Introduction

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1 Introduction

The field of entrepreneurship has been defined as "the study of how, by whom and with what consequences opportunities to produce future goods and services are discovered, evaluated and exploited" (Shane and Venkataraman, 2000). After a generation of scholars spent the better part of a half-century trying to figure out the relationship among the entrepreneur, product development and technological innovation (Shane and Ulrich, 2004), today we know that technology opportunity is generated endogenously by investments in knowledge.

What kinds of human capital are required of successful entrepreneurs? One central aspect in the creation and growth of knowledge-based firms is the role played by human capital. Human capital entails the stock of knowledge and skills that reside within individuals and that can be developed over time (Becker, 1962). General human capital comprises formal education, and previous job-market experience of the entrepreneur, which may lead to skills that are useful across different occupations and economic settings. Specific human capital entails prior experiences that are more relevant for an individual to engage on the development of knowledge-based firms. For instance, entrepreneurial experience, top management experience, or previous work experience in the same sector where the new firm is being started are likely to endow individuals with knowledge and skills that are specific for the tasks required from a knowledge-based entrepreneur.

Research on entrepreneurial human capital focuses on the role played by human capital of founders in the creation and development of knowledge-based firms. In doing so, it examines the main decisions taken by entrepreneurs during their life cycle, and attempts to determine how the interaction between firm and market conditions; and the background of these individuals influences these decisions and their outcomes in terms of firm success. The study of human capital as a driver of successful entrepreneurial opportunity recognition and exploitation is vital for business practitioners as well as for technology and higher education policies. This special issue is dedicated to this research.

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2 The papers in this special issue

All papers in this special issue are extended and enhanced versions of works presented at the 2009 Interdisciplinary European Conference on Entrepreneurship Research (IECER), held in Lisbon. Over 20 works were submitted in response to an invitation to the conference participants. Selection and revision of the papers published followed the customary double blind review process.

The first paper in this special issue looks at a critical issue in entrepreneurship research. Baptista and Preto examine the long term impact of new firm creation on employment growth, observing in particular the effects of different kinds of start-ups on employment change. Recognising the types of entrants that generate greater impacts on employment growth is of foremost importance. These authors find that start-ups that are larger and knowledge-based have considerably stronger effects on industrial restructuring and employment change. In the second paper in this issue, Gottschalk, Müller and Niefert find that entrepreneurs with greater amounts of human capital typically start larger, knowledge-based firms (i.e., with strategies based on the exploitation of new market opportunities). Together, these results suggest that entrepreneurs with greater human capital have greater impact on industrial restructuring and employment creation. This conclusion has important implications for industrial development policies.

The importance of the role played by the individual in the entrepreneurial process has led scholars to seek to recognise those people with greater entrepreneurial inclination through the development of operational definitions, instruments and methods. Researchers have found that certain individual differences (including traits and goals, but also acquired ability, i.e., human capital) distinguish entrepreneurs from others. Moreover, these personal qualities are present in different measures in successful entrepreneurs than in unsuccessful ones. The third paper in this special issue, by Cubico, Bortolani, Favretto and Sartori, provides an essay in the validation of the metric characteristics and selected research applications of an instrument that can be used to define aptitude for an entrepreneurial profile.

The fourth paper in this special issue, by Gurău, Dana and Lasch, examines the profile of top management teams in UK biopharmaceutical SMEs, investigating the link between the managerial human and social capital, and the performance of the firm during the three main phases of the product development process. The results show that firm size influences the managerial areas of expertise, as well as their distribution between executive and non-executive directors. Some of these professional competencies are significantly correlated with the level of firm performance during the main phases of the firm development process.

The research on the fifth paper in this special issue focuses on the entrepreneurial networking process from the individual's point of view. Leskinen outlines some important human factors that enhance cooperation during the networking process, finding that entrepreneurial motivation, persistence and responsibility are the key factors that triangulate with some organisational factors and affect the cooperation of the entrepreneurs in the entrepreneurial network.

The aim of the final paper in this special issue, by Helm, Mauroner and Dowling, is to discuss why entrepreneurial orientation and, in particular, risk taking behaviour and proactivity, are of particular importance in the context of high-technology venture success. Furthermore, the authors argue that innovativeness as a central entrepreneurial object mediates between the motivation and the success of entrepreneurs. These authors

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propose a model where the entrepreneurial orientation of the founders influences new venture performance through its generation of innovativeness. Results of an empirical test suggest that a marked entrepreneurial orientation is of great importance in particular in high technology sectors and fast growing markets where innovation is a requirement for survival.

3 Conclusions

This special issue aims to contribute towards a greater understanding of the role played by entrepreneurial human capital and attributes such as motivation, persistence and responsibility, risk taking behaviour and proactivity, play in the success of entrepreneurial ventures, including their ability to network, innovate, grow, survive and generate employment growth in the economy. The existence of human capital capable of recognising and exploiting opportunities is of vital importance for the development of entrepreneurial ventures in knowledge-based sectors.

Serving as guest editor for this special issue was a learning experience which underscored how much work is needed to better understand the link between individual knowledge and characteristics and successful entrepreneurship. A considerable amount of variance in both subjects and perspectives characterises the pages that follow, showing that, while the possibilities for future developments are plentiful, the road forward is likely to elicit substantial debate with regard to what is and is not an important topic for further inquiry. However, because the combination of novelty and utility promise significant profits for the individual willing to create (Lepak et al., 2007), surely there are sufficient incentives for scholars wishing to make a contribution to the scientific community to bear this uncertainty.

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