RESULTS OF THE SYSTEMATIC LITERATURE REVIEW
ON ENTREPRENEURSHIP
AND ITS INFLUENCING FACTORS

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Abstract
The aim of the article is to present the literature review of the most important articles dedicated to the entrepreneurial education and published between January 2004 and April 2010 in the scientific journals belonging simultaneously to both the Social Science Citation Index and the Entrepreneurship Journals Rankings.
Research was focused on graduate entrepreneurship and employability. The following results of the literature review were found as the most surprising: the creation of a new firm is more widespread than the creation of a new household or a baby born in society; those with full or part time job are more likely to start their business than unemployed, housewives, retirees, students; women are more likely to start solo-owned business, while men are more likely to use teams; learning and incubation resources do not correlate with an increase in attitudes towards self-employment and intentions, whereas inspiration does.
There have been three research questions and they built an order of the article:
1. How “the entrepreneurship” was defined?
2. Who can be “an entrepreneur”?
3. What are the main factors affecting entrepreneurial ability and having a positive impact on the decision to start a new venture?

Key words: entrepreneurial education, entrepreneurship, systematic literature review, university graduates.

Introduction
Importance of entrepreneurship is linked with the fact that in times of relatively high unemployment in most European countries, launching own company by university graduates can give them an opportunity to pursue
own dreams and give a chance for income and professional development. And since advanced education gives more chances for launching innovative companies with fast-growth potential, university graduates entrepreneurship seems to be especially desirable by economies. What is more, creating not any but innovative firms gives greater impact on economy and overall employment (Fritsch, Schroeter 2008: 3). Taking under consideration the outstanding importance of entrepreneurial behaviour for individuals and contemporary economies as a whole, the most important articles dedicated to entrepreneurship were investigated to get a deeper insight into the subject.

Some pretty surprising research results were found such as:
1. The creation of a new firm is more widespread than the creation of a new household or a baby born in society (US),
2. Those with full or part time job are more likely to start their business than unemployed, housewives, retirees or students,
3. Women are more likely to start solo-owned business, while men are more likely to use teams,
4. Learning and incubation of resources do not correlate with an increase in attitudes towards self-employment and intentions, whereas inspiration does.

The following article, however, is dedicated only to present the literature review outcomes on one area of the examinations that is on the graduates entrepreneurship and employability. To reach this point, however, deeper understanding of entrepreneurship will be provided. Specifically answers for the three questions will be given:

4. How “the entrepreneurship” was defined?
5. Who can be “an entrepreneur”?
6. What are the main factors affecting entrepreneurial ability and having a positive impact on the decision to start a new venture?

1 Nevertheless, an impact of new business creation on employment can be, in some situations, also negative – meaning that the new entries could also lead to a decline in employment (Fritsch, Schroeter 2008: 2). In such cases usually so-called “destructive creation” is blamed. It is also worth emphasizing that students of higher education (HE) not necessarily launch high-tech companies. For example the survey organized among business management students in Germany and Austria showed that students who intend to launch a new business almost exclusively think of service companies in low-tech areas (Luthje, Prugl 2006: 213).

2 Additionally, the employment effects of new business formation will probably be larger in high-density regions with a high productivity level and a large share of high-quality entries, abundant resources, and a well-functioning innovation system. Contrary to high-density regions, the employment effect will be much smaller or even negative in low-productivity regions which have a high share of low-quality entries, a scarcity of relevant resources, and a routinized technological regime. (Why does effect of New business formation..? p. 5 and earlier).
Methodological clarifications

The method of the systematic literature review (SLR) on entrepreneurial education was applied. The archetype came from the SLR method created by L. Pittaway and J. Cope (Pittaway, Cope 2004: 479-510). However, since the previous research results based on the examination of the articles from years 1970-2004, the added value of the below review lies in the updating of the Pittaway’s and Cope’s research with the newest publications. Consequently, the review bases on articles published by scientific journals between January 2004 and April 2010 and included simultaneously in both the Social Science Citation Index and in the Entrepreneurship Journals Rankings (Katz 1991: 53-67; 2003: 295). In practice four journals were searched through that is: Journal of Business Venturing, Entrepreneurship Theory and Practice, Small Business Economics, Entrepreneurship and Regional Development.

Additionally, the valuable research results, which were published in other publications, were also included in the review, but presented only in the footnotes.

Besides systematic literature review method, the descriptive method was also broadly applied.

The review was organised in the following way:

Table 1. Stages of the systematic literature review

<table>
<thead>
<tr>
<th>Stages</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>The researcher used entrepreneurship journal rankings to identify key journals in the field.</td>
</tr>
<tr>
<td>2.</td>
<td>Collecting of journals included simultaneously in both the Social Science Citation Index and in the Entrepreneurship Journals Rankings, that is: – Journal of Business Venturing, – Entrepreneurship Theory and Practice, – Small Business Economics, – Entrepreneurship and Regional Development.</td>
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<tr>
<td>3.</td>
<td>Decision about time range of the publications. Since SLR of L. Pittaway and J. Cope covered years 1970-2004, the researcher decided to continue the review from 2004 and to end in 2010.</td>
</tr>
<tr>
<td>4.</td>
<td>Setting criteria for acceptance or rejection of articles. The following words were chosen: – „entrepreneurship“, – „entrepreneurialism“, – „entrepreneurial education“, – „entrepreneurship education“ – or entrepreneurial education (written according to the Boolean rules).</td>
</tr>
<tr>
<td>5.</td>
<td>Searching for the appearance of these words or string of the words within: – titles of the articles, – abstracts – or as the key word(s).</td>
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6. Data base building consisting on the articles satisfying at least one of the set conditions.

7. Examination of the research main areas that is: 1. How “the entrepreneurship” was defined? 2. Who can be “an entrepreneur”? 3. What are the main factors affecting entrepreneurial ability and having a positive impact on the decision to start a new venture?

8. Prescribing of the articles to the research areas and description.

There were 31 articles chosen for the below review while the original SLR of L. Pittaway and J. Cope covered 27 articles.

1. How to understand “an entrepreneurship”?

The literature review proves that understanding of “entrepreneurship” varies and there is no consensus between researchers in this respect.

The main focus might be on a dynamic process linking vision, change and creation (Kuratko, The Emergence of Entrepreneurship, 2004: 578 with reference to Kuratko & Hodgetts 2004: 30). It is also emphasised that entrepreneurship “requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions”.

It can be also understood as “the ability to discover, select, process, interpret and use the necessary data to take decisions in an uncertain world and then to exploit market opportunities” (Ferrante 2005: 169).

Definition of Ferrante coincides with Arenius’ and De Clercq’s, who describe entrepreneurship as an activity, which involves “the discovery, creation and exploitation of opportunities aimed at the introduction of, e.g., new goods and services, new ways of organization, or new processes” (Arenius and De Clercq 2005: 250 with reference to Venkataraman 1997; Shane, Venkataraman 2000).

Besides various controversies around entrepreneurship as a teaching subject, the literature review confirms that nowadays entrepreneurship is recognised as a scientific discipline which can be learned (Kuratko 2004: 580 with reference to Drucker 1985; Gorman et al. 1997: 63).

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3 This research phase was completed thanks to the professional IT tools delivered by publishers of the journals for these kind of reviews.

4 Interesting definition comes also from Timmons (1994) who claims that entrepreneurship is “creating and building value from practically nothing. According to him entrepreneurship involves “the definition, creation, and distribution of value and benefits to individuals, groups, organizations and society.” Another worth noting description of entrepreneurship comes from Katz (2003, The Chronology…, p. 284 with the reference to his earlier work Katz, 1991c) in which entrepreneurship refers to a collection of academic disciplines and specialties including entrepreneurship, new venture creation, entrepreneurial finance, small business, family business, free enterprise, private enterprise, high-technology business, new product development, microenterprise development, applied economic development, professional practice studies, women’s entrepreneurship, minority entrepreneurship and ethnic entrepreneurship.
As far as definition of “an entrepreneur” is concerned, the presentation by I. Verheul et al. (2005) seems to be comprehensive and sufficiently explanatory. It refers to Vesper’s understanding of this term stressing different types of entrepreneur rather than solving a problem: “What is an entrepreneur’’?” (Ingrid Verheul et al. 2005: 487). The proposed entrepreneurial typology embraces a broad range of entrepreneurial behaviours. These activities are not ranked, but instead acknowledged that different types of entrepreneurial activity exist side by side.

Consequently, entrepreneur is a person possessing entrepreneurial abilities and is often associated with a company owner or self-employed, however in more broader sense it is also a person who launches new project or explores market opportunities in some other way (Wennekers et al. 2005: 487).

Table 2. Vesper’s entrepreneurial typology

<table>
<thead>
<tr>
<th>Name/ Type</th>
<th>Entrepreneurial activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starter</td>
<td>Enters an independent business by creating a new one</td>
</tr>
<tr>
<td>Acquirer</td>
<td>Enters an independent business by acquiring an ongoing one</td>
</tr>
<tr>
<td>Runner</td>
<td>Manages a small to medium business, Beyond start-up</td>
</tr>
<tr>
<td>Take-off artist</td>
<td>Steers a company into a high-growth trajectory</td>
</tr>
<tr>
<td>Turnaround artist</td>
<td>Saves a failing company</td>
</tr>
<tr>
<td>Innovator</td>
<td>Makes something new happen that is not a company</td>
</tr>
<tr>
<td>Champion</td>
<td>Supports innovator</td>
</tr>
<tr>
<td>Intrapreneur</td>
<td>Takes initiative for business unit creation inside an established business</td>
</tr>
<tr>
<td>Industry captain</td>
<td>Runs a big business</td>
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Self-perception of entrepreneurs about being or nor an entrepreneur depends to the great extend on the role which he/she pursues. For example those reporting business accomplishments as:

– Business owners – owning the major part of a business,
– Founders – starting a business from a scratch,
– Runners – managing a SME, beyond start-up are most likely to perceive themselves as entrepreneurs (Ingrid Verheul et al. 2005: 508).

It also turned out that, contrary to the expert panel study, those reporting business accomplishments as Corporate Entrepreneurs that is:

– Intrapreneurs,
– Innovators,
– Champions

are less likely to perceive themselves as entrepreneurs (Verheul et al. 2005: 509).
In terms of a gender effect on entrepreneurial self-image, study clearly demonstrate that even if performing a broad range of business accomplishments, women are less likely than men to perceive themselves as entrepreneurs (Ingrid Verheul et al., p. 511).

Additionally, in the research of Arenius and Clark males were proved to be more likely than females to be opportunity-minded (Arenius and Clark, 2005, Network-based approach, p. 261).

Interestingly, in the examination of Verheul et al. respondents with a Bachelor’s degree and without a business degree are more likely to view themselves as entrepreneurs than those with a Master or a business degree. (Ingrid Verheul et al., p. 512).

2. What are the main factors affecting an entrepreneurial ability?

Based on the Systematic Literature Review the main factors affecting entrepreneurial ability and having a positive impact on the decision to start a new venture were examined.

2.1. Certain personal characteristics

Some affective skills and traits seem to play especially important role in entrepreneurship:

a) Creativity (Burke et al., 2002 with references to Torrance, 1962) – or more precisely the creative skill to marshal needed resources (Kurako 2004),

b) Imagination (Burke et al. 2002 with references to Shackle 1979),

c) Degree of risk aversion, or risk-taking (Verheul et al. 2005: 490 with references to Knight 1921/71; Cantillon 1931; Hull et al. 1980; Sexton and Bowman, 1985, 1986; Stewart et al. 1999; Begley, 1995; Stewart and Roth, 2001) or, as Kuratko specifies “the willingness to take calculated risks – in terms of time, equity, or career” (Kurako 2004),

d) Alertness, which Burke et al. (2002 with references to Kirzner, 1973) links with the opportunity perception (Kirzner, 1979 [in:] Verheul et al. 2005: 490), or “the vision to recognize opportunity where others see chaos, contradiction, and confusion” (Kurako, 2004),

e) Motivation (McClelland 1965, 1971 [in:] Burke et al. 2002: 255), which can be also connected with locus of control (Verheul et al. 2005: 490 with references to Perry et al. 1986; Rotter, 1966), need for achievement (Verheul et al. 2005: 490 with references
McClelland, 1961; Perry et al., 1986), need for autonomy, initiative, persistence (Verheul et al. 2005: 490),
f) Innovation (Verheul et al. 2005: 490 with reference to Schumpeter, 1934),
g) Entrepreneurial self-efficacy (Wilson et al. 2007: 398-399).

2.1. Competences acquired through formal education/codified knowledge

If somebody was to ask “what is the most important in boosting graduates entrepreneurship?”, many would believe it is money, others point out culture, incubation of resources or support in generating ideas. Contrary to these common beliefs, scientific examinations show something different (Kim et al., 2006; Ferrante, 2005). Neither financial nor cultural capital resources are necessary conditions for pursuing entrepreneurial entry. It turned out that between three forms of resources, which were investigated, namely: financial, human, and cultural capital, the potential entrepreneurs gain significant advantages if they possess high level of human capital. Specifically: advanced education and managerial experience are strongly related with the entrepreneurial entry.

Research results confirm the positive link between entrepreneurial ability and the level of formal education. Advanced education supports entrepreneurial entry through (Kim et al., 2006):

1. The acquisition of skills – because students have more chances to develop necessary skills for an entrepreneur, especially critical thinking, communication and teamwork,

5 Additionally, according to Timmons “successful entrepreneurs share common attitudes and behaviours. They work hard and are driven by an intense commitment and determined perseverance; they see the cup half full, rather than half empty; they strive for integrity; they burn with competitive desire to excel and win; they are dissatisfied with the status quo and seek opportunities to improve almost any situation they encounter; they use failure as a tool for learning and eschew perfection in favour of effectiveness; and they believe they can personally make an enormous difference in the final outcome of the ventures and their lives [...]. Entrepreneurs who succeed possess not only a creative and innovative flair and other attitudes and behaviours but also solid general management skills, business know-how, and sufficient contacts” Timmons (1994).

6 Other research also indicates the importance of entrepreneurship education at precollege levels in order to increase both interest in the area and the level of overall preparedness (Dyer, 1994; Kourilsky, 1995).

7 Interesting conclusions from the research based on French and American students examination of entrepreneurial perception comes from study of Elias G. Carayannis et al. (A cross-cultural learning strategy, p. 757). As indicated, students „who do not recognize the positive impact that new ventures can have on the economy and the society, then we must develop a mechanism for students to understand, integrate and reinforce these positive values.”
2. Providing an access to certain social networks, e.g., alumni network,

3. Serve as a positive signal for nascent entrepreneurs when evaluated by resource providers, e.g. business angels, venture capitalists,

4. Sorting people by ambition and assertiveness.

Promotion of entrepreneurial education is especially recommended in low-income nations, besides improvements of confidence in property rights, guarantee access to capital, safeguard safe economic conditions, develop physical infrastructure (Wennekers et al. 2005: 306).

However, both too little and too much education discourages attempted entrepreneurship. As Kim noted: “The acquisition of skills and credentials may create valuable opportunities for individuals to work for others rather than pursuing a new business venture” (Kim et al. 2006).

I. Grilo and J.M. Irigoyen complemented Kim’s examination results and added that „relative to the intermediate level of education, belonging to the higher or the lower education group has a positive impact on being self-employed. In other words, the relationship between education and self-employment seems to be U-shaped” (Grilo & Irigoyen, 2006).

2.2. On-the-job experience

Practical experiences seems to be strongly supportive for entrepreneurial abilities (Mueller, 2006 with references to Shane, 2000; Shepherd and De-Tienne, 2005; Wagner, 2004). Especially multiple forms of work experience (Parker, 2006) is important for supporting nascent entrepreneurs. Without sufficient work experience, individuals may encounter difficulties in taking the first steps towards becoming an entrepreneur. In particular, researchers focus on four types of work experience: general full-time work experience, managerial experience, previous start-up experience, and current self-employment. Since managerial experience is usually out of touch for youth,

Kurato (Emergence of entrepreneurship…, p. 582) emphasizes the importance of education in the entrepreneurial learning by recalling proposition of Ronstadt (1987) that “entrepreneurial programs should be designed so that potential entrepreneurs are aware of barriers to initiating their entrepreneurial careers and can devise ways to overcome them. He proposed a two-continuum model of curricular design for entrepreneurship education. His “structured-unstructured” continuum addressed various methods of transferring information and expertise. Among the methods he discussed were lectures, case studies, and feasibility plans. He labeled his second continuum “entrepreneurial know-how/entrepreneurial know-who.” This continuum represented the belief that success in entrepreneurship is dependent not only on knowledge but the network of individuals with whom an entrepreneur is connected. Ronstadt (1987) contended that an effective program must show students “how” to entrepreneurially behave and should also introduce them to people who might be able to facilitate their success”.

Entrepreneurial perception is also heightened by Burke et al. 2002: 255; by greater access to information and an ability to analyse information. That is why business contacts (McGuire, 1976) and education (Schultz, 1980) become important attributes.
work experience in form of internship and work projects are within their reach and supportive for entrepreneurship.

It was also emphasised (Muller 2006: 55) that work and previous self-employment experience is more important than formal education for the likelihood of being a nascent entrepreneur. Particularly, “an entrepreneurial attitude is related to working in a small firm with managerial responsibilities and may substitute previous self-employment experience”.

Main benefits from work experience for the graduate entrepreneurship are links to (Kim et al. 2006):
- Social networks,
- Market information,
- Capital,
- Potential customers and employees.

Besides the existing arguments in favour of work-entrepreneurship connection, there are also some contrary opinions. For example findings of Arenius and Clark showed that work status does not play an important role in the perception of entrepreneurial opportunities (Arenius and Clark 2005: 261).

The competences and experience gained in the labour market can be transformed into:

a) The ability to formulate an effective venture team (Kurako 2004),
b) Fundamental skill of building solid business plan (Kurako 2004),
c) Experience and knowledge of the market (Burke et al. 2002 with references to Jovanovic, 1982).

2.3. Entrepreneurship programmes focused on inspiration

Another factor important for supporting graduates entrepreneurship are entrepreneurial programmes, especially if they include an inspirational part. Surely „knowledge and resources could increase the likelihood of success for those who are going to start a new venture, but it turns out that it is the inspiration that raises attitude, intention and increases the chances that students will eventually set up their own businesses” (Souitaris et al. 2007).

It was confirmed while testing the effect of entrepreneurship programmes on entrepreneurial attitudes and intention of science and engineering students. The result showed that:

- „Students in the programme group increased their subjective norm and intention towards self-employment, while students in the control group did not,”
- Intention towards self-employment was not related to nascency at the end of the programme (probably due to the time lag between intention and action, especially in the case of young students).
Inspiration (and not learning or resource-utilisation) was the entrepreneurial programme’s benefit related to the increase of subjective norm and intention towards self-employment” (Souitaris et al., 2007).

As V. Souitaris indicates that “the main practical implication for entrepreneurship programme developers is that if our aim is to increase the number of entrepreneurs from the student population, then the inspirational part of the programme has to be designed purposefully” (Souitaris et al., 2007).

2.4. Other factors playing a role in entrepreneurship

Besides entrepreneurship programmes focused on inspiration, on-the-job experience, formal education and personal characteristics, there are some other factors which might be decisive in making a decision to become an entrepreneur. It could be:

1. Tacit knowledge embedded in the life environment (Ferrante 2005: 169),
2. Social capital, especially social networks and contact to other entrepreneurs; it was confirmed (Muller 2006: 55-56; Davidsson and Honig 2003; Minniti 2004, 2005; Singh et al., 1999 [in:] Muller, 2006) that individuals are embedded in their local entrepreneurial environment which influences an individual especially at the beginning of the decision making process about whether to start their own business. However, once the entrepreneurial desire is established, the importance of role models decreases.
3. Availability of financial capital or individual wealth (Kim et al. 2007; Muller, 2006 with references to Dunn and Hotz-Eakin, 2000; Evans and Jovanovich, 1989), although the research results indicate, what was already pointed out, that financial assets are less important for nascent entrepreneurs than other resources (Muller 2006: 56; Kim et al. 2007),
4. Expected profit and success (Muller 2006: 41),
5. An economic environment (Fritsch, Schroeter 2008: 1).

3. Summary

Understanding of “entrepreneurship” varies but in most cases the term is defined as a dynamic process embracing opportunity recognition and its exploitation, which requires application of resources.

Entrepreneurs can be perceived as those engaged in various types of entrepreneurial activities – starting from entering an independent business by
creating the new one and finishing with intrapreneurs, who takes initiative for business unit creation inside an established firm.

The following factors seem to play the most important role in affecting an entrepreneurial ability: 1) Certain personal characteristics, 2) Competences acquired through formal education, 3) On-the-job experience, 4) Entrepreneurship programmes focused on inspiration, 5) Some other factors, e.g. social capital, especially contacts to other entrepreneurs, financial resources, an economic environment.

References
