Illustrating creativity’s role on entrepreneurship intentions in Greece: the female context

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Abstract

The purpose of this paper is to investigate the impact of creativity on individuals' intentions to undertake entrepreneurial activity. A review in the literature illustrates how two constructs are associated. This study also hopes to examine this relationship for female potential entrepreneurs in the Greek context for first time. An empirical research was conducted in order to provide with empirical results. The methodology design is based on a simple regression analysis and a principal axis factoring. The sample consists of 110 female undergraduate students from different academic fields who attended an educational program on “Entrepreneurship” of Aristotle University of Thessaloniki. The paper ends with discussion of the results and overview of research limitations and some ideas for future research.
Introduction

Over the last decades, entrepreneurship has been recognized as a major topic in the theory of economic development because of the creation of an important portion of new employment by new firms bringing ‘productive innovation’ (Lee, Florida, & Acs, 2004). Entrepreneurship is also viewed as a means towards nations’ socio-economic development (De Bruin, Brush, & Welter, 2006).

Entrepreneurship is considered as a relatively new academic field in the general academic realm of management. Thus, there is a lack of a unifying framework of definition (Kruger, 2004). Entrepreneurship was firstly used as term by Cantillon (1755), who defined entrepreneur based on the French imperative ‘entreprendre’, meaning ‘to undertake’. The term entrepreneurship was systematically developed by Schumpeter (1934) who launched substantially the field of entrepreneurship, defined it in terms of innovation (Amabile, 1997; Nyström, 1993). Later on, Amabile (1997) perceives entrepreneurship as a particular form of innovation. It is in other words “the successful implementation of creative ideas to produce a new business, or a new initiative within an existing business” (Amabile, 1997).

Creativity and entrepreneurship

Sternberg and Lubart (1999) defined creativity as “the ability to produce work that is both novel (original, unexpected) and appropriate (useful, adaptive concerning task constraints). Creativity occurs when we are able to organize thoughts in such a way that drives to a different and even better understanding of a situation (Proctor, 1991). Nyström (1993) argues that creativity contributes to the growth of knowledge and provides a new insight and guidance in the continuously changing environment with a perceived need for change.

Sternberg and Lubart (1999) connected entrepreneurship with creativity as a the first consists of a form of the second and can be called as business or entrepreneurial creativity because some new businesses are original and useful, satisfying Sterneberg’s (1999) definition (in Lee et al., 2004). A first step which can be done by a creative entrepreneur is the recognition of opportunities to create future goods and services or create an entrepreneurship to pursue them (Amabile, 1997; Shane & Venkataraman, 2007). Whereas, Kariv (2013) considers creativity as an ‘informal prerequisite’ to launch a business and a necessary capability to be implemented at all stages of the venture creation.

Moreover creativity is related to entrepreneurship, as creativity is the ability to recognize in short time the connection between problems and their potential solutions by identifying non-obvious linkages or by redesigning a product and reforming all resources in a non-obvious way (Zampetakis & Moustakis, 2006). Gilad (1984) in his interesting research shed light on the close relationship between creativity and entrepreneurship by arguing that entrepreneurship and creativity share common features, such as unusualness, appropriateness, transformation and condensation. Later, a similar analysis was done by Whiting (1988) who investigated the behavioral characteristics of entrepreneurs and creative people and he found that there are considerable similarities.

According to Amabile (1997) creativity can enter in entrepreneurial activity through different ways such as not only the generation but also the implementation of novel and appropriate ideas to establish a new enterprise. In addition, individuals’
creativity can be enforced in the case people being more intrinsically motivated rather than extrinsically motivated because of the autonomy in the work, a business idea positively challenging and a sense of interest and excitement (Amabile, 1997). Creative entrepreneurs are called “architects of innovation and paradigm pioneers” by Winslow & Solomon (1993) who have the ability to plan effectively, to adjust to and to develop alternative solutions to unexpected conditions.

Finally, sometimes in the past, entrepreneurship scholars were using alternatively the terms creativity and entrepreneurship. However, this association seems wrong, as innovation is “the process of development and application of an idea” (Van de Ven, Angle, & Poole, 2000, 12), while creativity is the production of new and useful ideas in each field (Amabile et al., 1996). According to Lumsdaine and Binks (2009) creativity and innovation are differentiated by timing. Creativity is needed at the first stage of a product or an idea creation, but innovation is needed later at the stage of spreading and acceptance.

Creativity in female entrepreneurship

The academic interest for the study of female entrepreneurship has been augmented significantly since the beginning of the decade of 2000 (Taniguchi, 2002). In the past, some research tools about entrepreneurship did not take into account the gender (Bruni, Gherardi, & Poggi, 2004), but they perceived it as a personal characteristic among others, such as age and educational level (Ahl, 2006). Recently, female entrepreneurship is recognized as a particular category of entrepreneurship both at the level of entrepreneurship and at the level of individual (De Bruin, Brush, & Welter, 2007).

In the literature, a distinction of creativity characteristics with reference to entrepreneurial undertaking between males and females is evident, such as creative thinking, learning styles, the level of openness to new experience. Females appear generally more active in searching new experiences and also more tolerant to the unknown. Females also appear more self-confident, active and optimistic. Females manifest more positive attitudes towards sectors based more on creativity rather than on innovation. Nevertheless, females show a lag in relation to males regarding risk-taking about entrepreneurial actions (Lau & Li, 1996; Petridou, 2009; Zhao, Seibert, & Lumpkin, 2010).

Creativity and entrepreneurial intentions

At the outset, entrepreneurial activity does not occur in a vacuum, but it is embedded in a cultural and social context (Reynolds, 1992). Potential entrepreneurship arises in an environment characterized as “nutrient-rich” by Shapero (1981, as cited in Krueger & Brazeal, 1994), by meaning as “nutrients” social and cultural support, information and tacit knowledge and some tangible resources. Entrepreneurship research has examined since the last decades the impact of personal history and social context of individuals on their intention to undertake entrepreneurial activity (Hamidi, Wennberg, & Berglund, 2008). Several studies have highlighted the link between entrepreneurial behavior and personality traits (e.g. Caird, 1991; Korunka, Frank, Lueger, & Mugler, 2003).
All entrepreneurial ideas for new products, services and social movements are generated by inspiration, sustained attention and intention (Bird, 1988). “Intentionality is a state of mind directing a person's attention (and therefore experience and action) toward a specific object (goal) or a path in order to achieve something (means)” (Bird, 1988). Over the recent years, intentions are considered by many researchers as antecedents of planned behavior to found an enterprise (Zampetakis & Moustakis, 2006). According to Souitaris, Zerbinati, & Al-Laham, (2007) intentions are best predicted by attitudes. All the other factors such as personality traits, demographics, skills and social, cultural and financial support are viewed by them as exogenous influences which affect attitudes and indirectly intentions and lastly behavior. Thus, intentions play the role of mediating variables between the act to found an enterprise and potential exogenous influences (Krueger & Brazeal, 1994). In Ajzens’s theory of planned behavior, there are three main attitudes that predict intentions: attitude towards the act, subjective norms and perceived behavioral control (Krueger & Brazeal, 1994).

To promote entrepreneurship is needed to explore these exogenous influences and attitudes that affect individuals’ intentions to undertake entrepreneurial action (Zampetakis & Moustakis, 2006). Creativity is a factor that has not examined widely before in accordance with entrepreneurial behavior (Amabile, 1997; Hamidi et al., 2008; Nyström, 1993).

Because of creativity and novel ideas are located at the focal point of entrepreneurial process or they consist of a characteristic of entrepreneurial behavior, the scope of this research is to highlight whether creativity may raise entrepreneurial intentions. There is a tendency in the literature to describe entrepreneurship and innovative business behavior as an act of creativity (Amabile, 1997; Hamidi et al., 2008; Ward, 2004). The logic behind this connection is that the fundamental component of entrepreneurship is newness and novelty. In turn, potential entrepreneurs should come up with creative ideas for new products or services. Feldman & Bolino (2000) based on Schein (1990) typology of five “career anchors” – technical competence, managerial competence, security and stability, autonomy and independence, entrepreneurial creativity – concluded in their empirical research that individuals disposing a high creativity anchor are motivated to become self-employed and in other words to become potential entrepreneurs.

With reference to female entrepreneurs, research reveals that women experience lower intentions to entrepreneurship than men, due to the fact women face some limitations in their attempt to launch a business. The main problem is their conflicting role between their professional and household responsibilities, while their lower prior experience on industry, management, and business start-ups (Buttnner, 2001; Cliff, 1998; Crant, 1996; Sexton & Bowman-Upton, 1990). However, when females develop their business ventures show higher creativity and better communicative skills than males entrepreneurs (Buttnner, 2001). In addition, females seem to experience more positive attitudes towards entrepreneurship in sectors associated with creativity rather than sectors based on innovation which are male-dominant (Boling & Boling, 1993; Kariv, 2013).

Taking all the above into consideration we can develop the following hypothesis to examine it in our empirical part.

H: Creativity is positively related to entrepreneurship intentions
Empirical research

Methodology

The purpose of this paper is to support and reaffirm the relationship between creativity and entrepreneurial intentions among women and to investigate which entrepreneurial characteristics are more influential on females’ entrepreneurial intentions by using GET test.

Our survey was conducted on 110 female undergraduate fourth-year students participating to the inter-scientific educational program of ‘Entrepreneurship’ of Aristotle University of Thessaloniki. The educational program consists of a series of actions, like attendance of seminar courses; participation in laboratory courses; working into groups for the development of business plans; visits in innovative firms/factories; meetings with public and market agencies relevant to entrepreneurship. The duration of the program is an academic year. A significant number of scholars in the literature contend that entrepreneurship education affects positively participants’ intentions towards entrepreneurship, by developing the skills, networks and opportunities for successful new ventures’ creation (Botha, Nieman, & Van Vuuren, 2007; Mgaya & Magembe, 2007).

Measures

GET: General Enterprising Tendency (GET) Test was developed by (Caird, 1991) to measure enterprising tendency through the assessment of five key enterprise characteristics – calculated risk-taking, creative tendency, high need for achievement, high need for autonomy, and internal locus of control. These factors perceived by Caird, based on prior research of Watkins (1976) who concluded that they are the most significant to affect individual’s entrepreneurial intentions. GET questionnaire includes 54 items, measured by a Likert scale.

Creativity: it was assessed using Zhou & George (2001) scale, consisting of 13 items. An example item is “Exhibits creativity on the job when given the opportunity to”. The Cronbach’s alpha for this scale was 0.688. The response was a five-point Likert scale with 1 meaning strongly disagree and 5 strongly agree.

Entrepreneurial intentions: Entrepreneurial intentions was assessed using Crant (1996) scale, using 3 items. An example item is "It is likely that I will personally own a small business in the relatively near future". The Cronbach’s alpha for this scale was 0.670. The response was a five-point Likert scale with 1 meaning strongly disagree and 5 strongly agree.

Analyses

With reference to Hypothesis test, a Principal Axis factoring was used to confirm constructs’ validity and it exported two factors, representing the constructs of creativity and entrepreneurship and all items loaded significantly on their respective factors. A hierarchical regression analysis was conducted to test if our hypothesis is acceptable. At the first step, we entered some control variables in order to examine their impact on dependent variable. At the second step, creativity’s impact on entrepreneurial intentions was tested.

In turn, a Factor Analysis was conducted to confirm GET test validity in our sample and to investigate which factors affect more females’ entrepreneurship tendency. A principal axis factoring with Varimax rotation method revealed 5 factors, representing the five factors of GET test. The reliability of both constructs was tested, using the Cronbach’s alpha criterion and also KMO and Bartlett tests were used to
assess the appropriateness of using factor analysis on data. Both values were acceptable.

**Results**

*Table I: Hierarchical Regression Analysis between Creativity and Entrepreneurial Intentions*

<table>
<thead>
<tr>
<th>Step 1. Control Variables</th>
<th>B coefficient</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-Life Balance</td>
<td>0.34*</td>
<td>0.34*</td>
</tr>
<tr>
<td>Prior contact with business environment</td>
<td>0.568***</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial background in family</td>
<td>0.202</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial background in family</td>
<td>0.105*</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2. Main effect</strong></td>
<td></td>
<td>0.32***</td>
</tr>
<tr>
<td>Creativity</td>
<td>0.477***</td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Entrepreneurial intentions  
Statistically significant at: * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001

*Table II: Descriptive Statistics of independent and dependent variables*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>3.3818</td>
<td>0.60551</td>
</tr>
<tr>
<td>Entrepreneurial Intentions</td>
<td>2.9709</td>
<td>0.95874</td>
</tr>
</tbody>
</table>

*Table II: Descriptive Statistics of 5 factor GET tool*

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated Risk taking</td>
<td>2.5909</td>
<td>0.81607</td>
</tr>
<tr>
<td>Creative tendency</td>
<td>3.2209</td>
<td>0.64246</td>
</tr>
<tr>
<td>High need for achievement</td>
<td>3.5091</td>
<td>0.64602</td>
</tr>
<tr>
<td>High need for autonomy</td>
<td>3.1364</td>
<td>0.62776</td>
</tr>
<tr>
<td>Internal Locus of Control</td>
<td>3.0636</td>
<td>0.66742</td>
</tr>
</tbody>
</table>

*Table III: Factor Loadings of GET tool*

<table>
<thead>
<tr>
<th>Factors</th>
<th>Total Eigen values</th>
</tr>
</thead>
<tbody>
<tr>
<td>High need for autonomy</td>
<td>2.419</td>
</tr>
<tr>
<td>Creative Tendency</td>
<td>2.089</td>
</tr>
<tr>
<td>High need for achievement</td>
<td>1.405</td>
</tr>
<tr>
<td>Calculated Risk-taking</td>
<td>1.255</td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>1.204</td>
</tr>
</tbody>
</table>
Discussion

The regression analysis conducted supports our hypothesis (H) that creativity is a predictor of entrepreneurial intentions at the statistically significant level of 99% among a sample of female undergraduate students who participated in the program of Entrepreneurship. In addition, although not hypothesized, the hierarchical regression analyses revealed that work-life balance and origin from a family with entrepreneurial background influences statistically significant entrepreneurial intentions.

Creativity appears also as a significant factor of entrepreneurship tendency as it ranks second in our factor analysis. Creative tendency as it is defined in GET test has the second highest mean among factors affecting entrepreneurial tendency. The high levels of creativity among these young females follow the literature trend. The contribution of this research is that illustrates the relationship between creativity and entrepreneurial intentions for first time in the Greek context and particularly in a group of young women potential entrepreneurs who have attended an one year program on entrepreneurship. An implication which can be produced is that the relatively high levels of entrepreneurial intentions of female students may be attributed to the impact of this entrepreneurship program on their attitudes about entrepreneurship.

Limitations and Future Research

The results of the present research face some limitations, though. Our research sample is composed only of students attended this program. A subsequent research could explore attitudes of individuals derive from different environments. A more extended inquiry on the topic could analyze how the impact of creativity on potential entrepreneurship is differentiated by other factors, such as gender, age, social status, entrepreneurial background into the family and income. This research address a general construct of creativity, but in the future a scale of different sorts of creativity can be adopted in order to illustrate how each one affects entrepreneurship potential. Finally a pre- and post- design can be adopted in order to investigate how an educational program on entrepreneurship can change individuals’ creative behavior and their intention towards entrepreneurship (like Souitaris et al., 2007).

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References


