

# **‘Let’s Put the Person Back into Entrepreneurship Research’**

## **A study of entrepreneurs’ personality and innovations**

### **Introduction**

Innovation is the route by which firms create inimitable assets and so to achieve sustainable competitive advantage (Esteve-Perez & Manez-Castillejo, 2008). It is well recognized that innovations stem from intentional investments of profit maximising entrepreneurs with intentional investments for profit and growth (see Romer 1990). Whilst entrepreneurship has been viewed as a key factor driving the innovative orientation for many small firms’ existence and survival (e.g. Sarasvathy 2004; Barreto 1989), the understanding of individual entrepreneur remains limited. As Rauch et al. (2007; p353) have stressed: ‘let’s put the person back into entrepreneurship research’, there exists an urgent need for research into the aspect of individual entrepreneur.

The purpose of this paper is to study entrepreneurs’ personality traits as the predictors of firms’ innovative inclination. Personality trait assessment is one of the most useful and versatile tools in management studies, particularly in entrepreneurship research. More importantly, the trait inventory allows the assessment to be accessed in a simple, straightforward and effective way. To better observe the association between entrepreneurs’ personality and a firm’s innovative inclination, a three year longitudinal study was conducted in the creative industries in the UK. The authors takes a pragmatic realism perspective using a mixed method study to explore the "reality" of the entrepreneur (Watson, 2013).

### **Prior Work**

The study makes reference to research of seminal works on personality traits (McClelland, 1961; Sandberg & Hoffer, 1987; Brockhaus, 1980; Baum & Locke, 2004; Ciavarella, 2004; Rauch & Frese, 2007). More recently, a growing cohort of psychology-based researchers have renewed interest in entrepreneurs’ personality characteristics as predictors of activity in small firms. This has moved the focus of research, from not simply an examination of the differences between entrepreneurs and non-entrepreneurs, but towards personality traits as a potential predictor of entrepreneurial behaviour, (Bird et al 2012). Prior studies have highlighted the predictive validity of personality traits in entrepreneurial research (see for example, Rauch et al., 2007; Collins et al. 2004; Stewart Jr and Roth 2007; Zhao et al. 2010). Along the same line, Roper et al (2014) examining innovation and collaborative propensity of the small firm, have found a consistent and positive relationship between the quality of firms’ human capital and their external connections leading to new developments.

Research into the role of personality in entrepreneurship has therefore seen a re-emergence after almost twenty years (e.g. Baum and Locke 2001; Ciavarella et al. 2004). Another role of entrepreneurs is to detect and exploit opportunities and to make rapid decisions under uncertainty, in a resource constraint environment, and therefore, they must possess a wide variety of skills, knowledge and abilities including leadership, management, marketing and innovation, for instance (Sarasvathy 2001; Shane et al. 2003). Examples of traits that are matched to such tasks are need for achievement, proactive personality, generalised self-efficacy, stress tolerance, need for autonomy, internal locus of control and risk taking. Further evidence of using meta-analysis provides support for the predictive validities of personality traits. For example, Zhao and Seibert (2010) addressed multiple traits in their meta-analysis by coding various personality traits. Results indicated differences between

entrepreneurs and managers in conscientiousness, openness to experience, neuroticism and agreeableness. Other meta-analyses studied the two specific personality traits, risk-taking and achievement motive, that are theoretically related to the domain of entrepreneurship. These studies suggest that entrepreneurs often risk losing their investments for better achievement, therefore, they should be high in risk taking (Yorke and Knight 2004). Align with this theory, Stewart Jr and Roth (2007) found small yet significant differences in risk propensity between entrepreneurs and managers.

Prior work has pointed to that the resurgence in the consideration of entrepreneurial personality takes the debate full circle to one of the core concepts of Schumpeter's approach to entrepreneurship (e.g. Schumpeter 1935; see also Drucker 1993), in the context of innovation and its relation to business success (Bausch and Rosenbusch 2005). People high on proactive personality want to influence their environment and proactive personality is a personal disposition for personal initiative behaviour (Frese and Fay 2001). Proactive personality is important for entrepreneurs because, by definition, entrepreneurs have to be self-starting and influence their environment by founding new organisations and by identifying and acting upon opportunities. Generalised self-efficacy (Poon et al. 2006; Utsch and Rauch 2000) is important for entrepreneurs because they must be confident in their capabilities to perform various, often unanticipated tasks in uncertain situations (Baum and Locke 2004). Despite it has long drawn researchers' attention (e.g. Schumpeter 1935), the effect of entrepreneurial personality remains under-researched.

## **Research Approach**

The authors takes a pragmatic realism perspective using a mixed method study to explore the "reality" of the entrepreneur (Watson, 2013). This study is conducted using a longitudinal, fieldwork process incorporating analytical induction methodology. Within the discipline of SMEs and entrepreneurship, a variety of different approaches are applied from a number of different perspectives and Gregoire et al. (2001) concluded that this area of management research is less categorised by a dominant paradigm as by successive topics of convergence. The potential contribution of personality assessment to the Human Resource Management (HRM) domain is now firmly established in the research literature (Burisch 1984; DeYoung et al. 2007; Goldberg 1990; Grucza 2007; John et al 1991; Saucier 2002; Williams and Anderson 1991). These studies have shown that well-designed personality assessments contribute in important ways to predicting job performance, training performance and organisational citizenship behaviour. The methodology, therefore, follows a single stage collection of Personality Trait data (ABA 2011). Trait constructs thirteen sub-dimensions grounded in the Big Five Model of personality and summarized in Table 1.

Quantitative data was first collected in 2011 (Year 1), followed by three consecutive year (2011 – 2014):

***Quantitative Trait Data collection:*** After recruiting each entrepreneur in the UK, each individual completed the Trait (ABA 2011) Personality test using an online survey tool. This measures the strength of personality (on a scale 01-10) of 13 personality traits indicated in the Sub Dimension column in the table above. Cluster analysis is used to identify a group structure among entrepreneurs who share similar characteristics.

***Qualitative Interview over three years:*** 60 semi-structured Interviews were recorded taking between thirty minutes and one hour. The questionnaire was designed in order to evidence

entrepreneurial innovative activity behaviour, defined as “the concrete enactment by individuals (or teams) of tasks or activities” within an innovation context (Bird 2012: p.890).

## **Results**

A two-step cluster analysis was used to identify innovative entrepreneurial activity over three years. Our samples suggest that innovative entrepreneurs identified ‘use of new business models’ or ‘use of new forms of funding’. From the Personality Trait data 33 entrepreneurs were identified as the ‘Innovate Cluster’ of individuals who demonstrated consistent innovative activity over the three year period. 27 Entrepreneurs had little evidence of new activities in any aspect of their businesses. This group saw little reason to invest in new products or ideas or new methods of doing things. Overall, samples reflect that the innovate cluster have higher mean value (from 7.33 to 5.30) than the non-innovate cluster (from 5.97 to 2.79) across all thirteen personality traits.

Furthermore, the results of cluster analysis indicate that there was no significance on differences in three-year data, suggesting personality traits have rather consistent prediction power. The results also suggest that the predicting power of entrepreneurs’ personality traits varies (See Figure 1). We categorize them into three different degree in terms of their importance:

- a. Leadership, sociability, sensitivity, optimism (Most important).
- b. Industriousness, compassion, culture (Medium importance).
- a. Achievement, intellectual, calmness (Least important).

## **Implications to Theory and Practices**

The results from this research indicate a tendency for stronger personality traits in the entrepreneur leading innovation in the firm and also collaborative behaviours (sociability), sensitivity to those around him and also staying optimistic. Less relevant in the process of innovation is achievement, any intellectual pursuit of entrepreneurship or staying calm. Industriousness, compassion and culture were of medium importance. These results appear consistent with prior studies. For example, Miner (1997) recognised the “expert idea generator” characterised by a desire to personally innovate. More importantly, the literature has pointed to the ‘unusual’ way, the leadership and the sensitivity of entrepreneurial personality, as Mitton (1989, p.12) stresses *“Entrepreneurs see ways to put resources and information together in new combinations. They do not see the system as it is, but as it might be. They have the knack for looking at the usual and seeing the unusual, at the ordinary and seeing the extraordinary. Consequently they can spot opportunities that turn the common place into the unique and unexpected.”*

By identifying ‘personality traits’ this research makes a contribution to the entrepreneurship literature through a tool which is capable of predicting innovation activity in small firms. For SME owners, financial institutions and organisations involved in the allocation of Government support to small firms, this research provides a methodology which enables the identification of entrepreneurs with a propensity to innovate. This overcomes some of the difficulties caused by information asymmetry between stakeholders.

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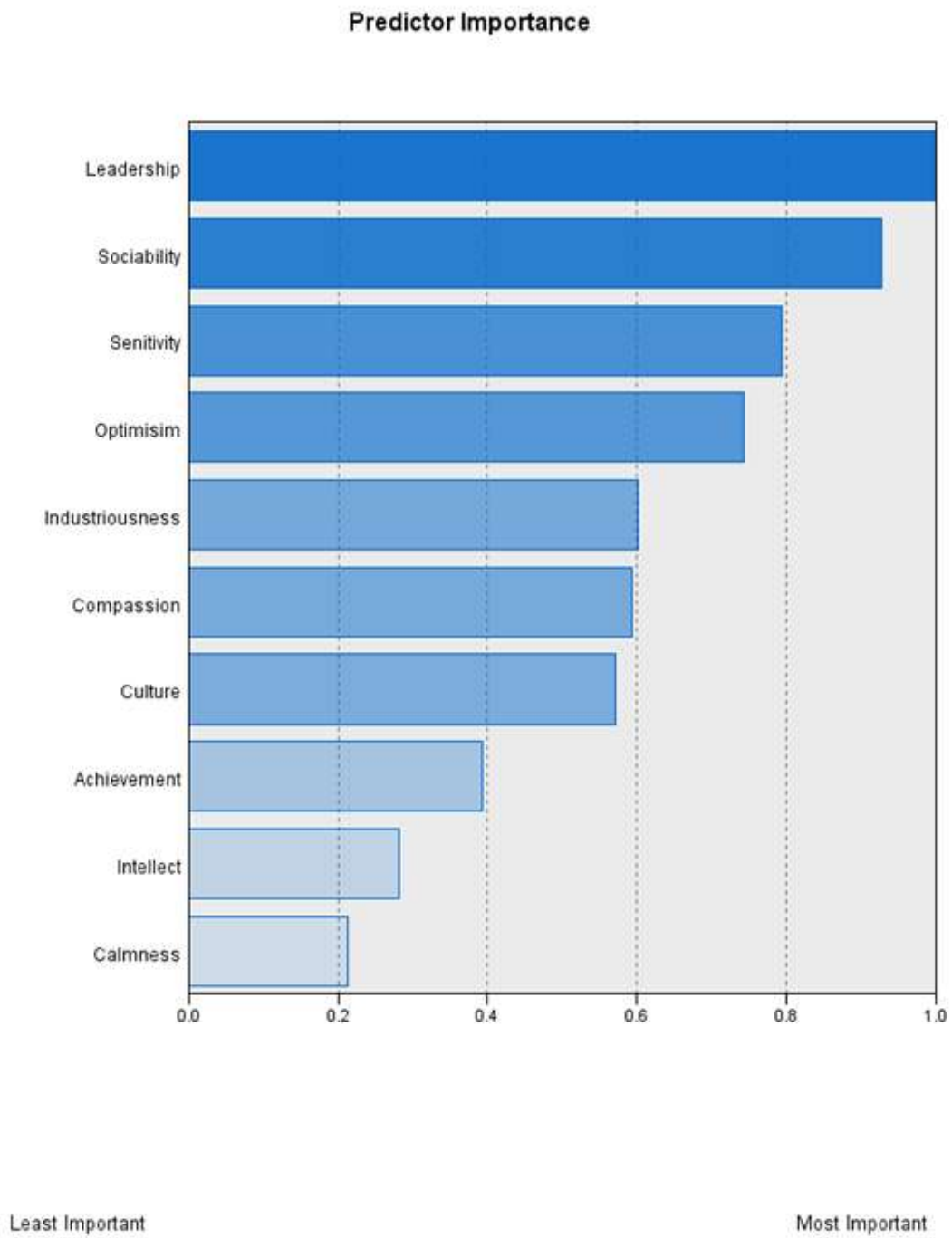
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**Figure One: Personality Traits Importance**



**Table 1: Personality Traits**

Factor	Description	Sub Dimension
Extraversion	The extent to which a person is outgoing and sociable versus quiet and reserved	Sociability, Leadership Achievement, Optimism
Agreeableness	The extent to which a person is warm and trusting versus cold and unfriendly	Compassion, Co-operation Sensitivity
Conscientiousness	The extent to which a person is organised and dependable versus impulsive and disorganised	Orderliness, Industriousness
Emotional Stability	The extent to which a person is calm and stable versus anxious	Stability, Calmness, Optimism
Openness	The extent to which a person is imaginative and open to new experiences, versus narrow minded and unimaginative.	Intellect, Culture