

Creativity of the Entrepreneur, Intrapreneurship, and the Growth of Small and Medium-Sized Enterprises: Evidence from China

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Creativity is an element of the personality of entrepreneurs which can be important for the foundation, advance, and business performance of small and medium-sized enterprises (SMEs). Intrapreneurship can be developed in small and medium-sized enterprises where entrepreneurs have a sufficient level of creativity and it can influence the growth of enterprises. Hypotheses are specified and empirically tested based on responses to a structured questionnaire on a sample of small and medium-sized enterprises from China. The research results indicate positive relationships between the creativity of the entrepreneur and intrapreneurship and growth of the enterprise.

Keywords: creativity, entrepreneur, intrapreneurship, growth, small and medium-sized enterprises (SMEs), China

Introduction

Creativity is an element of the personality of entrepreneurs which can be important for the foundation, advance, and business performance of small and medium-sized firms (Antoncic & Auer Antoncic, 2012). Entrepreneurs invest their time and energy in the entrepreneurship process, take financial, social, and emotional risks in order to create something new and thereby receive returns in the form of financial profits and personal satisfaction and independence (Hisrich, 1985). In the dynamic process in which entrepreneurs usually start and develop new firms, the key actor—the entrepreneur—typically evaluates, develops entrepreneurial ideas, and exploits opportunities (Antoncic, Hisrich, Petrin, & Vahcic, 2002; Antoncic, Bratkovic Kregar, Singh, & DeNoble, 2015). Intrapreneurship (entrepreneurship within existing companies) in small and medium-sized enterprises (SMEs) is based on the decisions of entrepreneurs and is also important for the business performance of enterprises (Antoncic & Auer Antoncic, 2012). The article deals with the creativity of the

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entrepreneur and its impact on intrapreneurship and firm growth by considering data from China.

Theory and Hypotheses

Personality characteristics of the entrepreneur are important for their enterprise activities and performance (Antoncic & Auer Antoncic, 2012; Antoncic et al., 2015). Company performance and competitiveness might largely depend on the knowledge and skills possessed by the entrepreneur (Gomezelj Omerzel & Antoncic, 2008). The intellectual capital that resides in people in the enterprise can improve firms' competitive position and performance (Tsui, Pearce, Porter, & Tripoli, 1997). Personality characteristics may be valuable for the acquisition of knowledge, skills, development of capabilities, selection between choices, advancement of activities, and the results attained by a person and their enterprise (Antoncic & Auer Antoncic, 2012): Creativity may be defined as the production of something new (Boden, 1992). An entrepreneur may be described as an individual who, among other things, is innovative and creative (Stevenson & Gumpert, 1985). Creativity can be important for innovation in general (Amabile, 1988) and firm-level innovation in particular (Amabile, 1996; Baron & Tang, 2011; Ahlin, Drnovsek, & Hisrich, 2014). It may be crucial for innovation in entrepreneurship and in new firms (Shane, 2003; Shane, Locke, & Collins, 2003) and may be a characteristic of entrepreneurs and entrepreneurship (Schumpeter, 1934; Gilad, 1984; Whiting, 1988; Kirzner, 1999; Ward, 2004; Baron, 2008; Hansen, Shrader, & Monllor, 2011). Organizational elements that can contribute to intrapreneurship are open communication, formal control, a thorough analysis of the environment, organizational support, organizational values, and cooperation via strategic alliances (Antoncic, 2008). Intrapreneurship and its elements (new business venturing, innovativeness, risk-taking, proactiveness) can be developed in firms of different sizes (Antoncic & Hisrich, 2001; Antoncic & Auer Antoncic, 2011). The development of elements of intrapreneurship and organizational factors in small and medium-sized enterprises can depend on the decisions of key decision-makers—namely entrepreneurs, who generally have two key roles: management and ownership of the company. The main emphasis in this article is on the creativity of the entrepreneur, which may have a positive impact on the enterprise's actions and be important for establishing entrepreneurial behaviors in the form of intrapreneurship. Therefore, the estimated link between creativity and intrapreneurship is positive. Based on the above findings, the following hypothesis is proposed:

Hypothesis 1: Creativity is positively associated with intrapreneurship.

Creativity may be related to growth of the company since the entrepreneur can be a vital driving force of the majority of actions of small and medium-sized enterprises (Antoncic & Auer Antoncic, 2012): Creative and innovative entrepreneurs establish successful enterprises (Antoncic et al., 2002). Entrepreneurs with a high level of creativity will try to find novel solutions, overcome problems, and achieve the desired results, giving them a greater possibility of achieving superior business results than entrepreneurs with less creativity. The creativity of the entrepreneur might be directly related to the performance of their firm (as described above) or indirectly through intrapreneurship since previous research found a positive link between intrapreneurship and enterprise growth (Antoncic & Hisrich, 2001; 2004; Antoncic & Zorn, 2004; Antoncic, 2007; Auer Antoncic & Antoncic, 2011). Based on the above discussion, we propose the following research hypothesis:

Hypothesis 2: Creativity is positively associated with growth of the firm.

Methodology

We used a questionnaire that primarily contained closed questions, which allow the possibility of later

thorough processing (Antoncic & Auer Antoncic, 2012): Likert-type scale ratings of responses to the questions mainly ranged from 1 = "Very untrue" to 5 = "Very true". Creativity was measured with three items from Saucier (1994): creative, uncreative (r), and imaginative; the measure showed good reliability (Cronbach Alpha 0.80). To measure intrapreneurship and growth, questions from previous research (Antoncic & Hisrich, 2001, 2004; Antoncic, 2007) were used: 14 questions related to intrapreneurship activities (entering new businesses and product innovation activities) (Cronbach Alpha reliability of 0.76). Growth included three questions (Cronbach Alpha reliability of 0.71). Control variables (person: age and gender; company: industry, size in terms of revenue and age) were also included.

Data collection was conducted in person after stating the purpose of the survey and asking potential respondents for collaboration. In China, a firm with fewer than 300 employees can generally be regarded as a small or medium-sized enterprise. Based on this categorization, in Shanghai there were around 30,000 small and medium-sized enterprises at the time of the research. Firms in the Shanghai region were visited and entrepreneurs (founders, managers/owners) completed the questionnaires in the front of the researcher. The administrations of some incubation centers also asked their companies to complete the questionnaires. Altogether, 121 useful questionnaires were collected.

Most firms were aged between two and five years old, the majority were small with up to 50 employees, with total annual sales of over USD 500,000 to USD 999,999, operated in service industries (almost four-fifths; three key industries were represented: (1) banking, investment insurance; (2) retail or wholesale trade; and (3) management consulting and business services; other industries were also well represented). Most entrepreneurs (about two-thirds) were male, aged from 40 to 50 years old (more than half; age groups 30 to 40 and over 50 were also well represented). Linear regression analysis was used to test the hypotheses. The control variables firm size and age and age of the person were also included as independent variables in the regression equations, whereas the effects of industry and gender were tested by splitting the sample into manufacturing and service firms and into males and females.

Results of the Regression Analysis

While examining Hypothesis 1 (see Figure 1) we found a link between creativity and intrapreneurship. The regression model proved to be significant ($F = 9.23$, sig. 0.003). The adjusted coefficient of determination is 0.064, meaning that 6.4% of the variance in the dependent variable can be explained by the independent variable. The standardized regression coefficient for creativity is 0.27 and significant (sig. 0.003). Creativity was therefore found to be positively related to intrapreneurship, which is consistent with Hypothesis 1.

In verifying Hypothesis 2 (see Figure 2), we tested the link between creativity and growth. The regression model was shown to be significant ($F = 4.20$, sig. 0.043). The adjusted coefficient of determination is 0.026, which means that 2.6% of the variance in the dependent variable can be explained by the independent variable. The standardized regression coefficient for creativity is 0.18 and significant (sig. 0.043). This result supports Hypothesis 2.

In addition, we checked the link between intrapreneurship and growth of the enterprise (see Figure 3). This relationship was well supported in past research (Antoncic & Hisrich, 2001; Antoncic, 2007). The regression model proved to be significant ($F = 14.56$, sig. 0.000). The adjusted coefficient of determination is 0.102, meaning that 10.2% of the variance in the dependent variable can be explained by the independent variable. The standardized regression coefficient for intrapreneurship is 0.33 and significant (sig. 0.000).

Intrapreneurship was found to be positively related to growth. Therefore, creativity can be related to firm growth both directly (as found for Hypothesis 2) and indirectly (through intrapreneurship).

Regression Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.966	0.256		7.688	0.000
Creativity	0.195	0.064	0.268	3.038	0.003
Dependent Variable: Intrapreneurship					
R Square = 0.072					
Adjusted R Square = 0.064					

Figure 1. Creativity and intrapreneurship.

Regression Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.821	0.422		4.314	0.000
Creativity	.217	0.106	0.185	2.049	0.043
Dependent Variable: Growth					
R Square = 0.034					
Adjusted R Square = 0.026					

Figure 2. Creativity and growth.

Regression Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.216	0.387		3.144	0.002
Intrapreneurship	0.534	0.140	0.330	3.816	0.000
Dependent Variable: Growth					
R Square = 0.109					
Adjusted R Square = 0.102					

Figure 3. Intrapreneurship and growth.

When checking the influence of the control variables (person: age and gender; firm: size, age, and industry), the following were found: a positive association between size of the firm and intrapreneurship, a positive association between size of the firm and growth, positive coefficients with a reduced level of significance were found for the creativity—growth relationship for male and female entrepreneurs (smaller gender-based control groups), a low coefficient and a low level of significance were found for the creativity—growth relationship for female entrepreneurs, a substantive and positive coefficient with a low level of significance was found for the intrapreneurship—growth relationship for female entrepreneurs, and a positive association between creativity, intrapreneurship, and growth was found for service firms but not for manufacturing and construction enterprises (a smaller number of manufacturing and construction enterprises); other control variables were not statistically significant.

Discussion and Conclusion

The research results based on data from small and medium-sized enterprises from the Shanghai area demonstrated a link between creativity, intrapreneurship, and growth. The results are in favour of accepting the hypothesis on the association between creativity and intrapreneurship, but only for service enterprises. The results were in line with the hypothesis on the association between creativity and growth, but solely for male entrepreneurs and service firms. In addition, the research shows that intrapreneurship may have a positive association with growth for service enterprises. Using control variables (age and gender of the person: age, size, and industry of the enterprise), we conclude in small and medium-sized enterprises the size of the company can have an effect on intrapreneurship and firm growth. The effect of gender might be substantial only for the creativity—growth relationship. The results show that creativity may be directly important for intrapreneurship and indirectly for the growth of service companies. The paper underlines the importance of creativity in intrapreneurship and firm growth, with an emphasis on small and medium-sized enterprises. The theoretical consideration was upgraded with an empirical quantitative analysis on a sample of Chinese enterprises. In addition to the scientific contribution, we developed some practical recommendations for small and medium-sized enterprises which may contribute to their growth: (1) This research found that creativity may impact intrapreneurship in service companies. Entrepreneurs in service firms should seek to develop their creativity or employ creative managers; (2) This study found that creativity may impact growth for male entrepreneurs and service firms. Male entrepreneurs in service companies should seek to develop their creativity or hire creative managers in order to boost growth; and (3) Intrapreneurship is also the key to the growth of service enterprise entrepreneurs (in terms of new businesses and product innovations). For example, in developing intrapreneurship activities it is important to stimulate new demand, work on new businesses in new markets, find new market niches, while offering and developing new products.

The study is limited to creativity as an important element that affects the intrapreneurship of the small and medium-sized enterprise. It does not include other elements that might also be important for enterprises to grow. In limiting the sample, firms from the Shanghai area were selected and not from other parts of China or other countries. The sample may be considered well representative of entrepreneurs in small and medium-sized enterprises from Shanghai. The collection of data on the growth of firms was based on perceptions of the representatives of enterprises because this was identified as relevant in previous intrapreneurship studies (Antoncic & Hisrich 2001; 2004; Antoncic 2007; Auer Antoncic & Antoncic, 2011). In the future, such research could rely on cross-national comparisons and include other factors important to intrapreneurship and the growth of small and medium-sized enterprises. Despite the limitations, this research indicates the importance of entrepreneurs' creativity in Shanghai for the intrapreneurship and growth of their small and medium-sized enterprises.

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