Chapter 2
Entrepreneurship, Non-Cognitive Skills, and Education

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ABSTRACT

The factors influencing entrepreneurship have been widely studied. The debate has focused on the dichotomy between personality characteristics and the influence of their experiences or the contexts in which entrepreneurs operate. Contextual conditions play an important role in promoting entrepreneurship but entrepreneurs are the critical entity of the entrepreneurial process hence the influence of genetics, entrepreneurial predisposition, and experiences are very relevant. Regardless the greater or lesser influence of genes or environmental factors in the impulse to engage in entrepreneurship, it is agreed that entrepreneurial activity depends on the detention of cognitive and non-cognitive skills. If the acquisition of the former is a fundamental objective of any education system, the latter have been clearly discarded, despite its importance. We intend to explore the process of non-cognitive skills acquisition, the influence of these skills on entrepreneurship as well as the role that the Portuguese educational system is playing in order to develop this competencies.

INTRODUCTION

The academic interest for entrepreneurship is not new. In fact, to find the roots of entrepreneurship we have to go back, at least, to the 18th century, more specifically to Richard Cantillon (e.g. Chell, Haworth, & Brearley, 1991; Hébert & Link, 1989). The practice of the entrepreneurial activity, in turn, has been a fairly normal occurrence throughout the history of humanity (Dantas, Moreira, & Valente, 2015).

Following Schumpeter (1934) who stated that entrepreneurs are the engine of growth, particularly through innovation, Lazear (2005) claims that “the entrepreneur is the single most important player in a modern economy” (p. 649). Actually, entrepreneurship, particularly when it is motivated by opportunity

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(Acs, 2006), has a huge potential in terms of economic growth, job creation, and regional and national competitiveness, i.e. it contributes to improve human wellbeing (Audretsch, 2007; European Commission, 2013). It is therefore no wonder that the research on entrepreneurship “has virtually exploded in recent years”, as pointed out by Rauch, Wiklund, Lumpkin and Frese (2009, p. 778).

The factors that may influence the entrepreneurial behavior have been widely researched over the years. The debate has largely centered on the dichotomy between personality characteristics (e.g. Caliendo, Fossen, & Kritikos, 2011; McClelland, 1961; Nicolaou, Shane, Cherkas, Hunkin, & Spector, 2008), on the one hand, and the influence of the experiences and the context that involve the potential entrepreneurs (Autio, Kenney, Mustar, Siegel, & Wright, 2014; Ganotakis, 2012; Gartner, 1988) on the other hand. This is an old struggle between nature’s dominance and the supremacy of the environment. To put it in extreme terms, one might say that for those in the former category our future has already been mapped out at conception while those in the latter would claim we are born mainly as a blank slate that the environment will gradually fill in. However, the issue is not as straightforward as all that.

Actually, even if genes are responsible for the transmission of personality traits between generations (White, Thornhill, & Hampson, 2006), they can only be considered as a propensity to act in a particular way (McCrae & Costa, 1990), that is, “our nature, our evolved psychology predisposes an individual to think and act in particular ways. But those endogenous predispositions are affected by a host of exogenous factors” (White et al., 2007, p. 453). Consequently, we can say that it is easy to understand that one’s genetic endowment can help to embark on entrepreneurial activities, but that it has to be supplemented with a favorable environment, particularly through education.

Our chapter has an exploratory character (Malhotra, 2001) and our goals are: 1) to understand what the critical competencies for the entrepreneurial activity are; 2) to understand the way those competencies are acquired and developed; and 3) to determine the role that the Portuguese education system plays in developing that kind of competencies.

Therefore, the chapter will provide a review of the literature on the aforementioned questions and will incorporate the results of a set of semi-structured interviews with agents from the Portuguese education system and a short case-study involving a brand new experience in the area of the childhood entrepreneurship education.

The chapter is divided into 6 sections: introduction; entrepreneurship; the genesis of the entrepreneurial spirit; the acquisition of competences; the role of the education system; and conclusions.

In the introduction the aims and the structure of the chapter are explained. Section 2 highlights the main reasons for the enormous economic and social importance of entrepreneurship. The chapter goes on (section 3) arguing that personality matters for the entrepreneurial activity. Using two different approaches – The Five-Factor model (McCrae, 1992) and specific personality characteristics that are related with the entrepreneurial activity (Rauch & Frese, 2007) – we attempt to show that besides cognitive skills, the personality traits, also referred to as “soft skills” and “non-cognitive skills”, do influence the entrepreneurial process. Section 4 is dedicated to the process of skill formation with particular focus on the non-cognitive competencies. These are essentially inborn (McCrae et al., 2000) and stable over the lifetime but can be changed by intervention (Heckman, 2012). The purpose of section 5 is to determine what the Portuguese education system is undertaking to match these competences with the entrepreneurial process demand. Finally, section 6 provides some practical implications of the chapter and a summary of our findings.