

1. Introduction: entrepreneurial research – towards conceptual richness and methodological diversity

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The current volume continues the collaboration tradition of university researchers in the European University Network on Entrepreneurship – ESU. This fifth book in the series “European Research in Entrepreneurship” demonstrates the endeavours of the editorial leaders, the authors’ team and the ESU network to improve and widen the conceptual and methodological coverage of entrepreneurship research in Europe. The ESU network grew from the idea to gather together professors and doctoral students in entrepreneurship and entrepreneurship education around the Entrepreneurship Summer University concept initiated by the French Government in 2002. It is from that initiative that the idea originated to develop and collect together all the outcomes of entrepreneurship research into this book series. ESU was previously defined by Professor Kyrö (2010), as “fed by European culture and roots in their diversity and their specificities”, an accolade which equally characterizes this book series.

In the first book, *Entrepreneurship Research in Europe: Outcomes and Perspectives*, three editors raised the issue of the European roots of entrepreneurship and entrepreneurship research by emphasizing the growing role of entrepreneurial behaviour at both individual and organizational levels in the modern era following the decline of growth or even the crises of the 1970s (Fayolle et al., 2005). Until that time the role of the entrepreneur had been largely lost throughout the period of flourishing economic theory, fed by growth. The importance of entrepreneurs and smaller firms as job creators became topical only after discovering that larger organizations did not tend to carry that role in society. This understanding leads researchers in part to formulate the *why*, *what* and *how* questions when studying entrepreneurship (Fayolle et al., 2005) and the summary of these

research fields in the introductory chapter of the first volume serves as the manifesto of the initial editors for this book series.

The question *why* largely corresponds to “the role and value of entrepreneurial practices” in providing new work and wealth for society. The focus of research has moved from classical and neo-classical macro-level theories of economics towards behavioural theories in order to better understand entrepreneurial processes in society, and this trend seems to be generally agreed amongst researchers.

The question of *what* to study has moved from theories of economic development to the complexity and dynamics of “processes of creating new economic activities in different contexts: individual, small business, organizations and networks”. This is still a field of inexhaustible topics for study in the framework of different conceptual approaches as well as the creation of new ones.

The methodological question of *how* to study entrepreneurship has experienced a change from abstract-deductive analysis to a broad methodological approach and a great variety of research methods. This refers to “the holistic and complex, non-dualistic view with a philosophical flavour throughout history” in the European approach.

In the second book of the series, *The Dynamics between Entrepreneurship, Environment and Education*, editors Alain Fayolle and Paula Kyrö (2008) expand the European dialogue on the dynamic dimensions of entrepreneurship by delineating a multidisciplinary landscape from which to learn. The author of the foreword, Hans Landström, points out that although entrepreneurship is a relatively new field of research (20–25 years), it has matured, becoming less sensitive to topical changes in society and focusing more narrowly on particular theoretical research issues. He does mention, though, that editors have recognized the need for an “interface between entrepreneurship research and the dynamics of society” (Landström, 2008). They compare enterprise and innovation in emerging and traditional market economy societies, finding that only the new EU member states of Latvia, Lithuania and Poland score better than the USA in the desirability of self-employment (Fayolle and Kyrö, 2008). The Total Entrepreneurial Activity (TEA) Index shows, however, that in more innovative countries, for example France, Finland and Estonia, enterprise levels are below the European average (Venesaar and Jakobson, 2008). Although not the theme of the current volume, we expect that the TEA Index in Estonia, along with those of other emerging economies such as Latvia and Lithuania, will demonstrate the entrepreneurial dynamic of these countries to recover from the latest crisis period (more reliable measurements of the TEA Index in Estonia have been possible following inclusion into the Global Entrepreneurship Monitor in 2012).

In the third book, *European Entrepreneurship in the Globalizing Economy*, the two editors, Alain Fayolle and Kiril Todorov, invite a range of international contributors to address a couple of key questions: (1) What role can entrepreneurship play in a European economy that is more and more open to the rest of the world? (2) In the European Union construction, what is the place of the nation states and economies that have only recently converted to a free market economy? It is these questions, among others, that the book explores and discusses in particular. The future steps required in developing European entrepreneurship in a dynamic and international context are also analysed and synthesized.

The expert contributors reveal both the macro and micro factors that influence European entrepreneurial development, with an emphasis on high-tech firms. The particular topics addressed include: SME research and innovation policy issues; starting and growing a new venture; innovation, marketing and entrepreneurial networks; entrepreneurship and regional (cross-border) development; building competitive advantage of SMEs; and social and cultural aspects of entrepreneurship.

In the fourth book, with the sub-title *Evolving Concepts and Processes* (2011), the editors assert the growth in validity of their initial prediction regarding the question of why study entrepreneurship in terms of the creation of new work and wealth. A changing reality and the social concepts and context deriving from that have inspired opportunity-driven research. In terms of the *why* question, the editors (Kyrö et al., 2011) conclude that European research has moved from the role of the entrepreneur in the economy towards entrepreneurial renewal in society. Thus a central issue within the book is the process approach to all aspects of entrepreneurship. The concept of process permeates throughout: becoming an entrepreneur as well as learning to become one, the social processes of becoming entrepreneurial as well as the creation and development of entrepreneurial organizations (Kyrö et al., 2011).

The first four books as well as the current volume of the series demonstrate entrepreneurship research in a plurality of research methods and the wide interpretation of entrepreneurship phenomena in a European cultural diversity context. That means continuing to ask the questions *why*, *what* and *how* in entrepreneurship research and especially focusing on the last two aspects when linked to the conceptual richness and methodological diversity of European research in entrepreneurship. In part, we follow the trend to internationalize entrepreneurship research in Europe. Although this may not have been a topic for larger national research communities such as in France and Germany (Welter and Lasch, 2008) or the UK (Blackburn and Smallbone, 2008), this is the key question for the development of research quality and standards for a heterogeneous

European research community generally. Besides, internationalization enables research teams to avoid “lock-in” effects which might hamper knowledge transfer and the development of new ideas even in large communities, as well as among small ones. We see the strength of the ESU community to be in linking researchers from countries of different historical backgrounds, sizes, cultures and economies. This is a generous ground in which to enrich the conceptual approach and methodological diversity of entrepreneurial research.

When comparing European and US entrepreneurship research and publication traditions, different patterns were identified. A wide variety of qualitative research methods and combinations of these methods characterize European research, while a more traditional quantitative orientation is more common with US researchers (Welter and Lasch, 2008). Several authors (see overview, for example Welter and Lasch, 2008) have stated that entrepreneurship research still lacks a paradigm and conceptual approach in the field. The European approach means a more open phenomenological, ontological and epistemological coverage of the field. That also implies “crossing not only thematic boundaries, but also disciplinary ones” (Welter and Lasch, 2008) and can be embedded only on a wider conceptual and methodological base.

Conceptual richness and methodological diversity can be considered as the main characteristic of the ESU network as well as within the current book, in conjunction with the four previous volumes, even though they focus on different facets of entrepreneurship research. The editors, together with authors of the book, continue to contribute to the European approach on entrepreneurship research. In this context the ESU as well as the book series represent “an academic ‘community in practice’ that values democratic dialogue between PhD students, researchers and professors” (Kyrö, 2010). The chapters of the book series created in that democratic dialogue are essential sources of differing methodological approaches to be elucidated before commencing research, discovering differing facets of entrepreneurial processes, entrepreneurship and entrepreneurship education generally. This means introducing an entrepreneurial element into entrepreneurship research, the widening of research techniques and/or using new methods in traditional studies, but also creating new research fields or reinventing older ones.

The book is divided into four parts, the coverage of which is already traditional for the ESU network: general enterprise and entrepreneurship topics in Part I, educational aspects in Part II and more practical entrepreneurship theory applications in Part III. In addition, following a desire for greater methodology development and to open some wider perspectives

on entrepreneurship research, in Part IV the concluding chapter is devoted to explorative research methodology.

PART I: ENTREPRENEURIAL MINDSET, CULTURE AND VALUES

Part I contains three chapters (numbered from 2 to 4) dealing with concepts of entrepreneurial culture, mindset and culture, implementing qualitative as well as quantitative research methods.

The second chapter by Inmaculada Jaén, Juan A. Moriano and Francisco Liñán titled “Personal values and entrepreneurial intention: an empirical study”, is the study of the psychosocial characteristics of new entrepreneurs from a cognitive perspective. The topic continues to attract more and more attention among researchers. Nevertheless, the identification of individual values and the influence they exert on the decision to become an entrepreneur is clearly an under-researched area of study. Social psychology has shown that values may cause behaviour by promoting positive attitudes and action-planning. This study examines the value–intention link in entrepreneurship using a sample of 1467 Spanish university graduates. Schwartz’s Portrait Value Questionnaire (PVQ) was used to measure values. The results confirm the positive effects of openness to change and self-enhancement values on entrepreneurial intentions.

Giancarlo Lauto, Massimo Bau’ and Cristiana Compagno in the third chapter, “The role of researchers’ motivations in the genesis of academic spin-off companies”, study how to foster technological innovation as science policy has increasingly encouraged academics to establish spin-off companies. The control of a suitable configuration of resources enables scientists to identify the business potential of their research. The authors argue that the decision to start a new venture is also affected by individual motivation. In their empirical study, based on a survey on 249 Italian researchers from all disciplines, the authors show that scientists’ acceptance of the need to postpone their academic career supports them in undertaking the entrepreneurial process. Motivational factors enable researchers to successfully satisfy both “new” and “traditional” goals of science.

In Chapter 4, “Could the perception about entrepreneurial culture be explained by demographic variables?”, José Carlos Márquez-López, Carmen Guzmán and Francisco Liñán find that entrepreneurial activity appears to depend on the existence of a more or less supportive culture towards entrepreneurship in the environment. The authors conceptualize a culture of entrepreneurship consisting of six factors or dimensions. On

the other hand, it is also argued that some variables such as gender, age or family background affect perceptions about the environment. Using data from a survey of students at the University of Seville, the influence of these demographic variables on each of the components of the Culture of Entrepreneurship scale has been analysed. These results may help to better understand how individual perceptions are formed.

PART II: ENTREPRENEURSHIP EDUCATION

Chapter 5, “An entrepreneurial self-efficacy scale with a neutral wording” by Kåre Moberg, presents a multidimensional entrepreneurial self-efficacy (ESE) scale. The scale builds on three established ESE scales, but its reliability has been improved compared to the original three scales through the transformation of the highly discipline-specific jargon into a more neutral wording of the items. The scale has been tested in a large-scale survey involving 445 students from twelve different programmes at three universities in Denmark and one university in Sweden. Exploratory factor analysis (EFA) has been applied in order to investigate the multidimensionality of the items in the scale, and confirmatory factor analysis (CFA) has been applied to investigate its convergent, discriminatory and nomological validity. The results demonstrate support for a multidimensional ESE scale with high predictive validity regarding entrepreneurial behaviours and with high reliability as the items are comprehensible to respondents, regardless of whether or not they have entrepreneurial experience. The scale can thus be used in programme evaluations that include control groups or other types of individuals who lack entrepreneurial experience.

Chapter 6, “Entrepreneurship education and metacognitive awareness: development of a tool to measure metacognitive awareness” by Hannes Ling, Paula Kyrö and Urve Venesaar, deals with the importance of metacognition and the need to develop students’ metacognitive abilities and their awareness of cognitive patterns through educational programmes which has been actively studied and encouraged by entrepreneurship scholars worldwide. Despite several instruments developed to capture the content and nature of metacognitive awareness, there is still a substantial amount of uncertainty regarding the most appropriate way to assess the level of this. The purpose of current research is to contribute to the scientific discussion about metacognitive awareness assessment practices by testing the applicability of the instrument developed by Haynie (2005) for sampling students on a university entrepreneurship course. As a result of this research a modified instrument is proposed extending the empirical evidence concerning the development of a measurement tool for

assessment of students' metacognitive awareness. Moreover, the authors share the view that there is also a need to create an additional instrument to catch the conative and affective aspects of meta awareness.

Chapter 7, "Differences in students' understanding of opportunity process matters for their learning!" by Paula Kyrö, Agnieszka Kurczewska and Nana Osei-Bonsu is based on the theories of Cantillon (1755, [1931]), von Mises (1949) and Kirzner (1973) about the centrality of human beings to entrepreneurship. The study identifies three approaches through which the opportunity process could take place: search, discovery and action. The authors argue that the differences in understanding what these opportunities affect determine how we learn and teach opportunity competences. First, different theoretical approaches to the opportunity process in a learning perspective are identified. Then the authors investigate (based on 16 reports and published papers), how students understand what opportunities there are in the venture creation process with respect to these different approaches. Finally, they elaborate what this means for learning and teaching practices. Their conclusion is that courses aimed at opportunity enhancement should be designed in ways that increase students' awareness of the various types of opportunities and their processes, as well as the varying nature of human involvement in opportunity processes. Entrepreneurship education should not merely look for uniform methods and teaching tools, but try to combine them in order to enable all students to learn and increase their competences.

Jaana Seikkula-Leino, Elena Ruskovaara, Markku Ikävalko, Johanna Kolhinen and Tiina Rytkölä in Chapter 8, "Teachers' reflections on entrepreneurship education: their understanding and practices", assume that the success of education and the desired implementation highlight teachers' perceptions and actual behaviours regarding entrepreneurship education. Therefore, this chapter aims to illustrate teachers' reflections of entrepreneurship education, and focuses on the content that teachers are giving within the main elements of entrepreneurship education. The research is based on the project "Measurement Tool for Entrepreneurship Education", which focuses on the development of teachers as entrepreneurship educators. The data was collected at the beginning of the project from 29 teachers at the basic, upper secondary and vocational secondary education levels of Finland in 2008. They were asked, for example, to answer questions about their aims in entrepreneurship education, how they put entrepreneurship education into practice, and what kind of results they had achieved. The analysis of the qualitative data was coded through content typing. When describing the objectives of entrepreneurship education, teachers mentioned the students' objectives but failed to specify objectives for themselves. The findings concern both understanding and

practice: teachers seem to have difficulties in arguing their objectives for entrepreneurship education, and are seemingly confused about objectives and practices – when questioned regarding the objectives, they answer regarding the practices. In summary, the authors suggest that there is a clear need for a more systematic data collection, evaluation, and discussion around issues concerning the role of the teachers in entrepreneurship education.

PART III: ENTREPRENEURSHIP DEVELOPMENT

In Chapter 9, “Cultural values and start-up rates in the Spanish provinces”, José Fernández, Francisco Liñán and Isidoro Romero find that countries with similar economic situations very often exhibit persistent differences in their rates of entrepreneurial activity. Among other factors, cultural values have been considered to explain these differences, as they may condition individuals’ behaviour and significantly affect society’s entrepreneurship rates. Most empirical works on this topic have studied the possible influence of international cultural differences on entrepreneurial activity in relation to Hofstede’s cultural dimensions. However, only a few studies have addressed this issue at the regional or local levels. This chapter tries to fill some of these gaps in the literature by analysing how specific cultural values – as defined by Schwartz (1999) – can influence the net firm entry in different Spanish provinces. Their findings indicate that the effects of inter-regional cultural differences are significant. More than 40 per cent of the difference in start-up rates can be explained by cultural variables alone. In particular, openness to change and self-enhancement appear to have a positive influence on firm entry rates. However, contradicting their initial hypothesis and previous works, conservatism values seem also to have a positive influence on entrepreneurial activity in the case of Spanish provinces.

Angelo Riviezzo, Maria Rosaria Napolitano and Antonella Garofano in Chapter 10, “Entrepreneurial orientation and market orientation in SMEs: an explorative study”, explore the relationship between entrepreneurial orientation, market orientation and firms’ performance with specific reference to Italian medium-sized firms. This relationship has been the subject of relatively few studies even though SMEs represent a substantial part of the Italian economy. The authors focus on international performance as a particularly significant measure of medium-sized firms’ competitiveness since, as widely emphasized in the published literature, the success of such firms is determined by their ability to grow in international markets, despite their limited size. In the chapter they use a multiple

case studies approach to explore the relationship between entrepreneurial orientation (EO), market orientation (MO) and the international performance of medium-sized firms. Even considering the limitations of the study, due to the limited number of case studies, it provides an important contribution to the literature, proposing the entrepreneurial orientation construct to have a moderating effect on the relationship between market orientation and firms' performance. While the case studies are not proof of causal relationships, the data analysis, however, does suggest that such an effect may well exist. Propositions are developed to help guide future investigations in this field. The results suggest that it is quite difficult to generalize the interplay between EO and MO within SMEs because it is necessary to shift attention from the organizational level to the individual level, considering the entrepreneur and the other managers' actions and interactions.

Chapter 11, "A social network approach to a better understanding of the survival-growth phase of innovative new ventures" by Alain Fayolle and Wadid Lamine, seeks to answer the question of how qualitative social network approaches can be useful to better understand the survival-growth phase of innovative new ventures. The chapter proposes a social approach to studying the success or failure of innovative new venture projects, by taking into account the dynamic of the entrepreneurial process and the subjectivity and contingency of success factors. The authors highlight the decisive role of social networks in entrepreneurial success from a dynamic perspective, and in the use of and comparative analysis of several sociological theories: the theory of structuration, the theory of social capital, the theory of conventions and the actor-network theory. They retain the actor-network theory as the most relevant for studying the survival-growth phase of innovative new ventures.

In Chapter 12, "Corporate venture capital choices setting and investment behaviors: analysis at corporate, venture and business environment levels", Luc Armel G. Da Gbadji and Benoit Gailly examine the factors at corporate, new venture and industry levels that influence the choices setting and the investment behaviours of large corporations' corporate venture capital (CVC) programmes. The authors specifically focus their attention on the deals of the 2008 Fortune Global 500 list of companies that set up a CVC programme. They find out that the revenue change, the return on assets, industries with significant technology potential, environments with high levels of innovativeness, and new ventures located in emerging economies positively influence the decision of CVC programmes to invest in their own business sector. In contrast, a high level of diversification of the parent corporation, and environments with a high level

of entrepreneurial activity, negatively influence the decision of CVC programmes to invest in their own business sector.

PART IV: CONCLUSION: OPENING NEW DOORS AND OFFERING ORIGINAL PERSPECTIVES IN ENTREPRENEURSHIP RESEARCH

In the concluding Chapter 13, “Explorative research: an unexploited opportunity for entrepreneurship research”, the authors Paula Kyrö, Outi Hägg and Kati Peltonen contribute to the methodology dialogue by introducing the explorative approach. Its use has long been forgotten and is still rare in entrepreneurship research but might offer a valuable methodological alternative for investigating the complexities of entrepreneurial processes. To repatriate explorative methodology to entrepreneurship research and to fill the gap between its current use and future needs, the authors first investigate what is meant by explorative research as a concept and in the dialogue of its neighbouring concepts. Then various characteristics and forms of explorative research are further identified. This is followed by more detailed analyses of its current use in entrepreneurship research. The results indicate that the explorative research approach is still marginal and its use does not meet those criteria set for methodologically solid research. Thus more research is needed to set the rules for conducting explorative research. As a result the authors provide more precise rules on the categories of different forms of exploration as well as suggest that pragmatism-oriented phenomenology interplaying between abductive, inductive and deductive reasoning might enrich the use of the explorative approach in entrepreneurship research.

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