International Journal of Entrepreneurship Education 1(4): 613-632.

East-West Differences in Entrepreneurial Self-Efficacy: Implications for Entrepreneurship Education in Transition Economies

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Abstract. Undergraduate business students in Croatia and the United States were surveyed to assess differences in entrepreneurial self-efficacy between the two groups. Controlling for the effects of entrepreneurial orientation and gender, self-efficacy was lower among Croatian students for tasks associated with the marshaling phase of venture creation process. No significant differences were found between the two groups in self-efficacy for tasks associated with the searching, planning, and implementing phases. Results suggest that while venture creation resources are relatively scarce in transition economies, entrepreneurship education programs in both the East and West need more emphasis on developing skills related to resource gathering.

Keywords: transition economies, entrepreneurship, self-efficacy, entrepreneurship education, Croatia, entrepreneurial potential.

1. Introduction

Entrepreneurial activity has for several decades been acknowledged as a major contributing factor to the economic vitality of a nation or region (Schumpter, 1934; Kent, 1982). Entrepreneurs are viewed as the engines of a market economy and the ventures they create serve as catalysts for technological progress (Schumpeter, 1934; Hagen, 1962; Kilby, 1971; Baumol, 1986; Kirzner, 1997).

The process of transition in Central and Eastern Europe has opened the door for entrepreneurial activity providing opportunity for individuals of various social levels and professions. As a result, many of the economic reform programs in the former centrally planned economies of Central and Eastern Europe emphasize the promotion of entrepreneurial activity (Bahtijarevic-Šiber, 1994; Johnson & Loveman, 1995; Luthans, Stajkovic, & Ibrayeva, 2000).

While the economic development benefits of entrepreneurship and venture creation activities are generally known and accepted, less is known about how to actually stimulate and encourage individuals to initiate new ventures. The most progress has been made in the United States where there is a relatively long history of programs, both at the Federal and State levels, intended to stimulate entrepreneurial activity and new venture formation. These include programs that provide low interest government loans, government-backed equity funding, grants for innovative research, and government contract "set-asides" for small business. In transition economies the more successful reform programs include privatization schemes that put the assets of former state-owned enterprises into the hands of nascent entrepreneurs (Johnson & Loveman, 1995; Dobrowski, Gomulka, & Rostowski, 2000).

1.1. Entrepreneurship Education

Another approach to stimulating entrepreneurial activity is through formal education and training programs. In the United States the number of entrepreneurship education programs offered at American universities has increased dramatically over the last several decades. For example, Robinson and Haynes reported that 81.5% of the 232 universities they surveyed offer at least one course in entrepreneurship (Robinson & Haynes, 1991). In a similar study, Solomon and Fernald reported that between 1979 and 1986 the number of collegiate entrepreneurship courses increased 428% at the 300+ four-year colleges and universities responding to their questionnaire (Solomon & Fernald, 1991).

Despite progress in the United States and in the West toward providing entrepreneurship training, the same cannot be said for the transition economies. Education in economics and business administration in the transition economies has centered on the management of large, state-owned enterprises covering the rudiments of management, marketing, and business finance. Specific programs for entrepreneurship and small business management are relatively rare.

Although business schools and universities in both the East and West have demonstrated a serious interest in providing educational programs to assist in the development of successful entrepreneurs, the increase in demand for entrepreneurship courses at the university level has challenged business educators to develop appropriate curriculum. In fact, there is some debate as to whether these relatively new entrepreneurship programs at universities are providing the nascent entrepreneur with the necessary tools to be successful (e.g., Bunch, 1995; Davis & McEacharn, 1995; Hillis & Morris, 1995; Krueger & Hamilton, 1995; Martello, 1995; McMullan & Long, 1987; Relf, 1995). Moreover, there is lack of clarity as to exactly what these "tools" should be.

For example, questions are raised as to what extent the entrepreneurship student should receive training in accounting, bookkeeping, finance, marketing, and management principles. Is it important for the student to be mentored by an experienced entrepreneur? Should the student work in an entrepreneurial firm as part of his/her training (i.e. internship)? Should the writing of a formal business plan also be required? An additional problem in the transition countries is finding qualified teachers, instructors, and professors who themselves have personal knowledge and/or experience in managing a small enterprise.

To properly address these questions and problems requires a theoretical framework to guide the design of formal entrepreneurship education programs and to objectively measure their effectiveness. Recently, researchers have proposed such a framework based on the social psychology construct known as *self-efficacy*. In the following sections we provide some background on the self-efficacy construct and present a theoretical model that includes entrepreneurial self-efficacy as a variable in explaining entrepreneurial behavior. Based on this model, we hypothesize that entrepreneurial self-efficacy among business students is lower in transition economies than in the United States. This hypothesis is tested using comparable samples of students from both the U.S. and Croatia. Results of the study are discussed in terms of implications for entrepreneurship education in transition economies.

2. Entrepreneurial Self-Efficacy

The concept of *self-efficacy* is derived from social learning theory and refers to a person's belief in his or her capability to perform a particular task (Bandura, 1977). More specifically, self-efficacy has been defined as "…belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands…" (Wood & Bandura, 1989, p. 408). Self-efficacy is based upon past experience and anticipation of future obstacles. It affects one's beliefs about whether or not specific goals are attainable (Gist & Mitchell, 1992). It influences choice, effort, and perseverance. If self-efficacy is low, an individual will not act, even if there is a perceived social approval for that behavior (Boyd & Vozikis, 1994).

According to Bandura, individuals develop and strengthen beliefs about their ability to perform a specific task in four ways: (1) mastery experiences; (2) modeling; (3) social persuasion; and (4) judgments of their own physiological states (Bandura, 1982; Wood & Bandura, 1989).

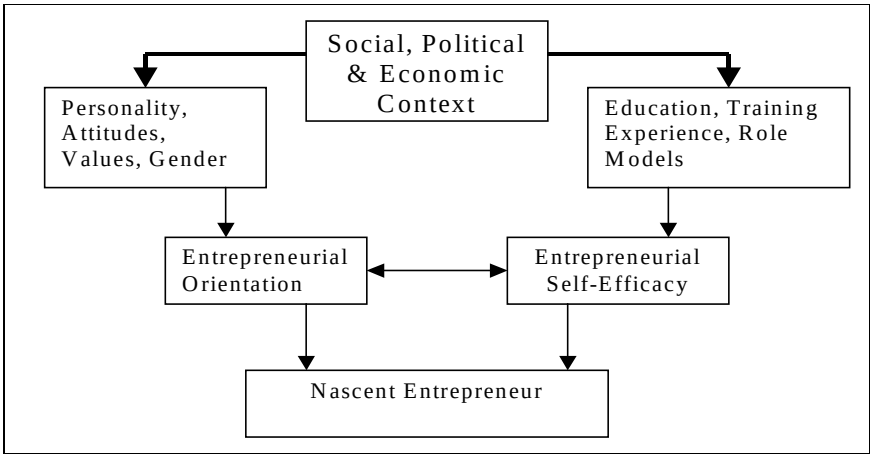
Recent research has demonstrated that entrepreneurial self-efficacy is potentially a key variable in determining whether an individual who is already psychologically predisposed toward entrepreneurship will actually put forth the necessary effort (both cognitive and behavioral) to turn an intention into a

reality. Several entrepreneurship theorists have recently proposed that self-efficacy may indeed play an instrumental role in the new venture creation process (Boyd & Vozikis, 1994; Scherer, Adams, Carley, & Wiebe, 1989). Boyd and Vozikis for example, proposed that self-efficacy influences the development of entrepreneurial intentions and hence the probability of venture creation. They argue that one's intention to start a venture is formed in part by his or her perception about the outcome anticipated - i.e. will the venture succeed or fail? Few people form intentions about engaging in entrepreneurial activities if they believe there is a high probably of failure. By extension, a person will have the intention to create a new venture, or act upon an existing entrepreneurial intention, only when self-efficacy is high in relation to the perceived requirements of a specific opportunity (Boyd and Vozikis, 1994).

2.1. Motivating Entrepreneurial Behavior

Nascent entrepreneurs are individuals with salient intentions toward starting a business venture at some point in the near future. However, before intentions can be formed, one must possess a "potential" for entrepreneurship (Krueger & Brazeal, 1994). One's potential for entrepreneurship is a latent attribute serving as a catalyst for entrepreneurial intention (nascence) and subsequent action. Following Krueger & Brazeal (1994) and Mueller, Thomas, & Jaeger (2002), we model entrepreneurial intentions as derived from two related but distinct individual attributes: *entrepreneurial orientation* and *entrepreneurial self-efficacy*.

Figure 1: Motivating Entrepreneurial Behavior



Entrepreneurial Orientation. Not all individuals are predisposed to engaging in entrepreneurial activity. Individual differences in family background, social status, personal characteristics, values, gender, and innate abilities give rise to differences in what some researchers refer to as an *entrepreneurial orientation* (Mueller, Thomas, and Jaeger, 2002). At the national or regional level, the prevalence of individuals with an entrepreneurial orientation can be either enhanced or constrained by social, political, and economic factors such as national culture, level of economic development, political system, and market structure (Mueller, Thomas, and Jaeger, 2002). As depicted in Figure 1, these contextual and personal factors combine to influence an individual's perception of the social and physical environment as well as shaping his/her attitudes, beliefs, and values about entrepreneurship (Mueller, Thomas, and Jaeger, 2002).

Entrepreneurial Self-Efficacy. As shown in Figure 1, having an entrepreneurial orientation is a necessary but not sufficient condition for motivating entrepreneurial intentions. Self-efficacy also plays a role. Although an individual may been entrepreneurially oriented, s(he) may lack the appropriate hands-on experience, training, role models, or education thereby inhibiting self-efficacy to the point where entrepreneurial intentions and desires are dampened. Entrepreneurial self-efficacy (ESE) is also affected by national or regional context to the extent that opportunities for gaining confidence through experience and role modeling are prevalent (enhancing ESE) or limited (reducing ESE).

2.2. Transition Economies

As noted in the introduction, economic constraints are not the only difficulty facing the transitional economies in their effort to stimulate entrepreneurial activity. Countries in transition often lack a sufficient number of individuals with the skills, experience, and background needed to successfully engage in entrepreneurial activities[1]. Of primary concern is whether individuals with entrepreneurial attitudes and inclinations (i.e. an entrepreneurial orientation) and/or those possessing high entrepreneurial self-efficacy exist in numbers comparable to Western economies where business education and training is commonplace.

Students of economics and business administration are a particular interesting segment of the population in this respect. First, majoring in economics or business administration is a general indicator of one's interest in

1. Several studies have shown that there are significant differences among countries in transition in the potential for entrepreneurial activity. In the case of Croatia, the potential is low relative to Western economies, but higher than most of the other countries in transition.

business-related activities. Thus business students can be viewed as an important source of nascent entrepreneurs. Second, education in economics and/or business administration can potentially provide the appropriate motivation for one to consider entrepreneurship as a career option.

The results of several studies however, suggest that business and economics students in transition countries are less likely to exhibit traits associated with successful venture initiation than are their counterparts in the United States and Western Europe. Based on the results of a seventeen-country study conducted in 1997, Mueller, Thomas, and Jaeger found that business students in Croatia, Russia, Slovenia, and the Czech Republic were significantly less predisposition toward entrepreneurial activity than were business students in the United States, Canada, and Mexico (Mueller, Thomas, & Jaeger, 2002). In a related study, Mueller and Goic found differences among the transition countries with Slovenia, Romania, and Poland scoring significantly higher on entrepreneurial orientation among its business students compared to business students in the Czech Republic, Croatia, and Russia (Mueller & Goic, 1999).

In non-free market (command) economies, individuals have little opportunity to observe entrepreneurs in action or ascertain how the entrepreneurial process functions. Furthermore, free markets generate sources of venture capital - crucial for the financing of entrepreneurial ventures. Historically, in non-free market economies, the main sources of potential venture capital have been government institutions, primarily banks. Furthermore, these local sources of capital have been extremely scarce with only a few of the transition economies benefitting from an inflow of foreign capital. Thus in the transition economies there is little experience in evaluating entrepreneurial ventures and therefore a reluctance to fund such ventures. These conditions tend to inhibit the perception of entrepreneurial opportunity as the relative absence of capital makes it difficult to actually realize entrepreneurial dreams. Thus self-efficacy in entrepreneurship is inhibited.

Given that the current social, political and economic conditions in the transition economies are not particularly conducive to entrepreneurial activity - at least relative to the U.S. - we hypothesize that:

H1: The likelihood of an entrepreneurial orientation is greater among business students in the United States than among business students in transition economies.

H2: Entrepreneurial self-efficacy is lower among business students in transition economies than among business students in the United States.

These hypotheses were tested using data taken from an empirical study of students from the United States and Croatia. Methodology and results of the

study along with implications for entrepreneurship education in Croatia and other transition economies of Central and Eastern Europe are discussed below.

3. Data Analysis

3.1. Survey Administration

The sample used for this study was drawn from responses to a survey of third- and fourth-year students in Croatia and the United States. The survey instrument administered to the students contained items designed to measure entrepreneurial orientation and self-efficacy. Respondents were also instructed to provide specific biographical background information so they could be categorized by age, gender, and national origin. The survey was administered to a sample of undergraduate business students at a university in the southwestern region of the United States during the fall term of 2000. During the same time period, the survey was administered to Croatian business and economics students at three universities in Croatia. In total, 346 students (with valid responses) were surveyed - 116 in the U.S. and 230 in Croatia. The questionnaire was prepared in English and then translated into the Croatian language.

3.2. Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy (ESE) is a measure of the strength of an individual's belief that he or she is capable of successfully performing the tasks of an entrepreneur. Identifying specific entrepreneurial tasks is challenging, however. First, entrepreneurship is not a single task but rather a mix and sequence of tasks related to creating and growing a new business venture. Second, although entrepreneurial tasks and managerial tasks are closely related and overlap, there are important differences as well.

Several studies have attempted to define entrepreneurial tasks thus providing a basis for measuring of ESE (Sherer et al., 1989; Chen, Greene, & Crick, 1998). Drawing upon the work of Long (1983), Miner (1993), and Kazanjian (1988), Chen, et al. identified six entrepreneurial roles that served as a framework from which thirty tasks were identified. These six roles are innovator, risk taker and bearer, executive manager, relation builder, risk reducer, and goal achiever.

In our view, these six roles and the underlying 30 tasks identified by Chen, et al. are problematic because they do not adequately distinguish entrepreneurial roles and tasks from managerial roles and tasks. The process of

starting a business involves very distinct activities unique to the new venture creation process. These activities, although somewhat management-related, should not be confused with general management tasks. For example, to varying degrees both entrepreneurs and managers engage in risk-taking activities, relationship building, risk reduction, and goal attainment.

To avoid these problems of ESE measurement as cited above, we elected to define entrepreneurial tasks within a "process model" theoretical framework. This process model, first proposed by Stevenson (in Stevenson, Roberts, and Grousbeck, 1985), divides entrepreneurial activities into four discrete steps or phases. We refer to these phases as (1) searching, (2) planning, (3) marshaling, and (4) implementing.

The first step *searching* involves the development by the entrepreneur of a unique idea and/or identification of a special opportunity. This step draws upon the entrepreneur's creative talents and the ability to innovate. Entrepreneurs, in contrast to managers, are particularly adept at perceiving and exploiting opportunities long before these opportunities are recognized by others (Hisrich & Peters, 1998).

The second step *planning* consists of activities by which the entrepreneur converts the idea into a feasible business plan. At this stage the entrepreneur may or may not actually write a formal business plan. However, he must evaluate the idea (concept) and give it substance as a business. The plan must be able to answer questions such as: What is the size of the market? Where will the business establishment be located? What are the product specifications? How and by whom will the product be manufactured? What are the start-up costs? What are the recurring operating costs of doing business? Can the venture be able to make a profit and if so, how soon after founding? How rapidly will the business grow and what resources are required to sustain its growth?

The third step *marshalling* involves assembling resources to bring the venture into existence. At the end of the planning phase the business is only "on paper" or in the mind of the entrepreneur. To bring the business into existence the entrepreneur must gather (marshal) necessary resources such as capital, labor, customers, and suppliers without which the venture cannot exist or sustain itself.

The final step is *implementing*. The entrepreneur is responsible for growing the business and sustaining the business past its infancy. In so doing, the successful entrepreneur must apply good management skills and principles. As an executive-level manager, the entrepreneur engages in strategic planning and manages a variety of business relationships with suppliers, customers, employees, and providers of capital. Growing an enterprise requires vision and the ability to solve problems quickly and efficiently. Not unique to entrepreneurship, these tasks are also required of

effective managers. But the entrepreneur is the primary risk-bearer of the enterprise with a financial stake in its long-term growth and success.

3.3. Measures

Entrepreneurial Tasks. The ten tasks listed in Table 1 below are derived from the four-step entrepreneurial process model and are representative of the tasks and activities associated with each step or phase of the process.

Table 1: Instrumental Tasks within the Entrepreneurial Process

Searching Phase Task 1: Conceive a unique idea for a business. Task 2: Identify market opportunities for a new business
Planning Phase Task 3: Plan a new business Task 4: Write a formal business plan
Marshalling Phase Task 5: Raise money to start a business Task 6: Convince others to invest in your business Task 7: Convince a bank to lend you money to start a business Task 8: Convince others to work for you in your new business
Implementing Phase Task 9: Manage a small business Task 10: Grow a successful business

Entrepreneurial Orientation. Respondents to the survey expressed their views about entrepreneurship by rating their agreement or disagreement with the items using a five point Likert scale. Eighteen items were used to construct scales for innovativeness and locus of control. Eight items for the innovativeness scale were adapted from the Jackson Personality Inventory (Jackson, 1994), while ten items used for the locus of control scale were adapted from Rotter's I-E scale (Rotter, 1966).

The Jackson Personality Inventory Manual (JPI) defines innovativeness as a tendency to be creative in thought and action. A high score on the JPI

innovativeness scale is an indication of a preference for novel solutions to problems and to appreciate original ideas on the part of others (Jackson, 1994). For this study, 8 items were adapted from the JPI innovativeness scale. Typical of these items are statements such as "I often surprise people with my novel ideas" and "I like to experiment with various ways of doing the same thing." This eight-item scale yielded innovativeness scores in the range of 40 points (maximum) to eight points (minimum).

A modified Rotter I-E Scale was used to measure internal locus of control (Rotter, 1966). This scale is designed to measure the respondent's perceived ability to influence events in his or her own life. Internal persons believe that their fate and fortune are within their own personal control. In contrast, external persons believe that their lives are controlled by external forces such as destiny, luck, or powerful others (Begley & Boyd, 1987). Ten items were adapted for this purpose. Typical of these are statement such as "My life is determined by my own actions" and "When I get what I want, it is usually because I worked hard for it". This ten-item scale yielded internal locus of control scores in the range of 50 points (maximum) to ten points (minimum).

Since theory suggests that individuals with an entrepreneurial orientation are at the same time innovative and "internal", the innovativeness and internal locus of control scales described above were combined in a multiplicative way to create a composite index of entrepreneurial orientation. Thus entrepreneurial orientation (EO) is the product of innovativeness (INN) and internal locus of control (ILOC). Under this indexing scheme, entrepreneurial orientation scores ranged from 2500 (maximum) to 80 (minimum).

In this study we also examine and control for the effects of age, gender and country. A dummy variable is used for gender (male=1 and female=2) and for country (U.S.=0 and Croatia=1).

4. Results And Discussion

4.1. Demographics of Student Samples

As shown in Table 2 opposite, the two country samples (U.S. and Croatian students) are similar in many respects. In both cases the students are undergraduates in economics and business administration in their last two years. The average age is approximately 21.5 years. Surveyed students in both countries are generally homogenous with respect to age with only 10 out of the 346 students older than 25.

Table 2: Sample Demographics

	TOTAL		USA		CROATIA	
Number of Students	346		116		230	
Male	122	35.26%	55	47.41%	67	29.13%
Female	224	64.74%	61	52.59%	163	70.87%
Average Age	21.53		21.41		21.59	
Number > 25 years old	10		1		9	
Born in country	310	89.60%	106	91.38%	204	88.70%
Born abroad	36	10.40%	10	8.62%	26	11.30%

A notable difference between the two samples is that the parents of the American students have more experience with entrepreneurial activities. For example, 56.6% of fathers and 24.4% of mothers of American students have owned or operated their own business. These percentages were only 33.0% of fathers and 12.2% of mothers of Croatian students.

4.2. Entrepreneurial Orientation

The dataset was subjected to multivariant regression analysis with entrepreneurial orientation as the dependent variable. Results are summarized as Table 3 below. Independent of nationality, results confirm a higher propensity towards entrepreneurial orientation (as defined in this study) among males. Age of the student has no apparent effect on entrepreneurial orientation. However, this “non-result” may be due to the fact that both samples are homogeneous with respect to age as noted earlier. The important finding of this analysis is that while controlling for gender, there is a statistically significant difference in entrepreneurial orientation between the American and Croatian students with EO being lower among the Croatian students in support of H1.

Table 3: Regression Analysis

	Entrepreneurial Orientation
Number of Cases	309
Intercept	1054.2257*** (114.3917)
Gender (Male=1, Female=0)	56.7269* (23.5861)
Age	3.9346 (4.9916)
Country (US=0, Croatia=1)	-105.8643*** (23.9999)

Std. Errors in Parentheses
*** p<.001
** p<.01
* p<.05

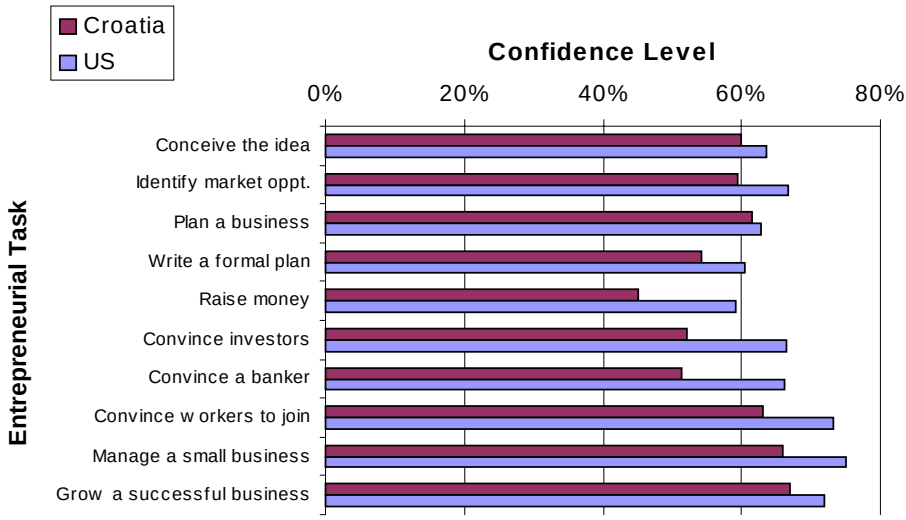
4.3. Entrepreneurial Self-Efficacy

Table 4 below provides a comparison of self-efficacy scores (by country) for each of the ten entrepreneurial tasks. A comparison between the two countries is also depicted graphically as Figure 2 opposite. As Figure 2 shows, self-efficacy (measured as confidence level) for each of the entrepreneurial tasks appears to be lower among Croatian students than among the American students.

Table 4: Self Eficacy Scores for Entrepreneurial Tasks - Rankings by Country

		United States		Croatia	
	Task	Ranking	ESE	Ranking	ESE
Task 9	Manage a small business	#01	0.75	#02	0.66
Task 7	Convince workers to join	#02	0.73	#03	0.63
Task 10	Grow a successful business	#03	0.72	#01	0.67
Task 2	Identify market opportunity	#04	0.67	#06	0.59
Task 6	Convince investors	#05	0.67	#08	0.52
Task 8	Convince a banker	#06	0.66	#09	0.51
Task 1	Conceive the idea	#07	0.64	#05	0.60
Task 3	Plan a business	#08	0.63	#04	0.61
Task 4	Write a formal plan	#09	0.60	#07	0.54
Task 5	Raise money	#10	0.59	#10	0.45

Figure 2: Entrepreneurial Self Efficacy



The general ranking pattern of entrepreneurial tasks is similar for both the Croatian and American samples. For example, the reported confidence level is highest for tasks associated with the implementing phase, moderately high for the searching tasks, and somewhat lower for the planning phase tasks. The reported confidence levels for the marshaling phase tasks are quite variable in both countries, with the highest confidence in tasks related to attracting workers and the least confidence is to tasks associated with raising capital.

The greatest difference between the Croatian and American students is in the area of raising capital (i.e. Tasks 5, 6, and 7). The most interesting (and unexpected) difference between the two country samples is with the planning phase tasks (Tasks 3 and 4). In this category the U.S. students showed relatively low self-confidence, while Croatian students showed relatively high self-confidence compared to the self-efficacy level of other tasks.

Table 5a and Table 5b below show regression analysis results for the ten entrepreneurial tasks. Each of the regression models provides a test for difference in self-efficacy between the two countries while controlling for gender and entrepreneurial orientation. The regression analysis summarized in Tables 5a and 5b generally confirms the preliminary findings presented in Table 4 and Figure 2 and also shows entrepreneurial orientation to be highly correlated with self-efficacy for each of the ten entrepreneurial tasks.

Table 5a: Entrepreneurial Tasks 1-5 - Regression Analysis

	Task 1	Task 2	Task 3	Task 4	Task 5
Number of Cases	309	309	309	309	309
Intercept	-11.049	27.414*	1.306	16.929	41.884**
	(12.817)	12.179)	(13.783)	(15.492)	(0.535)
Gender (Male=1,	5.7084*	4.3494*	1.4256	0.3128	7.3230*
Female=0)	(2.3732)	(2.2550)	(2.5520)	(2.8684)	(2.9617)
Age	0.7762	0.2226	0.7599	0.6026	0.1410
	(0.4974)	(0.4726)	(0.5348)	(0.6011)	(0.6207)
Country (US=0,	2.9521	-2.8364	3.3877	-3.2765	-10.6226**
Croatia=1)	(2.4557)	(2.3334)	(2.6407)	(2.9681)	(3.0646)
Entrepreneurial	0.0491***	0.0330***	0.0384***	0.0316***	0.0196**
Orientation	(0.0056)	(0.0054)	(0.0060)	(0.0068)	(0.0070)

Std. Errors in Parentheses
*** p<.001
** p<.01
* p<.05

Table 5b: Entrepreneurial Tasks 6-10 - Regression Analysis

Number of Cases	**309**	**309**	**309**	**309**	**309**
Intercept	58.952***	65.586**	38.087**	26.544*	22.809
	(14.227)	(15.325)	(12.827)	(13.678)	(13.867)
Gender (Male=1,	6.8256**	2.8717	2.1946	2.6271	3.2977
Female=0)	(2.9617)	(2.8376)	(2.3750)	(2.5325)	(2.5676)
Age	-0.6023	-0.5045	0.2710	0.7239	0.6630
	(0.5521)	(0.5947)	(0.4977)	(0.5307)	(0.0054)
Country (US=0,	-10.6321***	-12.3400***	-6.8284**	-4.9681*	-0.5163
Croatia=1)	(2.7258)	(2.9363)	(2.4576)	(2.6205)	(2.6569)
Entrepreneurial	0.0261***	0.0208**	0.0333***	0.0342***	0.0314***
Orientation	(0.0063)	(0.0067)	(0.0056)	(0.0060)	(0.0061)

Std. Errors in Parentheses
*** p<.001
** p<.01
* p<.05

While controlling for the effect of entrepreneurial orientation and gender, there remain statistically significant differences between the two countries for

some but not all of the entrepreneurial tasks. As the analysis indicates, self-efficacy is lower among Croatian student for Tasks 5, 6, 7, 8, and 9 (weak), while differences in self-efficacy are not statistically significant for Tasks 1, 2, 3, 4 and 10.

Country differences in self-efficacy are most apparent for the marshaling phase tasks with the coefficients for each of the marshaling phase tasks carrying a negative sign indicating lower self-efficacy among Croatian students. However, this result may have more to do with a negative assessment of business and capital raising opportunities in Croatia and less to do with students' perception of personal abilities at performing these tasks.

Coefficients for the searching and planning phase tasks have mixed signs indicating that after controlling for other factors (i.e. gender and entrepreneurial orientation), there is no clear evidence that Croatian students feel less prepared or able to perform these tasks. Negative but not statistically significant coefficients for implementing phase tasks might, as noted earlier, be attributed to the accurate perception of greater difficulties associated with running and developing a business in Croatia.

Entrepreneurial orientation was highly correlated with self-efficacy for each of the ten tasks. This finding was expected and confirms the basic model itself, which proposes a mutual relation between entrepreneurial orientation and entrepreneurial self-efficacy. Individuals with a psychological predisposition toward self-reliance and creative action will also tend to hold positive beliefs about their abilities to perform entrepreneurial tasks.

Our hypothesis (H2) was based on the assumption that Croatian students are less prepared for entrepreneurial activities and would therefore have lower entrepreneurial self-efficacy compared to their American counterparts and the education they receive. However, our results indicate that for the tasks more closely associated with knowledge acquired through formal business education (i.e. planning and implementing), there was no clear or significant difference in self-efficacy between the two groups of students.

5. Conclusions

5.1. Entrepreneurship Education

Formal education in economics and business administration could serve as a means to enhance entrepreneurial self-efficacy among young, nascent entrepreneurs. With respect to searching phase tasks, such an intervention should improve confidence in one’s ability to discover opportunities and develop innovative ideas. More emphasis in business education on the development of creative skills would help stimulate innovative thinking while

training in market research techniques would help students gain insight into different types of businesses and market opportunities.

Self-efficacy with respect to planning phase tasks should be the easiest to improve via formal business education given that planning training has historically been included in business administration and economics courses.

Marshaling phase tasks are most closely associated with self-reliance issues such as the ability to convince others to invest in a new venture or to lend money. However, successful execution of these tasks depends to a large degree on the strength of existing capital and labor markets in a particular country or region. Although one may have a high opinion about his or her ability to raise money, the objective situation (i.e. poor capital markets) may defeat success in this regard.

Implementing phase tasks (i.e. managing and growing a business) are common to general managerial tasks. Therefore self-efficacy with respect to these tasks is enhanced via skills acquired through traditional business training - particularly in the area of management.

5.2. The Case of Croatia

The results of this study suggest that Croatian students feel relatively well equipped with the knowledge and information necessary to start and run a business. However, they generally lack an entrepreneurial orientation and perceive a less stimulating business environment compared to their American counterparts.

One possible conclusion might be that for Croatian students in economics and business administration, formal education in entrepreneurship is not a critical factor for stimulating entrepreneurial activity. Educational improvements to support entrepreneurship advancement in Croatia are possible and desirable, but not crucial. Higher priority should be given to improving the social, political, and economic context, making the economy more entrepreneurship "friendly" and conducive for venturing activities. This conclusion would be applicable not only to Croatia, but also to a majority of the transition economies (Dobrowski, Gomulka, & Rostowski, 2000).

As we consider implications for education in entrepreneurship in Croatia, two general observations can be made. First, entrepreneurship education programs at the college/university level should provide more information and practical skill development oriented to resource gathering. Entrepreneurship-related knowledge that Croatian students are now receiving is primarily theoretical and deals only with broad business issues. Missing are issues concerning practical opportunities and obstacles in the real environment and with information as to how to exploit opportunities and overcome obstacles. Augmenting the traditional business curriculum with these entrepreneurship

topics should not only help to raise students' self-efficacy with respect to the critical entrepreneurial tasks identified in this study, but also enhance their entrepreneurial orientation - thereby raising their enthusiasm to engage in various entrepreneurial activities.

A second issue concerning entrepreneurship education in Croatia is providing educational opportunities outside the traditional university system. Students in economics and business administration represent only a small fraction of those who have entrepreneurial orientation, abilities, and intentions. If the goal is to promote entrepreneurial attitudes and behavior among members of the general population (with successful results), then issues related to entrepreneurial activities should be included in programs outside the business schools. Since a majority of potential and real entrepreneurs are not products of a university education, non-traditional education and information programs outside the university system should be devised and available to those who have entrepreneurial inclinations, plans, or are already involved in some kind of entrepreneurial activity. This is especially critical for transition economies where a fast "entrepreneurialization" of individuals with virtually no practical business knowledge and experience has taken place over the last ten years.

5.3. Central and Eastern Europe

At the beginning of transition, the economies of Central and Eastern Europe clearly lacked entrepreneurs and entrepreneurial knowledge. Furthermore, these countries lacked educators able to transmit and develop entrepreneurial knowledge and attitudes in the population of potential entrepreneurs. Thus, not only entrepreneurs, but also entrepreneurship educators needed to be developed. Quite understandably the existing professors and teachers of economics and business administration did not possess the necessary knowledge and experience related to market economies, business, and entrepreneurship to properly teach and train potential entrepreneurs. That is more accentuated in countries that under the socialist system were not market-oriented. On the other hand, countries such as Slovenia, Croatia, Poland, and Hungary had more experience with market forces and therefore had more knowledge about the functioning of market economies and entrepreneurship. As a result, local educators were better equipped to absorb, acquire, and develop knowledge on entrepreneurship.

After ten years of transition, a new generation of teachers in business administration and entrepreneurship has emerged. They are mainly young, capable people who have acquired their knowledge from Western sources, such as textbooks, educational materials, and through study and visits to Western universities and other institutions. Scholars from Western countries

have also taught business administration and entrepreneurship subjects (and/or tutored local teachers) at some of the highest-ranking schools and universities within the transition countries. As a result, much of the entrepreneurship education in the transition countries has been shaped according to Western (principally American) blueprints. A danger of this practice is a literal transfer of what is taught in Western countries, which is often unsuitable, inapplicable, or virtually useless in the transition countries.

This study, although limited in scope, suggests that educational needs of potential entrepreneurs in transition economies (e.g. Croatia) may be quite different from those in a developed country (e.g. United States). In that sense, findings from this study give credence to the argument that entrepreneurship education programs cannot be mechanically transplanted from one to another country or region. It would be imprudent to assume that the education and training programs designed to stimulate entrepreneurial activity in an advanced market economy can be directly applied to the transition economies.

Like general education, entrepreneurship education should be designed to fit specific local needs taking into account local cultural and historical heritage and peculiarities. One way to do that is to enable local teachers to blend knowledge and experiences from developed countries with their own knowledge and understanding of local culture and needs. In that way, entrepreneurship education programs will provide available assistance in stimulating entrepreneurial activity and economic development in transition countries that is effective and appropriate for each country.

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