ENTREPRENEURIAL ASPIRATIONS - A FIVE COUNTRY STUDY

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ABSTRACT

Entrepreneurial research has identified a number of personal characteristics considered to be important in inducing entrepreneurial activities. Among those personal traits considered to be important are locus of control and innovativeness. This study focuses on the personal traits of locus of control and innovativeness and examines their impact on third and fourth year business students’ aspirations to become an entrepreneur. A multiple regression analysis was conducted between the personality traits of locus of control and innovation as independent variables and the decision to build a business from scratch as the dependent variable measuring entrepreneurial aspirations. The results suggest that both locus of control and innovation are significant predictors of entrepreneurial aspirations when measured by the decision to build a business from scratch.

Key words: Entrepreneurial Aspirations, Innovativeness, Locus of Control

INTRODUCTION

The interest in entrepreneurship is continuing to grow and this has been brought about by many factors. First, increased entrepreneurial activity is viewed as an opportunity to rejuvenate industries that are declining in profitability and growth and to provide new employment opportunities to compensate for a soft labour market that has been principally brought about by corporate restructuring and downsizing during difficult economic periods [8]. Second, entrepreneurship has often been considered a catalyst for technological progress [5]. Third, entrepreneurial ventures are often seen as incubators for product, process, marketing and managerial innovations [34]. Finally, in the developing world entrepreneurial activities are frequently viewed as a means of stimulating economic growth [23]. That is why incentive programs have been developed by the governments of a large number of developing economies to encourage entrepreneurial activity [21] [32].

However, in spite of the obvious attractiveness of entrepreneurship as a means to enhance economic growth, productivity and development many issues remain unresolved as to what causes entrepreneurial activity, especially in a non-US context. For example, of the many personality traits underlying the entrepreneurship field, developed primarily in a North American context, are they applicable to countries with different economic and social climates [1] [10]? Such issues can only be resolved through research that applies sound theoretical concepts and personality traits in diverse country contexts in different regions of the world. However, with some exceptions [4] [34], international studies of entrepreneurship and the like are rare due mainly to difficulty in accessing a reliable sampling frame, cost and questionable secondary data.

As such, we focus on two personality traits commonly associated with entrepreneurial activity, namely, locus of control and innovation. Building on current entrepreneurial research we develop and test hypotheses linking these personality traits to entrepreneurial aspirations using an international sample of business students from 5 countries. The results of this study provide the basis for assessing entrepreneurial aspirations from personality traits.

LITERATURE REVIEW
The connection between entrepreneurs and personality traits is well documented in the literature. Many definitions of an entrepreneur include references to personality traits. For example, [28] compared predictions from two models of factors that influence entrepreneurial intentions, one based on [2] theory of planned behaviour and the other based on [43] ‘model of the entrepreneurial event.’ Both models suggest that an individual’s expected values will influence the perceived desirability of the intention to pursue entrepreneurship. Furthermore, [13] define an entrepreneur as “someone who perceives an opportunity and creates an organization to pursue it” [13, p.14]. With [20] further refining this definition and defining the creation of a new venture as an interaction among four dimensions: personal characteristics of the entrepreneur (individual), competitive entry strategies (organization), push and pull factors (environment), and the actions taken by the entrepreneur to bring the enterprise into existence (process). As such, the relationship between entrepreneurial activity and personality traits has support in the literature [32].

Moreover, motivations for becoming an entrepreneur have generally been argued to be either situational factors or personality traits [32]. As such, it is the influence of personality traits (sometimes referred to as personal characteristics) on entrepreneurial activity that is the focus of this study. Commencing with [29] there has been a proliferation of research that has focused on personality traits. [29] suggested that personality traits related to a high need for achievement, personal acceptance of outcomes, innovativeness, creativity, etc. are the defining traits of entrepreneurs and entrepreneurial activity and success. Since [29] ground breaking research there has been numerous studies that have examined the personality traits of entrepreneurs to examine those personal characteristics that motivate individuals to become entrepreneurs and also those characteristics that contribute to entrepreneurial success [17] [32]. There has been continued interest in determining what motivates entrepreneurs to initiate new businesses [44] [47]. Moreover, several relatively recent empirical studies seem to suggest that entrepreneurs can be distinguished from the general population on the basis of motivation, values and attitudes [31] [35].

A number of scholars have further suggested that personality traits define the entrepreneur and are instrumental in predicting entrepreneurial behaviour [24] [32]. [24] suggested that an entrepreneur is a person with initiative, is creative, is a person who has the ability and capabilities to realise the full potential of their economic resources and is a person that accepts risk and failure. [29] also offered similar explanations explaining entrepreneurial behaviour. [12] further reviewed a number of personality trait studies and concluded that the need for achievement, internal locus of control, and risk-taking propensity were all personal attributes associated with entrepreneurial behaviour. In this paper we focus on two attributes that have been among the building blocks of entrepreneurial research, namely, internal locus of control and innovativeness.

**Internal Locus of Control**

In psychology research the relationship between perceived control and its effect on human behaviour has been examined in a number of different contexts [45]. One of the major contributors to this area of research was [36] with the development of the Locus of Control construct. According to [36] “Locus of Control” theory an individual perceives the outcome of an event being either within or beyond his or her personal understanding and control. [36] concluded that a need for achievement was directly related to the belief in internal locus of control [12]. [36] concluded that earlier studies [3] found that people who have a high need for achievement tend to believe in their own ability to control their own destiny. [29] determined that an individual will expend greater effort when the individual perceives that his efforts will result in greater personal achievement.

Using these studies as his foundation [36] hypothesised that individuals with internal beliefs would have a higher need for achievement than individuals with external beliefs. An individual with internal beliefs believes that one has influence over his/her outcomes via ability effort, skills etc. An individual with external beliefs believes that forces outside the individual’s control determine eventual outcomes [32] [36]. Later studies also concluded that individuals with internal beliefs do have a higher need for achievement. These studies have established a relationship between a high need for achievement and a belief in internal Locus of Control. [29] also found that entrepreneurs have a high need for achievement and the writings of [29], [36] and their colleagues [18] [26] confirm the belief that entrepreneurs tend to believe that events are contingent upon their behaviour, that is, they hold “internal” beliefs.

[36] Locus of Control measure and later refinements and adaptations [32] have been widely used in studies examining organisational behaviour and outcomes. As a result internal Locus of Control has become one of the most studied areas of entrepreneurial behaviour [32] [33].

Entrepreneurs by definition are initiators, innovators, risk-takers and take responsibility for their own actions and welfare thereby not dependent on anyone for their own successes or failures [29] [32]. Additionally, if an individual doesn’t believe that the outcome of a business venture will be influenced by their own personal endeavour it is unlikely that that individual will risk the high penalties of personal failure. Since the perception of both risk and the likelihood to
influence the end result are critical in the decision to influence a new venture, it is quite reasonable to conclude that prospective entrepreneurs are more likely to have an internal Locus of Control rather than an external one [12] [32].

Internal locus of control can also be viewed as a prerequisite to take action. For example, both [43] and [27] suggest that a pre-disposition to act upon one’s decision is an essential element when deciding to form a new venture. Both [43] and [27] suggest that an individual who perceives an entrepreneurial opportunity as desirable and achievable will not actually initiate the venture unless they are psychologically predisposed to actually enact upon their decision. Furthermore, the propensity to act upon an opportunity is directly related to one’s perception of control [42]. As such, an internal Locus of Control orientation increases the likelihood that a potential entrepreneur will implement their entrepreneurial intentions.

Innovativeness

Innovation has been defined in a variety ways in the literature with a multitude of definitions resulting [7] [38]. However, the definition we focus on is that provided by [32] with innovation being defined as “…process that turns an invention…into a marketable product” [19]. This definition implies that innovation is more than an invention. It involves turning an idea into a tangible product that results in commercial success or results, involving the implementation and modification of existing products, systems and resources [7].

Innovation is a critical ingredient of the entrepreneur as defined by [38] as a catalyst of change “…an idea and a man of action…instrumental in discovering new opportunities [39]. [16] took this innovation role of the entrepreneur one step further arguing that innovation was a specific tool of the entrepreneur and the means by which they necessitate change. As such, the relationship between innovation and an entrepreneurial activity is well established in the literature [32].

The role of the entrepreneur as an innovator suggests that entrepreneurs implement competitive strategies, are instrumental in new product development, are looking for improvements in production technology, seeking new markets and sources of raw materials and are even seeking the extension of existing product life cycles and industry reorganization. [7] [32]. These roles suggest personality traits characterised by creativity and innovativeness.

There is strong empirical evidence to suggest that entrepreneurs are more innovative than non-entrepreneurs, especially entrepreneurs involved in successful businesses. For example, [40] concluded that entrepreneurship students tended to be more innovative than other business administration students. Furthermore, [15] found that successful entrepreneurs in relation to profit and growth oriented business objectives had more innovative tendencies than other small business owners. In a subsequent study [14] found that both male and female entrepreneurs had significantly higher innovative tendencies than their managerial counterparts.

There have also been many other studies that have reported that innovation is a primary motive to start a business [9] [37]. For example, [41] concluded that the opportunity to be innovative and the leaders or developers of new technology were frequently cited as the reasons for starting a new business.

As such, the relationship between the personality traits of locus of control and innovation and entrepreneurial activity is well documented in the literature, however, much of the empirical findings relate to the US. There has been limited empirical research on the relationship between these personality traits and entrepreneurial aspirations in a non-US context and in most cases the studies have been limited to comparisons between one or two countries [31] [46]. Therefore, this study considers this issue in four countries outside of the US, namely, Croatia, Iceland, Turkey and the UK to see if the findings from this sample are comparable to US-based studies.

Given the issues raised in the literature relating to entrepreneurial aspirations and the personality traits of locus of control and innovation the following research question is offered for testing in Croatia, Iceland, Turkey, the US and the UK:

RQ: To what extent is entrepreneurial aspirations influenced by Locus of Control and Innovation?

METHODOLOGY

The study was based on an empirical investigation of third and fourth-year students at six universities in Croatia, Iceland, Turkey, U.K. and the U.S. Overall, between 27 and 171 surveys were obtained from each institution. The instrument administered to the students surveyed their attitudes concerning their intentions to build a business from scratch. It also contained items designed to measure Locus of Control and Innovativeness orientations. All items were measured via seven-point bipolar scales with scale poles ranging from strongly disagree (1) to strongly agree (7). The
questionnaire was developed and pre-tested using a small sample of respondents with the final instrument self-administered by the sample at their respective institutions that included 551 students, yielding 534 usable responses being returned accounting for an effective response rate of 97.0 percent and considered to be adequate [22].

University students were selected as the subjects for this study for several reasons. Today’s university students represent, we believe, a significant share of the pool of potential entrepreneurs in both developed and developing countries. As the demands of technology and global competition increases, the need for university-trained entrepreneurs will become even more evident, and success in business will be more dependent upon the founders’ education and training. Furthermore, sampling only students in business enhances cross-national comparability by effectively controlling for important variables such as literacy, work experience, age and education. As a matter of practicality, student subjects are generally convenient, accessible, and through the support of administering professors, it is possible to maintain control over the testing environment [32].

The survey instrument was comprised of 19 items. Respondents were asked to indicate their level of agreement on seven-point bi-polar scales with scale poles ranging from Strongly Disagree (1) to Strongly Agree (7). Of the 19 items, 18 were used to construct scales for innovativeness (8) and locus of control (10). Items for the Innovativeness scale were adapted from the Jackson Personality Inventory Index [25] while items used for the Locus of Control scale were adapted from Rotter’s I-E scale [36]. Both scales were subjected to reliability testing using data collected in this five-country study. Preliminary reliability results revealed that one item in Rotter’s I-E Scale and three items in the Jackson Personality Inventory Index had a low item to total correlation. They presented item to total correlations of less than .2 and were subsequently eliminated from any further analysis. After eliminating those items that had a low item-to-total correlation the final reliabilities tests for both scales were .7 or greater and deemed acceptable. Both scales were also determined to be unidimensional based on results obtained from the principal components analysis.

Locus of Control

A modified Rotter I-E Scale was used in this study to measure internal locus of control [32] [36]. This scale is designed to measure the respondent’s perceived ability to influence events in his or her own life. Internal persons believe that destiny is in their own hands whilst external persons believe that happenings in their lives are controlled by external forces such as luck and powerful external forces [6] [32]. Nine items were identified for this purpose. These statements included the following: “my success depends on whether I am lucky to be in the right place at the right time”, “to a great extent my life is controlled by accidental happenings”, “when I get what I want, it is usually because I am lucky”, “my life is determined by others actions”, “it is not wise for me to plan too far ahead, because things turn out to be a matter of bad fortune”, “whether or not I am successful in life depends mostly on my ability”, “I feel that what happens in my life is mostly determined by people in powerful positions”, “I feel in control of my life” and “success in business is mostly a matter of luck.”

Innovation

The Jackson Personality Inventory Manual (JPI) which defined innovativeness as the psychological characteristic or trait of being creative in thought and action, was used to capture this construct as innovation, creativity and initiative have been consistently identified as enduring traits of entrepreneurs [30] [32].

Adjectives on the instrument used to describe entrepreneurs that are highly correlated with innovation include novel, original, enterprising, creative, inventive and imaginative [25]. A high score on the JPI innovativeness scale indicates a preference for novel solutions to problems and an appreciation for original ideas. For this study, 5 items were adapted from the JPI innovativeness scale. These items included such statements as: “I often surprise people with my novel ideas”, “people ask me for help in creative activities”, “I would prefer work that requires original thinking”, “I am a very creative person” and “I like to experiment with various ways of doing the same thing”.

RESULTS

The data were initially analysed using principal components analysis to assess the psychometric properties of the instrument assessing Locus of Control and Innovativeness. Our primary concern was interpretability of the factors. All items loaded appropriately and no cross loadings above .2 were identified with only factor loadings of above .5 being accepted. Each scale was reviewed using factor analysis to establish that they were unidimensional. The final reliabilities for all scales were greater than .7 in all cases. As such, the measures were judged adequate to examine the relationships between locus of control and innovativeness and entrepreneurial aspirations as measured by a single item measure to start a business from scratch.
A multiple regression analysis was then conducted to examine the relationship between entrepreneurial aspirations as a dependent variable when measured by the decision to start a new venture from scratch and the two personality traits as independent variables: “internal Locus of Control” and “Innovation” (Table 1). The analysis resulted in an $R^2 = .106$ suggesting that the two personality traits “internal Locus of Control” and “Innovation” explained 10.6 percent of the variation in the decision to start a new venture from scratch as explanatory variables. The results also show that both constructs – “internal Locus of Control” and “Innovation” as having a significant influence on the decision to start a new venture from scratch.

<table>
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<th>Variable</th>
<th>T-Statistic</th>
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<tr>
<td>Internal Locus of Control</td>
<td>2.466</td>
<td>.014</td>
<td>Yes*</td>
</tr>
<tr>
<td>Innovation</td>
<td>6.453</td>
<td>.000</td>
<td>Yes**</td>
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*p < .05  
**p < .001

$R^2 = 0.106; n = 533; df = 2; F = 31.467$

DISCUSSION

The results of this exploratory study support the proposition that Locus of Control and innovation have a significant effect on the decision to become an entrepreneur. The two variables, Locus of Control and innovation, together explained 10.6 percent of the variation in the decision to build a business from scratch and were significant predictors impacting that decision. Whilst the amount of variation explained by Locus of Control and innovation is acknowledged as being modest suggesting that there may be other variables impacting the decision to build a business from scratch the findings do support the contention that Locus of Control and innovation have a significant effect on entrepreneurial aspirations when measured by the decision to build a business from scratch.

It is important for future research into entrepreneurial aspirations to continue to focus on the importance of Locus of Control and innovation in predicting entrepreneurial behaviour. As far as Locus of Control was concerned, the study’s findings have quite clearly indicated that perceptions such as success being dependent on whether or not the person is lucky enough to be in the right place at the right time, to a great extent life is controlled by accidental happenings, the general perception of being lucky, having one’s life determined by others actions, the impact of forward planning, the importance of ability in relation to one’s success, the influence of people in powerful positions, being in control of one’s life and the perception of success being mostly a matter of luck all impact entrepreneurial aspirations when measured by the decision to build a business from scratch.

In relation to innovation, as measured by the Jackson Personality Inventory Scale, which measures the propensity of the respondent to think creatively with statements included in the construct like I often surprise people with my novel ideas, people ask me for help in creative activities, I would prefer work that requires original thinking, I am a very creative person and I like to experiment with various ways of doing the same thing was also a significant predictor of entrepreneurial aspirations when measured by the decision to build a business from scratch. This indicates that the level of creativity within a person is a significant determinant impacting the decision to become an entrepreneur.

Whilst they are not reported in the results we ran separate regression equations using the same predictor and criterion variables for each of the different countries in the study with varying amounts of variation ($R^2$) in the decision to build a business from scratch. In each and every regression equation innovation was significant in predicting the decision to build a business from scratch whilst the same was not the case for internal Locus of Control. This finding supports the work of [32] where they concluded that the impact of internal Locus of Control in predicting entrepreneurial aspirations may be country or culture specific whereas the level of innovation in predicting entrepreneurial aspirations is not confined to any one particular country or culture.

Despite the inconclusive results of the amount of variation explained by internal Locus of Control and Innovation in terms of entrepreneurial aspirations the overall positive findings of the study are that internal Locus of Control and innovation remain significant predictors of entrepreneurial aspirations in a number of different countries. Furthermore, that whilst many previous studies have been conducted in the US with very few conducted outside of the US this study’s findings are able to conclude that internal Locus of Control and innovation are still significant predictors of
entrepreneurial aspirations in a variety of different national settings including the US, UK, Turkey, Iceland and Croatia. As such, internal Locus of Control and innovation as predictors of entrepreneurial aspirations is not confined to any one particular national setting. This is a significant finding in itself and should further advance the literature on entrepreneurial activity.

REFERENCES