

Generic Competences of the First-Year Business Students beyond Nationalities

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Abstract

The European Qualifications Framework (EQF) includes recommendations for using generic competences and subject-specific competences in the curricula. According to results of earlier studies competences are developed partly as a result of personal growth and experiences outside the school environment, and partly during the studies. Therefore, both professional and generic competences should be emphasised also in the curricula of higher education. This paper presents the findings of the quantitative study that aimed at finding out generic competences of first-year business students in the beginning of their studies. The study was carried out in four higher education institutions in Hungary, Germany, Slovenia and Finland in January 2018. Based on the findings, this study suggests that there are eight factors in common for the first-year business students beyond the nationalities. Later, these findings can be used as a starting point for future studies which will examine the development of the generic competences of the students in higher education.

1. Introduction

Societies, business and technologies are changing rapidly, therefore students in higher education need to acquire several generic competences offered on all degree programmes (Boni & Lozano 2007, 819) in order to be in a better position on a changing labour market (Nygaard, Hojlt & Hermansen 2008, 33; Vaastra & de Vries 2007, 335). Therefore, higher education institutions not only need to facilitate students' professional competence building within a certain academic field, but also to facilitate the development of the generic competences that can be used outside the learning context (Nygaard, Hojlt & Hermansen. 2008, 34).

The entrepreneurial competences can be divided subject-specific competences and generic competences (Kakkonen 2012a, 15). The subject-specific competences can be considered typically to be the knowledge and skills needed for setting up and running a business. The generic competences, in turn, consist of other individual competences, namely a set of attributes, such as representation, independent functioning, initiative, willingness to change and make improvements, problem solving, and tolerance of stress, combined with personality characteristics, skills and knowledge. Some of the generic entrepreneurial competences can be considered a combination of "inborn" personal characteristics and learned abilities through upbringing and growth. The entrepreneurial generic competences

relate also to such features as initiative, work motivation, goal-orientation, independence and persistence (Leskinen 1999; Koironen & Ruohotie 2001; Paajanen 2001).

It can be argued that there are also numerous entrepreneurial attributes, of which the most typical are as follows: achievement-orientation and ambition, self-confidence and self-belief, perseverance, high internal locus of control (autonomy), action-orientation, diligence, determination, and creativity (Gibb 2005). Kirby (2004), in turn, summarizes earlier studies and regards the following as the most relevant entrepreneurial attributes: risk-taking ability, need for achievement, locus of control, deviancy, creativity and opportunism, intuition, and desire for autonomy. However, it is worth emphasizing that there is no single “entrepreneurial type”, but different characteristics which are often related to entrepreneurs and how they approach their tasks (Wickham 1999). To sum up, the diversity of entrepreneurial competences is wide and they relate to personality, but also to learning and growth.

According to the results of a qualitative study introduced by Kakkonen (2012a, 224), three types of students can be recognised based on their generic entrepreneurial competences: independent achievers, social team players and dependent individuals (see Figure 1) Their strengths varied related to the different generic entrepreneurial competences. The qualitative study was conducted for the international business students in the beginning of the studies in Finland. Based on the findings, it can be concluded that it seems that certain entrepreneurial types exist among new students regardless of their national background.

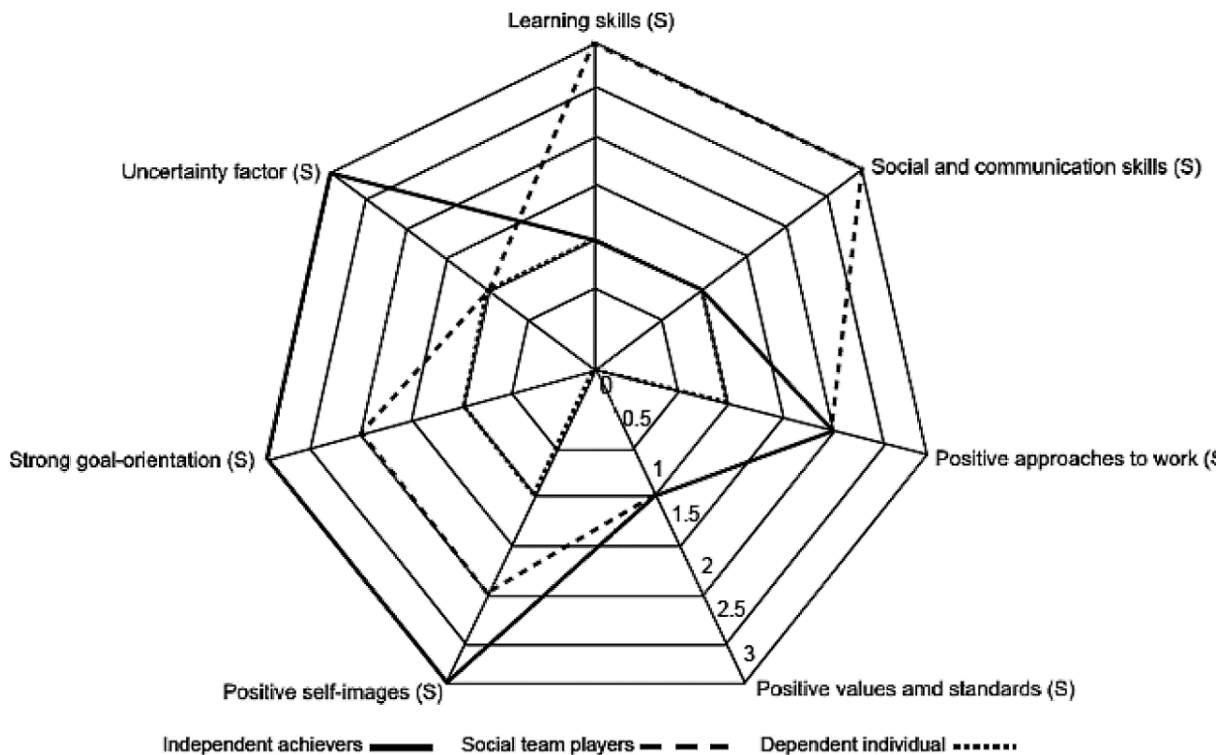


Figure 1: Three types of students based on their generic competences (Kakkonen 2012a, 224)

The findings related to those three entrepreneurial types were a starting point for this study. The new study was designed to be carried out in four different countries and it was targeted to their national new students. This study had three pre-assumptions: First, it was

assumed that students with different nationalities possess generic entrepreneurial competences and thus, therefore various entrepreneurial types could be recognized in the beginning of their studies in higher education. The second assumption of the study was that generic entrepreneurial competences can be related to personal traits as well as the upbringing and growth of the students. The third assumption is that the generic competences can also be learnt in higher education and therefore the findings of this study creates a starting point for future studies which will examine the development of the generic entrepreneurial competences of students.

Based on the findings introduced above, this quantitative study aimed at finding out how the first-year business management students perceive their generic competences in the beginning of their studies. This paper presents the findings of the study which was conducted in four partner universities in Hungary, Germany, Slovenia, and Finland.

2. The Importance of Perceptions of Generic Competences

In this section, the body of literature is presented depicting why generic competences are so important and why knowing students' perceptions of their competences is relevant.

In general, one can say that generic competences are important as they are the mechanism for linking individual behaviour to business performance. More specifically, Young and Chapman (2010, 1–4) outline three general factors that contributed to the increased demand for generic competences seen over the last three decades. First, new technologies have provided individuals with the means to access and distribute specialised information quickly and easily, reducing demand for skills associated with the storage and retrieval of detailed technical information. In contrast, the ability to source, process, manage, communicate and apply knowledge across diverse contexts has come to be seen as critical for workplace success (Hays 2017). Second, rapid transformations of the world economy have brought a shift toward global white-collar service industries, requiring broadband skills, or, using the terminology of this paper, generic competencies. This trend was also highlighted in many other studies (Richens & McClain 2000; Owen et al. 2000) reporting that „soft skills“ such as communication and interpersonal style were amongst the most important competencies sought by workplace employers. Third, from an economic perspective, generic competencies increase the competitiveness, efficiency and productivity of the labour market (Rychen et al. 2004).

Knowing the perceptions of competences' holders carries no less importance. Current models of employability among others also build upon the notion that not only the set of objective competences developed, but also the perceptions of mastering such competences is important to understand future graduates' employability (Monteiro, Almeida, & Vasconcelos 2016). Understanding own competences and skills is after all critical when managing one's own career. Knowing own skills and competences is fundamental precondition in the process of managing oneself on the labour market (Drucker 2005), living self-fulfilling life, finding ideal work, career and work-life balance (Harrington & Hall 2014). After all, our actions are influenced by how we perceive ourselves, and on how we perceive our social and physical environment (Huczynski & Buchanan 2013; Robbins & Judge 2017).

There is additional reason, why knowing perceptions of students' competences is relevant. There are many studies reporting a remarkable difference between the perceptions of students and their potential employers raising the concerns either from the structural

unemployment (Mourshed, Patel, & Suder 2014) point of view, emerging 4th industrial revolution (Hays plc 2017) or educational perspective (Hart Research Associates 2015). The study conducted by the Association of American Colleges and Universities (Hart Research Associates 2015) found that employers overwhelmingly endorse broad learning and cross-cutting skills as the best preparation for long-term career success. However, employers also give students very low grades on nearly all of the 17 learning outcomes explored in the study, including those deemed most important for career success. Students on the other hand understand what learning outcomes are most important in today's economy, but they judge themselves to be far better prepared for post-college success than do employers. Perception of students' skills and competences is important in order to give study credibility and importance in terms of whether students achieve desired competences that indicate the knowledge and skills that are needed to effectively practice DiPiro (2010). McKinsey & Co. study of how Europe's youth is getting from education into employment (Mourshed, Patel, & Suder 2014, 5) observes that an overriding reason for young people being held back in the labour market during the time of recession is a lack of skills relevant to the workplace. Across all eight EU countries included into survey, most employers —61 percent— were not confident they could find enough applicants with the right skills to meet their business needs. The study concludes that a critical reason for youth not getting the skills employers need is that education providers, young people, and employers do not understand one another. According to the annual Hays Global Skills Index 2017 (Hays plc 2017) more and more employers and workers will adopt innovative working patterns, such as freelancing, temporary or on-call jobs. This will have a major impact on the versatile skills the future employees (and employers) must be equipped with in order to succeed in business life. The working places will become intercultural requiring entirely new skills from the future employees. Finally, the digitalisation driven by artificial intelligence, big data, online platforms and computers communicating with each other with little or no human intervention will move up or down the skills spectrum, creating entirely new work roles due to greater efficiencies and lower costs. There are many different non-academic skills, which will play a major role in this context such as critical thinking, collaboration, communication, creativity, and information, media and technology skills.

Important cornerstone of presented research is the adoption of the international comparative perspective. There are two compelling reasons behind it. First, the sphere of education is engulfed in the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of higher education (Knight 2003) as well as in the process of commercializing research and postsecondary education, and international competition in order to generate revenue, secure national profile, and build international reputation (Khorsandi Taskoh 2014). And last but not least, culture influences perceptions (Wu and Keysar 2007). Ignoring comparative perspective would thus severely limit the validity and usability of research findings.

3 Implementation of the Study

The research adopts an international context – with a survey being carried out in four different countries targeted at the first-year business management program students. The study is aimed at mapping out generic competences of business students in the beginning of their studies in four universities in Hungary, Germany, Slovenia, and Finland. A self-assessment questionnaire was used in January 2018 to gather data on the convenience sample of 358 first-year students: 177 from Hungary, 70 from Germany, 56 from Finland and 55 from Slovenia.

Survey was carried out by an e-mail invitation and a link for a Webropol questionnaire to all the first-year business students. The questionnaire included 38 statements as variables. Besides the 38 statements (alternatives to answer how well the statements corresponded with their own opinions: 1 = not at all 2 = not well 3 = fairly well 4 = well 5 = very well), the students were asked questions about their background information, their age, gender and academic year.

The data analysis was made as follows: First, the frequencies, means and standard deviations were examined by each variable. Then, an explorative factor analysis was made. The criteria for the factor analysis was examined: the number of frequencies was big enough (n=358), an ordinal scale was used for variables, and the results of Bartlett's test supported the use of factor analysis. First 10 variables were excluded due to the low-ranking scores of communality (<0,3). There were eight factors which scored more than 1.0. These factors were named based on their variables strongly loaded on them.

4 Results

There were 358 respondents in-total. 228 of all the respondents were female students and 129 were male students (one did not reveal the gender) There were 358 first-year students as respondents from Hungary (n=177), Germany (n=70), Finland (n= 56) and Slovenia (n=55). About half of the respondents were from Hungary and therefore first, it was considered a limitation of the reliability of the study. Therefore, the findings were examined by country first. The results are presented elsewhere (Sirok & Kakkonen 2018). Nevertheless, the criteria of the factor analysis was examined and it supported the use of the explorative factor analysis.

The results of the 38 statements are presented in Table 1. The means and standard deviation of each statement are shown. The highest means of the statements are related to the statements of "Reaching goals makes me happy" (4.6) and "I like to get the job done" (4.5). The lowest mean of the statements was "I don't care about other people's interests" (2.2). All in all, it can be concluded that the means of all statements were quite high.

In order to find latent variables related to the 38 Likert items of the questionnaire, the explorative factor analysis was performed with SPSS. The necessary assumptions for factor analysis were fulfilled as the sample size was adequate (n = 359) and the items were measured on ordinal scale. The method of Maximum Likelihood was used and the rotation of factor solution was done with the help of Varimax rotation. The correlation matrix was suitable for the factor analysis according to some well-known standards. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.843 (recommendation >0.6). Bartlett's test of sphericity was significant ($\chi^2(703) = 3848.47, p < 0.05$). Eight items were eliminated because their communalities were small (less than 0.3).

The factor solution consists of eight factors. Those factors had eigen values more than one. Only loadings >0.30 are displayed in the factor solution. The eight-factor solution explains 47.2 % of the variance. The eight factors are Risk taking and decision making, Determination and goal orientation, Leadership, Learning from mistakes, Creativity and resourcefulness, Achieving goals and awareness of consequences of one's own actions, Keeping deadlines, and Trust and collaboration.

Table 1. The means of the variables

Statements	Mean	Median	St. Dev.
1. I am a goal -oriented person	4,1	4	0,8
2. Mistakes are helpful for further development work	4,0	4	0,8
3. I have work routines and checklists	3,5	4	1,0
4. I have the courage to take a step if I know where I am heading	4,1	4	0,8
5. I usually have many ideas	3,8	4	0,9
6. I see limited resources as a challenge	3,3	3	0,9
7. Other people tend to listen to me	3,7	4	0,9
8. I don't care about other peoples' interests	2,2	2	1,1
9. I like challenges	3,9	4	0,9
10. I trust people	3,4	4	1,0
11. I take initiative in various situations	3,4	3	0,8
12. I like deadlines	3,1	3	1,2
13. I stick to my own personal principles	3,9	4	0,8
14. I am punctual	3,9	4	1,0
15. I can achieve more with a team	3,5	3	1,1
16. I try hard to achieve the goals	4,0	4	0,8
17. I am willing to take risks	3,6	4	0,9
18. I need to sleep it over before I make the final decision	3,3	3	1,2
19. I am a self -confident person	3,6	4	1,0
20. I stick to the deadlines and terms	3,9	4	1,0
21. My planning is very detailed and exact	3,6	4	1,0
22. I am the most important person for my own success	4,0	4	0,9
23. I have the courage to take calculated risks	3,7	4	0,8
24. I am open for cooperation	4,2	4	0,8
25. I am a creative person	3,7	4	1,0
26. It is easy for me to delegate	3,5	3	0,9
27. I like to get the job done	4,5	5	0,7
28. Making decisions is easy for me	3,3	3	1,0
29. Mistakes can be useful	4,1	4	0,8
30. I always find a solution to a problem at hand	3,6	4	0,8
31. I get excited in unusual situations	3,5	4	1,0
32. I am not afraid of failure	3,0	3	1,1
33. I can convince other people of my ideas	3,7	4	0,8
34. When I start to work on something, I don't give up until I have completed the task	3,9	4	0,9
35. Reaching goals makes me happy	4,6	5	0,7
36. I understand possible consequences of my activities	4,2	4	0,7
37. I am flexible	4,0	4	0,9
38. During group work, I wait for others to take the first steps	3,0	3	1,2

Ten items loaded on factor 1. Most of these items directly refer to taking risks or making decisions so naming this factor accordingly seems appropriate. Seven items loaded on factor 2 and it seems clear that this factor represents goal-orientation.

Four items loaded on factor 3 and because statements such as “Other people tend to listen to me” and “I can convince other people of my ideas” had high loadings, this factor represents leadership qualities. Only two items loaded on factor 4 and they both were statements about usefulness of making mistakes so this factor was labeled “Learning from mistakes”.

Also, factor 5 had two loadings and both items (“I usually have many ideas” and “I am a creative person”) had a common ground. Factor 6 is the most ambiguous one: three items loaded on this factor but did not have many common features. Naming this factor “Reaching goals and understanding consequences” describes the situation fairly well.

Both factor 7 (“Coping with deadlines”) and factor 8 (“People and co-operation”) had three loadings.

The eight factors are Risk taking and decision making, Determination and goal orientation, Leadership, Learning from mistakes, Creativity and resourcefulness, Achieving goals and awareness of consequences of one’s own actions, Keeping deadlines, and Trust and collaboration. All in all, the results can be explained in a reasonable way with this model (explanation percentage was 47.2%). Based on the findings, this study suggests that there might be generic competences of the first-year business students that are in common beyond the nationalities. It seems that the students share same kinds of entrepreneurial behavioral aspects, knowledge, skills, attitudes and personal qualities based on their upbringing and growth before their studies in higher education. How valid these findings are it needs to be examined further. In addition, since this study was a cross sectional study, the impact of education on the generic competences should be revealed with a longitudinal study.

5 Conclusions

This quantitative study aimed at finding out how the first-year business management students perceive their generic competences in the beginning of their studies. The study was implemented in four partner universities in Hungary, Germany, Finland and Slovenia in 2018. Based on the findings, the study suggests that there might be generic competences of the first-year business students that are in common beyond the nationalities. How valid these findings are it needs to be examined in futures studies. In addition, the first factor seems to be the most relevant latent variable since almost half of the variables were loaded into the factor of Risk taking and decision making. How valid these findings are needs to be examined further. In addition, since this study was a cross sectional study, the impact of education on the generic competences should be researched further with a longitudinal study.

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