. (2002). Self-employment as a career choice: attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship: Theory and Practice*, 26(3), 81–90.
- Edelman, L., Brush, C. G., Manolova, T., & Greene, P. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management*, 48(2), 174–196.
- Etzioni, A. (1987). Entrepreneurship, adaptation and legitimation: a macro-behavioral perspective. *Journal of Economic Behavior & Organization*, 8(2), 175–189.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663–666. doi:10.1016/j.jbusres.2013.11.024.
- Fayolle, A., Barbosa, S. D., & Kickul, J. (2008). New venture creation and perceptions of entrepreneurial risk. *Revue Française de Gestion*, 34(5), 141–159.
- Feather, N. T. (1995). Values, valences, and choice: the influence of values on the perceived attractiveness and choice of alternatives. *Journal of Personality and Social Psychology*, 68, 1135–1151.
- Fischer, R. (2006). Congruence and functions of personal and cultural values: do my values reflect my culture's values? *Personality and Social Psychology Bulletin*, 32(11), 1419–1431.
- Fischer, R., & Schwartz, S. H. (2011). Whence differences in value priorities? Individual, cultural, or artifactual sources. *Journal of Cross-Cultural Psychology*, 42(7), 1127–1144.
- Frederking, L. C. (2004). A cross-national study of culture, organization and entrepreneurship in three neighbourhoods. *Entrepreneurship and Regional Development*, 16(3), 197–215.
- Gartner, W. B. (1989). 'Who is an entrepreneur?' is the wrong question. *Entrepreneurship: Theory and Practice*, 13(4), 47–68.
- Gollwitzer, P. M. (1996). The volitional benefits of planning. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action*. New York: Guilford.
- Gollwitzer, P. M., & Brandstätter, V. (1997). Implementation intentions and effective goal pursuit. *Journal of Personality and Social Psychology*, 73(1), 186–199.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: a review of behavioral research. *Entrepreneurship: Theory and Practice*, 26(4), 33–52.
- Hechavarria, D. M., & Reynolds, P. D. (2009). Cultural norms & business start-ups: the impact of national values on opportunity and necessity entrepreneurs. *International Entrepreneurship and Management Journal*, 5(4), 417–437.
- Hemingway, C. A. (2005). Personal values as a catalyst for corporate social entrepreneurship. *Journal of Business Ethics*, 60(3), 233–249.
- Holland, D. V., & Shepherd, D. A. (2013). Deciding to persist: adversity, values, and entrepreneurs' decision policies. *Entrepreneurship: Theory and Practice*, 37(2), 331–358.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education and Training*, 53(5), 353–370.

- Jaén, I., & Liñán, F. (2013). Work values in a changing economic environment: the role of entrepreneurial capital. *International Journal of Manpower*, 34(8), 939–960.
- Jaén, I., Moriano, J. A., & Liñán, F. (2013). Personal values and entrepreneurial intentions: An empirical study. In A. Fayolle, P. Kyrö, T. Mets, & U. Venasaar (Eds.), *Conceptual richness and methodological diversity in entrepreneurship research* (pp. 15–31). Cheltenham: Edward Elgar.
- Kautonen, T., Van Gelderen, M., & Tornikoski, E. T. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, 45(6), 697–707.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866–885.
- Krueger, N. F. (2003). The cognitive psychology of entrepreneurship. In Z. J. Acs & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research: An interdisciplinary survey and introduction* (pp. 105–140). London: Kluwer.
- Krueger, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship: Theory and Practice*, 31(1), 123–138.
- Krueger, N. F. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. In A. L. Carsrud & M. Brannback (Eds.), *Understanding the entrepreneurial mind* (pp. 51–72). New York: Springer.
- Krueger, N. F., & Day, M. (2010). Looking forward, looking backward: From entrepreneurial cognition to neuroentrepreneurship. In Z. J. Acs & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research. An interdisciplinary survey and introduction* (2nd ed., pp. 321–358). New York: Springer.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432.
- Levie, J. (2007). Immigration, in-migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics*, 28(2–3), 143–169.
- Liñán, F. (2008). Skill and value perceptions: how do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, 4(3), 257–272.
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship: Theory and Practice*, 33(3), 593–617.
- Liñán, F., Santos, F. J., & Fernández, J. (2011a). The influence of perceptions on potential entrepreneurs. *International Entrepreneurship and Management Journal*, 7(3), 373–390.
- Liñán, F., Urbano, D., & Guerrero, M. (2011b). Regional variations in entrepreneurial cognitions: start-up intentions of university students in Spain. *Entrepreneurship and Regional Development*, 23(3&4), 187–215.
- Liñán, F., Nabi, G., & Krueger, N. F. (2013a). British and Spanish entrepreneurial intentions: a comparative study. *Revista de Economía Mundial*, 33, 73–103.
- Liñán, F., Fernández, J., & Romero, I. (2013b). Necessity and opportunity entrepreneurship: the mediating effect of culture. *Revista de Economía Mundial*, 33, 21–47.
- McClelland, D. C. (1961). *The achieving society*. Princeton: Van Nostrand.
- Moriano, J. A., Palaci, F. J., & Morales, J. F. (2007). The psychosocial profile of the university entrepreneur. *Psychology in Spain*, 11(1), 72–84.
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162–185.
- Morris, M., & Schindehutte, M. (2005). Entrepreneurial values and the ethnic enterprise: an examination of six subcultures. *Journal of Small Business Management*, 43(4), 453–479.
- Noorderhaven, N., Thurik, R., Wennekers, A. R. M., & van Stel, A. (2004). The role of dissatisfaction and per capita income in explaining self-employment across 15 European countries. *Entrepreneurship: Theory and Practice*, 28(5), 447–466.
- Noseleit, F. (2010). The entrepreneurial culture: Guiding principles of the self-employed. In A. Freytag & A. R. Thurik (Eds.), *Entrepreneurship and culture* (pp. 41–54). New York: Springer.
- Pinillos, M. J., & Reyes, L. (2011). Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data. *Small Business Economics*, 37(1), 23–37.
- Posner, B. Z., & Schmidt, W. H. (1993). Values congruence and differences between the interplay of personal and organizational value systems. *Journal of Business Ethics*, 12(5), 341–347.
- Schacter, D., Gilbert, D., Wegner, D., & Hood, B. (2011). *Psychology: European edition*. Basingstoke: Palgrave Macmillan.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). Nueva York: Academic.

- Schwartz, S. H. (2006). Les valeurs de base de la personne: théorie, mesures et applications. *Revue Française De Sociologie*, 47(4), 929–968.
- Schwartz, S. H. (2011). Studying values: personal adventure, future directions. *Journal of Cross-Cultural Psychology*, 42(2), 307–319.
- Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 12, 257–279.
- Shapero, A. (1982). Social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton, & K. Vesper (Eds.), *The encyclopedia of entrepreneurship* (pp. 72–90). Englewood Cliffs: Prentice Hall.
- Shaver, K. G., & Scott, L. R. (1991). Person, process, choice: the psychology of new venture creation. *Entrepreneurship: Theory and Practice*, 16(2), 23–45.
- Siu, W.-S., & Lo, E. S.-C. (2013). Cultural contingency in the cognitive model of entrepreneurial intention. *Entrepreneurship: Theory and Practice*, 37(2), 147–173.
- Solesvik, M. (2013). Entrepreneurial motivations and intentions: investigating the role of education major. *Education+Training*, 55(3), 253–271.
- Tiessen, J. H. (1997). Individualism, collectivism and entrepreneurship: a framework for international comparative research. *Journal of Business Venturing*, 12(5), 367–384.
- van Gelderen, M., Brand, M., van Praag, M., Bodewes, W., Poutsma, E., & van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538–559.
- Vinogradov, E., Kolvereid, L., & Timoshenko, K. (2013). Predicting entrepreneurial intentions when satisfactory employment opportunities are scarce. *Education and Training*, 55(7), 719–737.
- Wdowiak, M. A., Schwarz, E. J., Breitenacker, R. J., & Wright, R. W. (2007). Linking the cultural capital of the entrepreneur and early performance of new ventures: a cross-country comparison. *Journal for East European Management Studies*, 17(2), 149–183.