

Students' Perceptions of Their Business Competences and Entrepreneurial Intention

MARJA-LIISA KAKKONEN

Mikkeli University of Applied Sciences, Finland

The study examined perceptions of higher education students' business competences and entrepreneurial intention. The sample consisted of the second- and third-year business students. The data were compared by academic years, by gender and internationality. In general, the findings indicated that the students were quite confident in rating their business competences, while the perceptions of their entrepreneurial intention remained at the lower level. Based on the findings, there were only small differences between the second and third academic years, yet the international students rated themselves with higher scores than the Finnish students. Further, the findings showed that there were no statistical differences between male and female students related to their perception of the business competences and entrepreneurial intention. All in all, the international students had higher scores than the Finnish students both in all the competences and in their entrepreneurial intention.

Key words: business competences, students, higher education, perceptions

Introduction

Education prepares the students for the world in which they will live in the future. In that world there will be greater uncertainty and complexity, which will demand more entrepreneurial behaviour at different levels. At the global level there are constant changes (e.g. reduction of trading barriers, growth of IT, greater product differentiation), which will put more pressure on individuals and collective entrepreneurial behaviour. At the societal level the pressure comes from the privatisation of public services, out-sourcing of services, the growing impact of interest groups in the society, the growing power of women's rights, and the rights of ethnic groups. At the organizational level, there has already been down-sizing, decentralisation, subcontracting etc. during the recent decades, and these trends are still ongoing. Finally, at the individual level there will be more and more occupational mobility and job uncertainty in the future work environment, and therefore individuals are more likely to face part-

time or contract employment, pressure for geographical mobility and also for self-employment (Gibb 2005, 51–52).

Also the European Parliament and Commission emphasise the importance of a broad approach to entrepreneurship and define the concept of entrepreneurship as follows: 'Entrepreneurship refers to an individual's ability to turn ideas to action. It includes creativity, innovation, and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day to day life at home and in society, employees in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by entrepreneurs establishing social or commercial activity.' (Commission of the European Communities 2005). Therefore, it can be concluded that entrepreneurship education is a much broader concept than entrepreneurship as creating and running businesses. Its components include an active and initiative taking individual, an entrepreneurial learning environment, education and training, and active and enterprise-promoting policy in the society. Thus, entrepreneurship education generates entrepreneurship at all levels of the society, and strengthens and creates businesses (Ministry of Education and Culture 2009). However, at the same time while emphasising enterprising competences and behaviour of an individual and an organization, there is also a need for increasing the number of new business creations in Europe (e. g. Henry, Hill and Leitch 2003, 3; Blenker, Dreisler and Kjeldsen 2006, 7). Especially, there is demand for young people in new business creation and entrepreneurship. Young people often have the kind of knowledge, ideas and capacity for identifying with other young people that should be put to better use in the development of new services and products (Ministry of Education and Culture 2009, 12).

The Finnish universities of applied sciences have written and adopted a joint entrepreneurial strategy in 2006. One of its aims is that one out of seven (about 14%) graduates in 2010 will set up their own businesses within ten years of graduation. (Ministry of Education and Culture 2009, 26). At the moment, if we use the case organisation as an example, the aim is that about 3% of all the graduates will become entrepreneurs after graduation. In other words, based on their education, the students should achieve the additional competences and experiences needed within ten years and become entrepreneurs. Nevertheless, the foundation is constructed already during the degree education.

But what should the students learn during their education? First of

all, they should learn the most important entrepreneurial skills and competences which are needed in running a company: general management skills in business, such as strategy skills, planning skills, marketing skills, financial skills, project management skills, and time management skills (Leskinen 1999; Paajanen 2001; Ristimäki 2004). In addition, they should learn relevant entrepreneurial skills including a variety of skills required when dealing with people, such as leadership skills, motivation skills, delegation skills, communication skills, and negotiation skills (Kuratko and Hodgetts 2002). However, if the aim is to increase the number of new business ventures, various skills for setting up a new business should be learnt. All in all, the education system is becoming more important in the creation of new businesses. Nowadays, one in five new entrepreneurs has a higher education degree in Finland. In the future, entrepreneurship must be even more strongly based on the professional skills and competences of the entrepreneurs. (Ministry of Education and Culture 2009, 13).

To conclude this introductory section, due to constant different changes in the world, the importance of entrepreneurship is acquiring more value at the different levels. Entrepreneurship is becoming an option for an increased number of students in their future. Education should prepare them in a way that they will have the competences needed in order to be aware of the option of starting a business after graduation or later. The competence-based curriculum of the case organisation aims at the skills and competences which are needed to set up one's own company and which the students should learn during their professional studies. In addition, beside the competences, the students should have willingness and motivation for becoming an entrepreneur, and thus an intention for it. Using all the above as a starting point, this study aims at finding out how the business students perceived their professional competences related to business and entrepreneurship which are the learning outcomes of the programme. In addition, this study examines the students' self-perceived entrepreneurial intention; ie. likelihood of setting up their own businesses after graduation.

Learning Objectives of Entrepreneurship Education

AIMS AND CONTENT OF ENTREPRENEURSHIP EDUCATION IN HIGHER EDUCATION

The concept of competence originates in vocational education and is now accepted in higher education. It integrates the personality and

<i>What</i>	<i>Know what</i>	<i>Know why</i>	<i>Know how</i>
Attention	Interest	Understanding	Action
Attention formation		Competence	Development

FIGURE 1 Education and entrepreneur competences expressed as a hierarchy of effect (adapted from Blenker, Dreisler and Kjeldsen 2006, 92)

behavioural perspectives, and it is the synthesis of knowledge, skills, attitudes and personal qualities for the performance of specific professional tasks (Nab, Pilot, Brinkkemper, and Ten Berge 2010, 22).

In general, entrepreneurship education refers to knowledge about entrepreneurship and competences in entrepreneurship. Entrepreneurship education can be seen as a process (see figure 1) in which students start by paying attention to it. Then the interest of entrepreneurship will help them to understand different relations and reasons. Finally, the students who are oriented towards starting their own businesses will set up their own business after having constructed the competences needed in owning and running a business.

The goals of entrepreneurship education and training may vary, but they are generally expressed in terms of developing an entrepreneurial skill set, enhancing an entrepreneurial mindset, stimulating entrepreneurial behaviour, and preparing and helping students' entrepreneurial endeavours. However, a common goal of many training programmes is to stimulate entrepreneurship in its various forms (Kickul, Gundry, Barbosa, and Simms 2010, 38). Kyrö and Carrier (2005) compare the orientation of different constructs, aims and focus in entrepreneurship education. With the comparison they emphasise two things: how different the learning outcomes might be if we focus only on the cognitive aspects of learning, and how important it is to broaden our views about the learning environment. All in all, competence-based learning is best stimulated in a learning environment which is functional, realistic, activating, coaching and inviting to learn (Nab, Pilot, Brinkkemper, and Ten Berge 2010, 22).

In order to define a focus of learning and course contents, Kyrö and Carrier (2005, 28) present four different aims for entrepreneurship education. First, learning *about entrepreneurship* focuses on rationality and reasoning, and typically the course content is a business plan and has functional approaches. The learning *for entrepreneurship* focuses on the will and competences to start a business. Then the course content includes different things about starting and managing the business. If the aim is to learn *through en-*

entrepreneurial pedagogy, the focus will be on the increase of the competences to find needed knowledge, to create knowledge and ventures. Finally, learning *in an entrepreneurial environment* supports and focuses on increasing and developing competences for enjoying and acting in complexity and insecurity. The focus is on recognising as well as creating opportunities involved in it.

The Present Study

This study aimed at finding out how the business students perceived their professional competences related to business and entrepreneurship. In addition, this study examined the students' self-perceived intention to set up their own businesses after graduation.

BUSINESS COMPETENCES OF THE CONTEXT

The entrepreneurship studies in the bachelor degree programmes include both entrepreneurial skills and business skills. The study modules add to the students' business management skills so that they are able to apply the knowledge and skills in their own enterprise or in another's service. There are *six subject-specific competences* defined as the learning outcomes of the business management degree programme, and each of them has different objectives in terms of skills, knowledge and understanding. In general, the competences are called Business competences in this study and they are introduced next.

First, *Business Operations and Entrepreneurship competence* includes the students' ability to adopt the principles of the business way of thinking, learn the basic concepts of business, and become familiar with the operational processes of a company. Further, they are able to apply the principles of entrepreneurship as an entrepreneur and employee as well as to understand the possibilities of entrepreneurship, and they will know how to set up a company and prepare a business plan. *Business Environment competence* means that the students recognize the interaction between business operations and business environment, and are able to follow and analyse the operational environment. In addition, the students create active connections with the internal and external interest groups also in the international business environment. According to the learning outcomes of *Marketing and Customer Relationships competence* the students are aware of the competitive tools of marketing and the principles of customer service, and are able to apply these in running a business. Further, the students acquire and analyse information to develop business with marketing research. *Organisa-*

tions and Management competence includes the students being able to act as members of a working community, and to supervise and develop its activities. They adapt to the changing situations of working life. Further, the students understand the principles of project management, and they are able to plan, implement and follow projects and understand strategic management. Based on the learning outcomes of *Financial Administration competence* the students know the principles of accounting, managerial accounting and cost-effective activities. Finally, according to the learning outcomes of *Research and Development in Business* competence, the students realise the principles of research and development needed in acquiring and adopting in-depth business expertise. They have the skills needed in applying qualitative and quantitative research methods.

RESEARCH QUESTIONS

Previous studies indicate contradictory results on the effects on entrepreneurship education and training. There are various studies which demonstrate the importance of entrepreneurship education and training for promoting and enhancing the entrepreneurial intention (e.g. Rodrigues, Raposo, Ferreira and do Paço 2010; Johansen 2010). However, there are also studies which show that entrepreneurship education does not have the intended effects: the effect on the students' self-assessed entrepreneurial skills is insignificant and the effect on the intention to become an entrepreneur is even negative (Oosterbeek, Praag and Ijsselstein 2010; Graevenitz, Harhoff and Weber 2010). Further, the research findings of Henry, Hill and Leitch (2003, 162) indicated that the participants of the study appeared to be quite confident about their entrepreneurial characteristics, but not about their business skills and knowledge. In addition, the findings of Pihkala (2008) showed that entrepreneurship education triggered uncertainty as to the students' confidence in their own entrepreneurial skills. The uncertainty was caused by the over-sized objectives set for entrepreneurship education, lack of encouragement and intellectual support for entrepreneurship, the quality of entrepreneurship studies and the timing of the studies. Based on the above, the first research question was formulated as follows: 'How do the students perceive their business competences and entrepreneurial intention after completing the professional studies in the programme?'

According to previous studies the likelihood of setting up one's own business (intention to start up a new venture) seems to be higher when students have spent a long period of time in a foreign

country (e.g. Degeorge and Fayolle 2008). There are two business programmes of the bachelor level in the case organisation: one is taught in Finnish and the other one is international, in which the language of instruction is English. Both bachelor level programmes have almost the same contents and learning objectives, although the language of instruction, implementation and the learning environment are different. Therefore the third research question was formulated as follows: 'What kinds of differences in the perceptions related to the business competences and entrepreneurial intentions exist between the Finnish and international student groups?'

Although the learning objectives of programmes have been constructed usually so that the competences will be developed year by year, previous studies indicate that there are no big differences between the perceptions of the second year and third year students' learning outcomes. For example, according to the findings of Arnold, Loan-Clarke, Harrington and Hart (1999) related to the students' perceptions of their competence development, there were not big differences between the second and the final academic year. In principle, the students of this case study take most of the compulsory professional studies during their second academic year and most of the selective professional studies during the third academic year. However, depending on the background and the motivation of students, they can take also selective courses already during the second academic year. Based on that, the second research question was formulated as follows: 'What kinds of differences in the perceptions exist between different student groups by academic years?'

Previous studies have shown that male students have more entrepreneurial characteristics and they are more likely to set up their own businesses compared to female students (e.g. Urbano 2006; Rodrigues et al. 2010). However, according to the research findings of Ljunggren and Kolvereid (1996) females perceived themselves as possessing higher entrepreneurial abilities than men. In order to understand the business competences by gender in this context, the third research question was formulated as follows: 'What kinds of differences in the perceptions related to the business competences and entrepreneurial intentions exist between the female and male students?'

SAMPLE

The regular time for completing the studies of a bachelor degree in the business management programme is 3.5 years. In April 2010, there were 430 students in the business department of the case or-

TABLE 1 Characteristics of the sample ($n = 111$)

Variables	Categories	<i>n</i>	%
1. Academic year	Second (BM2), international students	23	20.7
	Second (LT2), Finnish students	46	41.5
	Third (BM3), international students	18	16.2
	Third (LT3), Finnish students	24	21.6
2. Gender	Male	43	38.7
	Female	68	61.3
3. 'Internationality'	Finnish	78	70.3
	International (= non-Finnish)	32	28.8
	No answer	1	0.9

ganisation. According to the records of the students' affairs office of the case organisation, the number of students in each academic year was as follows: 136 first-year students, 105 second-year students, 80 third-year students, and 41 fourth-year students or students who have delayed their graduation. In addition, there were 68 adult students studying in the bachelor degree programme. However, a large part of their studies is compensated by their previous business studies and they study only for 1.5–2.5 years. Thus, only the young students who have followed the current curriculum from the beginning were included in the sample. In other words, the sample consisted of Finnish and international students in their second and third year of bachelor degree studies in the business department.

DATA COLLECTION AND ANALYSIS

The study was carried out in April 2010 and the questionnaires were delivered to the students in two ways: at the beginning of classes when the students were asked to answer the questions and the questionnaires were returned back as soon as they were completed by the students. The questionnaire was sent also by e-mail to the third year students since many of them were abroad doing their foreign study period at the time when the study was conducted. Eventually 111 questionnaires were returned (which is 60% of all the second and the third year students and 25.8% of all the business students of the department). The average age of the informants was 22.2 years. Table 1 introduces the characteristics of the sample.

The questionnaire included 37 statements related to the business competences introduced above. The students were asked to rate themselves against these competences (learning outcomes) of the degree programme. Using a Likert scale of 1 to 5, where 1 was the lowest and 5 was the highest, the students were asked to rate

the level of the competences they perceived to have. In this study also an additional competence was included which is named *Personal maturity skills* and consists of four dimensions related also to entrepreneurship: *Self-awareness* (ability to reflect and make self-assessments), *Accountability* (ability to take responsibility for resolving a problem), *Emotional coping* (emotional ability to cope with a problem), and *Creativity* (ability to produce a creative solution to a problem). Besides the 37 statements the students were asked questions such as background information, gender, academic year, and their likelihood to set up a business after graduation (entrepreneurial intention by self-evaluation), and each theme had one variable in the questionnaire.

The data analysis was made by using SPSS-software. First, the frequencies, means and standard deviations were examined by each variable. Then the means of the variables were combined as the combined variables according to the business competences introduced above. They are called Combined variables in this paper. The correlations between the combined variables were examined and tested by using correlation analysis (Pearson) and the crosstabs by using Pearson Chi-Square tests. In addition, *T*-tests were used to test differences statistically between academic years, by gender and internationality (Independent-Samples *T*-Test).

Findings

RESULTS OF ALL THE STUDENTS

The findings are presented as the combined variables (means of the means) related to the business competences of the programmes. First, the business competences of all the students are introduced as descriptive statistics (minimum and maximum values, means and standard deviations) in table 2. Then the correlations between the combined variables and the intention as an individual variable are introduced. In general, it can be presented that the scores were generally high. All scores were clearly above the midpoint of the scale. The competence called Personal maturity skills was scored with the highest (the mean was 3.89), while the lowest was the entrepreneurial intention (the mean was 2.78).

Next, to assess the strength of the relationship between the variables (Mouthinho and Hutcheson 2011, 56), the correlations between the competences and the entrepreneurial intention are presented (Pearson Correlation, Sig. 2-tailed). The findings indicated that Business Operations and Entrepreneurship and Intention had a very sig-

TABLE 2 Descriptive statistics of the combined variables and intention variable
($n = 111$)

Variable	Min.	Max.	Mean	St. Dev.
1. Business Operations and Entrepreneurship	1.78	4.78	3.43	0.60
2. Business Environment	2.00	5.00	3.32	0.63
3. Marketing and Customer Relationships	2.17	5.00	3.71	0.63
4. Organisations and Management	1.88	4.88	3.60	0.56
5. Financial Administration	1.25	5.00	3.19	0.88
6. Research and Development in Business	2.00	5.00	3.20	0.64
7. Personal Maturity Skills	2.50	5.00	3.89	0.62
8. Intention (as an individual variable)	1.00	5.00	2.78	1.24

nificant correlation ($r = 0.454$, $p = 0.000$) with each other. Further, Organizations and Management and Intention ($r = 0.198$, $p = 0.038$) as well as Financial Administration and Intention ($r = 0.231$, $p = 0.015$) had an almost significant correlation with each other (see table 3).

Based on the correlation between the competence of Business operations and entrepreneurship (BOE) and the entrepreneurial intention, it seems that in the clear majority of the cases they have the same direction, however there might be exceptions. It seems that the higher the level of students competences is, the stronger their entrepreneurial intention is, and vice versa. Further, regarding the correlations between the competences of Business Environment (BE) as well as between Financial Administration (FA) and the entrepreneurial intention, in most cases the tendency seems to be similar as it was described earlier. Based on the findings, it seems that the rest of the competences have at most a marginal influence on the entrepreneurial intention. Therefore it can be concluded that the competences are significant and they have influences on the entrepreneurial intention.

PERCEIVED BUSINESS COMPETENCES AND INTENTION BY INTERNATIONALITY

The data were also examined between the international group and the Finnish group, and the findings illustrated that the international students had higher scores than the Finnish students, both in all the competences and in the intention. The differences were also tested by *T*-test findings (Independent-Samples *T*-Test) to assess the likelihood of these groups being different (Saunders, Lewis, and Thornhill 2007, 447). The findings indicated that in terms of *Business operations and entrepreneurship* there was a very significant difference between the Finnish students and international students ($p = 0.001$).

Students' Perceptions of Their Business Competences

TABLE 3 Correlations between the combined variables and the intention

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Pearson Corr.	1							
Sig. (2-tailed)								
<i>n</i>	109							
(2) Pearson Corr.	0.668**	1						
Sig. (2-tailed)	0.000							
<i>n</i>	109							
(3) Pearson Corr.	0.613**	0.677**	1					
Sig. (2-tailed)	0.000	0.000						
<i>n</i>	109	111						
(4) Pearson Corr.	0.667**	0.530**	0.610**	1				
Sig. (2-tailed)	0.000	0.000	0.000					
<i>n</i>	109	111	111					
(5) Pearson Corr.	0.347**	0.287**	0.207*	0.390**	1			
Sig. (2-tailed)	0.000	0.002	0.029	0.000				
<i>n</i>	109	111	111	111				
(6) Pearson Corr.	0.534**	0.452**	0.457**	0.576**	0.447**	1		
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000			
<i>n</i>	109	111	111	111	111			
(7) Pearson Corr.	0.483**	0.479**	0.554**	0.594**	0.385**	0.468**	1	
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000		
<i>n</i>	109	111	111	111	111	111		
(8) Pearson Corr.	0.454**	0.185	0.175	0.198*	0.231*	0.139	0.074	1
Sig. (2-tailed)	0.000	0.052	0.67	0.038	0.015	0.147	0.442	
<i>n</i>	108	110	110	110	110	110	110	

NOTES Column/row headings are as follows: (1) Bus. Operations and E-ship (BOE), (2) Business Environment (BE), (3) Marketing and Customer relationships (MCR), (4) Organisations and Management (OM), (5) Financial Administration (FA), (6) Research and Development in Business (R&D), (7) Personal Maturity Skills (PMS), (8) Intention (as an individual variable, IN). **Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the level 0.05 (2-tailed).

Further, in Business environment there was a significant difference ($p = 0.008$) between the Finnish and international students. In addition, there was an almost significant difference in Organisations and management ($p = 0.038$) as well as in Intention ($p = 0.017$) between the Finnish and international students. The comparison between the two groups is presented in table 4.

PERCEIVED BUSINESS COMPETENCES AND INTENTION BETWEEN THE ACADEMIC YEARS

First, all the findings indicated that there were only small differences between the academic years. However, the tendency was that the scores of the third-year students were a little higher in each case

TABLE 4 Descriptive statistics of the means and *T*-tests by 'internationality'
(*n* = 111)

Variables	(1)		(2)		(3)
	(a)	(b)	(a)	(b)	(c)
1. Business Operations and Entrepreneurship	3.31	0.58	3.72	0.54	0.001***
2. Business Environment	3.21	0.61	3.56	0.65	0.008**
3. Marketing and Customer Relationships	3.67	0.65	3.80	0.60	0.314
4. Organisations and Management	3.52	0.56	3.76	0.52	0.038*
5. Financial Administration	3.01	0.78	3.61	0.96	0.001
6. Research and Development in Business	3.14	0.61	3.34	0.70	0.126
7. Personal Maturity Skills	3.81	0.63	4.06	0.58	0.057
8. Intention (as an individual variable)	2.60	1.25	3.22	1.16	0.017*

NOTES Column headings are as follows: (1) Finnish students (*n* = 76), (2) International students (*n* = 32), (3) *T*-test, (a) mean, (b) standard deviation, (c) sig. (2-tailed). Significance limits: $p < 0.001$ ***, $p < 0.01$ ** , $p < 0.05$ *.

TABLE 5 Descriptive statistics of the means and *T*-tests by the academic year
(*n* = 111)

Variables	(1)		(2)		(3)
	(a)	(b)	(a)	(b)	(c)
1. Business Operations and Entrepreneurship	3.39	0.56	3.51	0.66	0.292
2. Business Environment	3.27	0.58	3.40	0.71	0.265
3. Marketing and Customer Relationships	3.66	0.57	3.79	0.72	0.311
4. Organisations and Management	3.56	0.58	3.66	0.53	0.362
5. Financial Administration	3.18	0.81	3.21	0.98	0.892
6. Research and Development in Business	3.14	0.60	3.28	0.71	0.292
7. Personal Maturity Skills	3.87	0.65	3.93	0.58	0.653
8. Intention (as an individual variable)	2.69	1.28	2.93	1.18	0.333

NOTES Column headings are as follows: (1) 2nd year (*n* = 69), (2) 3rd year (*n* = 42), (3) *T*-test, (a) mean, (b) standard deviation, (c) sig. (2-tailed).

than the scores of the second-year students. The differences were tested by using *t*-tests (Independent-Samples *T*-test). However, no statistical differences were found. Table 5 presents the statistics by the academic years.

Nevertheless, since the second-year and the third-year students are quite heterogeneous and no statistical differences were found only by the academic years, the second and the third year students groups have been divided further into two categories: international students (BM) and Finnish students (LT). Table 6 illustrates that the international students have rated themselves in each case with higher scores than the Finnish students. The differences were

TABLE 6 Descriptive statistics of the means and ANOVA test by the students groups

Variables	(1)		(2)		(3)
	(a)	(b)	(c)	(d)	(e)
1. Business Operations and Entrepreneurship	3.62	3.27	3.70	3.36	0.023*
2. Business Environment	3.33	3.23	3.72	3.17	0.021*
3. Marketing and Customer Relationships	3.64	3.67	4.08	3.56	0.044*
4. Organisations and Management	3.78	3.45	3.96	3.44	0.001***
5. Financial Administration	3.39	3.08	3.72	2.82	0.004**
6. Research and Development in Business	3.13	3.15	3.57	3.06	0.047*
7. Personal Maturity Skills	3.95	3.84	4.33	3.63	0.002**
8. Intention (as an individual variable)	2.83	2.62	3.22	2.71	0.379

NOTES Column headings are as follows: (1) 2nd year students, (2) 3rd year students, (3) ANOVA, (a) BM ($n = 23$), (b) LT ($n = 46$), (c) BM ($n = 18$), (d) LT ($n = 24$), (e) one-way analysis of variance. Significance limits: $p < 0.001$ ***, $p < 0.01$ **, $p < 0.05$ *.

examined further and tested by using the ANOVA-test (one way analysis variance) in order to assess the likelihood of these groups being different (Saunders, Lewis, and Thornhill 2007, 448). There was statistically a very significant difference ($p = 0.001$) between the student groups related to the combined variable of *Organisations and management*. Further, there were statistically significant differences between the student groups related to the combined variables of *Financial administration* ($p = 0.004$) and *Personal maturity skills* ($p = 0.002$). In addition, the following combined variables were almost statistically significant between the student groups: Business operations and entrepreneurship ($p = 0.023$), Business Environment ($p = 0.021$), Marketing and Customer relationships ($p = 0.044$), and Research and development in Business ($p = 0.047$). In order to understand the findings better, the differences need to be studied further. Therefore the findings provide a topic for future studies.

PERCEIVED BUSINESS COMPETENCES AND INTENTION BY GENDER

In order to understand the business competences and intention by gender in this context, the findings are also categorised by male and female students. However, there were only small differences between the genders. The highest score was in Personal maturity skills (male: 3.89; female: 3.90) and the lowest in the entrepreneurial intention (male: 2.74; female: 2.81). The males had slightly higher scores in Financial administration and Research and Development in business than the female students, otherwise the female students rated themselves a little higher. The differences were also tested

TABLE 7 Descriptive statistics of the means and *T*-tests by gender ($n = 111$)

Variables	(1)		(2)		(3)
	(a)	(b)	(a)	(b)	(c)
1. Business Operations and Entrepreneurship	3.41	0.65	3.45	0.57	0.771
2. Business Environment	3.29	0.61	3.33	0.65	0.756
3. Marketing and Customer Relationships	3.59	0.62	3.78	0.64	0.120
4. Organisations and Management	3.49	0.63	3.66	0.51	0.123
5. Financial Administration	3.22	1.00	3.18	0.80	0.839
6. Research and Development in Business	3.22	0.68	3.18	0.62	0.777
7. Personal Maturity Skills	3.89	0.66	3.90	0.61	0.951
8. Intention (as an individual variable)	2.74	1.29	2.81	1.22	0.801

NOTES Column headings are as follows: (1) male ($n = 43$), (2) female ($n = 68$), (3) *T*-test, (a) mean, (b) standard deviation, (c) sig. (2-tailed).

by *T*-test (Independent-Samples *T*-Test). The findings showed that there were no statistical differences between the male and female students. The comparison by gender is presented in table 7.

Discussion and Conclusions

MAIN FINDINGS OF THE STUDY

In order to answer how the students perceive their business competences and entrepreneurial intention after completing the professional studies in the programme, it can be argued that the students were quite positive and confident in rating their competences. Most of the students gave themselves very high ratings against almost all the competences (cf. Henry, Hill, and Leitch, 2003). In that respect it can be concluded that the learning objectives of the degree programmes have been achieved. Nevertheless, the entrepreneurial intention of the students remained quite clearly at a lower level than the business competences.

Next, to answer what kinds of differences between the Finnish and international student groups exist, it can be presented that very significant differences were found. The findings illustrated that international students had higher scores than the Finnish students related to all the competences and in the intention. To some extent the differences can be explained by the fact that the Finnish students specialize either in Financial administration, Marketing or Business administration as their major, whereas the international students, as one small group of students, take almost the same courses during the programme. On the other hand, as Pihkala (2008) presents, the findings could be explained so that entrepreneurship education

triggers uncertainly to the Finnish students' confidence in their own entrepreneurial skills, if they perceive, for example, having oversized objectives set for entrepreneurship education, lack of encouragement and intellectual support for entrepreneurship. Further, as the likelihood of setting up one's own business seems to be higher when students have spent a long period of time in a foreign country (DeGeorge and Fayolle 2008), the findings of this study support that argument. The students who go to study abroad seem to have more entrepreneurial features and characteristics than those studying in their home country. Nevertheless, since both of the study programmes have almost the same contents and learning objectives, but the language of instruction, implementation and the learning environment differ, the differences could be explained based on those as well, however further studies are needed for this.

Then, to answer what kinds of differences in the perceptions between different student groups by academic years exist, the first notion is that there were only small differences between the second and third academic years, which also support the findings of Arnold et al. (1999). However, in comparing the second- and third-year students and also the internationality, the international students rated themselves with higher scores than the Finnish students. The highest scores of the perceptions relating to the business competences as well as entrepreneurial intention were given by the third year international students. However, before concluding how common this phenomenon is, further studies are needed.

Finally, in order to understand female and male students' perceptions of their business competences and their entrepreneurial intention, it can be argued that there were only small differences between the genders. The findings showed that there were no statistical differences between the male and female students (cf. Ljunggren and Kolvereid 1996). Based on that, it seems that female students of the programme are as likely – or as unlikely – to set up their own businesses after the graduation as male students are.

LIMITATIONS OF THE STUDY

The findings of this study improved the understanding of the students' perceptions of their business competences and entrepreneurial intention. Nevertheless, there are some limitations which should be taken into consideration. First, one should consider that the size of the sample was quite limited. However, the purpose was not to generalise the findings outside the sample, but to understand the phenomenon in its context. Then, it is worth reminding that the

study focused on the competences which have been defined at the degree programme level. If the competences had been examined at the study module level, the findings would have been more detailed, focusing on different business activities in practice.

Further, in order to understand the development of the students' perceptions, a longitudinal study is needed. In addition, the method of the study was a self-evaluation, which does not necessarily reflect the actual level of the learnt competences, but reflects, for example, the level of the self-confidence. In order to compare how realistic these perceptions are, the development should be compared with the actual assessment given by the teachers. Nevertheless, only the evaluation after graduation given by the forthcoming employers will reveal the real level of competences, and thus how competent actors the students really are in their forthcoming professions.

IMPLICATIONS FOR HIGHER EDUCATION

Despite the limitations, the conclusions can be drawn and the implications for higher education can be presented based on the findings of the study. First, since most of the students gave themselves quite high ratings against almost all the competences, it seems that the students have also learnt the business competences of the programmes. On the other hand, one could also question if the learning objectives are at too low a level and whether they could be upgraded. Further, it can be concluded that, since it seems that the intention does not develop during the education, it might be useful, as Pihkala (2008) presents, to select the students with stronger intention at the beginning of the studies and provide them special entrepreneurship study modules. In addition, since it seems that international students studying abroad have a higher likelihood of setting up their own businesses than those who study in their own country, it might be useful to profile the small study programme as an entrepreneurship programme which supports and facilitates the students' intention for becoming entrepreneurs during the whole study programme.

Nevertheless, it is also important to include all the dimensions of entrepreneurship in the study programmes to provide learning possibilities to all students both about entrepreneurship and for entrepreneurship (Kyrö and Carrier 2005). Since the learning process starts with paying attention to the phenomenon and continues to the development of the competences (Blenker, Dreisler, and Kjeldsen 2006), the awareness of entrepreneurship is a good starting point for all the students, not only for all potential candidates for entrepreneurship.

Finally, to conclude this section of the implications for higher education, it is worth discussing the entrepreneurial strategies which universities write and adapt. The strategies include clear and specific goals which are targeted to be achieved especially now in the constantly changing world (Gibb 2005). Nevertheless, if the aim is to increase the number of the graduates who will set up their own businesses after graduation or after having some work experience, the implementation should support the strategies by different means. Since it seems that the perceived entrepreneurial intention of the students is stable during the study years (Pihkala 2008) or even declines as was illustrated, for example, in this study, it might be worth considering what more should be done and how the teaching could have more influence on the learning outcomes in the programmes, especially if there are supposed to be more young entrepreneurs among graduates. For example, it can be concluded that the learning environment could be more entrepreneurial. Then the focus on learning will be more on increasing and developing competences while enjoying and acting in complexity and insecurity, as well as recognising and creating different kinds of business opportunities (Kyrö and Carrier 2005). Therefore it might increase the entrepreneurship competences and thus, the awareness of entrepreneurship as an actual option for the young students.

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