


How University's Activities Support the Development of Students' Entrepreneurial Abilities: Case of Slovenia and Croatia

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Abstract The paper reports how the offered university activities support the development of students' entrepreneurship abilities. Data were collected from 306 students from Slovenian and 609 students from Croatian universities. The study reduces the gap between theoretical researches about the academic entrepreneurship education and individual empirical studies about the student's estimation of the offered academic activities for development of their entrepreneurial abilities. The empirical research revealed differences in Slovenian and Croatian students' perception about (a) needed academic activities and (b) significance of the offered university activities, for the development of their entrepreneurial abilities. Additionally, the results reveal that the impact of students' gender and study level on their perception about the importance of the offered academic activities is not significant for most of the considered activities. The main practical implication is focused on further improvement of universities' entrepreneurship education programs through selection and utilization of activities which can fill in the recognized gaps between the students' needed and the offered academic activities for the development of students' entrepreneurial abilities.

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Introduction

Societies can assure their existence and progress with creative, knowledge-based, and innovative working and behavior (Leydesdorff 2006; Hage and Meeus 2009; Dubina et al. 2012). Progress is possible with common efforts of all society stakeholders—i.e. government, enterprises, non-profit organization, educational institutions, and individuals, for achievement of general welfare (Etzkowitz et al. 2000; Mitchell 2007; Acito et al. 2008; EuropeanUnion 2008). Consequently, modern societies are faced with questions how to select appropriate goals and enable tools for development of appropriate knowledge and abilities and competences for humans working in the knowledge-based economy (Alexander 1983; Korten 2009; E.G. Carayannis et al. 2014).

Several initiatives have emerged for sustainable development, e.g., sustainable development, social responsibility, and corporate social responsibility of modern societies (Drucker 1969; Korten 2009; Peet and Hartwick 2009). Their economic foundation is the concept of “new economy,” which united different innovative economic ideas like learning, creative, and knowledge-based economy (Alexander 1983; Senge et al. 1994; Howkins 2001; E. G. Carayannis and Campbell 2009; E. G. Carayannis and Rakhmatullin 2014). Sustainable development sees universities as the main developers of knowledge (Etzkowitz et al. 2000; Mitchell 2007; Acito et al. 2008); but, the newest demands of society and educational system itself requires from universities new capacity for (a) cooperation with other developers and users of knowledge and (b) forming of appropriate abilities and competences of their users, i.e., students, enterprises, non-profit organizations, state, etc. for working in current conditions (Senge et al. 1994; Howkins 2001; E. G. Carayannis and Campbell 2009; E. G. Carayannis and Rakhmatullin 2014).

Universities can importantly improve their working with forming of entrepreneurship-oriented working and behavior through researches, transfer of knowledge, new ways of teaching, and supporting of citizenship behavior (Mintzberg et al. 1998; Klimoski 2007; EuropeanUnion 2008; Acito et al. 2008; Philpott et al. 2011). Thus, several studies reported about the importance of universities’ entrepreneurship-related activities for economic growth and welfare of society (Drucker 1969; E. G. Carayannis and Campbell 2009; Tidd and Bessant 2009; E.G. Carayannis et al. 2014); Davidsson (1991) emphasized the abilities of employees, which small firms needed for their growth; Camelo-Ordaz et al. (2012) establish influence of entrepreneurs’ characteristics and personal values on innovation performance in small creative firms; and Kuratko (2016) reported about differences in influences of individual developers of knowledge on knowledge society.

Demanding conditions in educational market forced universities to compete for students, but at the same time, students’ expectations and estimations of adequacy of the offered educational programs importantly shape students’ opinions about the offered programs and decisions about the selection of study program (Newman et al. 2004; Mitchell 2007; R. D. Ireland and Ketchen 2008; Gibb 2012). For instance, Peterman and Kennedy (2003) reported that students change their perception about their entrepreneurial abilities through participation in an enterprise education program;

Pihie and Akmaliah (2009) detected that students' aspirations importantly determine students' perception about the offered entrepreneurship actions in the university; and Mandel and Noyes (2016) reported about results of experiential entrepreneurship education among the "Top 25" undergraduate schools of entrepreneurship in the USA.

Additionally, individual studies reported that the comparison of universities' offered and required activities of educational programs provides to users useful information for universities' development (Morris et al. 2013; Rideout and Gray 2013). For instance, Hansemark (1998) reported, that "students perception about importance of academic needs for their entrepreneurial development effect on students assessment of actions, which universities offered," Hills (1988) reveals different ways for students' evaluation of university programs; Koh (1996) emphasized the importance of students' opinion for their evaluation of university working; and Rothaermel et al. (2007) reported about importance of students' needs for evaluation of the offered entrepreneurial actions in universities.

Our study reduces the gap between the well-spread theoretical researches about entrepreneurship education and the rare empirical evidences about students' estimation of adequacy of the offered university activities needed for the development of students' entrepreneurial abilities. Additionally, we investigate how gender and study level as the selected personal demographic characteristics determine students' perception about the offered academic activities. This contribution offers a new conceptual framework and empirical results, which complement previous studies about students' estimation of the existing entrepreneurship programs and lead universities' selection and utilization of new activities for the improvement of students' entrepreneurial abilities.

Theoretical Background

Literature Review

For centuries, universities have played a crucial role in provision of new knowledge for humankind's existence and development (Drucker 1969; Mitchell 2007; Acito et al. 2008). Because of profound changing of modern society context, universities will be forced to work and behave in the future not only as traditional academic institutions but also as leading partners in the development of modern societies (Leydesdorff 2006; Dubina et al. 2012; E.G. Carayannis et al. 2014).

New society demands universities to change their learning, innovativeness, knowledge, and international operations (Drucker 1969; Korten 2009; Hage and Meeus 2009). Thus, universities lead the development and utilization of innovative economic concepts (Teece 1998; Howkins 2001; Powell and Snellman 2004; Dubina et al. 2012) like "new economy" (Alexander 1983), which enables economic surviving and sustainable development of modern societies and their organizations (Leydesdorff 2006; E. G. Carayannis and Campbell 2009; Dubina et al. 2012). In that framework, universities focused their education and researches on creativity, innovativeness, and entrepreneurship (Dill 1995; Schumpeter 1992; Daghfous 2007; Afuah 2003; Conway and Steward 2009; Lafley and Johnson 2010); development of students' intellectual capabilities for their future working in knowledge-intensive society (Mandel and Noyes 2016; Drucker

1969; Powell and Snellman 2004; Kaufman 2015); integration and cooperation with local, regional, national, and international societies (Leydesdorff 2006; Korten 2009); and development of adequate abilities of universities' stakeholders—i.e. owners, academic staff, professional staff, students, participating organizations (Newman et al. 2004; Peet and Hartwick 2009; Altmann and Ebersberger 2013) for their active leading of society development (Mintzberg et al. 1998; Klimoski 2007; Philpott et al. 2011).

Additionally, the last decades characterized changes of educational systems in Europe with development of the Bologna Process, the emergence of the European Higher Education Area (EHEA), increased internationalization of universities, student mobility, and study programs, the opening of local higher education markets to international competition, etc. (Howkins 2001; Korten 2009; Lafley and Johnson 2010; Dubina et al. 2012).

Therefore, international and internal changes demand universities to strategically shift from traditional working as “developer of knowledge” and “education of students,” into the working focused on “acceleration and leading of society's development” (Mintzberg et al. 1998; Klimoski 2007; Acito et al. 2008; Philpott et al. 2011). Necessary precondition for this shift is the enforcement of entrepreneurship orientation, working, and behavior of universities (Etzkowitz et al. 2000; Mitchell 2007; Acito et al. 2008; EuropeanUnion 2008; Philpott et al. 2011).

Academia can use different approaches to utilization of entrepreneurial capabilities and competences (Davidsson 1991; Morris et al. 2013; Kuratko 2016), which are focused on (a) contextual and methodological improvement of their working through curriculum reformation and quality improvement (Dill 1995; Acito et al. 2008; EuropeanUnion 2008); (b) acceleration of cooperation with academic and industrial partners in domestic and international environments (Teece 1998; Yusof and Jain 2010; Botsaris and Vamvaka 2016); development of solutions for entrepreneurial working of universities like triple helix and quadruple innovation helix models (R. Ireland and Hitt 1997; E. G. Carayannis and Campbell 2009; E. G. Carayannis and Rakhmatullin 2014).

Thus, several studies also establish successful utilization of entrepreneurship goals of universities—and their members like faculties, colleges, institutes, and participating organizations from environment, which are based on necessary combinations of activities aimed at (a) assurance of fundamental entrepreneurial knowledge (Mintzberg et al. 1998; Klimoski 2007; Acito et al. 2008; Gibb 2012), (b) transfer of knowledge in society (Wright et al. 2008; Tidd and Bessant 2009), and (c) especially development of necessary entrepreneurial capabilities and competences through educational and training programs for students and other university partners (Newman et al. 2004; Acito et al. 2008; EuropeanUnion 2008; Gibb 2012).

For example, Dill (1995) emphasized development of mechanisms for increasing technology transfer between universities and industry in USA; Etzkowitz et al. (2000) reported that “entrepreneurial university” is a global phenomenon with an isomorphic development path; Mueller (2006) established that entrepreneurship and university-industry relations are vehicles for knowledge flow in modern societies; and Holt et al. (2007) investigate how educational contextual and process variables effect the enterprises entrepreneurship.

Despite the broader foundations for university focus of entrepreneurship, surprisingly few researches have investigated how university educational and training programs for entrepreneurship are harmonized with needs and requirement of (a)

society, which defined the general framework and directions for university working (Etzkowitz et al. 2000; Acito et al. 2008; Altmann and Ebersberger 2013) and (b) students and other participants of educational programs as university clients (Hills 1988; Hansemark 1998; Pihie and Akmaliah 2009).

Therefore, universities are faced with the situation where two variables determine results of offer and demands of educational programs (Hills 1988; Hansemark 1998; Pihie and Akmaliah 2009). Universities offer educational programs and define which entrepreneurial competences and abilities student must acquire during their study, through their normative and non-normative documents—like policy, strategy, curriculum, culture, etc. (Wright et al. 2008; Yusof and Jain 2010; Philpott et al. 2011); universities ensure their attainability for students through activities and initiatives, which they perform in cooperation with academic and industrial partners (Mitchell 2007; Morris et al. 2013). On the other hand, students create their own perception about (a) their needed competences, abilities, and priorities and (b) offered entrepreneurial capacities and abilities in selected program (Hills 1988; Peterman and Kennedy 2003; Camelo-Ordaz et al. 2012). Students then used both variables to compare their requests and characteristics of offered education programs to select the most suitable program for their future education (Mitchell 2007; Rideout and Gray 2013; Mandel and Noyes 2016).

We add to the abovementioned studies our investigation which academic activities do students needed, and how students estimate importance of the offered university activities, for development of their entrepreneurial competences and abilities. We focused our investigation on samples of students from two central European countries—i.e., University of Maribor, Slovenia and University of Zagreb, Croatia. Creation of the European Higher Education Area (EHEA) makes universities in Slovenia and Croatia face new challenges regarding their future development of entrepreneurship education, which can lead to further competition or creation of linked academic area (Mrak et al. 2004). Before independence of Slovenia and Croatia from Yugoslavia in 1991, both universities were closely connected and based on similar (a) cultural, economic, and political characteristics, (b) development trends of societies including entrepreneurship, and (c) entrepreneurship education programs. Despite similarities between Slovenian and Croatian universities, important differences also exist between them resulting from political and economic trends and specific development of their educational systems in last 25 years (Mrak et al. 2004; Potocan et al. 2008). The abovementioned theoretical and applied findings allow us the following hypothesis:

H1: There are significant differences between Slovenia and Croatia in students' perception about the needed academic activities for students' development of entrepreneurial abilities. According to psychological literature, humans perception about reality—i.e., other person, object, or situation is effected by several human demographic characteristics (Fazio et al. 1983; Ajzen 2005). Thus, behavior studies established that personal demographic characteristics of humans—like age, gender, education, working experiences, form individuals' specific perception about reality (R. Ireland and Hitt 1997; Camelo-Ordaz et al. 2012; Kuratko 2016). E.g. Kimberly and Evanisko (1981) reported that age and working experiences of managers are reliable predictors for their perception about innovativeness; Miron et al. (2004) reveal that single personal characteristics of employees shape their perception about the importance of innovation in large R and D company. Also in

entrepreneurship theory, especially authors from “great person” and “psychological characteristics” theories, emphasized the effect of human demographic characteristics on their entrepreneurship working and behavior; e.g., Koh (1996) reported how working experiences of MBA students shape their perception about the quality of education program; Holt et al. (2007) reveals correlations between gender of employees and their perception about entrepreneurship. In accordance with cognitions from previous studies about individual perception of reality (R. Ireland and Hitt 1997; D. A. Ralston et al. 2011; D. Ralston et al. 2014), we additionally researched gender and level of study as demographic variables, which significantly defined students’ perceptions about their needed academic activities for their development of entrepreneurial abilities. The abovementioned theoretical and applied findings allow us the following hypotheses:

H2: The gender of students significantly influences the students’ perception about needed academic activities for development of their entrepreneurial abilities.

H3: The level of students’ study significantly influences students’ perception about the needed academic activities for the development of their entrepreneurial abilities.

Methods

Sample and Procedure

The survey included students of economics and business schools in Central European countries. In Slovenia, the survey was done at the University of Maribor, faculty of economics in business and in Croatia at University of Zagreb, faculty of economics. In both countries, the survey was conducted in the academic year 2014/2015 and included students from all years, fields and levels of study. The surveying was done during classes and all students participated voluntarily. In this survey, we included 306 responses from Slovenian students and 609 responses from Croatian students. At the Faculty of economics and business Maribor in the academic year 2014/2015, 1315 students were enrolled in undergraduate and 646 in master study programs. Our sample included students of entrepreneurship and management. Thus, 321 undergraduate and 182 master students were enrolled in two selected areas. Two hundred-one undergraduate students’ responses, indicating 62.6 % response rate, and 105 master students’ answers reveal, 57.5 % response rate. At the Faculty of economics, Zagreb in the academic year 2014/2015, 5769 students were enrolled in undergraduate and 2685 in master study programs. Again, students of entrepreneurship and management were considered. Thus, 820 undergraduate and 257 master students were enrolled in two selected areas. 477 undergraduate students’ responses, indicating 58.2 % response rate, and 132 master students’ answers reveal, 51.4 % response rate.

Detailed sample characteristics for Slovenian and Croatian respondents are outlined in Table 1.

Instrument

Data for this study were gathered with a questionnaire aimed to examine entrepreneurial activities of students and consisting of the following parts. The first part includes a

Table 1 Demographic profile of the survey respondents

| | Slovenia (<i>N</i> = 306) | Croatia (<i>N</i> = 609) |
|-----------------------------------|----------------------------|---------------------------|
| Gender | | |
| Male | 32.7 % | 47.3 % |
| Female | 67.3 % | 52.7 % |
| Age group | | |
| 20 or under | 41.2 % | 17.7 % |
| 21–25 | 54.6 % | 75.4 % |
| 26–30 | 3.9 % | 4.8 % |
| 30 or more | 0.3 % | 2.2 % |
| Level of study | | |
| First year of undergraduate study | 32.7 % | 33.7 % |
| Last year of undergraduate study | 33.0 % | 44.7 % |
| First year of master study | 17.0 % | 10.8 % |
| Last year of master study | 17.3 % | 10.8 % |

set of demographic variables commonly used in studies including samples of students (Grunbaum 1997; Onur et al. 2012; Zlatko Nedelko et al. 2011). The second part includes questions about their intentions and reasons to start own business. List of reasons was composed based on our experiences, while also reasons identified in previous studies were included (Birley and Westhead 1994; Busenitz et al. 2003; Carter et al. 2003; Scheinberg and MacMillan 1988). The third part includes a list of 20 academic needs, which are most commonly emphasized by students as needed for building of their entrepreneurial abilities. Included academic needs were identified based on cognitions from different examinations about entrepreneurial education (Sexton et al. 1997; Rubin and Dierdorff 2009; Peterman and Kennedy 2003; Wright et al. 2008; Koh 1996) and our own experiences, with researching students' needs during education process (Zlatko Nedelko and Cirmu 2009; Zlatko Nedelko et al. 2011). Those items outlined typical actions that higher education organizations does to match students' need, during the entrepreneurial education. For this study we used data from first and third part of our questionnaire. Thus, we outlined selected demographic characteristics and 20 academic needs of students in frame of entrepreneurial education.

Measures

The demographic information was collected by various types of questions. For gender respondents chose among male and female. Regarding the age, respondents can choose from 20 years or under, 21–25, 26–30, 30 years or more. For the level of study, respondents can choose from different options, ranging from “first year of undergraduate study” to “last year of master study.”

Twenty statements were outlined to measure the student's perceptions about the importance of the needed academic activities in frame of entrepreneurial education. To enable measuring, respondents rated each of the postulated academic activity using a Likert-type scale, ranging from “not needed at all” (1) to “very much needed” (6). In

terms of measuring the reliability of 20 academic needs, Cronbach's alpha for the entire sample ($N=915$) is 0.937. Looking into details, for the Slovenian sample, Cronbach's alpha is 0.907 and for the Croatian sample, 0.942. The outlined alphas indicate that the selected 20 academic needs are reliable measures to measure students' perception of the needed academic activities.

Research Design and Analysis

We examined the perceived importance of needed academic activities, which support the development of entrepreneurial abilities of university students in Slovenia and Croatia from various perspectives. With our quantitative analysis we examined (1) the importance of needed academic activities and the differences between the importance of several activities for Slovenian and Croatian students and (2) the role of gender and level of study for students' perception about needed academic activities.

In frame of examining the importance of needed academic activities for students, we outlined frequencies and ranks for 20 needed academic activities, which students evaluated in the survey. Ranks were assigned based on frequencies of single academic need. Next, we test the differences between students' perception about needed academic activities in Slovenia and Croatia. Since we compared two independent samples, we used independent samples *t* test for examination of differences between each of the needed academic activity in two countries; this matches suggestions of Ho (2006) and Leech and Onwuegbuzie (2007) for this quantitative method. In the interest of space and in line with our aims, we outline results for the five most needed academic activities, for both samples. We, thus, report results for the seven most needed academic activities for Slovenian and Croatian students.

In the second phase of our empirical research, we examined the impact of gender and study level of students' on their perception of needed academic activities. We used multivariate linear model, to examine the role of gender and study level, as independent variables and students' perception of the selected top five needed academic activities, considered as dependent variables. Among four multivariate tests (i.e., Pillai's, Wilks', Hotelling's, and Roy's) (Leech and Onwuegbuzie 2007) of the significance for the main effects of the between-group variables, in our case of gender and study level, we report results for the first mentioned test.

Mean values outlined in the “Results and Discussion” section are designed with letter “M.” The number in bracket, by each of the needed academic activity, indicates numbering in our questionnaire.

Results and Discussion

Importance of Needed Academic Activities

The outlined research design let us first present results about the importance of needed academic activities for students in Slovenia and Croatia. Results are presented in Table 2.

Based on the above results, it is evident that students in Slovenia and Croatia have different priorities, making the chosen academic activities crucially important for forming their entrepreneurial abilities. e.g., Slovenian students prefer studying in small

Table 2 Importance of needed academic activities of students in Slovenia and Croatia

| Needed academic activity | Slovenia | | | Croatia | | |
|---|----------|-------|---------------|---------|-------|---------------|
| | Rank | Freq. | Valid percent | Rank | Freq. | Valid percent |
| Studying in small groups and teams (52) | 1. | 40 | 13.1 % | 5. | 36 | 5.9 % |
| Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | 2. | 38 | 12.4 % | 15. | 16 | 2.6 % |
| Practical involvement of lecturers, teachers and/or course assistants in entrepreneurship (42) | 3. | 37 | 12.1 % | 1. | 111 | 18.2 % |
| Creating incubators to support students' initiatives (38) | 4. | 21 | 6.9 % | 2. | 60 | 9.9 % |
| Constructing formal and ongoing networking sessions with existing/successful entrepreneurs (41) | 5. | 19 | 6.2 % | 14. | 20 | 3.3 % |
| Constructing formal, ongoing visits to entrepreneurial enterprises (43) | 6. | 19 | 6.2 % | 13. | 21 | 3.4 % |
| Developing internship programs in entrepreneurship (37) | 7. | 18 | 5.9 % | 3. | 48 | 7.9 % |
| Developing workshops for practicing entrepreneurial "know-how" (54) | 8. | 17 | 5.6 % | 11. | 25 | 4.1 % |
| Incorporating courses in entrepreneurship within academic programs (36) | 9. | 16 | 5.2 % | 4. | 41 | 6.7 % |
| Building practical courses that teach the best practices in entrepreneurship (51) | 10. | 16 | 5.2 % | 9. | 30 | 4.9 % |
| Establishing web sites for tutoring in entrepreneurship specifically designed for students wishing to become entrepreneurs (40) | 11. | 14 | 4.6 % | 10. | 28 | 4.6 % |
| Developing meaningful relationship with the community (46) | 12. | 13 | 4.2 % | 7. | 33 | 5.4 % |
| Creating specific programs in entrepreneurship (35) | 13. | 11 | 3.6 % | 8. | 31 | 5.1 % |
| Establishing web sites for networking specifically designed for students wishing to become entrepreneurs (39) | 14. | 10 | 3.3 % | 6. | 35 | 5.7 % |
| Committing to develop special focus on innovation (50) | 15. | 6 | 2.0 % | 17. | 15 | 2.5 % |
| Commitment of senior administrators (49) | 16. | 4 | 1.3 % | 18. | 13 | 2.1 % |
| Constructing formal, ongoing visits in incubators (44) | 17. | 2 | 0.7 % | 20. | 4 | 0.7 % |
| Developing well-established research center for entrepreneurship (45) | 18. | 2 | 0.7 % | 16. | 15 | 2.5 % |
| Commitment to expanding students' networking through professors and students (53) | 19. | 2 | 0.7 % | 12. | 22 | 3.6 % |
| Commitment to robust, rigorous research in entrepreneurship at the school/department (47) | 20. | 1 | 0.3 % | 19. | 5 | 0.8 % |

groups and teams, while the Croatian students ranked this need fifth. For Croatian students, the most important is the practical involvement of lecturers, teachers, and/or course assistants in entrepreneurship. This activity is also very important for Slovenian students, ranked third. A great difference exists between students, regarding their need for producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, and countries, which is in Slovenia placed second, while in Croatia, fifteenth place. Slovenian students find several academic

activities much more important for their study and abilities building, than their Croatian counterparts, like constructing formal and ongoing networking session with existing/successful entrepreneurs, and constructing formal, ongoing visits to entrepreneurial enterprises. But the Croatian students perceive as much more important development of internship programs in entrepreneurship and establishing web sites for networking specifically designed for students, who wish to become entrepreneur. Presented results reveal that there are differences in the Slovenian and Croatian students’ perception about the importance of needed academic activities.

The above outlined differences in the importance of needed academic activities between students in Slovenia and Croatia, suggest deeper examination of the outlined differences. Thus, we tested the differences between students’ perception of needed academic activities in both countries. Results of independent samples *t* test are outlined in Table 3. In the interest of space, we outline results for the selected top five needed academic actions, as expressed by students in both countries. Thus, Table 3 reports results for the seven most needed academic activities in Slovenia and Croatia.

The results from the *t* test indicate significant differences between Slovenian and Croatian students’ perception about how much single academic activities are needed for their study and building of their entrepreneurial abilities. The Croatian students express significantly a higher need for each of the outlined academic activity, than their Slovenian counterparts. The biggest difference is related to practical involvement of educators in entrepreneurship. Croatian students express

Table 3 *t* test results for differences in needed academic activities between Slovenia and Croatia

| Needed academic activity | | <i>N</i> | Mean | Std. deviation | <i>t</i> | df | sig. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------|----------|------|----------------|----------|---------|-------|---|---------|-----|------|-------|-------|---------|-------|----------|-----|------|-------|--|---------|-----|------|-------|-------|---------|-------|----------|-----|------|-------|--|---------|-----|------|-------|-------|---------|-------|----------|-----|------|-------|--|---------|-----|------|-------|-------|---------|-------|----------|-----|------|-------|---|---------|-----|------|-------|-------|-----|-------|----------|-----|------|-------|---|---------|-----|------|-------|-------|-----|-------|
| Studying in small groups and teams (52) | Croatia | 609 | 5.18 | 1.124 | 6.754 | 533.934 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Slovenia | 305 | 4.58 | 1.308 | | | | Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | Croatia | 609 | 4.66 | 1.222 | 2.328 | 909 | 0.020 | Slovenia | 302 | 4.46 | 1.275 | Practical involvement of lecturers, teachers and /or course assistants in entrepreneurship (42) | Croatia | 609 | 5.24 | 1.027 | 7.577 | 517.067 | 0.000 | Slovenia | 305 | 4.62 | 1.244 | Creating incubators to support students’ initiatives (38) | Croatia | 609 | 4.80 | 1.162 | 5.191 | 547.478 | 0.000 | Slovenia | 306 | 4.34 | 1.319 | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | Croatia | 609 | 4.90 | 1.114 | 7.025 | 565.426 | 0.000 | Slovenia | 306 | 4.32 | 1.218 | Developing internship programs in entrepreneurship (37) | Croatia | 609 | 4.71 | 1.114 | 5.701 | 911 | 0.000 | Slovenia | 304 | 4.25 | 1.199 | Incorporating courses in entrepreneurship within academic programs (36) | Croatia | 609 | 4.58 | 1.215 | 7.207 | 913 | 0.000 |
| Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | Croatia | 609 | 4.66 | 1.222 | 2.328 | 909 | 0.020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Slovenia | 305 | 4.62 | 1.244 | | | | Creating incubators to support students’ initiatives (38) | Croatia | 609 | 4.80 | 1.162 | 5.191 | 547.478 | 0.000 | Slovenia | 306 | 4.34 | 1.319 | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | Croatia | 609 | 4.90 | 1.114 | 7.025 | 565.426 | 0.000 | Slovenia | 306 | 4.32 | 1.218 | Developing internship programs in entrepreneurship (37) | Croatia | 609 | 4.71 | 1.114 | 5.701 | 911 | 0.000 | Slovenia | 304 | 4.25 | 1.199 | Incorporating courses in entrepreneurship within academic programs (36) | Croatia | 609 | 4.58 | 1.215 | 7.207 | 913 | 0.000 | Slovenia | 306 | 3.95 | 1.292 | | | | | | | | | | | | | | | | | | | | |
| Creating incubators to support students’ initiatives (38) | Croatia | 609 | 4.80 | 1.162 | 5.191 | 547.478 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Slovenia | 306 | 4.34 | 1.319 | | | | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | Croatia | 609 | 4.90 | 1.114 | 7.025 | 565.426 | 0.000 | Slovenia | 306 | 4.32 | 1.218 | Developing internship programs in entrepreneurship (37) | Croatia | 609 | 4.71 | 1.114 | 5.701 | 911 | 0.000 | Slovenia | 304 | 4.25 | 1.199 | Incorporating courses in entrepreneurship within academic programs (36) | Croatia | 609 | 4.58 | 1.215 | 7.207 | 913 | 0.000 | Slovenia | 306 | 3.95 | 1.292 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | Croatia | 609 | 4.90 | 1.114 | 7.025 | 565.426 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Slovenia | 306 | 4.32 | 1.218 | | | | Developing internship programs in entrepreneurship (37) | Croatia | 609 | 4.71 | 1.114 | 5.701 | 911 | 0.000 | Slovenia | 304 | 4.25 | 1.199 | Incorporating courses in entrepreneurship within academic programs (36) | Croatia | 609 | 4.58 | 1.215 | 7.207 | 913 | 0.000 | Slovenia | 306 | 3.95 | 1.292 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Developing internship programs in entrepreneurship (37) | Croatia | 609 | 4.71 | 1.114 | 5.701 | 911 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Slovenia | 304 | 4.25 | 1.199 | | | | Incorporating courses in entrepreneurship within academic programs (36) | Croatia | 609 | 4.58 | 1.215 | 7.207 | 913 | 0.000 | Slovenia | 306 | 3.95 | 1.292 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Incorporating courses in entrepreneurship within academic programs (36) | Croatia | 609 | 4.58 | 1.215 | 7.207 | 913 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Slovenia | 306 | 3.95 | 1.292 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

significantly higher needs than Slovenians. The smallest difference tackles exchange programs with students in entrepreneurship programs at different academic institutions, cities, and countries. Based on these findings, we can confirm hypothesis 1, which states that there are significant differences between Slovenia and Croatia in students' perception about the needed academic activities for students' development of entrepreneurial abilities.

Based on above results, we can emphasize that in both countries, students emphasize high importance of teacher's involvement in business practices, making them more competent to fulfill student needs about more practical education. These findings are in line with the cognitions of Morris et al. (2013), who emphasize that practical involvement of teachers in practice is one of the key factors for teachers' success and ability to share knowledge, also based on practical examples. On the other hand, the perceived lack of teacher's practical involvement has been outlined (Pihie and Akmaliah 2009; Gibb 2012), although not enough often to omit this problem.

The Impact of Gender and Study Level on Students' Perception of Needed Academic Activities

Now, we outline results about the role of gender and study level of students for their perception of the importance of needed academic activities. In multivariate linear model, gender and study level were entered as independent variables, and all the seven needed academic activities (outlined in previous paragraphs), were entered as dependent variables. The multivariate tests for both gender (multivariate Pillai $F(7,898) = 2.593$, $p = 0.012$) and study level (multivariate Pillai $F(7,898) = 3.040$, $p = 0.004$) are statistically significant. This indicates that (1) males, when compared to females and (2) undergraduate students, when compared to master students, differ significantly in their perception about the needed academic activities. The results of multivariate analysis are reported in Table 4.

For the independent variable gender, the results show significant differences for one academic activity (48)—namely producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (male: $M = 4.42$; female: $M = 4.72$). For the remaining six needed academic activities, the differences between males and females are not statistically significant. Based on these results, we can support the hypothesis 2, which states that the gender of students significantly influences the students' perception about the needed academic activities for the development of their entrepreneurial abilities, for academic activity (48)—producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, and countries; while we reject the hypothesis 2 for the six remaining needed academic activities.

For the independent variable study level, the results show significant differences for two academic needs; studying in small groups and teams (52) (undergraduate: $M = 4.91$; master studies: $M = 5.18$) and incorporating courses in entrepreneurship within academic programs (36) (undergraduate: $M = 4.32$; master studies: $M = 4.53$). For the remaining five needed academic activities, the differences between undergraduate and master students are not statistically significant. Based on these results, we can support the hypothesis 3, which states that the level of students' study significantly influences students' perception about the needed academic

Table 4 The role of gender and study level for student’s perception of needed academic activities

| Source | Dependent variable | Type III sum of squares | df | Mean square | F | Sig. |
|-----------------|---|-------------------------|----|-------------|-----------|-------|
| Corrected Model | Studying in small groups and teams (52) | 13.964 | 3 | 4.655 | 3.146 | 0.024 |
| | Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | 20.104 | 3 | 6.701 | 4.374 | 0.005 |
| | Practical involvement of lecturers, teachers and /or course assistants in entrepreneurship (42) | 3.439 | 3 | 1.146 | 0.879 | 0.452 |
| | Creating incubators to support students’ initiatives (38) | 2.523 | 3 | 0.841 | 0.551 | 0.648 |
| | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | 1.933 | 3 | 0.644 | 0.464 | 0.708 |
| | Developing internship programs in entrepreneurship (37) | 3.275 | 3 | 1.092 | 0.812 | 0.488 |
| | Incorporating courses in entrepreneurship within academic programs (36) | 11.391 | 3 | 3.797 | 2.343 | 0.072 |
| Intercept | Studying in small groups and teams (52) | 17630.684 | 1 | 17630.684 | 11915.516 | 0.000 |
| | Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | 14408.506 | 1 | 14408.506 | 9403.694 | 0.000 |
| | Practical involvement of lecturers, teachers and /or course assistants in entrepreneurship (42) | 17568.286 | 1 | 17568.286 | 13465.562 | 0.000 |
| | Creating incubators to support students’ initiatives (38) | 14832.445 | 1 | 14832.445 | 9717.693 | 0.000 |
| | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | 15446.242 | 1 | 15446.242 | 11120.740 | 0.000 |
| | Developing internship programs in entrepreneurship (37) | 14489.145 | 1 | 14489.145 | 10770.236 | 0.000 |
| | Incorporating courses in entrepreneurship within academic programs (36) | 13544.989 | 1 | 13544.989 | 8359.335 | 0.000 |
| Gender | Studying in small groups and teams (52) | 0.127 | 1 | 0.127 | 0.086 | 0.769 |
| | Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | 17.431 | 1 | 17.431 | 11.376 | 0.001 |
| | Practical involvement of lecturers, teachers and /or course assistants in entrepreneurship (42) | 0.005 | 1 | 0.005 | 0.004 | 0.948 |
| | Creating incubators to support students’ initiatives (38) | 0.400 | 1 | 0.400 | 0.262 | 0.609 |
| | | 0.710 | 1 | 0.710 | 0.511 | 0.475 |

Table 4 (continued)

| Source | Dependent variable | Type III sum of squares | df | Mean square | <i>F</i> | Sig. |
|-------------|---|-------------------------------|----|----------------|----------|-------|
| | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | | | | | |
| | Developing internship programs in entrepreneurship (37) | 0.962 | 1 | 0.962 | 0.715 | 0.398 |
| | Incorporating courses in entrepreneurship within academic programs (36) | 0.561 | 1 | 0.561 | 0.346 | 0.556 |
| Study level | Studying in small groups and teams (52) | 12.593 | 1 | 12.593 | 8.511 | 0.004 |
| | Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | 0.464 | 1 | 0.464 | 0.303 | 0.582 |
| | Practical involvement of lecturers, teachers and /or course assistants in entrepreneurship (42) | 0.152 | 1 | 0.152 | 0.117 | 0.733 |
| | Creating incubators to support students' initiatives (38) | 1.849 | 1 | 1.849 | 1.211 | 0.271 |
| | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | 0.000 | 1 | 0.000 | 0.000 | 0.987 |
| | Developing internship programs in entrepreneurship (37) | 1.021 | 1 | 1.021 | 0.759 | 0.384 |
| | Incorporating courses in entrepreneurship within academic programs (36) | 8.651 | 1 | 8.651 | 5.339 | 0.021 |
| Gender * | Studying in small groups and teams (52) | 0.687 | 1 | 0.687 | 0.464 | 0.496 |
| Study level | Producing exchange programs with students in entrepreneurship programs at different academic institutions, cities, countries (48) | 0.516 | 1 | 0.516 | 0.337 | 0.562 |
| | Practical involvement of lecturers, teachers and /or course assistants in entrepreneurship (42) | 2.769 | 1 | 2.769 | 2.123 | 0.145 |
| | Creating incubators to support students' initiatives (38) | 0.757 | 1 | 0.757 | 0.496 | 0.481 |
| | Constructing formal and ongoing networking sessions with existing/ successful entrepreneurs (41) | 0.333 | 1 | 0.333 | 0.240 | 0.624 |
| | Developing internship programs in entrepreneurship (37) | 0.411 | 1 | 0.411 | 0.306 | 0.580 |
| | Incorporating courses in entrepreneurship within academic programs (36) | 3.642 | 1 | 3.642 | 2.248 | 0.134 |

activities for the development of their entrepreneurial abilities, for academic needs studying in small groups and teams (52), and incorporating courses in entrepreneurship within academic programs (36), while we reject the hypothesis 3 for the remaining five needed academic activities.

In terms of the impact of gender and the study level on student's perception about the needed academic activities, the gender contributes to the significant differences in perception of males and females only for one needed academic activity. Previous studies—e.g., by Peterman and Kennedy (2003) and Mitchell (2007), reported about minor influence of gender on perception of needed academic activities; this matches with business studies, where authors report about the minor role of gender on perception of researched phenomena—e. g., see Davidsson (1991) and Rutherford and Holt (2007).

Implications

Practical Implications

This study provides several implications. The main practical implication is focused on academia, since results provide an insight into the students' perception, which academic activities are most important for development of students' entrepreneurship abilities. Higher education institutions can compare their existing activities and identify gaps in their education programs. Based on the identified gaps, educational institutions can identify the needed actions, which will reduce the gap between what students need and what education institution is offering. For instance, studying in smaller groups will require from organizations more effort of teachers and more contact hours offered to students. Anyway, this feature is way more attainable in short-term, in comparison for instance to the fulfilling students' needs that academic staff should be more involved in the practice of entrepreneurship. Second, our results could be also useful for broader use, for instance on national/ministry level. For instance, due to the higher emphasized students' need in both counties, for practical involvement of teachers in entrepreneurship, a set of instruments and adjacent measures should be developed in order to better link academia with entrepreneurial practices—e.g., through programs and activities for enhancing collaboration between academia and practice. Such initiative would importantly contribute to the improvement to the most desired academic activities—i.e., more practical involvement of teachers in practice and provides a fertile ground for realization of several students' ideas, via solving actual problems for companies. In frame of enhancing practical involvement of teachers in business practice, higher education institutions should adapt their models, which will enable tighter cooperation and knowledge and practice exchange between academia and business. Current forms of cooperation, like partnering in projects, participation of specialists from practice in education process, and students' participations in workshops in organizations, should be strengthened (Mrak et al. 2004; Potocan et al. 2008; EuropeanUnion 2008). Additionally, opportunities exist for utilization of other innovative initiatives, like joint programs between university and business sector—e.g., Master of Business Administration (MBA) and Doctor of Business Administration (DBA) programs, higher proportion of practical work of students in organizations, active participation of organizations in selection of thesis problems and preparation of graduation work, by providing practical supervisors (Koh 1996; Rubin and Dierdorff 2009). This type of cooperation between academia and business in education process can generate several benefits for participants of the education process. Teachers will gain even more experiences and can mediate their knowledge to organizations. Students can become more familiar with the actual state of business practice and they will obtain more accurate and up-to-date

knowledge as well as first-hand practical experiences. Organizations will benefit with the transfer of knowledge from higher education institutions, increasing their recognition and reputation, and have an opportunity to create skilled students for business practice.

Limitations and Future Research Directions

This paper has several limitations. First, the list of needed academic activities that are aimed to support development of students' entrepreneurship abilities is limited to 20. Since the activities were formulated based on statements in various studies (see for instance Peterman and Kennedy 2003; Wright et al. 2008), the list of activities may not be exhaustive. Second, the research is focused on two countries from Central Europe, which have specific backgrounds for development of entrepreneurship, due to the transition processes to a market economy (Potocan et al. 2013; Potocan and Nedelko 2014) and EU membership. They differ from other transition economies and well-developed Western economies, which may have an impact on students' perception about the needed academic activities for development of their entrepreneurial abilities. Thus, the focus on Slovenia and Croatia could limit the generalization of our cognitions to other countries. Third, a minor limitation of the paper results from the utilization of a self-assessment approach (Schwartz 1999), where students assessed importance of needed academic activities that are aimed to support the development of students' entrepreneurship abilities. Also, the use of convenience sampling in this study weakens research objectivity and the relatively small size of the sample somewhat limits generalizations (Jan and Haque 2014). In the framework of researching students' samples, it could be questioned also students' objectivity, due to the voluntary nature of students' participation in the survey, which could affect the research results. Studies emphasized concerns about students' objectiveness, where most common are those about students' assessing their teachers (Goldberg and Callahan 1991). Finally, another limitation is the lack of practical experiences of students, since students are only partially involved in business practices and consequently may have narrower knowledge than what is actually needed in practice. Thus, it may happen that students assign high importance to single needed activity, although these activity is perhaps not of very high importance in practice. For example, Sexton et al. (1997) emphasized that most studies addressing learning needs of students, have examined students in an academic environment, away from real-world problems, in a relatively structured setting of a specific duration and with similar levels of competency and knowledge. This means that students can have different opinions, than situation is in actual business practice. Our concerns, about the lack of students' practical experiences, when assessing actual needs, are drawn on the critique of Rubin and Dierdorff (2009) who emphasized that the MBA is wholly out-of-touch with the "real world" and is irrelevant to the needs of practicing managers.

In terms of future research directions, several ways are possible. First, to expand the research also on well-developed economies, which have different circumstances and in turn different needs to develop entrepreneurs and their abilities. This presumption is based on the perceived differences between the well-developed and catching-up economies (Z. Nedelko and Potočan 2016; Potocan and Nedelko 2014; Potočan and Mulej 2007). Second, interesting will be to compare differences between the importance of

needed academic activities between students in considered samples and high-ranked university, which are highly ranked according to different rankings, e.g., Financial Times, Shanghai ranking (Aguillo et al. 2010; Usher and Savino 2007). Third, we can examine how students' practical experiences impact on their perception of needed academic activities (Rubin and Dierdorff 2009; Koh 1996). Finally, one should include in the analysis also employees, besides students, and compare the hierarchy of needed academic activities for both groups. Thus, this will give us an insight, how the importance and hierarchy of needed academic activities are changing, when comparing students and employees with various years of working experiences. This research direction has its roots in findings that peoples' priorities change during peoples' life (Rokeach 1973; Potocan et al. 2013), and how the lack of practical experiences of students, can shape their answers (Koh 1996; Hills 1988).

Conclusions

The paper discusses an interesting approach, since it outlines the importance of needed activities for the development of students' entrepreneurial abilities, based on the students' perception. Results for two countries in Central Europe, namely Slovenia and Croatia, are outlined. They reveal some differences in Slovenian and Croatian students' perceptions about importance of different activities for building their entrepreneurial abilities. In both countries, students' desire their teachers to be more involved in the entrepreneurial practice. The role of gender is minor, while the study level strongly impacts student's perception about the importance of needed academic activities for building their entrepreneurial abilities. This study presents a fertile ground for managing actions concerning curricula improvement, organizations of study, and other activities.

References

- Acito, F., McDougall, P. M., & Smith, D. C. (2008). One hundred years of excellence in business education: what have we learned? *Business Horizons*, 51(1), 5–12. doi:10.1016/j.bushor.2007.08.004.
- Afuah, A. (2003). *Innovation Management: Strategies, Implementation, and Profits*. New York: Oxford University Press.
- Aguillo, I. F., Bar-Ilan, J., Levene, M., & Ortega, J. L. (2010). Comparing university rankings. *Scientometrics*, 85(1), 243–256. doi:10.1007/s11192-010-0190-z.
- Ajzen, I. (2005). *Attitudes, personality, and behavior*. Beckshire: Open University Press.
- Alexander, C. (1983). The New Economy. *Time magazine*, May 30, 121(22), 62–70. Retrieved from <http://content.time.com/time/magazine/article/0,9171,926013,00.html>
- Altmann, A., & Ebersberger, B. (2013). *Universities in Change: Managing Higher Education Institutions in Age of Globalization*. New York: Springer.
- Birley, S., & Westhead, P. (1994). A taxonomy of business start-up reasons and their impact on firm growth and size. *Journal of Business Venturing*, 9(1), 7–31. doi:10.1016/0883-9026(94)90024-8.
- Botsaris, C., & Vamvaka, V. (2016). Attitude toward entrepreneurship: structure, prediction from behavioral beliefs, and relation to entrepreneurial intention. *Journal of the Knowledge Economy*, 7(2), 433–460. doi:10.1007/s13132-014-0227-2.
- Busenitz, L. W., West III, G. P., Sheperd, D., Nelson, T., Chandler, G. N., & Zacharakis, A. (2003). Entrepreneurship research in emergence: past trends and future directions. *Journal of Management*, 29(3), 285–308. doi:10.1016/s0149-2063(03)00013-8.

- Camelo-Ordaz, C., Fernandez-Alles, M., Ruiz-Navarro, J., & Sousa-Ginel, E. (2012). The intrapreneur and innovation in creative firms. *International Small Business Journal*, 30(5), 513–535.
- Carayannis, E. G., & Campbell, D. F. J. (2009). ‘Mode 3’ and ‘Quadruple Helix’: toward a 21st century fractal innovation ecosystem. *International Journal of Technology Management*, 46(3–4), 201–234.
- Carayannis, E. G., Pirzadeh, A., & Popescu, D. (2014). *Institutional Learning and Knowledge Transfer across Epistemic Communities: New Tools of Global Governance*. New York: Springer.
- Carayannis, E. G., & Rakhmatullin, R. (2014). The quadruple/quintuple innovation helixes and smart specialisation strategies for sustainable and inclusive growth in Europe and beyond. *Journal of the Knowledge Economy*, 5(2), 212–239. doi:10.1007/s13132-014-0185-8.
- Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13–39. doi:10.1016/s0883-9026(02)00078-2.
- Conway, S., & Steward, F. (2009). *Managing and Shaping Innovation*. Oxford: Oxford University Press.
- Daghfous, A. (2007). Absorptive capacity and innovative enterprise systems: a two-level framework. *International Journal of Innovation and Learning*, 4(1), 60–73. doi:10.1504/ijil.2007.011475.
- Davidsson, P. (1991). Continued entrepreneurship—ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405–429. doi:10.1016/0883-9026(91)90028-c.
- Dill, D. D. (1995). University-industry entrepreneurship: the organization and management of American university technology transfer units. *Higher Education*, 29(4), 369–384. doi:10.1007/bf01383958.
- Drucker, P. (1969). *The Age of Discontinuity: Guidelines to Our Changing Society*. New York: Harper and Row.
- Dubina, I., Carayannis, E., & Campbell, D. (2012). Creativity economy and a crisis of the economy? Coevolution of knowledge, innovation, and creativity, and of the knowledge economy and knowledge society. *Journal of Knowledge Economy*, 3(1), 1–24.
- Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000). The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm. *Research Policy*, 29(2), 313–330.
- European Union (2008). *Entrepreneurship in Higher Education, Especially within Non-Business Studies*. Brussels: EU, Commission of the European Communities, Directorate-General for Enterprise and Industry.
- Fazio, R. H., Powell, M. C., & Herr, P. M. (1983). Toward a process model of the attitude-behavior relation—accessing ones attitude upon mere observation of the attitude object. *Journal of Personality and Social Psychology*, 44(4), 723–735. doi:10.1037/0022-3514.44.4.723.
- Gibb, A. (2012). Exploring the Synergistic Potential in Entrepreneurial University Development: Towards the Building of a Strategic Framework. 2012, doi:10.3402/aie.v3i0.16742.
- Goldberg, G., & Callahan, J. (1991). Objectivity of student evaluations of instructors. *Journal of Education for Business*, 66(6), 377–378. doi:10.1080/08832323.1991.10117505.
- Grunbaum, L. (1997). Attitudes of future managers towards business ethics: a comparison of Finnish and American business students. *Journal of Business Ethics*, 16(4), 451–463. doi:10.1023/a:1017909311756.
- Hage, J., & Meus, M. (2009). *Innovation, Science, and Institutional Change: A Research Handbook*. Oxford: Oxford University Press.
- Hansemark, O. C. (1998). The effects of an entrepreneurship programme on need for achievement and locus of control of reinforcement. *International Journal of Entrepreneurial Behavior & Research*, 4(1), 28–50. doi:10.1108/13552559810203957.
- Hills, G. E. (1988). Variations in university entrepreneurship education: an empirical study of an evolving field. *Journal of Business Venturing*, 3(2), 109–122. doi:10.1016/0883-9026(88)90021-3.
- Ho, R. (2006). *Handbook of Univariate and Multivariate Data Analysis and Interpretation with Spss*. Boca Raton: Chapman & Hall/CRC.
- Holt, D. T., Rutherford, M. W., & Clohessy, G. R. (2007). Corporate entrepreneurship: an empirical look at individual characteristics, context, and process. *Journal of Leadership & Organizational Studies*, 13(4), 40–54. doi:10.1177/10717919070130040701.
- Howkins, J. (2001). *The Creative Economy: How People Make Money from Ideas*. London: Penguin.
- Ireland, R., & Hitt, M. (1997). Performance strategies for high growth entrepreneurial firms. *Frontiers of Entrepreneurship Research*, 9(1), 101–104.
- Ireland, R. D., & Ketchen, D. J., Jr. (2008). Interesting problems and interesting research: a path to effective exchanges between managers and scholars. *Business Horizons*, 51(1), 65–71. doi:10.1016/j.bushor.2007.10.001.
- Jan, M. T., & Haque, A. (2014). Antecedents of the use of online banking by students in Malaysia extended Tam validated through Sem. *International Business Management*, 8(5), 277–284. doi:10.3923/ibm.2014.277.284.
- Kaufman, B. E. (2015). Market competition, Hrm, and firm performance: the conventional paradigm critiqued and reformulated. *Human Resource Management Review*, 25(1), 107–125. doi:10.1016/j.hrmr.2014.08.001.

- Kimberly, J. R., & Evanisko, M. J. (1981). Organizational innovation—the influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal*, 24(4), 689–713. doi:10.2307/256170.
- Klimoski, R. (2007). Introduction: “The Times They Are A’changin’”. *Academy of Management Learning & Education*, 6(2), 234–235.
- Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: a study of Hong Kong Mba students. *Journal of Managerial Psychology*, 11(3), 12–25. doi:10.1108/02683949610113566.
- Korten, D. (2009). *Agenda for a New Economy: From Phantom Wealth to Real Wealth*. San Francisco: Berrett-Koehler.
- Kuratko, D. (2016). *Entrepreneurship: Theory, Process, and Practice*. Nashville: Cengage/South-Western Publisher.
- Lafley, A., & Johnson, M. (2010). *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston: Harvard Business Press.
- Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative data analysis tools: a call for data analysis triangulation. *School Psychology Quarterly*, 22(4), 557–584. doi:10.1037/1045-3830.22.4.557.
- Leydesdorff, L. (2006). *The Knowledge-Based Economy*. Boca Raton: Universal Publishers.
- Mandel, R., & Noyes, E. (2016). Survey of experiential entrepreneurship education offerings among top undergraduate entrepreneurship programs. *Education and Training*, 58(2), 164–178. doi:10.1108/et-06-2014-0067.
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategic Safari: A Guide Tour through the Wilds of Strategic Management*. New York: The Free Press.
- Miron, E., Erez, M., & Naveh, E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? *Journal of Organizational Behavior*, 25(2), 175–199. doi:10.1002/job.237.
- Mitchell, T. R. (2007). The academic life: realistic changes needed for business school students and faculty. *Academy of Management Learning & Education*, 6(2), 236–251.
- Morris, M., Kuratko, D., & Cornwall, J. (2013). *Entrepreneurship Programs and the Modern University*. Cheltenham and Northampton: Edward Elgar Publishing.
- Mrak, M., Rojcek, M., & Silva-Jauregui, C. (2004). *Slovenia: From Yugoslavia to the European Union*. Washington: The World Bank.
- Mueller, P. (2006). Exploring the knowledge filter: how entrepreneurship and university–industry relationships drive economic growth. *Research Policy*, 35(10), 1499–1508. doi:10.1016/j.respol.2006.09.023.
- Nedelko, Z., & Cimu, C. E. (2009). *E-Literature in E-Learning (Icvl 2009 - Proceedings of the 4th International Conference on Virtual Learning)*.
- Nedelko, Z., Potocan, V., & Cimu, C. E. (2011). Readiness for E-Learning. In T. Frunzeti, V. Popescu, R. Jugureanu, V. Stefan, & C. Radu (Eds.), *Anywhere, Anytime - Education on Demand, Vol I* (pp. 308–315, Elearning and Software for Education).
- Nedelko, Z., & Potočan, V. (2016). Management practices utilization in organizations—a comparison between catching-up and well-developed economies. *Management (Croatia)*, 21, 1–20.
- Newman, F., Couturier, L., & Scurry, J. (2004). *The Future of Higher Education*. San Francisco: Jossey-Bass.
- Onur, A., Sahin, E., & Tekkaya, C. (2012). An investigation on value orientations, attitudes and concern towards the environment: the case of Turkish elementary school students. *Environmental Education Research*, 18(2), 271–297. doi:10.1080/13504622.2011.614690.
- Peet, R., & Hartwick, E. (2009). *Theories of Development: Contentions, Arguments, Alternatives*. New York, NY: Guilford Press.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: influencing students’ perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129–144. doi:10.1046/j.1540-6520.2003.00035.x.
- Philpott, K., Dooley, L., O’Reilly, C., & Lupton, G. (2011). The Entrepreneurial University: Examining the Underlying Academic Tensions. *Technovation*, 31(4), 161–170. doi:http://dx.doi.org/10.1016/j.technovation.2010.12.003.
- Pihie, L., & Akmaliah, Z. (2009). Entrepreneurship as a career choice: an analysis of entrepreneurial self-efficacy and intention of university students. *European Journal of Social Science*, 9(2), 338–349.
- Potocan, V., Mulej, M., & Cancer, V. (2008). Influence, of values, culture, ethics and norms on economic results: case of Slovenia. *Drustvena Istrazivanja*, 17(3), 373–395.
- Potocan, V., Mulej, M., & Nedelko, Z. (2013). The influence of employees’ ethical behavior on enterprises’ social responsibility. *Systemic Practice and Action Research*, 26(6), 497–511. doi:10.1007/s11213-013-9299-3.
- Potocan, V., & Nedelko, Z. (2014). Management innovativeness: a case of Slovenian small and medium enterprises. *Transformations in Business & Economics*, 13(1), 41–59.

- Potočan, V., & Mulej, M. (2007). *Transition into Innovative Enterprise*. Maribor, Slovenia: Faculty of Economics and Business.
- Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annual Review of Sociology*, 30, 199–220.
- Ralston, D., Egri, C., Furrer, O., Kuo, M.-H., Li, Y., Wangenheim, F., et al. (2014). Societal-level versus individual-level predictions of ethical behavior: a 48-society study of collectivism and individualism. *Journal of Business Ethics*, 122(2), 283–306. doi:10.1007/s10551-013-1744-9.
- Ralston, D. A., Egri, C. P., Reynaud, E., Srinivasan, N., Furrer, O., Brock, D., et al. (2011). A twenty-first century assessment of values across the global workforce. *Journal of Business Ethics*, 104(1), 1–31. doi:10.1007/s10551-011-0835-8.
- Rideout, E. C., & Gray, D. O. (2013). Does entrepreneurship education really work? a review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of Small Business Management*, 51(3), 329–351. doi:10.1111/jbsbm.12021.
- Rokeach, M. (1973). *The Nature of Human Values*. New York: The Free Press.
- Rothaermel, F. T., Agung, S. D., & Jiang, L. (2007). University entrepreneurship: a taxonomy of the literature. *Industrial and Corporate Change*, 16(4), 691–791. doi:10.1093/icc/dtm023.
- Rubin, R. S., & Dierdorff, E. C. (2009). How relevant is the Mba? Assessing the alignment of required curricula and required managerial competencies. *Academy of Management Learning and Education*, 8(2), 208–224.
- Rutherford, M. W., & Holt, D. T. (2007). Corporate entrepreneurship—an empirical look at the innovativeness dimension and its antecedents. *Journal of Organizational Change Management*, 20(3), 429–446. doi:10.1108/09534810710740227.
- Scheinberg, S., & MacMillan, I. C. (1988). An 11 County Study of Motivations to Start a Business. In B. A. Kirchoff, W. A. Long, W. E. McMullan, K. H. Vesper, & W. E. Wetzel Jr. (Eds.), *Frontiers of Entrepreneurship Research* (pp. 669–687). Wellesley: Babson College.
- Schumpeter, J. A. (1992). *Capitalism, Socialism, and Democracy*. London: Routledge.
- Schwartz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, 54(2), 93–105.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., & Smith, J. (1994). *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organisation*. Sydney: Doubleday/Currency.
- Sexton, D. L., Upton, N. B., Wacholtz, L. E., & McDougall, P. P. (1997). Learning Needs of Growth-Oriented Entrepreneurs. *Journal of Business Venturing*, 12(1), 1-8, doi:http://dx.doi.org/10.1016/S0883-9026(96)00037-7.
- Teece, D. J. (1998). Capturing value from knowledge assets: the new economy, markets for know-how, and intangible assets. *California Management Review*, 40(3), 55–79.
- Tidd, J., & Bessant, J. (2009). *Managing Innovation: Integrating Technological, Market and Organizational Change*. Chichester: Wiley.
- Usher, A., & Savino, M. (2007). A global survey of university ranking and league tables. *Higher Education in Europe*, 32(1), 5–15. doi:10.1080/03797720701618831.
- Wright, M., Clarysse, B., Lockett, A., & Knockaert, M. (2008). Mid-Range Universities' Linkages with Industry: Knowledge Types and the Role of Intermediaries. *Research Policy*, 37(8), 1205-1223, doi:http://dx.doi.org/10.1016/j.respol.2008.04.021.
- Yusof, M., & Jain, K. K. (2010). Categories of university-level entrepreneurship: a literature survey. *International Entrepreneurship and Management Journal*, 6(1), 81–96. doi:10.1007/s11365-007-0072-x.