

Students in the light of studies of self-perceived employability and information management skills

Marzena Świgoń¹

¹Institute of Journalism and Social Communication, University of Warmia and Mazury in Olsztyn, Poland

Abstract: The problem of self-perceived employability, the concept connected with personal knowledge and information management in the context of students was described. The self-perceived employability can be defined as the ability to keep the job and as the ability to get the job one desires. And highly educated young people in variety of European Union countries, including Poland, are often unsatisfied with his or her first job.

The empirical studies were conducted among the Polish and German students of various majors. A special scale was used which consisted of 19 statements regarding five components: 1) student's perception of university, 2) field of study, 3) self-belief, 4) state of the external labour market and 5) personal knowledge and information management. The last component, that is the PKIM-personal knowledge and information management, is strongly connected to information literacy, well known in the library and information science literature. The findings of these studies were compiled using statistical methods: descriptive and inferential statistics and compared with the findings of other studies in this scope. Limitations were discussed as well as the implications for the future research of this problematic.

Keywords: Employability, self-perceived employability, information literacy, students, personal knowledge and information management

Introduction

The concept of employability stems from the second half of the 20th century and is related to human resource management (Van der Heijde and Van der Heijden, 2006). However, today the contributions to the subject literature come from different disciplines, including psychology, management science, knowledge management and library and information science. The literature of

Received: 2.3.2022 Accepted: 15.4.2022
© ISAST

ISSN 2241-1925



employability may be divided into four areas of work: (1) employability of the workforce, (2) employability as human resource strategy and (3) employability of individuals (Rothwell, Herbert and Rothwell, 2008; Rothwell, Jewell and Hardie, 2009), (4) employability as something to be achieved (Reid, 2016). The first perspective on employability at a national workforce level is related to government policy or national level “skills” agendas. It stems from concerns about the changing nature of work and employment at the end of the 20th century. It is worth adding that information literacy is a kind of national assets (Katsirikou, 2008). The second perspective on employability within human resource management and the psychology of work and careers is related to the notion of employability as the ability of individuals to get or retain jobs. This notion is based on skills and personal flexibility acquired through employment, and it is natural that there are clear distinctions between the concept of entry level employability and expert practitioners’ employability. A third perspective, the most popular and originating in UK (Fallows and Steven, 2000), is connected with the ability of the university sector to provide graduates with the skills employers need, called employability skills, including information management skills. A fourth perspective is a conceptual framework for employability that move away from the individual dispositions (skills, attributes and relationships) by positing employability as a process, something to be achieved in relation.

The employability, including self-perceived employability, is as dependent on context as on the individual. It is determined by factors within the control of the individual but also by factors that are outside of his or her control (Clarke, 2008; Reid, 2016). In general, these factors cover individual characteristics, for example: age, gender, ethnicity, health, skills and competences etc.; and labour market characteristics, for instance: number and type of available jobs. That is why personal employability management (Świgoń 2011, 2014a) on one hand, is connected with personal knowledge and information management (Świgoń 2013), including information literacy, which may be managed by individuals on an individual level; and on the other, includes perception of the external variables, for example economic, political and social, macro environments (Reid, 2016).

The aim of this article is to present the results of the author’s own empirical studies in the scope of self-perceived employability and information management of students, carried out among Polish and German respondents, especially the following components of this phenomenon: perception of university, field of study, state of the labor market and self-belief.

Literature review

The following skills and competences are needed for personal employability management (PEM) cover: (1) personal skills and competences: self-knowledge (of strong and weak points), professional/occupational knowledge, expertise, writing, reading, foreign languages; motivation and commitment, an active

attitude, problem solving, decision making, creativity, analysis, learning and self-development, reflection etc.; (2) interpersonal skills and competences: knowledge about macro/world and micro/local environments; listening, talking, communicating, conveying; teamwork, collaborating, creating of relationships, socializing, coordinating etc.; (3) information management skills and competences: knowledge about information sources; technological skills, information retrieving, storing, sending, presenting, distributing, securing, evaluating, organising etc., (Świgoń, 2011, 2013, 2014a); and these skills include information literacy (IL) (Katsirikou, 2008). It is worth adding that there are a lot of other typologies of competences (Mallough and Kleiner, 2001; Markowitsch and Plaimauer, 2009). Moreover, the European Commission is developing a European Skills, Competencies and Occupations taxonomy, ESCOpedia, related to the labour market and education sector.

As was said the personal employability management (PEM) is compatible with the personal knowledge and information management (PKIM), and PKIM skills are related to information literacy (IL). In general, all these concepts: PEM, PKIM and IL are based on skills and competences; and are valuable in all spheres of life, in learning, problem solving and decision making (Świgoń, 2011, 2013). PEM enhances individual lifelong development, effectiveness, competitiveness and leads to more effective decision making regarding employment and career; while PKIM along with IL, as the more universal concepts, are relating with various life and professional choices. PKIM and IL skills and competences are transferable in nature, they can be taken from one job, life role or activity to another.

Empirical studies concerning student employability, as previously mentioned, stem from the UK, where the first scale for examining the expectations and self-perceptions of employability was tested among business undergraduates and post-graduate students (Rothwell, Herbert and Rothwell, 2008; Rothwell, Jewell and Hardie, 2009). The student self-perceived employability scale consisted of 16 statements regarding four components: a student's perception of their university, field of study, self-belief and the state of the external labour market. This model was a crucial pattern in the author's own research, as well as others described in this article. Another model of self-perceived employability regarding graduates was developed by Pool and Sewell (2007). The essential components of this model were: career development learning, experience, degree (subject, knowledge and skills), generic skills and emotional intelligence. The individual perspective of graduates employability from a variety of disciplines was examined in such countries as Indonesia (Qomariyah, Savitri, Hadiano and Claramita, 2016), Kuwait (Al-Mutairi, Naser and Saeid, 2014), Slovenia (Farčnik and Domadenik, 2012), Greece (Panagiotakopoulos, 2012), Sweden (Nilsson, 2010), Sri Lanka (Wickramasinghe and Perera, 2010), and Poland (Świgoń, 2014ab, 2016abc, 2017).

The Polish employability scale was created using the abovementioned British scale (Rothwell, Herbert and Rothwell, 2008, p. 10, Rothwell, Jewell and Hardie, 2009, p. 159) and supplemented by the aforementioned PKIM issue because of its high correlation with the self-perceived employability. In other

words, an important contribution to the measurement of the employability of individuals was the (present) author's studies in the scope of the abovementioned personal knowledge and information management (Świgoń, 2013, 2014a). It is worth adding that several years ago Truch (2001, p. 102) suggested that managing personal knowledge as a basic competence could be "the key to tomorrow's employability". The author's own test in the academic environment confirmed this suggestion, at least to some extent. During the empirical studies among over 500 Polish students (Świgoń, 2014a) it was pointed out that the higher the PKIM self-assessment of surveyed students, the better their employability self-assessment ($r=0.98$). Moreover, in order to match the Polish conditions and the interest of Polish graduates in emigration, the statement about the chance of finding a job abroad was added to the scale of students' employability.

To summarise, the scale used in the comparative studies consisted of 19 statements which were grouped into 9 components: (1) engagement with the studies and academic performance, (2) the university's brand, (3) the field of study at university, (4) the status of the field of study, (5) the labour market's demand for professionals in the field of study, (6) perception of the state of the labour market, (7) opportunities in the labour market, (8) confidence in the skills and competences and (9) personal knowledge and information management (PKIM). The last item is the central point of the self-perceived employability of students because it is connected with all other components.

Empirical studies and results

The research questions in the author's own empirical studies were: what was the level of self-perceived employability of BTU students (Brandenburg University of Technology, Cottbus, Germany) and UWM students (University of Warmia and Mazury in Olsztyn, Olsztyn, Poland); and what were the main similarities and differences between both groups, and between various of majors of study.

The respondent group in Germany consisted of 135 students of two study programs: 'culture and technology' and 'environmental studies'. The respondents group in Poland were 257 students of three majors: 'history', 'international relations' and 'economy'. These respondents groups were chosen because of the similarity of academic environments in both cities. Cottbus and Olsztyn have a similar number of inhabitants, a similar economic and geographical situation (in the east of both countries). The empirical studies were conducted by the author of this article personally from 2013 to 2017.

The questionnaire used in this study consisted, as mentioned, of 19 statements. Respondents were requested to choose a level of agreement with them from a five-point Likert scale, that is from 1 - strongly disagree to 5 - strongly agree.

The findings of the empirical studies were compiled by using statistical methods: descriptive statistics (mean, percentile rank) and inferential statistics (chi-squared test). The interpretation includes a socio-cultural and economic context. In addition to the research question, the data collection and interpretation was guided by the hypothesis: "there is no significant difference

between BTU students and UWM students as to their level of self-perceived employability”. The hypothesis was tested at a level of significance of 0.05. Because of the normal distribution of mean scores the following five levels of self-perceived employability were proposed: very low (0.00-2.21), low (2.22-2.65), moderate (2.66-3.54), high (3.55-3.98), and very high (3.99-5.00).

The results of these studies are described below. The comprehensive average (from all 19 statements in the questionnaire, see last row in the table) among BTU students was 3.16 and UWM students was 2.91, that is both averages fall into the moderate self-assessment range.

All individual components of self-perceived employability are described in detail below, as well as differences between students of all 5 study majors.

Table. Summary of components of students’ self-perceived employability and knowledge and information management.

	Components of employability	Culture and technology	Environmental studies	Economy	International relations	History	BTU students Average	UWM students Average	F	P
1 a	Academic performance	3.45	3.36	3.62	3.88	4.01	3.42	3.81	18.52	0.001
1 b	Engagement with the studies	3.36	3.42	3.74	3.41	3.86	3.37	3.70	10.21	0.001
2 a	Perception of the strength of the university’s brand	3.01	3.18	2.75	2.51	2.47	3.05	2.60	39.04	0.001
2 b	Perception of the status of the university	3.33	3.00	2.61	2.46	2.45	3.25	2.52	64.96	0.001
3 a	Perception of employers’ opinion about the university	2.95	3.03	2.72	2.50	2.59	2.97	2.63	18.52	0.001
3 b	The university reputation within the field of study	2.99	3.36	2.76	2.56	2.61	3.08	2.67	23.91	0.001
4 a	The credibility of the field of study	2.56	2.24	3.03	2.08	1.90	2.48	2.44	0.14	0.704
4 b	The status of the field of study	2.35	3.06	3.40	2.40	2.64	2.52	2.92	13.41	0.001

5 a	The external labour market's demand for professionals in the subject field	2.70	3.60	3.06	2.13	2.09	2.92	2.52	14.55	0.001
5 b	Perception of degree in the subject field	2.83	3.03	3.17	2.31	2.29	2.88	2.68	3.59	0.058
6 a	Perception of the demand for graduates	3.73	3.39	2.61	2.48	2.32	3.65	2.48	65.87	0.001
6 b	Perception of the number of job vacancies	2.73	3.93	2.45	2.28	2.09	2.78	2.29	20.45	0.001
7 a	The awareness of opportunities in the labour market	2.64	3.18	2.68	2.00	1.91	2.77	2.27	23.43	0.001
7 b	Perception of skills in the labour market	3.29	3.60	3.24	3.08	3.01	3.37	3.13	6.20	0.013
8 a	The confidence in the success in job interviews	3.52	3.30	3.07	3.26	3.40	3.47	3.22	6.34	0.012
8 b	The confidence in the skills and competences	3.57	3.60	3.32	3.41	3.52	3.58	3.41	2.85	0.092
9 a	PKIM and the employability of students	3.70	3.42	3.84	3.66	3.64	3.63	3.73	1.09	0.295
9 b	PKIM at the studies	3.57	3.54	3.38	3.08	3.22	3.57	3.26	9.33	0.002
10	The confidence of the job seeking abroad	3.18	3.96	3.16	3.06	2.73	3.37	3.00	12.74	0.001
	Total	3.13	3.27	3.09	2.77	2.78	3.16	2.91		

The first component of the abovementioned students' employability model was engagement with their studies and academic performance (1a, 1b in the table).

The majority of students agreed with the statement that they achieved high grades at their studies (Chi-square=32.43 $p<0,001$) but the group was much bigger in Poland (over 70%) in comparison to Germany (45%). The same

observation was made regarding the statement about engagement with the studies; many more Polish respondents (almost 70%) than German ones (52%) said that they regarded academic work as a top priority (Chi-square=18.15 $p=0,001$).

The second component of the employability of students was their perception of the strength of the university's brand (2a, 2b in the table).

It is very interesting that the majority of respondents did not know at all whether employers were eager to employ graduates from their universities (Chi-square=42.76 $p<0,001$). The answer 'don't know' was chosen by almost 60% UWM and 80% BTU students. Moreover, one in three Olsztyn students disagreed with the statement. Similar differences were observed regarding average assessments of the status of university. More surveyed students in Cottbus (35%) than in Olsztyn (12%) agreed with the statement that the status of their university was a significant asset in job seeking (Chi-square=69.92 $p<0,001$).

The third element of self-perceived employability of the students was the reputation of their university within their fields of study (3a, 3b in the table).

A very interesting observation was that the vast majority of BTU respondents (over 80%) as well as UWM students (55%) did not know whether employers targeted their university in order to recruit employees from their subject areas (Chi-square=21.48 $p<0,001$). Only some respondents were sure about it (about 8% in every group). Regarding university reputation, one can again point out that a lot of students did not know anything about it: 70% of BTU students and 41% UWM students (Chi-square=44.24 $p<0,001$).

The fourth component of students' employability consisted of the status and credibility of the fields of study (4a, 4b in the table). It is worth pointing out here that perhaps every major (culture and technology, environmental studies, economy, international relations and history) included in this study has its impact on self-perceived employability on the labour market.

In relation to the credibility of the fields of study, the average assessments in both national groups were only low. Over half of the respondents in both cities disagreed with the statement that there were more people applying for their degree than the places available (Chi-square=31.98 $p<0,001$). The minority of respondents in Cottbus (12%) and one in three in Olsztyn (35%) agreed with the statement that their chosen subjects ranked highly in terms of social status (Chi-square=23.89 $p<0,001$).

The next element of the described students' employability model was the external labour market's demand for people in their field (5a, 5b in the table).

More UWM students (53%) in comparison to BTU students (28%) disagreed with the statement that people in their desired career were in high demand in the external labour market (Chi-square=23.89 $p<0,001$). However, more UWM students (44%) than BTU students (26%) disagreed with the statement that their degree was seen as leading to a specific career that is generally perceived as highly desirable (Chi-square=23.89 $p<0,001$). Nevertheless, a lot of respondents (55% in Cottbus and 32% in Olsztyn) did not know what the perception of a

degree in their subject fields really was. Both averages were similar and moderate.

The sixth component of self-perceived employability of students was their perception of the state of the external labour market (6a, 6b in the table).

A very large difference was observed between the German and Polish groups regarding the assessment of the present demand for graduates; it was high amongst BTU respondents and only low amongst UWM students (Chi-square=88.44 $p<0,001$). Over 62% respondents in Cottbus agreed with this statement in comparison to only 22% in Olsztyn. Regarding the perception of the number of job vacancies, there are similarities and differences between both groups (Chi-square=48.85 $p<0,001$). On one hand about 18-19% students in Cottbus and in Olsztyn agreed with the statement that there were plenty of job vacancies in the geographical area in which they were looking for a job. On the other hand, less students in Cottbus (34%) than in Olsztyn (65%) disagreed with this statement.

Students' awareness of opportunities on the external labour market was the following component of their employability (7a, 7b in the table).

Many more students in Olsztyn (64%) than in Cottbus (34%) disagreed with the statement that they can easily find out about job opportunities in their chosen field. On the other hand, twice as many German than Polish respondents chose the answer 'I do not know' (Chi-square=35.99 $p<0,001$). A similar number of respondents in both groups (37-39%) agreed with the statement that the skills and abilities that they possess were what employers were looking for (Chi-square=23.11 $p<0,001$).

Students' confidence in their skills and abilities was the eighth component of employability, which consisted of three statements in the questionnaire (8a, 8b, 10 in the table).

More students agreed than disagreed with the statement that they were generally confident of success in job interviews and selection events; 47% in Cottbus and 40% in Olsztyn (Chi-square=11.46 $p=0.021$). However, about 40% in both national groups chose "I do not know". The majority of respondents felt that they could get any job so long as their skills and experience were reasonably relevant; 59% in Cottbus and 55% in Olsztyn (Chi-square=5.09 $p=0,277$). More BTU students (44%) than UWM students (31%) agreed that they had a good chance of finding employment abroad which matches their qualifications and expectations. Both averages of self-assessment were moderate in this scope (Chi-square=16.06 $p=0.002$).

The final, but no less important, element of self-perceived employability of students was connected with personal knowledge and information management and information literacy (9a, 9b in the table). The average level of agreement, that appropriate management of personal knowledge by students (information and ideas searching, evaluating, creating, presenting, etc.) makes looking for work and employment easier, was high in both cities. The majority of students (60-70%) in Cottbus and Olsztyn agreed with it (Chi-square=3.42 $p=0.489$). The majority also agreed that they were well prepared to manage information and knowledge – 62% in Cottbus and 47% in Olsztyn (Chi-square=9.85 $p=0.043$).

The table summarizes not only all individual components and representatives' statements, but data grouped by study majors as well. As it has been noted earlier, it can be presumed that the study major could have an influence on self-perceived employability.

According to the table, environmental studies students presented the highest level of self-perceived employability (3.27), followed by culture and technology (3.13), economy (3.09), history (2.78), and international relations (2.77) students.

As one can see, the strongest point in the opinion of all respondents was self-confidence regarding success in job interviews as well as skills and competences possessed by students, among others skills connected with personal knowledge and information management as well as information literacy (table, components 8 and 9). Averages of students of the above-mentioned 5 study programmes were close to or above 3.50.

Moreover, it is worth highlighting that respondents who took part in the empirical studies conducted in Cottbus and Olsztyn were good students in general (table, component 1); more than half of them (in both groups) achieved high academic performance, with history students presenting the highest average (4.01). Nevertheless, one can observe that Polish students were more engaged with the studies (3.70) and achieved higher academic performance (3.81) than German counterparts.

Components of students' employability connected with external variables, that is the situation on the current labour market (components 5 and 6), were assessed lower than individual characteristics. It is worth noticing that environmental studies students most positively assessed the situation on the labour market, compared to students of other 4 majors. Another similarity was related to the lack of respondents' knowledge about university perception by employers; the majority of students did not know whether employers targeted their university in order to recruit employees. The components related to the perception of the field of studies (components 3 and 4) were assessed as low as the external labour markets demand for professionals in the field of study. History students ranked the credibility of their field the lowest of 5 majors, and the lowest in the whole questionnaire (1.90).

The study described in this paper has limitations that should be noted. Some limitations of the study arise from the choice of the sample. Respondents came from two different countries, from two universities (BTU, UWM). This is the reason why the study's generalizability is limited. Future comparative studies should benefit from a bigger number of academic institutions. Moreover, the sample was drawn from different majors and study programmes in both countries. This limitation is inherently difficult to overcome, because even study programmes with the same names, e.g. history or economy, may differ noticeably.

Other limitations represent weaknesses arising from design issues. The use of self-report scores limits the findings to students' perceptions which could be

affected by response bias. Future employability studies would benefit from multiple methodologies including interviews, assessments by professors and possible employers, e.g. managers from business, services and cultural areas. Practical implications of this study are related to the scale, convenient measurement tools with which students can evaluate their employability and identify any areas in which they need to take advantage of opportunities for development.

Moreover, each of the components of self-perceived employability described here may be a subject of a deeper, separate analysis in the future. Every of these components is important not only for students and their careers, but for managers of university faculties (departments) as well. Such exemplifications can be helpful in modifications of current study programmes or creations of new majors.

Because of redefinition of employability as a process and something to be achieved, all people involved in employability work at all levels are important: students, tutors and policy makers. That is why some aspects illustrated in this study are crucial for future changes in labour markets and are important for government, ministry of higher education and their cooperation with companies, firms and enterprises.

4. Conclusions

The following components of self-perceived employability and information management of students were presented in this article in detail: engagement in the studies and academic performance, the university's brand, the field of study at university, the status of the field of study, the labour market's demand for professionals in the field of study, perception of the state of the labour market, opportunities in the labour market, confidence in the skills and competences and personal knowledge and information management (PKIM) along with information literacy (IL).

Although some limitations of such studies have been pointed out, the study has a potential to make contribution to the development of employability research. It seems that studies of self-perceived students' employability, including information literacy, should be continued in the future, especially among other groups of students, other universities, other majors and other countries. Research such as that presented in this article can contribute to the theory of some disciplines, e.g.: education as well as library and information science, by emphasizing the role of knowledge-relating skills and competences; knowledge management and intellectual capital through highlighting an individual perspective of employability of graduates from undergraduate and postgraduate courses.

References

- Al-Mutairi A., Naser K. and Saeid M. (2014). Employability Factors of Business Graduates in Kuwait: Evidence from An Emerging Country, *International Journal of Business and Management*, Vol. 9: 49-61.
- Clarke, M. (2008), Understanding and managing employability in changing career contexts, *Journal of European Industrial Training*, Vol. 32 No. 4: 258-284.
- Fallows, S. and Steven, Ch. 2000. Building employability skills into the higher education curriculum: a university-wide initiative. *Education + Training*, Vol. 42 No. 2: 75-82.
- Farčnik, D. and Domadenik, P. 2012. Has the Bologna reform enhanced the employability of graduates? Early evidence from Slovenia. *International Journal of Manpower*, Vol. 33 No. 1: 51-75.
- Katsirikou, A.(2008). Information Literacy as National Assets: Individual and Cooperative Activities. In Carla Basili (ed.), *Information Literacy at the crossroad of Education and Information Policies in Europe* (pp. 203-228). Roma: Consiglio Nazionale delle Ricerche.
- Mallough, S. and Kleiner, B. 2001. How to determine employability and wage earning capacity, *Management Research News*, Vol. 24 No. 3: 118-122.
- Markowitsch, J. and Plaimauer, C. (2009). Descriptors for competence: towards an international standard classification for skills and competences. *Journal of European Industrial Training*, Vol. 33 No. 8/9: 817-837.
- Nilsson, S. (2010). Enhancing individual employability: the perspective of engineering graduates, *Education + Training*, Vol. 2 No. 6/7: 540-551.
- Panagiotakopoulos, A. (2012). Employability skills development in Greek higher education institutions (HEIs): Implications for policy makers, *Higher Education, Skills and Work-based Learning*, Vol. 2 No. 2: 141-150.
- Pool, L. D. and Sewell, P. (2007). The key to employability: developing a practical model of graduate employability, *Education + Training*, Vol. 49 No. 4: 277-289.
- Qomariyah N., Savitri T., Hadianto T. and Claramita M. (2016). Formulating Employability Skills for Graduates of Public Health Study Program, *International Journal of Evaluation and Research in Education*, Vol. 5 No. 1: 22-31.
- Reid, J. (2016). Redefining “Employability” as something to be achieved: Utilising Tronto’s conceptual framework of care to refocus the debate, *Higher Education, Skills and Work-Based Learning*, Vol. 6 Iss. 1: 55-68.
- Rothwell, A., Herbert, I. and Rothwell, F. (2008). Self-perceived employability: construction and initial validation of a scale for university students, *Journal of Vocational Behavior*, Vol. 73: 1-12.
- Rothwell, A., Jewell, S. and Hardie, M. (2009). Self-perceived employability: investigating the responses of post-graduate students, *Journal of Vocational Behavior*, Vol. 75: 152-161.
- Truch, E. (2001). Managing personal knowledge: the key to tomorrow’s employability, *Journal of Change Management*, Vol. 2 No. 2: 102-105.
- Świgoń, M. (2011). Personal Knowledge Management (PKM) and Personal Employability Management (PEM) – concepts based on competences”. In G. Turner and C. Minonne (Ed.) *Proceedings of the 3rd European conference on Intellectual Capital*. University of Nicosia, Cyprus, 18-19 April 2011 (pp. 432-438) Academic Publishing International Limited, UK.

- Świgoń, M. (2013). Personal Knowledge and Information Management – conception and exemplification. *Journal of Information Science*, Vol. 39 No. 6: 832-845.
- Świgoń, M. (2014a). Potencjał kariery studentów kierunków i specjalności informatologicznych, *Teraźniejszość – Człowiek – Edukacja*, Vol. 66: 79-90.
- Świgoń Marzena (2014b). Samoocena potencjału zawodowego studentów informacji naukowej i bibliotekoznawstwa oraz specjalności info- i bibliologicznych. Wyniki badań z przełomu 2010 i 2011 roku. *Zagadnienia Informatyki Naukowej*; Vol. 52 Nr 2 (104): 135-148.
- Świgoń Marzena (2016a). Porównanie samooceny potencjału zawodowego niemieckich i polskich studentów kierunków i specjalności info- i bibliologicznych. *Zagadnienia Informatyki Naukowej*, Vol. 54, Nr 2: 48-62.
- Świgoń, M. (2016b). Self-perceived employability of students of international relations of University of Warmia and Mazury in Poland. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, Vol. 10: 3299-3304.
- Świgoń Marzena (2016c). Potencjał zawodowy historyków w opinii magistrantów Uniwersytetu Warmińsko-Mazurskiego w Olsztynie. *Edukacja Humanistyczna*, Nr 1(34): 59-75.
- Świgoń Marzena (2017). Potencjał zawodowy – samoocena magistrantów ekonomii UWM w Olsztynie. *PTINT. Praktyka i Teoria Informatyki Naukowej i Technicznej*. T. 25 Nr 1: 3-16.
- Van der Heijde, C. M. and Van der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management*, Vol. 45 No. 3: 449-476.
- Wickramasinghe, V. and Perera, L. (2010). Graduates', university lecturers' and employers perceptions towards employability skills. *Education + Training*, Vol. 52 No. 3: 226-244.