Information Literacy of Polish Students in Social Sciences and Humanities

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Abstract

Purpose/Thesis: The aim was to study information competencies of Polish students of library and information science (LIS), history and journalism with two aspects taken into consideration: students' belief regarding the importance (BIM) of a set of core information competencies, and their self-efficacy (SE) in this field.
Approach/Methods: The IL-HUMASS questionnaire, slightly modified, was used. It consists of 26 information literacy aspects divided into four areas: information retrieval, evaluation and processing, and communication skills.
Results and conclusions: The results reveal, on one hand, some common attitudes apparently associated with students' current life phase. On the other hand, some differences emerged that can be connected with the field and character of the study.
Originality/Value: The results enable a preliminary evaluation of information literacy of the students in different study fields, as well as the comparison of their attitudes and skills to those of the respondents of similar foreign projects.

Keywords

Humanities. Information literacy. Quantitative survey. Self-assessment. Social sciences. Students.

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1. Introduction

The information literacy (IL) constitutes an education process as well as a set of informative skills. This process is also implemented at the stage of the academic education. The level of the IL forms a crucial indicator of the students' information culture. There have been several studies related to their skills in the discussed field. The project discussed in this paper is in line with the trend of such analyses; it relates to the students of selected courses in humanities and social sciences of two Polish universities (the University of Warsaw and the Nicolaus Copernicus University in Toruń). It was inspired by The Information Literacy–Humanities and Social Sciences (IL-HUMASS) questionnaire, and by the results obtained by Maria Pinto and Rosaura Fernandez-Pascual in their projects on students of history (Pinto, 2012) and of library and information science (LIS) (Pinto & Pascual, 2017)

and a few more disciplines from the range of social sciences, such as journalism (Pinto et al., 2016). The subjects of our research, similarly to the above-mentioned studies, were the students' perceptions of self-efficacy within information literacy, and their opinions on the importance of these skills. Competencies of LIS students, potential educators in information skills, are of key importance. However, information skills of those studying journalism and history seemed to be interesting too, since both these groups work intensively with information and knowledge, either as users or authors and developers of new resources.

2. Literature review

Maria Pinto and Rosaura Fernandez-Pascual have conducted several research projects concerning students of history (Pinto, 2012) and those of LIS (Pinto & Pascual, 2017), as well as social sciences students of five Spanish universities (Pinto et al., 2016). The latter covered eight fields of study: LIS, journalism, pedagogics, elementary education, tourism, social work, communication, and psychology. As discussed in detail below, the survey of Polish students was based on the same questionnaire to receive data comparable on an international level, for future potential research. However, IL of students has also been analyzed by other authors. Their projects focused on students' self-efficacy, evaluation of information competencies' levels, as well as analysis of information literacy trainings and their effectiveness.

Simple everyday observation suggests that young people perceive their information skills as high. The LIS students do not differ in this aspect from the others (Kurbanoğlu, 2003; Conway, 2011; Bronstein, 2014). However, this is often an overestimation, as they are often unable to find needed information (Gustavson & Nall, 2011; Mahmood, 2013; Michalak & Rysavy, 2016), the latter regardless their gender or social background (Kim & Shumaker, 2015; Mahmood, 2013). Regarding their actual information skills, the students usually limit their searching to the most popular searching engines, Wikipedia, manuals or friends' assistance, and verify their reliability referring to Internet rankings and previous experiences (Head & Eisenberg, 2010; Daugherty & Russo, 2011; Fain, 2011). Studies on correlation between self-evaluation and objective evaluation of competencies have not been found in literature.

To complete a picture of IL, we should mention the literature on evaluating effectiveness of IL trainings, usually offered by the librarians. Most of these trainings conclude with evaluation tests (Fain, 2011; Daugherty & Russo, 2011; Blumer et al., 2013; Chen, 2015; Saunders et al., 2015; Kavšek et al., 2016) consisting of a self-assessment part and the one focused on the results of a training. As in the studies mentioned before, the students usually assess their ICT and Internet skills higher than information retrieval skills.

3. Research aim and methodology

The aim of this study was to investigate students' attitudes towards the importance and self-efficacy concerning selected information skills. To make our work comparable to other studies, we adopted the data processing and analysis methods used by Pinto and Pascual

(2017). Comparison of the attitudes and opinions of students in LIS, journalism, and history was also purposive to find out whether there were (and possibly – what were) the differences in self-assessment and perception of IL depending on the attended course. The IL-HUMASS questionnaire (see below) applied in this study enables further studies of data in relation to the results of the research conducted by Pinto & Pascual (2012; 2016; 2017).

In the three different projects, Pinto & Pascual have analyzed history and LIS students' beliefs about the importance of basic IL and their self-efficacy in this respect by means of the Information Literacy–Humanities and Social Sciences (IL-HUMASS) questionnaire. As they stated: "Questionnaire is designed on the basis of a large body of literature within the field of IL. It was developed employing both general and normative methods, as well as specific methods, from both user and evaluation perspectives" (Pinto & Pascual, 2017, 706). The study has been described by its authors as "a comprehensive and user-friendly survey of self-assessment containing an exhaustive set of variables (grouped into categories) related to IL and to the specific target population of higher education in the humanities and social sciences of various Spanish and Portuguese universities" (Pinto & Pascual, 2017, 706). The survey responses cover the three internal pillars of IL (motivation, self-efficacy, and preferred source of learning) and offer basic information on the IL perceptions of students. It consists of 26 IL aspects located within four areas: information retrieval, evaluation and processing, and communication skills (see Appendix).

The students were asked to assess the importance of the skills (BIM — belief in the importance), perform self-efficacy (SE) for each one and to provide a source of the obtained competency. As the above-mentioned authors stated: "Twelve of the twenty-six competencies (46.15%) are related to ICT. The questionnaire has been widely validated in previous studies, and we believe that this scale seems highly consistent and reliable (Cronbach alpha coefficient, 0.831)" (Pinto & Pascual, 2017, 707).

In our study, we have employed the IL-HUMASS questionnaire, modifying it slightly (see Appendix) so that the respondents understand better the set of competencies, particularly that we have been analyzing the students of different fields of humanities and social sciences, not only those representing LIS. The detailed modifications of the tool included:

- deletion of the W17 competency (the usage of the bibliographical managers) due to its low popularity among students;
- dividing the question about the usage skills of spreadsheets and the SPSS statistics software, as the latter is hardly known among students in Poland (W18a and W18b);
- adding the examples of sources and/or software for the improved readability of the tool.

Due to comparative goal, we employed the same data processing and analysis methods as in Pinto & Pascual's research (Pinto & Pascual, 2017). The median, minimum and maximum values, arithmetic mean and standard deviation were calculated for the individual variables, and the domains of validity and self-efficacy in competency. To evaluate the differences in accordance with the cycles of the studies, Mann-Whitney test has been employed (a semi-nonparametric test for assessing whether the values of two independent samples from two different populations are equally large), whereas in accordance with the fields of the studies — the Kruskal-Wallis test has been applied (a rank-based test comparing variable distributions for more than two populations). Also, a reduction of validity and self-efficacy indicators by means of a factor analysis has been conducted (precisely: the principal components analysis).

4. Research sample

The research was conducted between May and July 2017 on two Polish universities: The University of Warsaw (UW) and The Nicolaus Copernicus University in Toruń (NCU). It has targeted students from three fields and three cycles of study (see Tab. 1). An auditorium questionnaire was conducted in randomly selected days, on randomly chosen classes and during breaks between them, among all students available during the probe.

At NCU the study was successfully completed among 51% of BA, and 36% of MA students of LIS, 25% of BA and 55% of MA history students, and 73% of BA journalism students (there is no MA studies in this discipline at NCU). At UW these percentages were distributed as follows: 17% of both BA and MA LIS students, 13% of BA and 5% of MA history students, and 5% of BA and 4% of MA journalism students. In general, 47% of population (out of 283 students in total) at NCU, and 7% at UW (out of 2675) were surveyed. Therefore, the sample was not representative, however it is a common issue in case of auditorium questionnaires, and quite sufficient part of population was covered.

At NCU no PhD students were available at the time of survey. At UW two PhD students of journalism and one of history took part in the study. Because the PhD students group is relatively small in comparison to other study cycles, and only a few of them were reached, they were included into graduate students' subgroup in the following analysis, assuming that their competencies and expertise may be quite similar.

A detailed structure of the research sample is presented in the following table.

Tab. 1. Research sample — NCU and UW students

Field of study	Study cycle							
	BA		MA		Ph.D.		no data	
	NCU	UW	NCU	UW	NCU	UW	NCU	UW
Library and information science	41	28	14	14	0	0	1	2
Journalism	29	64	0	23	0	2	0	13
History	15	48	35	7	0	1	0	2
No data	0	0	0	0	0	0	1	0
TOTAL	85	140	49	44	0	3	2	17

216 women and 103 men were surveyed. Twenty-one respondents chose not to disclose their gender in the survey.

5. Findings and discussion

5.1. Believe in importance (BIM) and Self-Efficacy (SE) levels

The average evaluation of importance and self-efficacy in relation to the four types of competencies among the Polish students were the lowest in the group of skills regarding the

information processing. Figure 1 illustrates the mean (as bars), and the standard deviation (as lines) for the categories of importance and self-efficacy within the four basic areas.

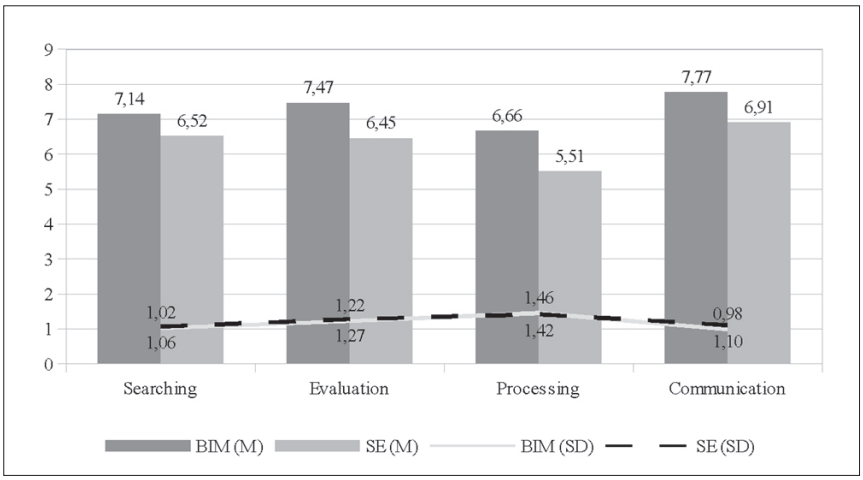

Fig. 1. The mean and the standard deviation of the categories of importance and self-efficacy

According to students, the following skills were moderately important (mean lower than 7, important/normal)[1]:

- using informal electronic sources of information (blogs, discussion lists, and the like) (BIM7; M=6.05);
- handling statistical programs (for instance, SPSS) (BIM18b; M=6.22);
- using database managers (such as Access, MySQL) (BIM16; M=6.30);
- handling spreadsheets (for instance, Excel) (BIM18a; M=6.33);
- knowing the typology of scientific information sources (thesis, proceedings, and so on) (BIM11; M=6.52);
- knowing information search strategies (descriptors, Boolean operators, and such) (BIM8; M=6.64);
- entering and using Online Public Access Catalogues (OPACs) (BIM2; M=6.65);
- using electronic sources of secondary information (like databases) (BIM4; M=6.69);
- recognizing text structure (BIM15; M=6.70);
- installing computer programs (BIM19; M=6.82).

At the same time, among the most important skills the students considered (mean above 7, excellent):

- recognizing the author's ideas within the text (BIM10; M=8.01);
- searching for and retrieving Internet information (such as advanced searches, directories, portals) (BIM6; M=8.06);
- communicating in other languages (BIM21; M=8.19).

The means of the other competencies ranged between 7 and 8 (very important/high).

The Figure 2 below illustrates the following interesting issues:

[1] In all of the following lists variables are presented in order of increasing average value.

(1) In general, students rated their own skills lower than the importance of competencies. The only exception was the use of informal electronic sources of information. Let us remind that, in terms of importance this was the lowest rated competency. The assessment of self-efficacy for this point exceeded the importance rate.
(2) On average, the difference between the importance rate and self-efficacy equaled 0.88. The biggest difference, that was, the lowest rated competencies in relation to their importance, occurred in three variables — the use of the database creation software, the use of the statistical software (one of the lowest grades in terms of importance) and communicating in other languages (maximum rate).
(3) Therefore, it seems that the biggest differences and anomalies between the importance and self-efficacy of competencies occurred exactly on the extremities of the distribution — where the importance of the given competency was rated very low or very high. The closer to the centre the smaller the difference between these values was.

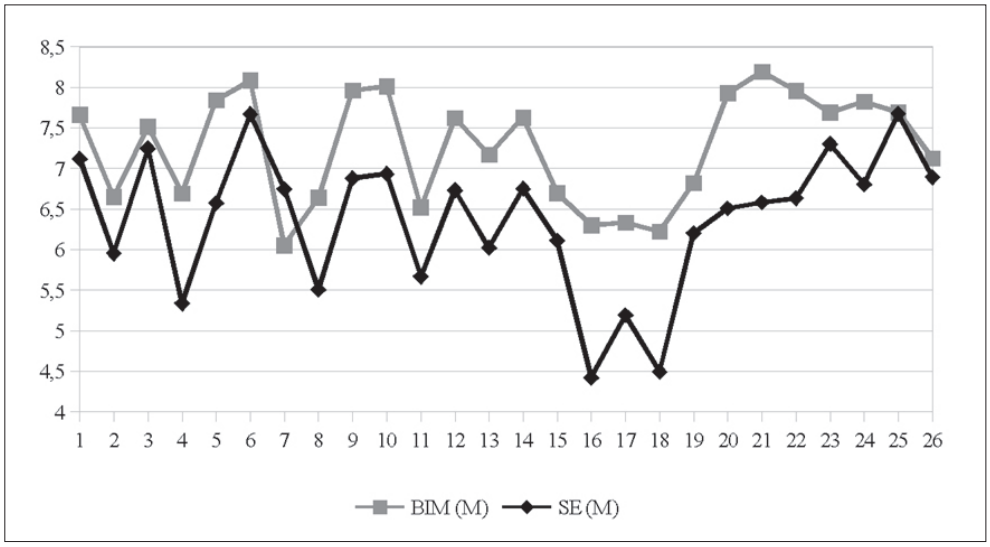

Fig. 2. Mean of the importance and self-efficacy of competencies

5.2. Reviewing learning sources

After gaining and/or improving their skills in the covered area, the students very seldom took part in additional courses (Tab. 2). They developed these skills mostly as a result of their independent work and activities (especially in the field of information quality evaluation — see Fig. 3).

Among other methods of acquiring competencies, personal sources dominated — the students declared that they gained necessary skills through the support of their families, friends and other close people.

Tab. 2. The most common sources of acquiring information literacy

	Undergraduate	**Graduate**	**Total**
In the classroom	59.12%	58.52%	58.94%
Specialist courses	6.99%	8.49%	7.44%
Self-study	55.89%	64.47%	58.48%

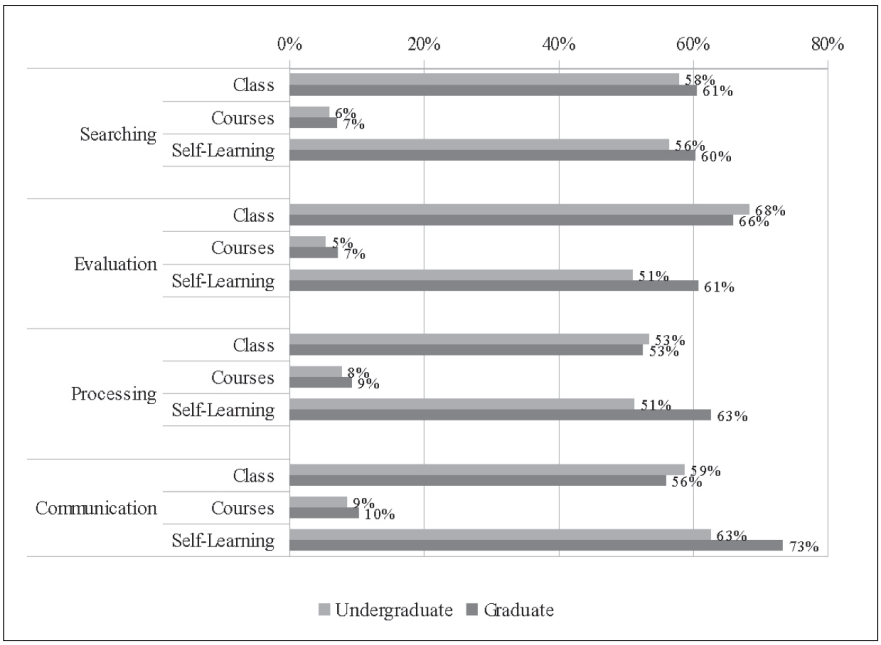

Fig. 3. Favourite sources of learning by competency categories

5.3. Examining gender, level and field of study

Within this part of the study, Mann-Whitney test (for gender and study cycle) and Kruskal-Wallis test (for the fields of study) were carried out. The statistical significance level was set at p=0.05.

The analysis showed that there was no difference in the belief in importance of a category of competency between men and women only regarding to the assessment domain. In other cases, women rated the importance of the individual competency categories higher and their responses were less diversified.

While analyzing the individual competencies, one could see that in all the cases where the hypothesis about the differences between men and women was confirmed, women considered the given competency more important than men did. This included the following: the information search strategy knowledge, the use of spreadsheets, handling statistical programs, and database managers, information dissemination on the Internet, creating presentations, and the knowledge of the ethical rules in own academic field.

Subsequently, we tested whether there is a difference in the importance assessment of a category of competency between first-, second-, and third-cycle students. No statistically significant distinctions were found in the case of two categories: information evaluation and communication skills. The differences were noticeable regarding to information retrieval and processing — the second – and third-cycle students considered these competencies more important than their younger colleagues did.

The statistically significant differences were apparent for six competencies and nearly all of them related to the ICT — the use of databases and tools for their creation, spreadsheets, statistical software and skills in computer software installation. In all the cases, the students already holding the bachelor's degree rated their importance higher. It was similar in relation to the use of the print sources of information.

When it comes to differences between the responses of students from particular fields of study, statistically significant differences were found in categories of searching, evaluating, and processing information. The LIS students rated the importance of the competencies in searching and processing information the highest. Slightly less important for them was the information evaluation. This, in turn, was the most important for the history students. In comparison to the other groups, the journalism students rated the above-mentioned competencies the lowest (in particular, information retrieval and evaluation).

In comparison to the representatives of the other two fields of study, the history students appreciated more the importance of print sources of information and searching using catalogues, the knowledge of the information sources typology and the methods of verification of the validity of the sources, as well as the knowledge of the terminology and the most relevant authors and institutions within their subject area; whereas they considered less important the use of informal communication channels and skills of working with spreadsheets. Moreover, comparing to other respondents, they considered knowledge about searching strategies and searching for information on the Internet itself, using database managers, and statistical software less important. Also, communication skills, such as dissemination of information and creating academic presentations, received lower importance rates.

On the other hand, the journalism students considered the following less important: use of the online public access catalogues (OPACs) and specialist databases, and knowledge of the information sources typology, as well as the use of the statistical software and database managers and installing programs. Interestingly, they rated the importance of compliance with the ethical rules in communication, the use of the print sources, and ability to recognize out-of-date materials lower than the respondents from the other fields of study.

The LIS students, who are supposed to have better knowledge on the subject of IL and its importance in the modern world, appreciated more than others the importance of many of the competencies. They were most aware of the advantages of employing the tools (specialist databases, database managers, spreadsheets or statistical software, as well as installing programs), evaluating and disseminating information, as well as the preparation of academic presentations. They had a better understanding of the importance of the competence in information retrieval and the impact of the informal communication channels. However, in spite of their education in this area, they rated printed resources and online public access catalogues or the knowledge of the information sources typology, terminology of subject and its most known authors slightly lower than the future historians.

The assessment of the competency importance among the students of the analyzed fields of study indicated, on one hand, some common attitudes apparently resulting from their current life phase (studies) — valuing skills of using sources, preparing written assignments and communication. On the other hand, some differences emerged that can result from the field and character of the study: history students paid attention to quite different competencies than other respondents, whereas LIS students, despite overall lower results, knew best the importance of the ICT and information retrieval (Fig. 4).

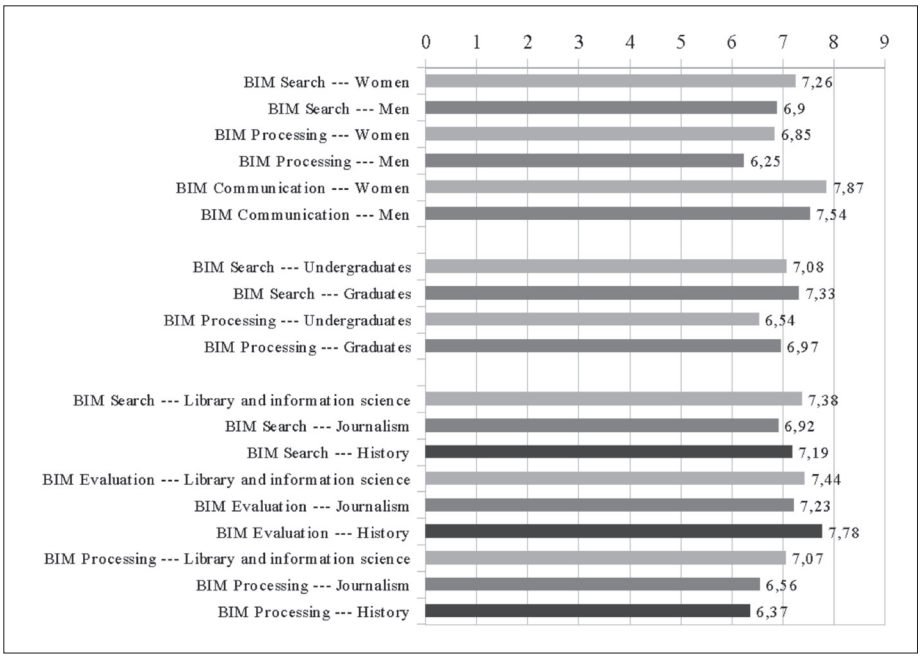

Fig. 4. Mean value for the BIM categories where statistically significant differences between the populations occur in relation to gender, cycle of studies, and field of study

In relation to the self-efficacy (Fig. 5), there were no statistically significant differences between men and women. However, at the level of the competencies themselves, some differences occurred. Men rated higher their skills in the computer software installation, online information retrieval, whereas women — in the use of print sources and presentation preparation.

Similarly, to the case of importance assessment, there was a no significant difference between the students of different cycles of study in the self-efficacy of competency within the category of evaluation and communication. Correspondingly, in case of differences within the category of search and processing — the second – and third-cycle students rated their competencies higher. It is worth noting that the responses of younger students varied more.

Amongst the competencies where we observed a statistically significant difference between the responses of first-, second-, and third-cycle students, there were: the use of printed and electronic sources of information and specialist databases, skills of Internet search and recognising obsolete materials determining whether an information resource is updated, knowledge about the most relevant authors and institutions of their subject area

and typology of scientific sources, as well as systemizing information. Within the named areas, the undergraduate students assessed their competencies lower.

In the case of the self-efficacy in own competencies, a significant difference occurred only in relation to the category of processing information. The LIS students rated their competencies in this respect the highest, then — journalism students, and the lowest — history students (although in this case, the dispersion rate of the responses was the highest).

Considering their own competencies, the history students assessed themselves lower than other respondents in terms of use of spreadsheets and database managers, computer software installation as well as knowledge of the information retrieval strategy, and the skill of searching in the Internet and statistical software knowledge. They also considered themselves to be less educated in communicating in foreign languages, creating academic presentations or dissemination of information, also by means of informal communication channels. On the other hand, they rated higher their skills in operating OPACs and the knowledge of the sources terminology and typology and the most relevant authors and institutions within subject area.

Journalism students rated themselves lower than others in terms of the use of OPACs, specialist databases and statistical software, knowledge of typology of the information sources, search strategies, and software installation. Their own skills in information retrieval in the Internet, using spreadsheets and communicating in foreign languages or through informal communication channels, as well as dissemination of information, they rated slightly higher than those of other fields of study.

LIS students more often believed that they know how to use specialist databases and database management tools, and also statistical software, how to implement search strategies, employ spreadsheets and install computer software, as well as prepare presentations, and in general disseminate information, also through the informal channels. Even though they noticed some skill deficiencies (OPACs use, knowledge of sources typology, communication in foreign languages), their self-assessment still reached the medium level compared to the students of other fields of study. They rated low only the skill of information retrieval and knowledge of the terminology within their field of study and the most relevant authors and institutions within subject area.

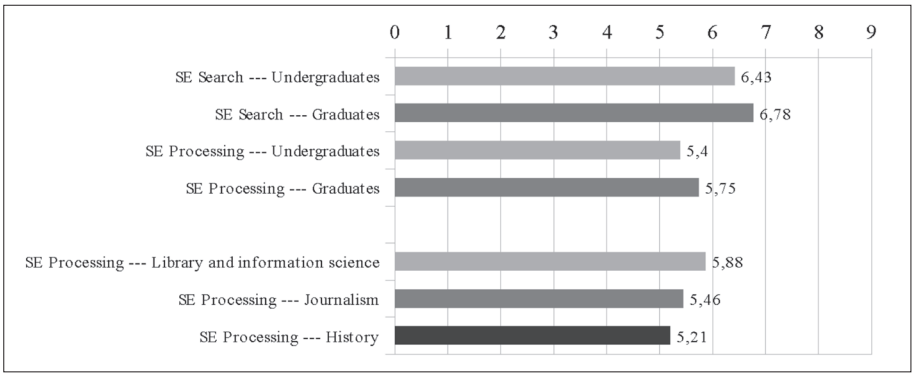

Fig. 5. Mean value for the SE categories where statistically significant differences between the populations occur in relation to cycle of studies and field of study

In the case of the influence of gender and field of study variables on the diversity of assessments concerning importance of information competencies and self-efficacy in this regard, the following can be observed:

(1) Gender was a variable that strongly differentiated the assessment of the importance of the competencies. However, it did not differentiate the self-efficacy of own knowledge, competencies and attitudes.
(2) The differences between the first-, second-, and third-cycle students occurred in the cases of both the importance assessment and self-efficacy of competencies in the information retrieval and processing. More advanced students rated them higher.
(3) The field of study differentiated more the students' assessment of the importance of competencies than their self-efficacy.

5.4. Factors relating to belief of importance and self-efficacy

The purpose of the study was also to test the extent of correspondence of the categories proposed by the Spanish researchers in the form of an IL-HUMASS questionnaire to the competencies occurring in the analyzed group. A factor analysis of exploratory nature was employed; it aimed to reduce and reclassify the variables.

The Kaiser criterion was adopted, in accordance with which the factors are excluded from the analysis if their eigenvalue was below 1. In the case of the importance assessment as well as within the self-efficacy in competencies, four factors met this criterion. Variables that had a primary factor loading of above 0.6, and the others – less than 0.5 were taken into account. Promax rotation method that allows for extracting correlated factorial solutions was employed.

First, the variables that were reduced are worth discussing. In case of the competency importance assessment, 9 variables were reduced, including the majority related to the information retrieval (BIM1, BIM3–5 and BIM8) and communication (BIM23–25) and also 1 variable from the category of processing (BIM15). In relation to the self-efficacy, as many as 11 variables were reduced: 5 from the category of search (BIM2, BIM4–7), 3 from the category of processing (BIM18a, BIM19), and 3 from the category of communication (BIM20–21, BIM23). Also, in relation to the previous results, it appears that information evaluation and processing were the most important factors in the case of Polish students of the analysed fields of study. They explained a significant percentage of variance what is illustrated by the following tables (Tab. 3 and 5).

The first factor of the importance of competencies related to the search process and evaluation. It was assigned six variables and it explains 33.79% of variance. In this perspective, using OPACs, as an essential element during the search, became a part of the process of information evaluation. The other factor, explaining 14.92% of the variance, concentrated on the information processing – mostly on the use of software of various degrees of advancement, thus they can be named the technical processing of information. It was assigned four variables. The third factor, related to communication, explained 8.12% of variance and collated three variables. The last one referred to use (search and communication) information on the Internet. It explained 6.47% of variance.

Tab. 3. Reduction of competency importance indicators

Factors of beliefs in importance of competencies	Factor loadings	Cumulative variance explained
Factor 1 – information search and evaluation		33.79
BIM2. Entering and using OPACs	0.673	
BIM9. Evaluating the quality of information resources	0.751	
BIM10. Recognizing the author's ideas within the text	0.811	
BIM11. Knowing the typology of scientific information sources	0.781	
BIM12. Determining whether an information resource is updated	0.745	
BIM13. Knowing the most relevant authors and institutions within your subject area	0.624	
Factor 2 – technical processing of information		48.70
BIM16. Using database managers	0.888	
BIM18a. Handling spreadsheets	0.830	
BIM18b. Handling statistical programs	0.888	
BIM19. Installing computer programs	0.677	
Factor 3 – communication – dissemination		56.84
BIM20. Communicating in public	0.734	
BIM21. Communicating in other languages	0.842	
BIM22. Writing a document	0.785	
Factor 4 – use of information on the Internet		63.30
BIM6. Searching for and retrieving Internet information	0.685	
BIM7. Using informal electronic sources of information	0.801	
BIM26. Disseminating information on the Internet	0.727	
Method of extracting factors – the principal components. Rotation method – Promax with Kaiser normalisation. Loadings value according to the structure matrix.		

Tab. 4. Correlation between four factors of the competency importance

Partial correlations matrix			
Component	**1**	**2**	**3**
1	1.000	0.261	0.352
2	0.261	1.000	0.365
3	0.352	0.365	1.000
4	0.156	0.450	0.288
Method of extracting factors – the principal components. Rotation method – Promax with Kaiser normalization			

The factors identified in the case of self-efficacy distribute quite differently. Of the highest importance, explaining 34.6% of the variance, was the factor collating eight variables — it related to the evaluation of information (the text structure recognition and knowing the laws seem to belong more to the assessment category) and its practical use – creating own documents. The second factor, assigned three variables from the scope of technical processing of information, explained 10.5% of the variance. Therefore, like in the research of Pinto and Pascual (2017), the factor typically associated with the use of information technology was extracted. The third factor incorporated two variables — both related to working with various sources of information. It explained 8.0% of variance. The last one, explaining 7.0% of variance referred to dissemination in scientific environment and on the Internet.

Tab. 5. Reduction of competency self-efficacy indicators

Factors of self-efficacy on competencies	**Factor loadings**	**Cumulative variance explained**
Factor 1 – information evaluation and it's practical usage		34.60
SE9. Evaluating the quality of information resources	0.763	
SE10. Recognizing the author's ideas within the text	0.743	
SE11. Knowing the typology of scientific information sources	0.733	
SE12. Determining whether an information resource is updated	0.696	
SE13. Knowing the most relevant authors and institutions within your subject area	0.693	
SE15. Recognizing text structure	0.718	
SE22. Writing a document	0.671	
SE24. Knowing the laws on the use of information and intellectual property	0.672	
Factor 2 – technical processing of information		45.04
SE8. Knowing information search strategies	0.638	
SE16. Using database managers	0.864	
SE18b. Handling statistical programs	0.800	
Factor 3 – information sources usage		53.04
SE1. Using print sources of information	0.730	
SE3. Consulting and using electronic sources of primary information	0.830	
Factor 4 – dissemination		60.05
SE25. Creating academic presentations	0.815	
SE26. Disseminating information on the Internet	0.808	
Method of extracting factors – the principal components. Rotation method – Promax with Kaiser normalisation Loadings value according to the model matrix.		

Tab. 6. Correlation among four factors of the competency self-efficacy

Partial correlations matrix			
Component	**1**	**2**	**3**
1	1.000	0.280	0.479
2	0.280	1.000	0.216
3	0.479	0.216	1.000
4	0.352	0.127	0.196
Method of extracting factors – the principal components. Rotation method – Promax with Kaiser normalisation			

The substantial reduction of the variables and their partial reclassification showed primary and secondary variables and may result in a suggestion of partial modification of IL-HUMASS questionnaire, that is removing the variables reduced in the both cases from the research tool. Also, further research would have been necessary to make it a reference point for the competency assessment of Polish universities students.

6. Research limitations

This study has its limitations. First of all, only a part of Polish humanities and social sciences students were surveyed. Probably, the results of the comparison would have been more precise if the research sample had been expanded (perhaps on students of the same fields of study, but from more universities in Poland). We have also attempted to examine whether there were differences in the results of research performed among the students from other disciplines — we have chosen history and journalism. Perhaps, it will be possible to expand the list of the selected fields of study to analyze more precisely the differences and similarities among the students in this regard.

7. Conclusions

The assessment of the competency importance among the Polish students of the analyzed fields indicated, on one hand, some common attitudes apparently resulting from their current life phase (studies) — valuing skills of using sources, preparing written assignments and communication. On the other hand, some differences emerged that can result from the field and character of the study: history students paid attention to quite different competencies than other respondents, whereas LIS students, despite overall lower results, knew best the importance of the ICT and information retrieval. Journalism students did not appreciate the use of databases, knowledge of the information sources typology, use of statistical and database creation software and informal communication channels. They also rated low the importance of compliance with the ethical rules in communication and use of information sources what should be deeper analyzed in further studies. While the LIS students, having at least theoretically, the best knowledge on the subject of information literacy and its

importance in modern world, appreciated more than others the importance of many competencies but not of all of them. They were aware of the advantages of employing various information sources and tools for information processing; they also attached importance to the ethical use of sources. They had a better understanding of the importance of the competence in information retrieval and the impact of informal communication channels. Referring to previous studies, self-efficacy of Polish students' competencies was similar to the outcome of Pinto & Pasqual's (2017) research on LIS students. Spanish history students assessed low their competencies in employing bibliographic managers and database creation software, communicating in foreign languages, knowledge of search strategies, and of the law on the use of information (Pinto, 2012). They rated their skills high in the information structuring and summarizing, understanding author's ideas, information retrieval on the Internet, and understanding the text structure. Polish history students had the highest confidence, among others, in their searching skills and also in the knowledge of copyright and competencies related to the dissemination of information.

In terms of the differences between men and women, similarly as in Pinto & Pascual's (2017) research, there were no statistically significant differences in relation to the self-efficacy, whereas certain differences were present on the level of the competency alone. Men rated higher their skills in the computer software installation, online information retrieval and the sources quality evaluation; whereas women — in the use of printed sources and presentation preparation. Referring to the conclusions of the Spanish survey of LIS students (Pinto & Pascual, 2017), Polish group reported lower BIM level with regard to the communication and information evaluation competencies. In general, in relation to the history students, in terms of comparison between the Spanish and Polish analyses, there was only a consentience in the negative attitudes (low evaluation of the importance of the ability to employ the ICT tools) but not in the positive ones. The Spanish journalism students much stronger than Polish ones appreciated the importance of competence in communication, and in this respect rated their skills higher.

The results of the Polish survey, as well as a preliminary comparative analysis of Polish and Spanish projects revealed interesting similarities and differences not only between national groups, but also in course specific perspective. A detailed analysis of these relations will be reported in another paper. However, even at this point one can already notice a potential of broader international comparative research concerning students' attitudes towards information literacy.

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Appendix

The IL-HUMASS Questionnaire

No.	With regard to...	Belief in importance	Self-efficacy	Source of learning
	Information Literacy Competencies-Abilities	Low High 1 2 3 4 5 6 7 8 9	Low High 1 2 3 4 5 6 7 8 9	Cl Class Co Courses S Self-learning O Others
Searching				
W1	Using print sources of information (books, papers, and so on)			
W2	Entering and using OPACs			
W3	Consulting and using electronic sources of primary information (such as journals)			
W4	Using electronic sources of secondary information (like databases)			
W5	Knowing the terminology of your subject			
W6	Searching for and retrieving Internet information (such as advanced searches, directories, portals)			
W7	Using informal electronic sources of information (blogs, discussion lists, and the like)			
W8	Knowing information search strategies (descriptors, Boolean operators, and such)			
Evaluation				
W9	Evaluating the quality of information resources			
W10	Recognizing the author's ideas within the text			
W11	Knowing the typology of scientific information sources (thesis, proceedings, and so on)			
W12	Determining whether an information resource is updated			
W13	Knowing the most relevant authors and institutions within your subject area			

Processing				
W14	Systematizing and abstract information			
W15	Recognizing text structure			
W16	Using database managers (such as Access, MySQL))			
W18a	Handling spreadsheets (for instance, Excel)			
W18b	Handling statistical programs (for instance, SPSS)			
W19	Installing computer programs			
Communication-Dissemination				
W20	Communicating in public			
W21	Communicating in other languages			
W22	Writing a document (such as a report, academic work)			
W23	Knowing the code of ethics in your academic/professional field			
W24	Knowing the laws on the use of information and intellectual property			
W25	Creating academic presentations (using PowerPoint, for example)			
W26	Disseminating information on the Internet (through webs, blogs, and other social platforms)			

Kompetencje informacyjne polskich studentów kierunków społecznych i humanistycznych

Abstrakt

Cel/Teza: Celem badań było poznanie opinii studentów kierunków: historia, dziennikarstwo oraz informacja naukowa i bibliotekoznawstwo (i pokrewnych) dotyczących znaczenia poszczególnych kategorii kompetencji informacyjnych oraz ich samooceny w tym zakresie.
Koncepcja/Metody badań: Przeprowadzono badania ilościowe z zastosowaniem kwestionariusza IL-HUMASS, obejmującego 26 rodzajów kompetencji informacyjnych.

Wyniki i wnioski: W wyniku badań wskazano pewne znaczące statystycznie podobieństwa w ocenie ważności kompetencji informacyjnych wśród polskich studentów, wynikające z ich sytuacji życiowej, a także różnice związane ze studiowaniem na różnych kierunkach i w różnych dyscyplinach.
Oryginalność/Wartość poznawcza: Uzyskane wyniki pozwalają na wstępną ocenę kompetencji informacyjnych studentów wybranych kierunków, a także na porównanie ich postaw i umiejętności z respondentami analogicznych badań zagranicznych.

Słowa kluczowe

Badanie ilościowe. Kompetencje informacyjne. Nauki humanistyczne. Nauki społeczne. Samoocena. Studenci.

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