

Entrepreneurship Education Satisfaction Assessment Instrument: An Empirical Examination

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By engaging in management and entrepreneurship-related education, training and professional development, both practicing and potential entrepreneurs can gain new knowledge and skills. The need for continuous management and entrepreneurship education has increased due to a faster pace of change and globalization of markets. With the prospective enlargement of the EU in 2004, management and entrepreneurship education providers in the accession countries will be faced with new opportunities and threats of the enlarged common market. They will need to make every endeavor to satisfy entrepreneurs' expectations in order to improve the rate of education continuation, and consequently, their own business results. The focus of this paper is on the measurement of entrepreneurs' satisfaction with education. We have developed and, by using a sample of prospective and practicing entrepreneurs in Slovenia, empirically tested a multi-item measure of entrepreneurship education satisfaction. An instrument that could help education and training providers assess education performance is proposed as an important element of education evaluation process.

INTRODUCTION

Management and entrepreneurship-related education, training and professional development are important for development of business skills of entrepreneurs and for economic progress. The need for continuous entrepreneurship education has increased due to a faster pace of change and globalization of markets. New opportunities and threats may arise for Slovenian entrepreneurs as well as for entrepreneurship education

and training providers with the expected enlargement processes of the European Union (EU) and the accession of Slovenia to the EU common market in 2004.

The employment rate in Europe is 61%; although millions of new jobs have been created in the EU, millions of people are still unable to find work (European Commission 2000). Some population groups have special difficulties on the labor market: the long term unemployed, young people, older jobseekers, people with disabilities, women and ethnic minorities. In order to make improvements in this area in the EU, better opportunities on the labor market need to be provided for these population groups with the emphasis on the employability of jobseekers, entrepreneurship, the adaptability of businesses and employees to economic and technological change, and equal opportunities for women and men and for people with disabilities. Employability refers to the skills of jobseekers; it needs to be improved with training, retraining, employment or a practical traineeship. On the other hand, the intention of the EU countries is to make it easier for people to set up new businesses and become self-employed. The aim in the European Union is to teach people entrepreneurship, not only reduce the tax and contributions burden on labor, especially with regard to low-paid jobs. Good basic education and training seems to be the European way to ensure more and better jobs in the knowledge-based information society. In education, two programs, Socrates and Leonardo da Vinci, have successfully promoted an international dimension in universities and schools and in vocational training. The EU measures are designed with the purpose to open up access to learning opportunities for everyone, through partnerships, exchange schemes and the removal of red tape that prevents recognition of qualifications in other countries. Qualifications like language skills and experience in other countries, the knowledge of new technologies, and ecology have been recognized as vital for the future.

During the last years Slovenia has become quite comparable with other European countries in primary and secondary school education, which can not be said for adult education. In Slovenia, only 31% of adults educate themselves, whereas this proportion is, for example, higher in Finland, Denmark, Sweden, and Norway (50%), as well as in the Great Britain, Switzerland, and the Nederland (40%), and lower in accession countries such as Hungary (19%) and Poland (14%) (Gaber et al. 2000, 19). Slovenian firms were not prepared to invest enough in education

in past decade. The money was put aside for managers and experts, but there was no money for the vast majority of the employees whose educational attainment, though good enough before, was no longer of a very good use. In many Slovenian companies there have been no development plans, no knowledge or numbers on needs for knowledge and skills, no plans of education, nobody knew anything about education and education continuation; and the labour force has just not been prepared to invest in education on their own (Vilič-Klenovšek 1994, 185). Lately, some companies have recognized the need for continuous education but still impose quite restrictive budget constraints for this type of investment in people.

For the development of continuous education we do not need only a better demand but also a better supply. This holds also for entrepreneurship education where management and entrepreneurship education providers are trying to satisfy knowledge acquisition needs of entrepreneurs. Faced with the changes they will need to increase their endeavors to satisfy entrepreneurs' expectations in order to improve the rate of education continuation and consequently their business results. In order to properly evaluate the level of satisfaction with education of entrepreneurs, education providers need to use proper and valid measurement instruments. In this paper we develop and empirically test a multi-item measure of entrepreneurship education satisfaction.

ENTREPRENEURSHIP EDUCATION SATISFACTION

Entrepreneurship education can be defined as structured, formal conveyance of entrepreneurial knowledge; entrepreneurial knowledge as the concepts, skills, and mentality individual business owners use during the course of starting and developing their growth-oriented businesses; and entrepreneurial learning as the active and cognitive processes individuals employ as they acquire, retain and use entrepreneurial knowledge (Young 1997). Entrepreneurs, in order to be able to solve emerging problems and to increase business results of their enterprises, need to learn continuously through self-directed learning, as well as through formal education and training.

Overall satisfaction is defined as an emotional reaction to a product or service experience (Spreng, MacKenzie, and Olshavsky 1996). In the context of services of management or entrepreneurship education par-

ticipants may evaluate the educational experience in general terms by their overall satisfaction and in terms of their assessment on how good their overall requirements have been met.

Many researches explore contents of education – what entrepreneurs need to be successful, but training organizations want to know answers to questions about the evaluation of their training programs. If the results of such evaluations are disappointing, the training or educational organization can modify its policy and programs. The main method to collect the data is closed questionnaire sent or distributed to the participants of training. Mulder (2001, 323), for example, prepares the questionnaire that consists of eight blocks of questions. An important part within the group of general questions is the assessment of the general satisfaction with the training project as a whole. Other questions assess three groups of objectives of the training project (learning result, work behavior, organizational change support), personal factors, training program factors, organizational factors and transfer conditions.

In satisfaction with education measurement Westbrook (1980) made an assumption that the satisfaction concept is uni-dimensional and used only one item on a five-point Delighted-Terrible Scale to measure satisfaction. Antoncic and Hvalic Erzetec (2001) used such a measure and discovered that measuring satisfaction with education on a single six-point scale ranging from ‘very satisfied’ to ‘very unsatisfied’ results in a very skewed answer distribution, which may not be usable for the analysis with continuous variables. We agree with Westbrook that the overall satisfaction may be uni-dimensional, but it needs to be operationalized by multiple items:

- in order to assess a wider range of feelings of satisfaction of education or training participants (such as satisfaction, dissatisfaction, delight, favorability, pleasantness, liking, and content) and
- because a multi-item measure can be more usable in quantitative research due to its advantages over a single-item measure in terms of distribution properties (more normal, less skewed).

We propose that a concept of education satisfaction and its measure captures multiple elements of educational experience important for the customer (education participant). Thus, we hypothesize that the education satisfaction and construct will be composed of items that will show internal consistency. In addition, we propose that the concept will show not only internal but also nomological validity – satisfaction will be also

Table 1: Education satisfaction measurement items

Education Satisfaction (eight items, Cronbach Alpha 0.96)							
<i>What is your overall feeling about the education you are engaged in?</i>							
Very dissatisfied	1	2	3	4	5	6	7 Very satisfied
Terrible	1	2	3	4	5	6	7 Delighted
Very dissatisfied	1	2	3	4	5	6	7 Not at all dissatisfied
Not at all satisfied	1	2	3	4	5	6	7 Very satisfied
Unfavorable	1	2	3	4	5	6	7 Favorable
Unpleasant	1	2	3	4	5	6	7 Pleasant
I did not like it at all	1	2	3	4	5	6	7 I liked it very much
Frustrated	1	2	3	4	5	6	7 Contented

important for education providers in terms of their expected positive relationship with continuing education by the same provider (loyalty of participants).

METHODS

In this section, methodology (variables and measurement, sample and data collection, and analysis) is presented.

Variables and Measurement

Satisfaction was measured with a multi-item measure – eight items on seven-point semantic differential scales answering a question about the respondent’s general feeling about education they were engaged in (anchors: very dissatisfied–very satisfied, terrible–delighted, very dissatisfied–not at all dissatisfied, not at all satisfied–very satisfied, unfavorable–favorable, unpleasant–pleasant, I didn’t like it at all–I like it very much, frustrated–contented). Items were adapted from Crosby and Stephens (1987), Eroglu and Machleit (1990), and Spreng, MacKenzie, and Olshavsky (1996). Education satisfaction items are shown in Table 1.

Education continuation – the variable for the assessment of predictive validity of education satisfaction construct – was measured as the respondent’s intention to continue his or her education in the future in terms of his or her expressed loyalty to the educational program and provider. Five questions were adapted from Bettencourt (1997), and Zeithaml et al. (1996):

1. saying positive things,

2. recommend to people, who are thinking about education,
3. encourage friends and relatives to engage in this education,
4. consider this education provider as a first choice, and
5. engage more in education from this provider in next years.

A seven-point Likert-type scale was used with anchors from 'strongly disagree' to 'strongly agree'.

Control variables data was collected about the respondent's entrepreneur type (non-entrepreneur, potential entrepreneur, practicing entrepreneur), education type (degree, non-degree), age, gender, length of work experience, education level, and industry.

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Data Collection and Sample

Data was collected from Slovenian practicing and potential entrepreneurs, as well as non-entrepreneurs, who were engaged in degree and non-degree management education and training. A structured questionnaire was administered mainly via classroom distribution to eight conveniently selected groups of participants. Responses of 127 management and entrepreneurship education participants were used for the analysis.

The sample included 17.2% practicing entrepreneurs, 68.1% potential entrepreneurs, and 14.8% non-entrepreneurs. The sample consisted of 58.6% participants, who educated themselves at the degree education type (high school, college and university level) and 41.4% participants, who were engaged in the non-degree education type (mainly workshops and seminars). The majority of the education participants were young – up to 30 years of age (60.6%). The sample was well balanced in terms of gender (56.8% female), included a good proportion of participants with completed college or university degree (34.1%) and work experience of over 10 years (37.2%), and included entrepreneurs from different industries (for example consumer and business services, manufacturing, trade, financial services, construction).

Analysis

The multi-item scale of education satisfaction was checked for its dimensionality and convergent validity by using exploratory factor analysis and by using Cronbach Alpha reliability measure. Factor analysis was conducted by using the maximum likelihood extraction method and

oblimin rotation, which does not assume the non-correlation of underlying dimensions. Education loyalty (Cronbach Alphas for the 5-item measure was very high indicating very good reliability: 0.92) was used for the assessment of predictive validity of the education satisfaction construct by using regression analysis.

FINDINGS

Findings will be presented in terms of tests of internal validity, structure, and nomological validity of the education satisfaction construct.

Internal Validity and Structure of the Education Satisfaction Construct

Exploratory factor analysis of eight satisfaction items resulted in one factor solution, which was justified with the scree plot results, high item communalities, high and positive factor loadings, and high variance explained (75%). Cronbach Alpha reliability measure (0.96) also indicated good internal consistency. Thus, the education satisfaction construct is composed of internally valid multiple elements and can be considered uni-dimensional.

Nomological Validity

The relationship between the education satisfaction and the education loyalty (dependent variable) constructs was assessed with regression analysis. The resulting formula (with unstandardized coefficients) is as follows:

$$\text{Loyalty} = 1.40 + 0.70 \text{ Satisfaction} + \text{Error}$$

(standardized coefficient 0.65, significant at 0.001, R^2 0.42)

The relationship was found positive (st. coef. 0.65) and significant, with 42% variance explained. These results show, as expected, that education satisfaction tends to be predictive of loyalty of education participants and has good nomological validity.

IMPLICATIONS AND CONCLUSIONS

Entrepreneurship education is important for entrepreneurs, who acquire new knowledge, and for education providers, who are trying to do a good

business and to satisfy entrepreneurs' expectations in order to ensure good results also in the future despite changes due to globalization and integration processes. Assessment of education satisfaction gives valuable information for further development of educational programs. As we showed in this paper, the education satisfaction construct should be used as a multi-item measure. We showed internal and nomological validity of the construct that can be of use in future practice and research, despite the limitations of this study (for example, non-random sample from one economy, non-inclusion of other education quality elements, perceptual measures, exploratory factor analysis). The education satisfaction assessment instrument can be helpful for education and training providers to assess education performance in order to improve entrepreneurship education evaluation process.

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