Managerial Competencies in Knowledge Context: Comparative Analysis of Poland and United Kingdom

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The present study aims at defining the importance of the managerial competencies, taking particular interest in knowledge, in students’ prospective professional career and the level in which these competencies were gained in the course of their studies. The empirical material was collected on the basis of a diagnostic survey carried out from 2009 to 2010 in Lublin, Poland and Huddersfield, Great Britain. The group of respondents consisted of the final year university students of economics and management. The research results revealed that, among both respondent groups, the importance of evaluated competencies exceeded the level of competencies gained during their studies.

Keywords: managers’ education, knowledge, competencies

Introduction

Globalisation and internationalisation processes pose particular challenges for the universities. Modern universities should implement such educational process that would supply the students with comprehensive knowledge thus enabling them to solve socio-economic problems. This is especially important for the universities that provide education for potential managers – courses in the field of economy and management.

In the process of globalisation and European integration, the free movement of EU nationals, services, and capital seems fundamental for the development of a single market. Furthermore, intellectual, educational, cultural and social domains are no less important for the integration. These domains are defined as ‘Europe of Knowledge’ and university studies constitute its vital element.

The present study aims at defining the importance of the managerial competencies, taking particular interest in knowledge, in students’ prospective professional career and the level in which these competencies were gained in the course of their studies. On the basis of these stipulations, an
attempt was made to define the competence gap (perceived as the difference in the level of competencies required vs. competencies gained).

The empirical material was collected on the basis of studies conducted from 2009 to 2010 with the use of a diagnostic survey. The study included final year students of management and economics from three state universities of Lublin, namely John Paul II Catholic University, Maria Curie-Sklodowska University, and Lublin University of Technology, and also Business School University of Huddersfield.

**The Issue and Literature**

In the modern global world of profound and rapid socio-economic and technological changes, the issue of competencies is frequently discussed in the literature. Due to the fact that managerial competencies are considered by researchers as complex, they are most frequently analysed among all the competence types. However, acquiring the managerial competencies does not ensure the competency of a manager, since they ought to also possess other characteristics allowing them to put their skills and knowledge into practice.

D. C. McClelland (1973, pp. 9–13) was the forerunner of research in competencies. In the 1970s he put forward a statement that graduates’ professional success cannot be associated with university grades. In order to diagnose the professional predispositions, he developed a test of competencies. In the following years, the research in the field of competencies was taken up by C. J. Constable who claimed that competencies constitute the ability to implement knowledge and skills, thus helping the manager to effectively fulfil their role. Therefore, all managerial skills could be regarded as competencies when used effectively (Constable, 1988). L. and S. Spencer presented a similar point of view. They assumed that competencies encompass the knowledge, skills, values, standards, motives, work ethics, enthusiasm, and self-image (Spencer & Spencer, 1993, p. 388).

Modern authors emphasise the fact that, currently, knowledge and information have become a key factor in the success of an organisation. Namely, modern organisations can swiftly react to changes in unsteady environments and use them to solve problems with the help of all employees. It is possible that, due to considerable effort and streaming of resources into the selection of appropriate talents as human resources, the competencies of talented leaders of change seem to be the fundamental success factor (Prahalad & Krishnan, 2010, pp. 160–180).

The researchers studying the current issues of human resources are unanimous in their claim that human resources ought to be developed and perfected. Additionally, the organisational culture and effective training systems ought to be devised, which may benefit the employee development (Sitko-Lutek, 2005, pp. 262–263; McCallum & O’Connell, 2009, pp. 152–
In order to dominate the market, modern companies attempt to gain competitive edge by developing their key competencies (Prahalad & Hamel, 2000, pp. 3–22).

At present, the researchers studying the issue of human resources are unanimous in their claim that the employee competencies’ development and perfection, and consequently fostering culture together with efficient training system advantageous to the development of employees in organizations, seem fundamental. It is estimated that, in the coming years, the rise of competitiveness among organisations on the global market will lead to the necessity of modifying the strategies regarding this issue. As a consequence, the requirements for competencies of a leader will change. The ability to adapt to rapidly changing situations and environment will become the focus of this change fostering the ability among the employee groups.

Therefore, considerable employees’ competence flexibility and becoming a learning organisation are required from a modern enterprise. The essence of a knowledge-based organisation is constant change, brought about as a result of continuous learning mainly via challenging the common thinking patterns, acting upon, and considering numerous possible scenarios of own functioning (Chuen Huang & Shih, 2011, pp. 623–644). Such organizations value knowledge, support competencies, and invest in employees’ perfecting.

In order to meet the requirements of the global knowledge-based economy (Drucker, 1993, pp. 6–20), companies implement modern methods of knowledge management, competencies, and organisation’s perfecting. This entails greater efficiency and effectiveness of the company’s operations and translates directly into an improvement of its financial gains (Ubeda Garcia & Liopis Vano, 2002, pp. 169–181). In the knowledge-based economy, the employees’ qualifications and competencies provide value for the company. These valuable resources ought to be constantly supplemented and developed in order to provide a means for creative and efficient problem solving (Kambil, 2010, pp. 43–45; Chadam & Pastuszak, 2005, pp. 459–475). Globalisation and internationalisation processes pose particular challenges for the universities. The modern universities ought to implement such educational process that would supply comprehensive knowledge and consequently enable the students to solve socio-economic problems.

As a result of Poland’s accession to the European Union and ensuing idea of creating the European Higher Education Area, the issue of graduates’ competencies gained particular importance. One of the main stipulations of the Bologna process is the necessity of reforming the university curricula in order to unify the competencies gained as a result of studying a particular subject in individual EU member states. Changes in this regard are to facilitate the occupational mobility among individual EU member states (and consequently contribute to the opening of the labour market).
and promote life-long learning. The process was initiated by the emergence of the Framework for European Higher Education Area (QF for EHEA), which led to the development of the National Qualifications Framework (NQF) in the signatory countries.

NQF is to become the reference point for individual university studies’ majors based upon the effects of education and competencies. In this case, the competencies are understood as the combination of knowledge and its understanding, occupational, interpersonal, intellectual, and practical skills, as well as ethical values (Gonzalez & Wagenaar, 2003, pp. 4–5). Such definition of competencies was applied in the methodology of the present paper.

Currently, particular importance is attached to the development of management in organizations. In literature, the improvement of managers is presented as the process of constant learning and regarded as the key success factor, and also competitiveness tool (Sitko-Lutek, 2004, p. 76). The process of managers’ shaping begins during the formal education stage, namely in the course of university studies. Studies with particular influence on the process of managers’ shaping are studies in the field of economics and management. Therefore, for the purpose of the present paper, the research was performed among the students of these majors. In Poland, the studies in these fields became popular only recently – in 1990. The interest was sparked off by economic changes (political transformation) and the perception of economist’s profession – more of a manager than an office worker. At present, the studies of economics are offered by more than 300 public and private universities and higher education schools.

A special term pertaining to the issue of competencies is the competence gap. It may be perceived as a certain lack or deficiency of skills. The term may also be understood as ‘a difference between the required and real competencies, the structure and level of management’s competencies, and desired and required competencies’ (Loboda & Sitko-Lutek, 2007, p. 23). Such an understanding of the competence gap was applied in this article.

The present study aims at defining the importance of the managerial competencies, taking particular interest in knowledge, in students’ prospective professional career and the level in which these competencies were gained in the course of their studies. On the basis of these stipulations, an attempt was made to define the competence gap (perceived as the difference in the level of competencies required vs. competencies gained).

**The Role of Knowledge in the Bologna Process**

In the process of globalisation and European integration, the free movement of EU nationals, services, and capital seems fundamental for the development of a single market. Furthermore, intellectual, educational, cultural and
social domains are no less important for the integration. These domains are defined as the ‘Europe of Knowledge’ with university studies constituting its vital element. Economists are unanimous in the opinion that, in order to establish a European global knowledge-based economy, a well-organised and competitive educational system, providing an opportunity for solving economic and social problems, is crucial (Teaching and Learning Research Programme 2008).

As early as the second half of the 20th century, the Council of Europe developed a series of regulations enabling education and research in various EU countries. However, the issues concerning the recognition of diplomas and the heterogeneous character of educational systems in individual countries still existed. Projects and programmes such as ERASMUS, Tempus or ECTS system seem vital for the development of the European Higher Education Area. These programmes aim at harmonisation of higher education systems and uniformisation of education in individual countries.

The Bologna Declaration, signed on the 19th of June 1999 by the ministers of education representing 29 European countries, greatly contributed to harmonisation of higher education systems and uniformisation of education in individual countries. The document defines the activities necessary for the establishment of the European Higher Education Area (EHEA) up to 2010 (Bologna Working Group on Qualifications Frameworks, 2004, pp. 8).

Activities undertaken in the framework of the Bologna Declaration initiated the so-called Bologna Process, which represents the basis for the undertakings aimed at the regulation of the higher education system (carried out with the establishment of common values, rules concerning the educational process, and development of common guidelines) while, at the same time, maintaining systemic and cultural independence of regions and countries participating in the process, as well as the autonomy and academic traditions of individual universities (Cardoso, Portelay, Sà, & Alexandre, 2008, pp. 231–234).

The implementation of the Bologna Process is to facilitate the students’ and researchers’ mobility among the countries and universities, and boost the flexibility of the system, especially in regard to its adaptation to the changing requirements of the global labour market. Initiators of the process also aim at attracting the students from outside Europe to undertake studies at the universities belonging to the EHEA, which would improve the European universities’ competitiveness (Mechtenberg & Strausz, 2008, pp. 109–130).

The stipulations of the process also emphasise the necessity of close cooperation between the universities and the employers in order to facilitate a swift transfer from education to employment and maintain life-long learning ability, which provides the capacity to fulfil the economy’s requirements for
new qualifications. The graduates’ mobility on the European labour market is to be ensured with the ability to compare and recognise the qualifications and degrees obtained during their studies in various EHEA countries (Bologna Process, 2007).

Currently, the European universities face a new challenge – the introduction of the National Qualifications Framework (NQF) for higher education system. These are to constitute a part of a comprehensive NQF system. The NQF for higher education system is a presentation of an individual country’s higher education system, which is understandable in an international context, and defines the results of the studies in a way which enables their comparison among various countries. In accordance with the European Qualifications Framework, the NQF descriptors for the results of the studies are divided into the following three categories:

1. Knowledge (theoretical or factographic) as a result of the acquisition of information by learning and a collection of facts, regulations, theories, and practices connected with a particular science.

2. Skills, divided into intellectual (logical thinking, intuition, and creativity) and practical (utilisation of methods and tools), denote the ability to use knowledge to solve problems and undertake activities.

3. Competencies (responsibility and autonomy), which denote a proven ability to use knowledge, skills, personal, social, and methodological competencies at work, education or personal and professional development.

The literature of the subject devotes much attention to the necessity of improving the practical aspect of education, which ought to be pursued regardless of the field of study. Currently, universities are encouraged to establish more favourable conditions for the cooperation with the surrounding socio-economic elements. By including the employers in the process of education, enabling students’ participation in trainings and internships, the universities can considerably improve the results of studies and consequently positively influence the students’ preparedness when entering the labour market.

Actually, in the 21st Century, which is called ‘the age of the knowledge-based economy’ (Besenyei, 2010, pp. 3–9), there are many debates about the role and the future of the European higher education system. Nowadays, the perceptions of the role of universities and their expectations have been modified due to the fact the learning process often takes place outside of them. That is why higher education institutions will be facing functioning problems in the future. The answer could be in Life Long Learning (LLL), which is becoming more meaningful and important for the universities. The
higher education sector may play a special role in this process, progressively increasing its provision of LLL. The universities should, therefore, commit to promoting LLL (Bikfalvi, Rafart, & Mancebo, 2013, p. 8), which is formalized in the document of the European Association of Universities (2008). The document emphasizes the role of universities as model institutions of LLL.

**Research Methodology**

The empirical analyses presented in this article were conducted on the basis of authors’ own questionnaire.

The respondents were asked to assess ten managerial competencies, such as:

1. Managing change
2. Specialist knowledge
3. Knowledge concerning management
4. Knowledge of strategic management
5. Knowledge of HRM
6. Knowledge of law
7. Knowledge of financial issues
8. Knowledge of marketing
9. Global thinking and action
10. Professional experience

The competencies were evaluated based on the following two aspects:

- their role in the respondents’ future professional career,
- the level of competencies gained by the respondent while at the university.

Cafeteria-style answer evaluation ranging from 1 (none, of low significance) and up to 4 (significant) was proposed.

Empirical material was collected on the basis of studies conducted in 2009–2010 with the use of a diagnostic survey. Studies encompassed two respondent groups. The first group included 278 students of the final, fifth, year at three state universities in Lublin, namely:

- Maria Curie-Sklodowska University (UMCS) – Economics, Management, and Finance and Accounting majors;
- Lublin University of Technology (LUT) – Management and Marketing majors;
- John Paul II Catholic University of Lublin (KUL) – Management majors.
Table 1  The Structure of Respondent Groups

<table>
<thead>
<tr>
<th>Specification</th>
<th>Polish students (n = 278)</th>
<th>British students (n = 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Sex Female</td>
<td>169</td>
<td>61</td>
</tr>
<tr>
<td>Male</td>
<td>109</td>
<td>39</td>
</tr>
<tr>
<td>Place of residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural area</td>
<td>97</td>
<td>35</td>
</tr>
<tr>
<td>Urban area</td>
<td>181</td>
<td>65</td>
</tr>
<tr>
<td>Work for money</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>82</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>196</td>
<td>71</td>
</tr>
<tr>
<td>Material status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>75</td>
<td>27</td>
</tr>
<tr>
<td>Average</td>
<td>177</td>
<td>64</td>
</tr>
<tr>
<td>Low</td>
<td>26</td>
<td>9</td>
</tr>
</tbody>
</table>

The second group of respondents consisted of 50 students of Business School University of Huddersfield. The collected empirical data provided the opportunity for simultaneous comparative analysis regarding the importance of the evaluated competencies and the level of competencies gained by the two groups of respondents.

Women (61%) and persons residing permanently in cities (approximately 2/3) constituted the majority of researched Polish students. The majority of respondents were unemployed (71%) and defined their economic situation as average (64%).

In the case of the respondents from the British university, women (64%) and persons residing permanently in cities (78%) constituted the majority of respondents as well. As opposed to the respondents from universities in Lublin, their British colleagues were employed (more than 2/3) despite attending a full-time course. This may be due to the fact that British universities charge tuition fees, whereas full-time studies at Polish public universities are free of charge.

Respondents studying in Huddersfield, similarly to their Polish counterparts, defined their economic situation as average (70%). 16% and 14% of respondents defined their economic situation as either poor or good respectively.

Research Outcome
Table 2 presents self-evaluation of managerial competencies as seen by Polish and British students.

Each of the assessed groups of competencies was evaluated much lower in comparison with the opinion expressed in reference to their role at work. This fact seems to confirm the existence of a competence gap related to all evaluated competencies. The most significant differences occurred in relation to a professional experience, which was evaluated as the most vital in
Table 2  Competence Gap As Self-Evaluated by Polish and British University Students

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Polish students</th>
<th>British students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Managing change</td>
<td>2.76</td>
<td>2.42</td>
</tr>
<tr>
<td>Specialist knowledge</td>
<td>2.82</td>
<td>2.36</td>
</tr>
<tr>
<td>Knowledge concerning management</td>
<td>2.96</td>
<td>2.50</td>
</tr>
<tr>
<td>Knowledge of strategic management</td>
<td>2.74</td>
<td>2.34</td>
</tr>
<tr>
<td>Knowledge of the HRM</td>
<td>2.60</td>
<td>2.06</td>
</tr>
<tr>
<td>Knowledge of the law</td>
<td>2.52</td>
<td>1.98</td>
</tr>
<tr>
<td>Knowledge of financial issues</td>
<td>2.92</td>
<td>2.44</td>
</tr>
<tr>
<td>Knowledge of marketing</td>
<td>2.92</td>
<td>2.44</td>
</tr>
<tr>
<td>Global thinking and action</td>
<td>2.70</td>
<td>2.34</td>
</tr>
<tr>
<td>Professional experience</td>
<td>3.52</td>
<td>2.10</td>
</tr>
</tbody>
</table>

Notes  Column headings are as follows: (1) role in professional career, (2) Level reached at university.

a professional career with the average of 3.66 on a 4 point scale; however, this competence was at the same time acquired the least in the course of studies (1.65 points). In addition, significant differences pertained to specialist knowledge, whose importance in professional career scored 3.49 points, but its realization in the course of studies received only 2.18 points. In the case of the remaining competencies connected with knowledge, the differences were not as considerable; however, they were statistically significant.

Similar to the case of the Polish students, statistically significant differences were also found in the competencies related to the professional career and their level exhibited by the British students. Professional experience was evaluated as the most significant for prospective employment (average 3.52), but at the same time achieved the least in the course of studies (2.10 points). In the case of the remaining competencies, the differences in ranking were slightly lower and amounted to 0.5 percentage points. Unlike the Polish students’ rankings, the individual competencies received similar scores in both rankings. The following areas scored the lowest in both classifications: law (averages respectively 2.52 and 1.98) and human resources management (average 2.60 and 2.06).

From the perspective of the present paper, the comparison of competencies evaluated by both the British and the Polish final year students seemed interesting. The results of the comparative analyses are displayed in Table 3.

The analysis of the significance of competencies in regard to the professional career indicated that the greatest convergence applied to professional experience (1st place in both rankings), global thinking and action
Table 3  A Comparison of the Managerial Competencies As Assessed by Both Groups of Students

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Role in professional career</th>
<th>Level reached at university</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PL</td>
<td>UK</td>
</tr>
<tr>
<td>Managing change</td>
<td>9.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Specialist knowledge</td>
<td>2.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Knowledge concerning manag.</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Knowledge of strategic manag.</td>
<td>6.5</td>
<td>7.0</td>
</tr>
<tr>
<td>Knowledge of the HRM</td>
<td>6.5</td>
<td>9.0</td>
</tr>
<tr>
<td>Knowledge of the law</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Knowledge of financial issues</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Knowledge of marketing</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Global thinking and action</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Professional experience</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Notes  Column headings are as follows: PL – Polish students, UK – British students.

(8th place), and knowledge of law, which was evaluated as the lowest by both respondent groups (10th place). Slight differences pertained to the knowledge of strategic management, knowledge concerning management, knowledge of financial issues, and knowledge of marketing.

A comparative analysis regarding the knowledge gained in the course of the studies indicated greater disparities. Only global thinking and action was evaluated in the same way (7th place among both respondent groups). The least significant differences pertained to the knowledge concerning management, strategic management and financial issues, and marketing.

Conclusions

As discussed in the course of this study, globalisation and internationalisation processes pose particular challenges for the universities all over the world. This is a particularly important challenge for the higher education institutions in the European countries, due to the Bologna Process and the formation of the European Higher Education Area.

Improving the practical aspect of education, which ought to be pursued regardless of the field of study, has become crucial for the universities. In the 21st century, the universities are encouraged to establish more favourable conditions for the cooperation with the surrounding socio-economic elements. By including the employers in the process of education, and enabling students’ participation in trainings and internships, the universities can considerably improve the results of their studies and positively influence the students’ preparedness when entering the labour market.

The authors of the present work conducted a diagnostic survey among the final year students of economics and management university courses
in Lublin, Poland and Huddersfield, Great Britain. The research results revealed that, among both respondent groups, the importance of evaluated competencies exceeded the level of competencies gained in the course of studies. The level of declared managerial competencies gained in the course of studies differs in a statistically significant manner in favour of the students from Polish universities.

The research results in both respondent groups revealed the existence of a competence gap in relation to all evaluated competencies associated with knowledge. In the light of this research, undertaking corrective measures in order to fill the gap between the significance of individual competencies in professional career (in students’ opinion) and the level of these competencies exhibited by graduating students seems vital. For that reason, greater students’ involvement in the process of gaining knowledge, skills, and social competencies is crucial.

Due to the fact that a diagnosis of the predispositions and skills of an individual takes place in the course of their studies, students ought to make greater use of the available forms of professional development support offered by the universities via the university career services (i.e. professional counselling, workshops, trainings). Furthermore, the students ought to be made aware of the necessity of greater activity during the course of their studies, involvement in social and scientific activities, student exchange, and university life.

The empirical data revealed the greatest gap, in regard to professional experience, which implicates the necessity of a greater involvement of students in acquiring such experience during the course of their studies. The time of their studies should be used in order to attempt cooperation with various organizations not only in the form of full or part-time work, but mainly in the framework of internships or voluntary work.

Filling the competence gap is not possible without the involvement of universities, who are responsible for the education of the students of economics and management, as well as potential employers employing their graduates. For that reason, the universities ought to devote more attention to cultivating not only the theoretical knowledge, but also providing the ability of implementing knowledge in practice, as well as emphasize problem solving. In response to the European Commission’s guidelines presented in ‘The European Qualifications Framework for Lifelong Learning’ (EQF), the youth ought to be supported in gaining the competencies that are fundamental when entering the labour market. The last three levels of the competencies defined in the guidelines are concerned with the effects of the studies in the higher education level. The following items belong to these levels: knowledge, personal, and professional skills (Bohlinger, 2007, pp. 96–118).
In order to support the development of the students’ competencies in regard to knowledge and practical experiences, the involvement of the universities in establishing the cooperation with businesses or employers’ organizations seems advisable, especially in terms of reinforcement of practical aspects of education by:

- introducing more practical classes performed not only at the university, but also in companies;
- organizing student and graduate internships in cooperation with businesses;
- inviting experienced entrepreneurs to conduct classes for students;
- emphasising the practical character and applicability of diploma theses, which should address the possible solutions of the real problems of businesses;
- joint organization of conferences, job fairs, panel meetings, competitions, study visits to inspect production lines, etc.

Conducting supportive activities for young people, assisting them in the development of their talents by organizing additional activities, enabling participation in science clubs, etc. is worthwhile. A vital role is also played by supportive activities assisting students in making decisions regarding their career and developing their competencies (including social competencies) e.g. personal support services, group workshops or professional trainings.

It is obvious that the present study and the authors’ analysis have limitations that require further research, particularly in the area of the preparation of the graduates for the requirements of the global labour market. Thus, both the content of the study and the survey results represent a contribution to the discussion on the importance of knowledge in the graduates’ professional career.

References


Prahalad, C. K., & Krishnan, M. S. (2010). Nowa era innowacji [A new era of innovation]. Warsaw, Poland: Wydawnictwo Naukowe PWN.


Sitko-Lutek, A. (2005). The modern manager’s competence improvement [Doskonalenie kompetencji współczesnego menedżera]. In E. Masłyk-
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