EVALUATION OF FORMAL PREPARATION OF UNIVERSITIES FOR INTERNATIONAL MOBILITY. RESULTS OF QUESTIONNAIRE RESEARCH CONDUCTED AMONG EMPLOYEES

Dorota Kwiatkowska-Ciotucha

Wroclaw University of Economics and Business, Wroclaw, Poland
e-mail: dorota.kwiatkowska@ue.wroc.pl

ORCID: 0000-0002-0116-4600

Urszula Załuska

Wroclaw University of Economics and Business, Wroclaw, Poland
e-mail: urszula.zaluska@ue.wroc.pl

ORCID: 0000-0001-5305-8087

Cyprian Kozyra

Wroclaw University of Economics and Business, Wroclaw, Poland
e-mail: cyprian.kozyra@ue.wroc.pl

ORCID: 0000-0002-8500-6836

Abstract: The article is dedicated to the evaluation of the formal preparation of universities for international mobility. In order to perform the analysis, the authors used the results of the quantitative primary research conducted in the Stranger project of the Erasmus + strategic partnership. The target group included employees (administrative staff and academic teachers) from universities in Poland, Greece, Hungary and Ukraine that form the partnership. To make it possible for respondents to answer closed-ended questions, summative scales were created. The study examined correlation relationships between the respondents' answers aggregated to summative scales, and also strived to classify the respondents in terms of the obtained values for summative scales using hierarchical cluster analysis (Ward's method). The results of the analyses showed the existence of many problems in the field of broadly understood internationalization of universities, and also indicated a significant differentiation of evaluations due to respondents' characteristics.

Keywords: internationalization of the university, international mobility of students, questionnaire research, statistical analyses.

1. Introduction

The phenomenon of internationalization is one of the greatest challenges faced by universities in the 21st century, where the activities in this area are highly positioned in all rankings indicating the place of a given university on the domestic or international market (Brandenburg, Berghoff, and Taboadela, 2014; Martyniuk, 2011; OECD, 2020). However, whether this challenge can be met depends not only on the substantive preparation and commitment of scientific and educational staff, but also on the formal preparation of universities for admitting foreign lecturers and students, including their administrative employees. The ability to communicate and act effectively, to understand different norms, attitudes and values, often determines whether academic teachers and students arriving at a given university will find themselves in a culturally different environment. Will they receive the necessary support and will they complete the curriculum agreed upon before departure, or conduct planned lectures and classes without major obstacles? Nevertheless, when traveling as a student or employee to a foreign university, it is also worth having the necessary knowledge about the standards and rules in force at the host university. It is crucial to bear in mind that the effectiveness of international mobility requires preparation of both sides, that is universities and the people who decide to work or study there. Cultural differences may constitute an additional barrier, and the lack of knowledge and skills in this area may cause numerous tensions and unnecessary stressful situations (Bielinis, Grochalska, and Maciejewska, 2018; Hofstede, 2011; Hofstede, Hofstede, and Minkov, 2010).

"The Stranger"[1] project under the Erasmus+ strategic partnership was dedicated to the development of universal solutions allowing for the proper organisation of activities in the area of the formal preparation of universities for admitting foreign students and lecturers. The development of specific solutions was preceded by extensive primary quantitative and qualitative research conducted by all the project partners. The research covered foreign students and university employees, and was aimed at collecting the opinions of target groups in the field of formal university preparation and activities undertaken in this area. The group of foreign students included those benefitting from international exchange under the Erasmus+ Programme, and those choosing a full cycle of studies at a foreign university. The group of employees included teachers and university administrative staff. It is worth emphasising that academic mobility is often the subject of analyses, and the literature contains many publications addressing its various aspects, including mobility in the Erasmus+

---

[1] Project "The International mobility – opportunity and problems. Proper preparation for studying at a foreign university" (No 2018-1-PL01-KA203-050756), implementation period 09.2018-06.2021. This project was founded with support from the European Commission under the Erasmus+ Programme Strategic Partnerships for higher education. Leader: Wroclaw University of Economics and Business (Poland), Partners: University of Pannonia (Hungary), Hellenic Open University (Greece), West Ukrainian National University (Ukraine).

Programme and future trends in the area of university internationalization (Berg, 2014; Bracht et al., 2006; Bridger, 2015; Curaj et al., 2015; Demange, Fenge, and Uebelmesser, 2020; Knight, 2012; Marciniak and Winnicki, 2019; Teichler, 2017).

The purpose of the article is an assessment of the formal preparation of four selected universities for admitting foreign students. The paper presents the evaluation of activities undertaken by universities in this area. In order to structure the conducted analyses, the authors decided to ask three questions:

Question 1. How do employees evaluate the formal preparation of universities for admitting foreign students, and how do they evaluate the activities undertaken in this area?

Question 2. Does the evaluation of formal preparation translate into the evaluation of the activities undertaken? In other words, is there a relationship between the evaluations in individual areas?

Question 3. Do the demographic or professional characteristics of the respondents influence the differentiation of the formulated evaluations?

2. Data and methods

2.1. Data collection and research sample

PAPI research was conducted in the period from December 2018 to March 2019, and covered teachers and administrative staff having contact with students. The research involved employees of four universities participating in the *Stranger* project, namely: Wroclaw University of Economics and Business (Poland), University of Pannonia (Hungary), Hellenic Open University (Greece), and West Ukrainian National University (Ukraine). It is worth noting that all the universities participating in the study have been recognized for many years, with at least several thousand students each, and annually admit several hundred foreign students. It should be emphasized that limiting the research sample to employees of four universities made it unrepresentative for the entire population. Therefore, the generalization of conclusions from the research sample to the population using the methods of statistical analysis should be carefully formulated. Most of the questions were closed-ended, and the respondent's task was to choose one of the answers provided. In some questions, after selecting a specific answer, the employees were asked to clarify the issues raised (e.g. in the question about preparation for admitting and taking care of foreign students, after selecting "No" it was necessary to indicate elements that needed improvement). In some questions concerning formal issues (e.g. having an internationalization strategy or a website for foreign students), apart from "yes"/"no", the "I don't know" option was also included. This made it possible to evaluate not only the formal preparation of the university itself, but also the level of awareness of the issues among the employees. In the case of open-ended questions, the respondents could describe selected issues in more detail (e.g. problems when

dealing with foreigners), indicate areas requiring change or suggest new solutions in the process of admitting foreign students. In the first part of the questionnaire, employees were asked to evaluate the formal preparation of universities in the area of internationalization and the activities undertaken in this area. The subsequent questions were aimed at identifying strengths and weaknesses in preparing employees for cooperation with people from other countries, and the role of universities in this preparation. The respondents were also asked about problems when in contact with students from other cultures, the possibilities of solving them and assistance in this regard on the part of university.

The structure of the research sample according to the selected characteristics is presented in Table 1. The research covered a total of 224 university employees from Greece, Hungary, Poland and Ukraine.

Table 1. Structure of the research sample of employees in the PAPI research

Characteristic	Categories	Frequency	Percentage of respondents
Country	Greece	51	22.8
	Hungary	40	17.8
	Poland	83	37.1
	Ukraine	50	22.3
Sex	Female	143	63.8
	Male	74	33.0
	No data	7	3.2
Type of work	Administrative	105	46.9
	Research-teaching	113	50.5
	No data	6	2.6
Work experience	Up to 5 years	53	23.7
	6-10 years	39	17.4
	11-15 years	41	18.3
	16+ years	84	37.5
	No data	7	3.1

Source: own elaboration.

Taking into account each country, the largest group consisted of the respondents from Poland (37.1%), whereas the smallest one from Hungary (17.8%). The share of respondents from the other two countries was on a similar level (22.8% and 22.3%). In the whole sample, there were about twice as many female than male respondents, and the largest disproportions in terms of gender occurred in Poland and Ukraine, where the difference reached 50 pp. Greece was the only country where the majority of respondents were men. Academic teachers and administrative staff were represented by groups similar in terms of the number of participants, which suggested that the research conclusions are adequate on the level of functioning of the entire university. The share of these two subgroups in Poland and Ukraine was

almost the same; in Hungary there mostly research and educational staff, while in Greece there were slightly more administrative employees. Most of the employees participating in the research had extensive work experience (at least 11 years), but it is worth paying attention to the differences in the structure of the research sample for this characteristic in specific countries. In Poland, people with 16 years and over, of work experience constituted the biggest group (55.4%); in Hungary the share of the group with the shortest and the longest work experience was very similar (32.5% and 35.0%, respectively); in Greece the most numerous group consisted of the least experienced participants (35.3%), and the more work experience the respondents had, the smaller groups they created (the group of 16+ accounted for 17.6%). In Ukraine, on the other hand, the largest group consisted of people with work experience between 11 and 15 years (34.0%), followed by those with 16 or more years of seniority (30.0%).

2.2. Methods of analysis

The same questionnaire was given to both academic teachers and university administrative staff (32 questions, including 4 open-ended ones). In order to obtain answers to the research issues, the authors used the answers to 14 closed-ended questions directly related to the evaluation of the formal preparation of universities for international mobility. The questionnaire with those questions is in Appendix. The metric questions concerned such characteristics as the place of employment (country), gender, type of work and seniority. The analysis began with the evaluation of the possibility of creating summative scales for questions relating to the individual subject areas included in the questionnaire. For this purpose psychometric methodology was applied, using the reliability analysis with Cronbach's alpha coefficient, equivalent in the case of binary characteristics to the Kuder-Richardson (KR-20) coefficient (DeVellis, 2003, p. 28). In order to evaluate the preparation of universities for admitting foreign students and activities undertaken in this area, the study relied on descriptive statistics of selected research results and the frequency of choosing answer options included in the questions (the first research question). In order to find the answer to the second research question, the authors examined the linear correlation relationships between the respondents' answers aggregated to summative scales. The study strived to classify the respondents in terms of the obtained values for summative scales using hierarchical cluster analysis (Ward's method). The statistical analysis also included Pearson's chi-squared test in cross tables while examining the dependence of categorial characteristics (Aczel, 2012) and the one-way analysis of variance while examining the dependence of quantitative characteristics on categorial ones, which allowed finding the answer to the third research question. The calculations were made using the Statistica 12.5 and IBM SPSS 26 computer programmes.

3. Results of analysis

The first group of issues concerned the preparation of universities for admitting foreign students. In this group, four different areas were distinguished, with the number of evaluated issues ranging from 5 to 8 in each of them. Then, the authors tried to create summative scales for each of the distinguished areas (see Figure 1). The adopted dichotomous response coding method, where 1 denoted a positive situation, whereas 0 a negative one, means that the summative scales are of stimulant nature – a higher value denotes more positive evaluation of the situation in a given area.
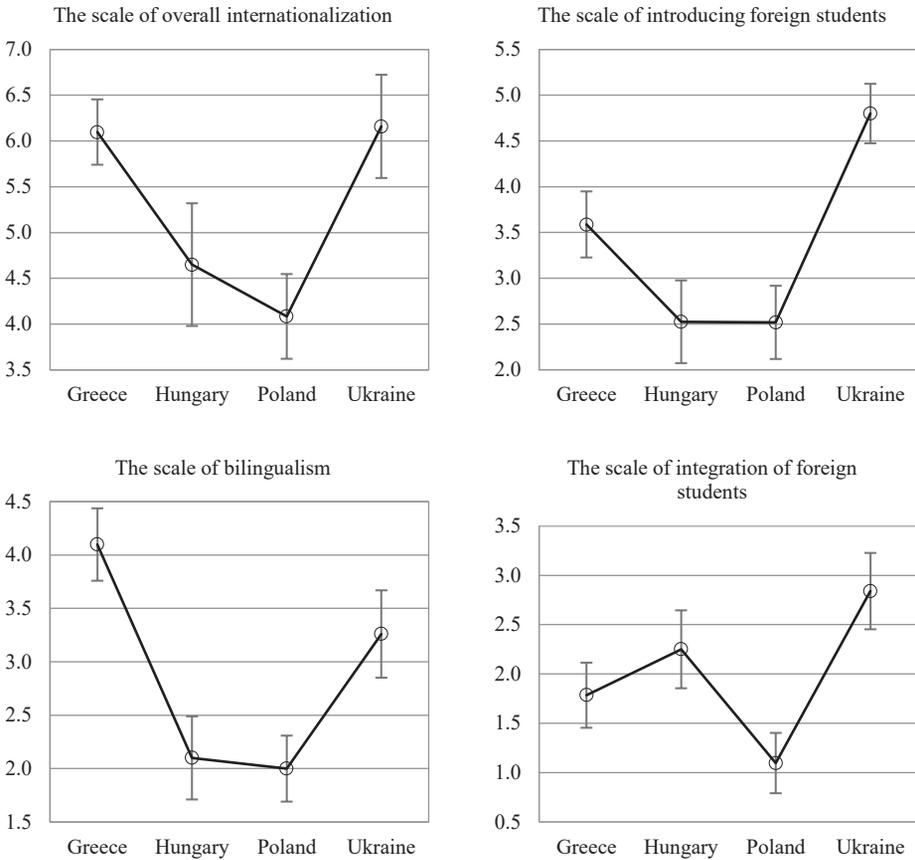
Note: maximum possible values for summative scales: 8 (top left), 6 (top right), 5 (bottom left and right)

Fig. 1. Evaluation of preparation of the university for accepting foreign students according to summative scales – differentiation by country

Source: own elaboration.

The first eight questions in the questionnaire (Q1 to Q8) concerned the awareness of formal documents and procedures in the field of the broadly understood university internationalisation. The authors asked whether the university has a clearly defined goal and internationalisation strategy, and whether it has a catalogue of activities enabling their implementation. They were also asked about the coordinator taking care of new and leaving students, an information website for foreign students, information available in foreign languages and conducting marketing activities to attract foreign students. Due to the thematic similarity of the questions and the same cafeteria of answers ("yes", "no" and "I don't know"), the authors created a summative binary scale of "yes" vs. the remaining answers, called the scale of *overall internationalisation*. High values of statistical measures (KR-20 coefficient = 0.73) confirmed the reliability of the developed scale and a strong correlation of respondents' answers in this area. Similarly, in the case of variants of the question concerning the procedures for introducing foreign students into academic life (Q9, cafeteria: information meetings, adaptation days, guided tours around the university, information meetings with employees and university authorities, courses in the language of the host country as a foreign language), the authors developed a summative scale of *introducing foreign students* (KR-20 coefficient = 0.68). For the variants of the question concerning the conscious university policy in the area of communication with foreign students (Q10, cafeteria: bilingual character of messages, signs on the doors of the most important places at the university, websites, advertisements and menus in the canteen), a summative scale of *bilingualism* (KR-20 coefficient = 0.73) was created. The last summative scale was called the scale of *foreign students' inclusion* (KR-20 coefficient = 0.64) and it was developed using variants of the question about the offer of universities for foreign students in the area of spending free time and socialising with local students (Q11, cafeteria: guided tours around the city, integration meetings with local students, learning the local language in tandem with a local student, meetings with prominent persons of the city and university, and the involvement of local students in the inclusion process – Q12).

The high reliability of all the developed summative scales allowed for evaluating the situation in the analysed fields in a multifaceted way, and made it possible to check – on these basis – the possible differentiation of the situation evaluation due to personal characteristics. The study took into account the following characteristics: country, gender, work experience and type of work performed. Table 2 presents the results obtained from the one-way analysis of variance for those characteristics for which there was at least one significant difference, i.e. for country and type of work performed. There were no statistically significant differences in terms of respondent's gender and work experience.

For all four summative scales, the authors observed significant differentiation of evaluations in terms of the formal preparation of universities for the process of internationalization and activities undertaken in this area depending on the country. In each of the distinguished areas, the Polish university obtained the poorest results.

Table 2. Differences in the evaluation of the formal preparation of universities for the process of internationalization and activities undertaken in this area, depending on the country and type of work performed

Scale	Country		Type of work	
	F stat.	*p*-value	F stat.	*p*-value
Scale of overall internationalization	18.11	<0.001	0.69	0.406
Scale of introducing foreign students	28.12	<0.001	3.18	0.076
Scale of bilingualism	31.34	<0.001	17.06	<0.001
Scale of integration of foreign students	19.83	<0.001	1.20	0.274

Source: own elaboration.

Similarly, low evaluations were also observed in the case of the Hungarian university for the scale of introducing foreign students as well as the scale of bilingualism. In the case of three of the four scales (except for the scale of bilingualism), the situation was assessed most positively by the employees of the Ukrainian university. However, those working at the Greek university highly evaluated not only the area of bilingualism but also the awareness of formal documents and procedures in the field of university internationalization. Taking into account maximum possible values for each of the summative scales, it should be stated that one of the latter areas – activities undertaken by universities to ensure the inclusion of foreign students in the local community – was evaluated in the least positive manner. The highest average assessment (for Ukraine) constituted less than 57% of the maximum possible value, with values of around 80% for other areas. At the same time, the lowest average assessment (for Poland) is 22% of the maximum possible value, whereas for other scales it was not lower than 40%. One statistically significant difference which concerns the scale of bilingualism was found in the case of the type of work performed (administrative staff vs. academic teachers) – administrative staff evaluated the preparation of universities in this area in a more positive way than academic teachers. It is also worth noting that the assessments given by both groups of employees vary considerably. For administrative staff, the average evaluation was 64% of the maximum possible value, whereas for academic teachers – only 47%.

In the next step, the study analysed the relationship between the respondents' evaluations concerning the preparation of universities for the process of inter-nationalization and the activities undertaken in this regard for the four areas distinguished. The obtained values of the correlation coefficients are presented in Table 3.

There is a statistically significant correlation (*p*-value <0.05) between all the pairs of summative scales, and in most cases the relationships can be described as moderately strong. All the correlation coefficients had positive values, which means that positive evaluations in one area were accompanied by positive evaluations in

Table 3. Matrix of correlation coefficients for the distinguished summative scales

Scale		1	2	3	4
1	scale of overall internationalization	1.000	0.566	0.554	0.536
2	scale of introducing foreign students	0.566	1.000	0.409	0.534
3	scale of bilingualism	0.554	0.409	1.000	0.294
4	scale of integration of foreign students	0.536	0.534	0.294	1.000

Source: own elaboration.

other areas, and vice-versa – less positive evaluations in one area resulted in poorer evaluations in the others. The strongest relationships were noted between the first summative scale and the others, which means that the formal preparation of the university and the awareness of procedures among employees influence the activities undertaken at the university in the following areas: introducing foreign students, bilingualism and integration of foreign students. Another strong relationship was also observed in the pair of the second and fourth scale, which means that the procedures of introducing foreign students into the academic community are often accompanied by activities aimed at their inclusion, also outside the time spent at university. The lowest value of the correlation coefficient was obtained for the pair of the third and fourth scale, which means that there is no strong relationship between activities in the area of bilingualism and foreign students' integration.

Based on the values of summative scales calculated for specific respondents, the authors classified and determined the profiles of the obtained clusters, taking into account the country where the respondent worked as a university employee. The dendrogram obtained as a result of hierarchical cluster analysis is presented in Figure 2.

Based on the analysis of the dendrogram, it is possible to propose a division into three clusters according to Mojena's rule one (Mojena, 1977), which, in the respondents' opinions, differentiate the level of university preparation in the area of internationalization. Mojena proposed to stop joining clusters when the linking distance is greater than the average linking distance plus standard deviation times coefficient k. The best, according to Mojena, values of coefficient k for Ward's method with Euclidean distance are between 2.75 and 3.5. In this case it gives the interval (54.08; 67.59) of stopping linkage distance, equivalent to a cut tree diagram in order to obtain three clusters. The legitimacy of the division into three clusters is also confirmed by the examination of the significance of the differences between the mean values of the diagnostic variables (summative scales) in individual clusters (p-value <0.001). The first cluster is characterised by the lowest mean values for all four diagnostic variables, while the third one – by the highest ones (cf. Figure 3). The most numerous cluster is the third one, where 118 out of 224 university employees participating in the research were classified. The second cluster included 72 respondents, whereas the first one – 34. Taking into account the characteristics
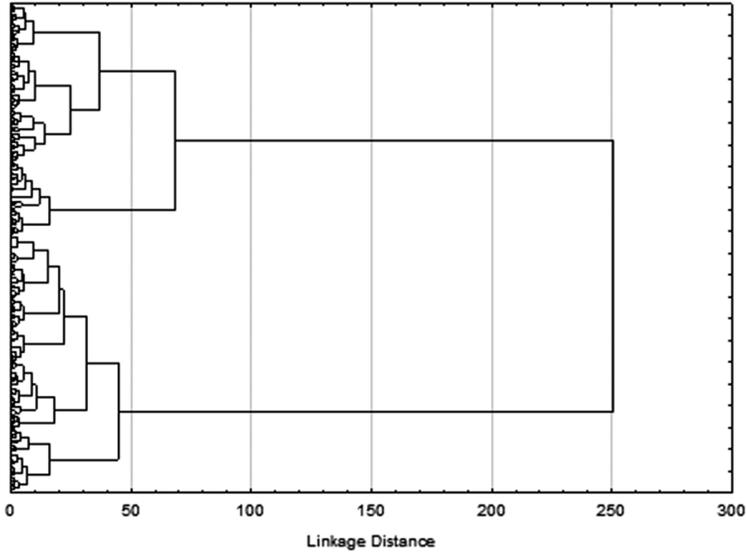
Fig. 2. Tree Diagram obtained as a result of hierarchical cluster analysis –
Ward's method, Euclidean distances
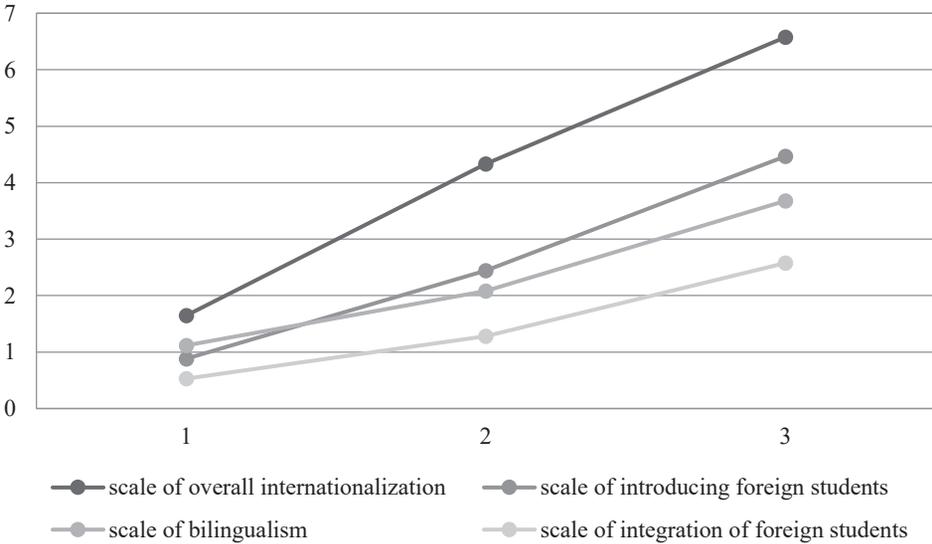
Source: own elaboration.

Fig. 3. Characteristics of specific clusters – mean values of diagnostic variables

Source: own elaboration.

of specific clusters, this division appears to be rather optimistic. The highest number of respondents was noted in the cluster with the highest mean values for diagnostic variables, whereas the lowest – in the cluster with the poorest evaluations of university preparation and activities in the field of internationalization. However, it is necessary to bear in mind, at least in some cases, that the average evaluations for the entire research sample of employees constituted less than 50% of the maximum possible value for a given summative scale. That was the case for seven out of eight mean values in the first and second cluster (values 11-42%).

The profiles of the obtained clusters due to the share of respondents from specific countries are presented in Table 4. The differentiation for countries is characterized by a strong dependency ($\chi^2 = 85.13$, p-value < 0.001). The third cluster is dominated by respondents from Greece and Ukraine (84% and 88%, respectively), while the majority of respondents from Poland and Hungary are classified into the second cluster (51% and 48% respectively). In the case of Greece and Ukraine, the first cluster (the worst in the perspective of the evaluation) included only 1 or 2 people. For Poland and Hungary, the distribution of respondents in the remaining clusters (except the second one) is similar (20.0-32.5%). It can be concluded that the analysed countries (universities) can be paired in the following way: Poland-Hungary and Greece-Ukraine.

Table 4. Share of respondents from specific countries in the distinguished clusters

Cluster no	Measure	Greece	Hungary	Poland	Ukraine
1	number	1	8	23	2
	frequency	1.96%	20.00%	27.71%	4.00%
2	number	7	19	42	4
	frequency	13.73%	47.50%	50.60%	8.00%
3	number	43	13	18	44
	frequency	84.31%	32.50%	21.69%	88.00%

Source: own elaboration.

The next part of the research concentrated on single questions, without creating summative scales, which resulted mainly from the importance of the analysed questions. The first one concerned everyday problems related to the service and cooperation with foreign students, while the second – satisfaction with the support provided by the university to employees to increase the effectiveness of this cooperation (Q 13). Here it was important not only to identify possible differences due to the respondents' characteristics, but also to determine the areas requiring the most urgent changes. As far as problems were concerned, the study included issues such as inability to communicate due to insufficient knowledge of the language, being used to a different teaching and grading system, improper flow of information (information deficiencies among students), cultural differences and other barriers.

The biggest problems were those related to language issues, and for 50% of the respondents this problem was indicated as requiring a solution. However, it is worth emphasising that the source of this problem may be the lack of language skills on the part of foreign students as well as university employees. In second place, one should mention information deficiencies among students connected with improper information flow, an issue which was reported by 45% of the respondents. Cultural differences constituted a barrier according to 36% of the respondents, whereas a different system of teaching and grading – according to 30% of the employees participating in the research. The opinions were statistically significantly differentiated due to two out of four analysed respondents' characteristics, namely the type of work performed and the country (cf. Table 5). Administrative staff perceived problems related to communication in a foreign language to a greater extent than academic teachers. For the latter group, a different system of teaching and grading appeared to be problematic (p-value slightly above the threshold of 0.05). Taking into account the country of origin, it is necessary to point out the differentiation of the situation in the other two identified issues – the flow of information and cultural differences. The flow of information was the biggest problem for the Polish university (over 66%), followed by the Greek (approximately 39%), whereas the smallest was for the Ukrainian one (28%). Cultural differences were thought to be an important problem for 56% of the respondents from Ukraine, less than 43% of the respondents from Hungary, and approximately 27% of respondents from Greece and Poland.

Table 5. Significant differences in problems related to the service and cooperation with foreign students due to the type of work performed and country

Problem	% of answer "yes"				$\chi2$	p-value
	Administration		Teachers			
Communication in a foreign language	57.14		43.36		4.13	0.042
Different teaching and evaluation system	21.90		32.74		3.21	0.073
Problem	% of answer "yes"				$\chi2$	p-value
	GR	HU	PL	UA		
Incorrect flow of information	39.22	30.00	66.27	28.00	25.32	0.000
Cultural differences	27.45	42.50	26.51	56.00	14.25	0.003

GR – Greece, HU – Hungary, PL – Poland, UA – Ukraine.

Source: own elaboration.

The last of the analysed issues concerned employee satisfaction with the support provided by the university in terms of methods of cooperation with foreign students (Q 14). The respondents could choose one of the answers from the following cafeteria: "yes" (I am satisfied), "no" (I am not satisfied) and "there is no such support at all". According to the majority of university employees

(51%), such support was satisfactory. Almost 1-3 of the respondents answered "no", while 20% did not notice this type of activity on the part of universities. Statistically significant differences between the respondents were visible in terms of two characteristics – work experience (p-value <0.001) and the country of origin (p-value <0.001), whereas gender and type of work performed were not a differentiating factor. Table 6 contains information on the share of the respondents declaring satisfaction with the support offered by universities in the area of cooperation with foreign students.

Table 6. Share of respondents declaring the involvement of universities in supporting employees in the cooperation with foreign students (work experience and country)

Work experience					
Answer	measure	up to 5 years	6-10 years	11-15 years	16+ years
No	number	15	8	14	23
	frequency	28.85%	21.62%	35.00%	30.67%
Yes	number	33	24	22	25
	frequency	63.46%	64.86%	55.00%	33.33%
There is no such support	number	4	5	4	27
	frequency	7.69%	13.51%	10.00%	36.00%
Country					
Answer	measure	Greece	Hungary	Poland	Ukraine
No	number	9	12	26	14
	frequency	17.65%	36.36%	33.77%	28.00%
Yes	number	41	17	17	33
	frequency	80.39%	51.52%	22.08%	66.00%
There is no such support	number	1	4	34	3
	frequency	1.96%	12.12%	44.16%	6.00%

Source: own elaboration.

Employees with shorter work experience (up to 10 years) perceive the support of universities in the field of cooperation with foreign students more positively – more than 60% evaluated it as satisfactory. However, university employees with at least 16 years of work experience evaluate this situation in the most negative way – only a third of them gave positive answers, whereas 36% claim that there is no activity in this area at all. As far as country characteristics are concerned, there were even greater discrepancies. Over 80% of the Greek university's employees evaluated the situation in this area as satisfactory, but in the case of Poland this was 22%. For Hungary and Ukraine, this amount equalled approximately 52% and 66%, respectively. One should also note the share of respondents who chose the answers saying there is no involvement on the part of university in activities that could improve the cooperation

between university employees and foreign students. In the case of the university in Poland there were over 44% of answers of this type, in Greece 2%, in Ukraine 6%, whereas in Hungary 12%.

4. Conclusion

The article presents the results of international comparative research conducted in a group of university employees as part of the Stranger project of the Erasmus+ strategic partnership. According to the analyses carried out, it can be concluded that the assessment of formal preparations made in the questionnaire is not positive for the universities participating in the research. Both academic teachers and administrative staff expressed critical opinions on the existing formal solutions, possible support in the case of problems or preparation in the field of cultural differences. The respondents claimed that the universities are prepared for the admission of foreign students on an average level, and evaluated the activities that they undertake in this area in the same way. University employees from Poland, both academic teachers and administration staff, were particularly critical in their assessments.

In the literature, international mobility is mainly analysed from the point of view of the primary target group, i.e. students. Most of the research in this area relates to identifying the motives of departure and the main benefits of mobility for this group (Bielinis et al., 2018; Marciniak and Winnicki, 2019). Referring to the results of the research carried out in the Stranger project, it is worth emphasizing that they are consistent with the few previous studies conducted on groups of university employees. In studies conducted by the National Agencies of the Erasmus Program, the lack of adequate awareness and motivation on the part of university employees were indicated as one of the functional barriers to the development of international mobility (Martyniuk, 2011). A critical approach to the subject of the administrative preparation of universities emphasizing its importance in the context of successes in the field of international mobility is also presented by the results of Erasmus + exchange evaluation studies (Berg, 2014). The results of the research also confirm the necessity to undertake activities under the so-called Internationalization at Home. These are activities in the area of internationalization and intercultural approach in the everyday functioning of universities (Curaj et al., 2015).

The summative scales allowed for including many areas in the evaluation. They also made it possible to classify the respondents taking into account the similarity of their assessments in the analysed issues. The high correlation relationship between the four summative scales indicates the existence of a strong relationship between the assessments given by respondents in specific areas. This means that a highly positive/highly negative assessment in one area translates into a highly positive/ highly negative assessment in the remaining ones. The first summative scale appears to have a leading role – it characterises the formal preparation of universities and the awareness of procedures displayed by employees, which has the greatest impact on

the assessment of activities undertaken by the university in the field of the broadly understood internationalization.

The greatest differentiation of evaluations was observed in terms of the respondent's country of employment, and in most of the analysed areas it was possible to notice statistically significant differences. Other characteristics that had an impact on the differentiation of assessments include work experience and type of work performed. It worth emphasising that both employees with longer work experience and academic teachers expressed more critical opinions on the preparation of universities and activities undertaken. However, in none of the analysed issues did the authors observe any statistically significant differences due to gender.

The cluster analysis allowed to obtain interesting results, and it showed the following pairing: Poland-Hungary and Greece-Ukraine. The respondents from Poland and Hungary assessed the preparation of universities and the undertaken activities much worse than those from Greece and Ukraine. This is indicated by the strong underrepresentation of respondents from Poland and Hungary in the third cluster (people who evaluated the analysed issues in a positive manner) with the strong overrepresentation of the respondents from these countries in the first one (i.e. people most critical in their assessments). It is worth considering the reasons for the results of such grouping. As long as the similarity of the first pair could result from comparable conditions (post-socialist countries, joining the European Union in 2004, currently highly sceptical about openness towards cultural differentiation), there are no common conditions in the case of the second pair. Greece and Ukraine were in a similar position in the classification, but this was probably due to different reasons. Greece is a country that has been participating in student exchange programmes for a long time; it also has experience and formal preparation e.g. in the area of bilingualism. Additionally, it is a popular destination owing to its climate and history, whereas openness towards other cultures results from an extensive tourism industry. On the other hand, Ukraine is still a post-Soviet country, and the opinions expressed by employees may to a large extent result from the conviction that it is necessary to present the situation in the best light, regardless of their personal beliefs in this regard. Less critical evaluations can also result from the lack or very little possibility of comparison due to the limited mobility of employees.

The obtained results should provoke a broader discussion of the problems associated with the formal adaptation of universities to the requirements resulting from the internationalization process. This is particularly important due to the fact that the analysed issues fit into the currently important issues of diversity management (Gross-Gołacka, 2018; Mor Barak, 2017; Thomas and Ely, 1996). The enormous interest of university employees in training courses dedicated to cultural differences, which were prepared in the Stranger project, confirms the significance of the topic and its importance for the quality of the university's functioning. The problems identified in the research in the area of formal preparation of universities for the internationalization process require consideration and probably also taking action by decision-makers.

Appendix. Survey questionnaire

Q1. Does the university have a clearly defined internationalization objective and strategy known to its employees?

☐ yes   ☐ no   ☐ I don't know

Q2. Does the university have a catalogue of activities enabling implementation of the goal and strategy of internationalization and is this directory known to you?

☐ yes   ☐ no   ☐ I don't know

Q3. Is there, at your university, person(s) responsible for the coordination of comprehensive care and counselling activity towards outgoing students to foreign universities?

☐ yes   ☐ no   ☐ I don't know

Q4. Is there, at your university, person(s) responsible for coordinating comprehensive care and counselling activity towards foreign students?

☐ yes   ☐ no   ☐ I don't know

Q5. Does this person(s), responsible for the coordination of comprehensive care and counselling activity towards incoming students from foreign universities regularly contact the university's administration and teaching staff involved in the service of foreign students?

☐ yes   ☐ no   ☐ I don't know

Q6. Does the university have a website containing information dedicated to foreign persons visiting the university?

☐ yes   ☐ no   ☐ I don't know

Q7. Are there any procedures, instructions or information sets prepared for foreign students that facilitate their functioning at the university?

☐ yes   ☐ no   ☐ I don't know

Q8. Does the university conduct marketing activities aimed at recruiting foreign students?

☐ yes   ☐ no   ☐ I don't know

Q9. Are there any procedures at the university for involving foreign students in the university's life?

information meetings	☐ yes	☐ no	☐ I don't know
open days	☐ yes	☐ no	☐ I don't know
guided tour of the university and department	☐ yes	☐ no	☐ I don't know
information meeting with the dean's office staff	☐ yes	☐ no	☐ I don't know
meeting with the university and faculty authorities	☐ yes	☐ no	☐ I don't know
local language as a foreign language courses	☐ yes	☐ no	☐ I don't know

Q10. Does the university have an information policy in place to ensure better communication with foreign students (information in local language and English)?

bilingual messages for students	☐ yes	☐ no	☐ I don't know
bilingual signs at the door(s) where the service and counselling towards foreign students is provided	☐ yes	☐ no	☐ I don't know
bilingual websites	☐ yes	☐ no	☐ I don't know
bilingual announcements	☐ yes	☐ no	☐ I don't know
bilingual menu in the cafeteria	☐ yes	☐ no	☐ I don't know

Q11. Does the university offer the range of extra-curricular activities for foreign students?

guided city tour	☐ yes	☐ no	☐ I don't know
integration meetings with local students	☐ yes	☐ no	☐ I don't know
learning a language in tandem local student with a foreign student (university staff provides support in twinning)	☐ yes	☐ no	☐ I don't know
meetings with prominent persons of the city and university	☐ yes	☐ no	☐ I don't know

Q12. Are local students also involved in the integration of foreign students?

☐ yes   ☐ no   ☐ I do not know

Q13. What were the difficult issues that you encountered while cooperating with foreign students?
☐ unable to communicate because of language
☐ getting used to a different teaching and evaluation system
☐ incorrect information flow (information deficiencies in students)
☐ cultural differences
☐ there were no difficult issues

Q14. Are you satisfied with the support provided by the university to its own staff responsible for international cooperation in the area of quality of the accomplishment of the services for foreign visitors?

☐ yes   ☐ no   ☐ there is no such support at all

Sociodemographic Information

1. Country: ☐ Greece   ☐ Hungary   ☐ Poland   ☐ Ukraine

2. University:

3. Gender: ☐ female   ☐ male

4. Employee: ☐ administrative   ☐ research-teaching/teaching

5. Work experience: ☐ up to 5 years ☐ 6-10 years   ☐ 11-15 years   ☐ 16+ years

References

Aczel, A. D. (2012). *Complete business statistics* (8th Ed.). Morristown, NJ: Wohl Publishing.

Berg, V. (2014). Evaluation of the outcome of European students-teachers' Participation in the Erasmus Exchange Programme (2008-2011): A survey of students' knowledge, thoughts and feelings before and after their Erasmus Exchange. *Journal of the European Teacher Education Network*, *9*, 33-45. Retrieved from https://core.ac.uk/download/pdf/35074757.pdf

Bielinis, L., Grochalska, M., and Maciejewska, M. (2018). Lekcje z podróży. Doświadczanie mobilności jako krok w stronę transformatywnego uczenia się studentów. *Teraźniejszość – Człowiek – Edukacja*, *21*(2(82)), 47-67.

Bracht, O., Engel, C., Janson, K., Over, A., Schomburg, H., and Teichler, U. (2006). *The professional value of ERASMUS mobility*. Retrieved from https://www.eurashe.eu/library/modernising-phe/mobility/professional/WG4%20R%20Professional%20value%20of%20ERASMUS%20mobility%20Teichler.pdf

Brandenburg, U., Berghoff, S., and Taboadela, O. (2014). *The Erasmus impact study: Effects of mobility on the skills and employability of students and the internationalisation of higher education institutions: executive summary*. Luxembourg: Publications Office. Retrieved from https://ec.europa.eu/assets/eac/education/library/study/2014/erasmus-impact-summary_en.pdf

Bridger, K. (2015). *Academic perspectives on the outcomes of outward student mobility*. Retrieved from https://www.heacademy.ac.uk/sites/default/files/resources/academic_perspectives_on_the_outcomes_of_outward_student_mobility_-_final_report.pdf

Curaj, A., Matei, L., Pricopie, R., Salmi, J., and Scott, P. (Eds.). (2015). *The European higher education area: Between critical reflections and future policies* (1st ed.). Cham: Springer International Publishing, Imprint: Springer.

Demange, G., Fenge, R., and Uebelmesser, S. (2020). Competition in the quality of higher education: The impact of student mobility. *International Tax and Public Finance*, *27*(5), 1224-1263. doi: 10.1007/s10797-020-09595-5

DeVellis, R. F. (2003). Scale development: Theory and applications (2nd ed.). *Applied social research methods series: Vol. 26*. Thousand Oaks Calif.: Sage Publications Inc.

Gross-Gołacka, E. (2018). *Zarządzanie różnorodnością: W kierunku zróżnicowanych zasobów ludzkich w organizacji*. Warszawa: Difin.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, *2*(1). doi: 10.9707/2307-0919.1014

Hofstede, G., Hofstede, G. J., and Minkov, M. (2010). *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival* (Revised and expanded 3rd edition). New York: McGraw-Hill.

Knight, J. (2012). Student mobility and internationalization: Trends and tribulations. *Research in Comparative and International Education*, *7*(1), 20-33. doi: 10.2304/rcie.2012.7.1.20

Marciniak, D., and Winnicki, M. (2019). International student exchange – motives, benefits and barriers of participation. *Scientific Papers of Silesian University of Technology. Organization and Management Series*, (133), 93-105. doi: 10.29119/1641-3466.2019.133.8

Martyniuk, W. (Ed.). (2011). *Internacjonalizacja studiów wyższych*. Retrieved from http://czytelnia.frse.org.pl/media/internacjonalizacja-studiow-wyzszycht.pdf

Mojena, R. (1977). Hierarchical grouping methods and stopping rules: An evaluation. *The Computer Journal*, *20*(4), 359-363. doi: 10.1093/comjnl/20.4.359

Mor Barak, M. E. (2017). *Managing diversity: Toward a globally inclusive workplace* (4th ed.). Thousand Oaks, California: SAGE Publications, Inc.

OECD. (2020). *Education at a glance 2020: OECD indicators*. Paris: OECD Publishing. Retrieved from https://www.oecd-ilibrary.org/content/publication/69096873-en

Teichler, U. (2017). Internationalisation trends in higher education and the changing role of international student mobility. *Journal of international Mobility*, *5*(1), 177. doi: 10.3917/jim.005.0179

Thomas, D. A., and Ely, R. J. (1996). Making differences matter: A new paradigm for managing diversity. *Harvard Business Review*, *74*(5), 79-90.

OCENA PRZYGOTOWANIA FORMALNEGO UCZELNI DO MIĘDZYNARODOWEJ MOBILNOŚCI. WYNIKI BADAŃ KWESTIONARIUSZOWYCH W GRUPIE PRACOWNIKÓW

Streszczenie: W artykule oceniono formalne przygotowanie uczelni do międzynarodowej mobilności. Do analiz wykorzystano wyniki ilościowych badań pierwotnych prowadzonych w projekcie *Stranger* partnerstwa strategicznego Erasmus+. Grupą docelową badania kwestionariuszowego byli pracownicy uczelni (administracja i nauczyciele akademiccy) z uczelni tworzących partnerstwo z Polski, Grecji, Węgier i Ukrainy. Do udzielenia odpowiedzi na postawione pytania badawcze utworzono skale sumacyjne dla wybranych pytań zamkniętych kwestionariusza. Badano związki korelacyjne między odpowiedziami respondentów zagregowanymi do skal sumacyjnych. Podjęto próbę klasyfikacji respondentów ze względu na uzyskane wartości dla skal sumacyjnych z wykorzystaniem hierarchicznej analizy skupień (metoda Warda). Wyniki pokazały istnienie wielu problemów w zakresie szeroko pojętej internacjonalizacji uczelni, a także dużego zróżnicowania ocen ze względu na cechy metryczkowe respondentów.

Słowa kluczowe: internacjonalizacja uczelni, międzynarodowa mobilność studentów, badania kwestionariuszowe, analizy statystyczne.