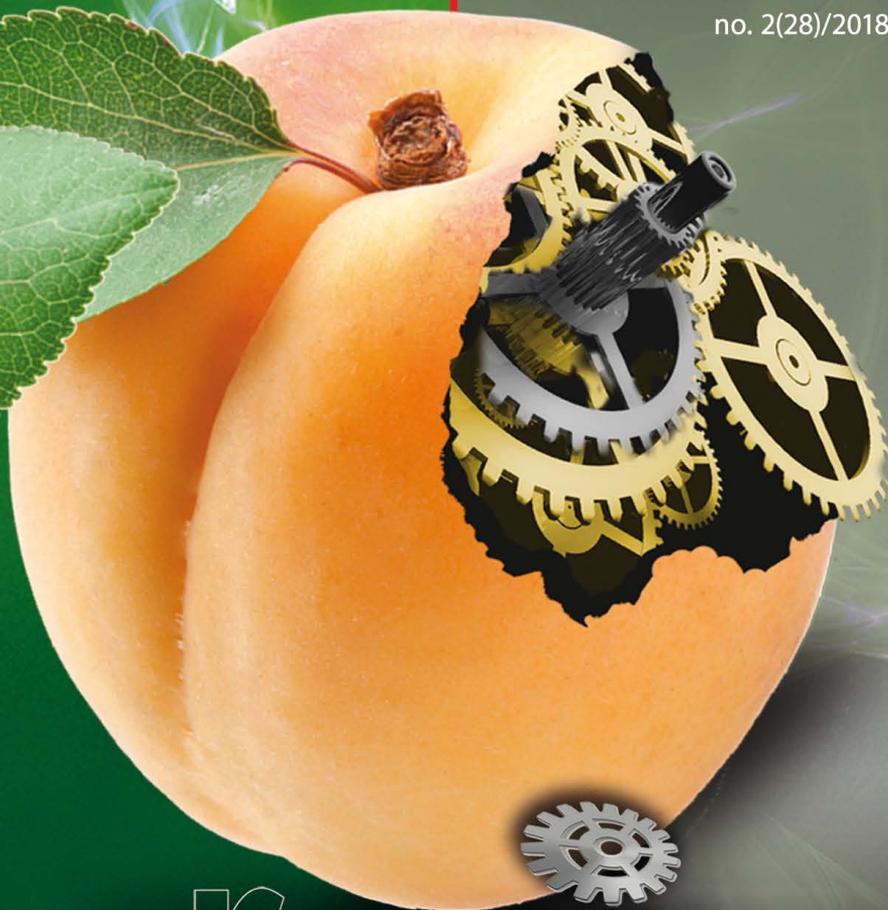


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**ASSOCIATIONS WITH THE UNIVERSITY  
AS AN EMPLOYER — OPINIONS OF WOMEN  
AND MEN REPRESENTING YOUNG  
POTENTIAL EMPLOYEES**

## ASSOCIATIONS WITH THE UNIVERSITY AS AN EMPLOYER — OPINIONS OF WOMEN AND MEN REPRESENTING YOUNG POTENTIAL EMPLOYEES

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### Summary

The article has theoretical-empirical character. In the theoretical part on the base of the results of cognitive-critical analysis of world literature the meaning of potential employees' connotations with a future employer was presented. The special attention was paid to the key role of these connotations in the case of an university as the employer. Universities should shape their image among young participants of outer labour market on the base of buiding the positive connotations. They can be diversified depending on the demographical features. The fact of lack of researches in this scope was underlined. So there is the cognitive and research gap. In this article the following goals were to be realized: identifying connotations with an university as the future employer among women and men; conducting the comparison of identified connotations etc. 2 research hypotheses were formulated. In the process of gaining mentioned goals and checking the both hypotheses the empirical research were realized. These research covered representatives of young potential employees. To gather the primary data the method of questionnaire survey was applied. Gathered data were analyzed statistically. The method of factor analysis was applied and the Kruskal-Wallis test was used. The results of these analyses showed that connotations of women were different from connotations of men. Statistical significance was identified in the case of positive connotations mainly.

**Keywords:** university, employer, potential employee, associations, external image



## Introduction

Every participant of the contemporary market establishes various relations with other entities. He doesn't function in isolation, but constitutes an element of a complex system of relations of a social, cultural, financial etc. character forming a market system. This system is subject to dynamic changes which influence the functioning of particular entities and in turn their activities to a smaller, or greater extent can influence the whole system by exerting influence on its remaining members. This influence may concern various areas of their functioning, including the personal area. It is because every contemporary organization plays various roles, including the role of an employer.

Depending on the position of a particular person in relation to a particular organization, we can talk of the role of a potential, or current employer. From the point of view of the person who belongs to the external labour market, an organization is a place where the person could start working in the future. At the same time from the perspective of a person employed in a particular organization it is the current workplace<sup>1</sup>. Both in the first and in the second case particular associations with the employer are formed in the conscious and/or subconscious minds of the employees. In case of the current employees they are based above all on their own experiences obtained during mutual relations. At the same time in case of potential employees associations with the future employer can be based solely on external personal and/or non-personal sources, that is, among others, on the opinions of friends working for a particular employer<sup>2</sup>, or on messages conveyed by the mass media, or information coming from a particular employer, who provides it in course of formal<sup>3</sup> image-related activities.

What results from the associations with a particular organization as an employer is a particular way it is perceived, which is reflected by its image<sup>4</sup>. That's why in course of image-related activities it is necessary to take into consideration the need to evoke and strengthen possibly best associations, as it is not possible to build a positive image, if associations with a particular organization have unfavourable undertones. Active measures aimed at evoking positive associations are particularly important with regard to young potential employees, who on the one hand don't have any

experiences associated with a particular organization, and on the other hand don't have any other professional experiences. Thus, they constitute a kind of a tabula rasa, which can be filled and strengthened in a way desired by the employer, obviously under the condition that his image-related message is fully compatible with the personal actions taken in practice<sup>5</sup>.

Both in market practice and in theoretical deliberations aspects associated with the formation of image are related above all to companies as employers. At the same time, these issues are hardly ever analysed with regard to universities. Investigating associations with the university as an employer is even less popular. Universities themselves are still not taking coherent and complex actions associated with personal image policy, which hampers, or even sometimes makes it impossible to lure attractive scientific-didactic and didactic employees.

It is worth adding here that literature on the subject mentions an 'attractive employer'<sup>6</sup>, but the term 'attractive employee' is not really used. Thus, it is possible to get the impression that it is assumed that it is potential employees who want to find the best employer, but that employers don't have to look for the best employees.

In case of universities image-related activity is still limited to actions aimed at attracting student candidates, but it practically doesn't cover measures aimed at attracting employees. This means that surveys concerning associations with the university as an employer are not conducted either among the current, or the potential employees<sup>7</sup>. Even more so these associations are not analysed with regard to various groups of employees which can be distinguished, according to, for example, demographic criteria such as age, or sex<sup>8</sup>. In course of research conducted thus far gender was analysed above all with regard to the current employees as a feature influencing: possibilities of getting promoted<sup>9</sup>; shaping the path of professional career<sup>10</sup>; applied style of management, or inclination to take decision-making risk<sup>11</sup>; or different treatment (actually discrimination) of women as employees<sup>12</sup> etc.

Thus, we can say that there is a cognitive gap and a research gap in the area of employees' associations with the university as an employer, where this concerns in particular the associations of young representatives of the external labour market.

That's why this article is an attempt to reduce both identified groups by achieving the following research goals:

- 1) identifying associations with the university as a future workplace among women and among men,
- 2) comparing the identified associations of women and men with the university as a workplace,
- 3) highlighting the groups of people who have analogous associations with the university as an employer,
- 4) defining statistically important differences between associations with the university as a workplace found among women and among men.

In the process of implementation of the above-mentioned targets the following two research hypotheses were tested:

H1 — sex is a feature differentiating positive associations with the university as an employer.

H2 — sex is a feature differentiating negative associations with the university as an employer.

## General characteristics of empirical research

For the purpose of achieving the above-mentioned research goals and testing both research hypotheses, in Q1 2018 the second edition of questionnaire surveys<sup>13</sup> was conducted. It covered 150 students completing second cycle full time courses as potential employees<sup>14</sup>. The surveys were direct in character, as they required personal contact between the researcher and the surveyed. All survey questionnaires qualified for the quantitative analysis, which was possible thanks to face-to-face type contact. The collected primary data was subject to quantitative analysis. In the analysis the methods of percentage analysis, exploratory factor analysis and the Kruskal-Wallis independence test were used.

In course of the survey the respondents were presented with a set of 18 statements reflecting associations with the university as a workplace. 10

out of them had positive undertones and the rest had negative undertones. They were determined on the basis of the cognitive-critical analysis of literature on the subject and on the basis of the results of non-structured interviews preceding the first edition of the research. The respondents were supposed to assess each statement on a five-degree Likert scale, in which 5 meant definitely yes, 4 — rather yes, 3 — neither yes, nor no, 2 — rather not and 1 — definitely not. The application of this scale is the necessary condition for using the method of exploratory factor analysis.

Factor analysis made it possible to carry out a deepened analysis of the collected primary data. It is used for the reduction of the number of variables constituting primary data obtained from questionnaire surveys and for detecting structures in relations between these variables, in other words, for their classification<sup>15</sup>. This analysis was thus applied to reduce the number of variables influencing the investigated category, that is, the respondents' associations with the university as a workplace and for the purpose of detecting internal correlations in relations between these variables.

To distinguish factors the method of principle components was applied, where it was important to determine their number. For the purpose of identifying the number of common factors (the so-called principle components) the technique of Kaiser's criterion was used. The technique involves leaving only those factors, which have own values higher than 1. Every such factor explains some level of general variability of the considered set, defined with the variance percentage, which can be interpreted as a measure of explanation of a phenomenon. The factors were subject to rotation based on the normalized varimax method. Within particular factors variables with the highest factor loadings with regard to a particular factor were distinguished (the assumed value is  $\geq 0,7$ ).

Factor analysis identifies hidden factors which contain features responsible for the perception from their perspective of a problem described with a question. However, factor analysis doesn't allow finding the answer, whether diversification in terms of division into particular groups (e. g. sex) is statistically significant enough to make it possible to say that the opinions of respondents defined by the analysed answer is significantly different. The answer to this question is given by Kruskal-Wallis test, that is, non-parametrical equivalent of ANOVA.

From the point of view of statistical criteria in case of KW test the data don't have to satisfy many requirements. The only requirements for carrying out the test are<sup>16</sup>:

- 1) the variable should be measured on at least an ordinal scale (it can also be measured on a quantitative scale),
- 2) observations in the analysed groups should be independent from each other, which means that a person present in one group shouldn't be in another compared group (this requirement is satisfied by dichotomous questions making it possible to divide the respondents into disjunct groups — e. g. division of the respondents into women and men — and single-choice questions).

Kruskal-Wallis test as a non-parametrical equivalent of single-factor variance analysis is thus used when data doesn't satisfy the requirements for carrying out similar parametrical tests and they can be ordered according to particular criteria. It involves checking, whether a number of independent factors from a group come from the same population, or a population with the same median. Particular samples don't have to be equally numerous. The input data are an n-element statistical sample divided into „k” of disjunct groups of respondents with numbers of respondents from  $n_1$  to  $n_k$ .

The interpretation of the test can be based only on comparing the „p” value with the assumed level of significance (usually 0.05), or on the analysis of the values of test statistics in case when an assessment of the „strength/intensity” of differences between groups is necessary. Big values of the test statistics show diversification in particular groups (that is, against the hypothesis on equality in particular groups), where the higher the values, the higher the diversification.

Statistical analysis of the collected primary data was conducted by means of the IBM SPSS Statistics package Ver. 22.

## The results of empirical research

The conducted surveys show that over a half of respondents confirmed the occurrence of 5 out of 18 analysed associations with the university as a workplace in case of women and 8 out of 18 associations in case of men (table 1). It is worth pointing out here that with regard to women each of these associations had a positive undertone, while in case of men one was related to the negative aspects of perception of work at a university. It was the 'necessity to share your knowledge with others'.

It is worth adding here that among 8 associations mentioned by a total of over 50% of men there were all associations mentioned by over a half of women. However, they were accompanied also by the associations with 'high salaries' (a total of 65.5% of the surveyed men agreed with the statement) and with 'responsible and hard, but rewarding work' (a total of 62.1% of the surveyed men agreed with this), while both among the surveyed women and among all respondents the occurrence of such associations was confirmed by less than a half of people. Thus, it is possible to make a preliminary conclusion that the surveyed men had comparably better associations with the university as an employer than the surveyed women.

At the same time, none of 8 associations with negative undertones was chosen by over a half of men and over a half of women. This may suggest a comparable advantage of positive associations over negative associations. What's more, in case of up to 6 negative associations over 50% of the surveyed women and over 50% of the surveyed men denied that such associations occur. The occurrence of the association of work at a university with 'shame of your workplace' was denied by the biggest share of respondents in both groups (over 80% of people in each of them). It is worth adding here that most of the surveyed men didn't associate work at a university with 'burning out professional and life energy fast', but both less than a half of women and less than a half of all respondents didn't have such associations. The only negative association rejected by a total of less than 50% of women and men was the association with the 'necessity to share your knowledge'. Thus, it was the only unfavourable association in case of which the percentage of people agreeing with it was higher than the percentage of people who denied it occurs. It is also necessary to point out that in case of up to 5 associations with negative undertones no surveyed man definitely

disagreed with the associations. At the same time every association from this group was definitely confirmed by some of the surveyed women, even though the percentage was comparably small (from 1.1% for association with the 'lack of prospects for professional development' to 12% for the association with the 'necessity to share your knowledge').

Table 1. Associations with university as a workplace and the sex of respondents (in %)

| Analysed associations                                  |                     | Answers in % |      |          |
|--|---------------------|--------------|------|----------|
|  |                     | woman        | man  | in total |
| Very easy and pleasant work                            | definitely not      | 3,2          | 0,0  | 2,4      |
|  | rather not          | 22,3         | 17,2 | 21,1     |
|  | neither yes, nor no | 35,1         | 37,9 | 35,8     |
|  | rather yes          | 33,0         | 41,4 | 35,0     |
|  | definitely yes      | 6,4          | 3,4  | 5,7      |
| High social prestige                                   | definitely not      | 1,1          | 3,6  | 1,6      |
|  | rather not          | 19,1         | 7,1  | 16,4     |
|  | neither yes, nor no | 20,2         | 14,3 | 18,9     |
|  | rather yes          | 41,5         | 57,1 | 45,1     |
|  | definitely yes      | 18,1         | 17,9 | 18,0     |
| High salaries  | definitely not      | 7,6          | 3,4  | 6,6      |
|  | rather not          | 27,2         | 17,2 | 24,8     |
|  | neither yes, nor no | 25,0         | 13,8 | 22,3     |
|  | rather yes          | 32,6         | 55,2 | 38,0     |
|  | definitely yes      | 7,6          | 10,3 | 8,3      |
| An opportunity for a professional career               | definitely not      | 0,0          | 0,0  | 0,0      |
|  | rather not          | 5,3          | 6,9  | 5,7      |
|  | neither yes, nor no | 18,1         | 24,1 | 19,5     |
|  | rather yes          | 51,1         | 48,3 | 50,4     |
|  | definitely yes      | 25,5         | 20,7 | 24,4     |
| Certainty of employment and professional stabilization | definitely not      | 1,1          | 0,0  | 0,8      |
|  | rather not          | 5,3          | 0,0  | 4,1      |
|  | neither yes, nor no | 25,5         | 13,8 | 22,8     |
|  | rather yes          | 50,0         | 51,7 | 50,4     |
|  | definitely yes      | 18,1         | 34,5 | 22,0     |
| The possibility to share your knowledge with others    | definitely not      | 1,1          | 0,0  | 0,8      |
|  | rather not          | 0,0          | 0,0  | 0,0      |
|  | neither yes, nor no | 5,4          | 10,3 | 6,6      |
|  | rather yes          | 35,5         | 24,1 | 32,8     |
|  | definitely yes      | 58,1         | 65,5 | 59,8     |

cont. table 1

| Analysed associations  |                     | Answers in % |      |          |
|--|---------------------|--------------|------|----------|
|  |                     | woman        | man  | in total |
| The possibility of impressing others   | definitely not      | 4,3          | 3,4  | 4,1      |
|  | rather not          | 12,9         | 10,3 | 12,3     |
|  | neither yes, nor no | 28,0         | 31,0 | 28,7     |
|  | rather yes          | 35,5         | 34,5 | 35,2     |
|  | definitely yes      | 19,4         | 20,7 | 19,7     |
| The possibility of "being forever young" thanks to continuous contacts with young people | definitely not      | 8,5          | 14,3 | 9,8      |
|  | rather not          | 24,5         | 17,9 | 23,0     |
|  | neither yes, nor no | 33,0         | 39,3 | 34,4     |
|  | rather yes          | 23,4         | 17,9 | 22,1     |
|  | definitely yes      | 10,6         | 10,7 | 10,7     |
| More free time than in other places  | definitely not      | 8,5          | 0,0  | 6,5      |
|  | rather not          | 27,7         | 27,6 | 27,6     |
|  | neither yes, nor no | 26,6         | 34,5 | 28,5     |
|  | rather yes          | 29,8         | 37,9 | 31,7     |
|  | definitely yes      | 7,4          | 0,0  | 5,7      |
| Very responsible and hard, but rewarding work  | definitely not      | 3,2          | 3,4  | 3,3      |
|  | rather not          | 19,4         | 3,4  | 15,6     |
|  | neither yes, nor no | 34,4         | 31,0 | 33,6     |
|  | rather yes          | 38,7         | 55,2 | 42,6     |
|  | definitely yes      | 4,3          | 6,9  | 4,9      |
| Low social prestige  | definitely not      | 22,3         | 31,0 | 24,4     |
|  | rather not          | 46,8         | 41,4 | 45,5     |
|  | neither yes, nor no | 23,4         | 17,2 | 22,0     |
|  | rather yes          | 5,3          | 10,3 | 6,5      |
|  | definitely yes      | 2,1          | 0,0  | 1,6      |
| Low salaries   | definitely not      | 17,0         | 24,1 | 18,7     |
|  | rather not          | 36,2         | 37,9 | 36,6     |
|  | neither yes, nor no | 23,4         | 13,8 | 21,1     |
|  | rather yes          | 19,1         | 24,1 | 20,3     |
|  | definitely yes      | 4,3          | 0,0  | 3,3      |
| Lack of prospects for professional development   | definitely not      | 30,9         | 24,1 | 29,3     |
|  | rather not          | 52,1         | 48,3 | 51,2     |
|  | neither yes, nor no | 11,7         | 10,3 | 11,4     |
|  | rather yes          | 4,3          | 17,2 | 7,3      |
|  | definitely yes      | 1,1          | 0,0  | 0,8      |

cont. table 1

| Analysed associations                                      |                     | Answers in % |      |          |
|--|---------------------|--------------|------|----------|
|  |                     | woman        | man  | in total |
| Job insecurity and lack of professional stabilization      | definitely not      | 14,9         | 17,2 | 15,4     |
|  | rather not          | 51,1         | 51,7 | 51,2     |
|  | neither yes, nor no | 27,7         | 27,6 | 27,6     |
|  | rather yes          | 4,3          | 3,4  | 4,1      |
|  | definitely yes      | 2,1          | 0,0  | 1,6      |
| The necessity to share your precious knowledge with others | definitely not      | 7,6          | 6,9  | 7,4      |
|  | rather not          | 23,9         | 24,1 | 24,0     |
|  | neither yes, nor no | 20,7         | 10,3 | 18,2     |
|  | rather yes          | 35,9         | 34,5 | 35,5     |
|  | definitely yes      | 12,0         | 24,1 | 14,9     |
| Shame of your workplace                                    | definitely not      | 46,8         | 41,4 | 45,5     |
|  | rather not          | 36,2         | 41,4 | 37,4     |
|  | neither yes, nor no | 11,7         | 10,3 | 11,4     |
|  | rather yes          | 3,2          | 6,9  | 4,1      |
|  | definitely yes      | 2,1          | 0,0  | 1,6      |
| Burning out professional and life energy fast              | definitely not      | 9,6          | 17,2 | 11,4     |
|  | rather not          | 34,0         | 37,9 | 35,0     |
|  | neither yes, nor no | 35,1         | 31,0 | 34,1     |
|  | rather yes          | 19,1         | 10,3 | 17,1     |
|  | definitely yes      | 2,1          | 3,4  | 2,4      |
| Less free time than in other places                        | definitely not      | 13,8         | 17,2 | 14,6     |
|  | rather not          | 38,3         | 41,4 | 39,0     |
|  | neither yes, nor no | 28,7         | 20,7 | 26,8     |
|  | rather yes          | 14,9         | 17,2 | 15,4     |
|  | definitely yes      | 4,3          | 3,4  | 4,1      |

Source: Own materials prepared on the basis of research results.

It seems that it is worth analysing also the structure of associations with the university, taking into consideration the criterion of the respondents' sex. For this purpose with regard to associations with the university as a potential workplace the method of factor analysis was applied. On the basis of Kaiser's criterion four factors whose own values are higher than 1 were distinguished for each of the groups: the whole group of respondents (table 2), the surveyed women (table 4) and the surveyed men (table 6). The first

factor explains over 27% of the total variability of the investigated phenomenon both in case of all surveyed people and in case of women, as well as 20% in case of the surveyed men.

Table 2. Hierarchy of factors according to their own values determined on the basis of Kaiser's criterion (for all respondents)

| Factor | Own value | % of all own values (variance) | Accumulated own value | Accumulated % own values |
|--------|-----------|--------------------------------|-----------------------|--------------------------|
| 1      | 1,942     | 27,742                         | 1,942                 | 27,742                   |
| 2      | 1,364     | 19,479                         | 3,306                 | 47,221                   |
| 3      | 1,003     | 14,275                         | 4,309                 | 61,496                   |
| 4      | 1,001     | 14,265                         | 5,310                 | 75,761                   |

Source: Prepared on the basis of research results.

In case of the group of all respondents the first factor covers 3 variables with values of factor loadings exceeding the assumed threshold value of 0.7, where these are variables reflecting negative associations (table 3). At the same time, each of the remaining three factors covers exclusively variables reflecting positive associations. What's more, the values of factor loadings in case of both variables forming factors number three and four, respectively, are comparably highest substantially exceeding the value of 0.9. However, it is necessary to remember that each of these two factors explains a much smaller part of the whole variability of the investigated phenomenon than the first factor.

The results of factor analysis conducted on the surveyed women show that the first most important factor covers 2 variables referring to positive associations with work at a university illustrating the feeling of security in the financial and professional dimension (table 5). Thus, its character is completely different from the specific character of the first factor distinguished for the whole group of respondents, which refers more to the feeling of lack of professional security<sup>17</sup>. It is also worth paying attention to the fact that within the first factor distinguished for the surveyed women the value of factor loading of the variable reflecting the association with

'low salaries' is negative. This is synonymous with the fact that the surveyed women who associated the university with a workplace offering high salaries and security of employment didn't have associations with low salaries.

Table 3. The results of factor analysis of associations with the university as a workplace (for all respondents)

| Variables   | Factor* |       |       |       |
|---|---------|-------|-------|-------|
|   | 1       | 2     | 3     | 4     |
| Lack of prospects for professional development        | 0,824   |       |       |       |
| Job insecurity and lack of professional stabilization | 0,787   |       |       |       |
| Shame of your workplace                               | 0,758   |       |       |       |
| Very easy and pleasant work                           |         | 0,841 |       |       |
| More free time than in other places                   |         | 0,777 |       |       |
| Very responsible and hard, but also rewarding work    |         |       | 0,987 |       |
| The possibility to share your knowledge with others   |         |       |       | 0,979 |

\*for greater transparency the table presents only the values of factor loadings exceeding the assumed threshold value of 0.7.

Source: Prepared on the basis of research results.

Table 4. Hierarchy of factors, according to their own values determined on the basis of Kaiser's criterion (for women)

| Factor | Own value | % of the whole group of own values (variance) | Accumulated own value | Accumulated % of own values |
|--------|-----------|---|-----------------------|-----------------------------|
| 1      | 2,436     | 27,064  | 2,436                 | 27,064                      |
| 2      | 1,586     | 17,617  | 4,022                 | 44,681                      |
| 3      | 1,252     | 13,912  | 5,274                 | 58,593                      |
| 4      | 1,032     | 11,467  | 6,306                 | 70,060                      |

Source: own materials prepared on the basis of research results.

The second and fourth factor in case of the surveyed women cover variables referring to positive associations with the university as an employer, where the second factor contains the same variables that form an analogous factor for all participants of the survey. It is worth adding here that the variable whose factor loading value was the highest for the surveyed

women, referring to the association with the 'possibility to impress others', forming the fourth factor, doesn't belong to any of the factors distinguished for the whole group of respondents. At the same time the third factor is formed by a variable with a definitely negative undertone concerning 'shame of your workplace'. This variable in case of the whole group of respondents belongs to the first factor. Thus, even though it was an association rejected by a comparably highest percentage of the surveyed women and the surveyed men (table 1), we can talk of representatives of both these groups who have above all such associations with the university as an employer.

Table 5. The results of factor analysis of associations with the university as a workplace (for women)

| Variable   | Factor* |       |       |       |
|--|---------|-------|-------|-------|
|  | 1       | 2     | 3     | 4     |
| High salaries  | 0,818   |       |       |       |
| Low salaries   | -0,802  |       |       |       |
| Certainty of employment and professional stabilization | 0,790   |       |       |       |
| More free time than in other places                    |         | 0,777 |       |       |
| Very easy and pleasant work                            |         | 0,729 |       |       |
| Shame of your workplace                                |         |       | 0,881 |       |
| The possibility to impress others                      |         |       |       | 0,933 |

\*for greater transparency the table presents only the values of factor loadings exceeding the assumed threshold of 0.7.  
Source: own materials prepared on the basis of research results.

Table 6. Hierarchy of factors according to their own values determined on the basis of Kaiser's criterion (for men)

| Factor | Own value | % of all own values (variance) | Accumulated own value | Accumulated % of own values |
|--------|-----------|--------------------------------|-----------------------|-----------------------------|
| 1      | 2,425     | 20,211                         | 2,425                 | 20,211                      |
| 2      | 2,205     | 18,377                         | 4,630                 | 38,588                      |
| 3      | 2,052     | 17,100                         | 6,682                 | 55,688                      |
| 4      | 1,819     | 15,162                         | 8,501                 | 70,850                      |

Source: Own materials prepared on the basis of research results.

At the same time carrying out a factor analysis for the surveyed men made it possible to distinguish 3 factors covering variables reflecting negative associations with the university as a workplace (table 7). This means clear difference from the results of factor analysis conducted for women and for all respondents. Among the mentioned factors the first factor explains the biggest part of the analysed phenomenon. It is worth pointing out here that it covers, among others, 2 of the same variables which form the first factor distinguished for the whole group of respondents. In case of men they are also accompanied by a variable referring to associations with 'low social prestige'. However, it has a similar undertone as associations with 'shame of your workplace', which is included in the first factor for the whole group of respondents. It is because both of them suggest the inability to satisfy social and psychological needs associated with the fact that people employed at universities and the work they do are not appreciated enough.

It is worth pointing out here that within the third and fourth factor (table 7), both of which cover variables referring to negative associations, there are variables with a high negative value of factor loadings. What suggests that this is the case is the lack of associations with these variables. In other words, people associating universities with 'little free time' and 'the necessity to share your knowledge' don't have associations with 'a lot of free time', while people associating universities mainly with 'low salaries' don't associate them with the possibility of getting 'high salaries', even though as opposed to the surveyed women and the whole group of respondents, only among men more than a half of people confirmed the occurrence of this association. The only factor in case of the surveyed men covering variables reflecting positive associations with the university is the second factor. In case of the surveyed men it covers, among others, the variable referring to association with 'high social prestige', which doesn't belong to any of the factors distinguished for the whole group of respondents, or for the surveyed women.

On the basis of the results of comparing the results of factor analyses conducted for each group of respondents it is possible to assume that sex is a significant feature with regard to the way people perceive the university as an employer. It was possible to distinguish 4 factors for each group — the whole group of respondents, for the surveyed women and for the surveyed men. In case of carrying out a factor analysis with regard to the market

attitudes and behaviours the distinguished factors can be interpreted as segments of respondents<sup>18</sup>. The representatives of segments, which have been revealed according to associations with universities, include persons who display uniform opinions on the university within a particular segment. However, these segments differ substantially, depending on sex. This leads to the question, whether this diversification is statistically important, or not. In order to find an answer to this question, the Kruskal-Wallis test was carried out.

Table 7. The results of factor analysis of associations with the university as a workplace (for men)

| Variable   | Factor* |       |        |        |
|--|---------|-------|--------|--------|
|  | 1       | 2     | 3      | 4      |
| Job insecurity and lack of professional stabilization      | 0,855   |       |        |        |
| Low social prestige  | 0,798   |       |        |        |
| Lack of prospects for professional development             | 0,749   |       |        |        |
| High social prestige                                       |         | 0,786 |        |        |
| Very responsible and hard, but rewarding work              |         | 0,772 |        |        |
| Less free time than in other places                        |         |       | 0,822  |        |
| More free time than in other places                        |         |       | -0,818 |        |
| The necessity to share your precious knowledge with others |         |       | 0,706  |        |
| High salaries  |         |       |        | -0,896 |
| Low salaries   |         |       |        | 0,868  |

\*for greater transparency the table presents only values of factor loadings exceeding the assumed threshold value of 0.7

Source: own materials prepared on the basis of research results.

The results of this test suggest the existence of statistically significant diversification in case of 3 associations (table 8). This comes from the fact that the value of the level of significance for 3 variables reflecting these associations is lower than the assumed threshold value of 0,05. These are associations with 'certainty of employment'; 'high salaries' and 'hard and responsible, but rewarding work'. Thus, preliminary conclusions drawn on the basis of cross table analysis and factor analysis have been confirmed. It is because among the surveyed women there is a segment of people associating universities with 'high salaries' and 'certainty of employment' (first factor). At

the same time such associations weren't found among the associations that the representatives of particular segments distinguished among the surveyed men had. In their case there was a segment of people who had associations with 'rewarding work', which weren't typical of the representatives of any of four segments distinguished among the surveyed women.

Table 8. Analysis of the importance of differences between the answers of respondents concerning associations with the university as a workplace, according to the criterion of sex

| Variable   | Sex   | Value of Kruskal-Wallis test | Level of significance p |
|--|-------|------------------------------|-------------------------|
| Very easy and pleasant work  | Woman | 60,82                        | 0,486                   |
|  | Man   | 65,83                        |                         |
| High social prestige   | Woman | 59,73                        | 0,284                   |
|  | Man   | 67,43                        |                         |
| High salaries  | Woman | 57,45                        | 0,039                   |
|  | Man   | 72,26                        |                         |
| Opportunity for a professional career  | Woman | 63,36                        | 0,410                   |
|  | Man   | 57,60                        |                         |
| Certainty of employment and professional stabilization                                   | Woman | 58,10                        | 0,018                   |
|  | Man   | 74,64                        |                         |
| The possibility of sharing your knowledge with others                                    | Woman | 60,71                        | 0,610                   |
|  | Man   | 64,03                        |                         |
| The possibility of impressing others   | Woman | 61,14                        | 0,834                   |
|  | Man   | 62,66                        |                         |
| The possibility of "being forever young" thanks to continuous contacts with young people | Woman | 62,13                        | 0,710                   |
|  | Man   | 59,39                        |                         |
| More free time than in other places  | Woman | 61,22                        | 0,651                   |
|  | Man   | 64,52                        |                         |
| Very responsible and hard, but also rewarding work                                       | Woman | 58,10                        | 0,043                   |
|  | Man   | 72,40                        |                         |
| Low social prestige  | Woman | 63,11                        | 0,509                   |
|  | Man   | 58,41                        |                         |
| Low salaries   | Woman | 63,41                        | 0,410                   |
|  | Man   | 57,41                        |                         |
| Lack of prospects for professional development   | Woman | 59,95                        | 0,209                   |
|  | Man   | 68,66                        |                         |

cont table 8

| Variable   | Sex   | Value of Kruskal-Wallis test | Level of significance p |
|--|-------|------------------------------|-------------------------|
| Job insecurity and lack of professional stabilization  | Woman | 62,72                        | 0,659                   |
|  | Man   | 59,66                        |                         |
| Necessity to share your precious knowledge with others | Woman | 59,21                        | 0,299                   |
|  | Man   | 66,69                        |                         |
| Shame of your workplace                                | Woman | 61,31                        | 0,677                   |
|  | Man   | 64,22                        |                         |
| Burning out professional and life energy fast          | Woman | 64,19                        | 0,198                   |
|  | Man   | 54,90                        |                         |
| Less free time than in other places                    | Woman | 62,81                        | 0,634                   |
|  | Man   | 59,36                        |                         |

Source: own materials prepared on the basis of research results.

## Summary

On the basis of the deliberations presented above it is possible to conclude that sex is a feature differentiating in a statistically significant way the answers of respondents concerning 3 associations with the university as an employer which have positive undertones. They are: 'certainty of employment', 'high salaries' and 'rewarding work'. Thus, it is impossible to reject hypothesis H1, as the claim contained in it has been recognized as true in case of respondents with regard to 3 associations. At the same time, statistically significant diversification hasn't been observed in case of any association with negative undertones. Thus, it is possible to say that with regard to the respondents, hypothesis H2 has been recognized as untrue.

Summing up, it is possible to conclude that universities should take complex image-related measures aimed at shaping their positive image in the role of employers. The starting point for these activities should be identifying associations with the university, which should be analysed not

just with regard to all potential employees, as it is also worth taking into consideration their various groups, for example those distinguished according to demographic criteria. It is because it turns out that women and men have different associations with the university as an employer. Even though we can talk of statistically significant diversification in 3 out of 8 analysed associations, the results of percentage analysis suggest that the two groups have different opinions about universities. Also, the structure of associations is different, which was identified thanks to carrying out factor analysis.

Naturally, the conducted research is subject to certain limitations and the authors of the research are aware of them. Among these limitations is the fact that it covered only Polish students and the fact that differentiation was based on just one feature etc. Noticing these limitations will lead to the resolve to eliminate them in further stages of the research process. In these following stages research characterized by broader coverage and broader subject scope will be conducted.

## References

<sup>1</sup> Literature on the subject points to the existence of the so-called psychological contract between the employee and the employer (see: C. Foster, K. Punjaisri, et al., Exploring the relationship between corporate, internal and employer branding, "Journal of Product & Brand Management" 2010, vol. 19, no. 6, pp. 401–409), which confirms the fact that emotions are an important dimension of mutual relations

<sup>2</sup> As K. Zelga correctly points out, they can play the role of 'advocates' of a particular employer efficiently encouraging others to start working for the employer (K. Zelga, The corporate image of an employer as a tool to create the business reputation of the company, "World Scientific News" 2017, vol. 78, pp. 307–312), where the messages they convey in a rather informal way are regarded as much more credible than the messages conveyed by the employers in course of formal image-related campaigns.

<sup>3</sup> The formal character of these measures leads to a situation in which the recipients assess them as less credible (see: F. Lievens, J. E. Slaughter, Employer Image and Employer Branding: What We Know and What We Need to Know, "Annual Review of Organizational Psychology and Organizational Behavior" 2016, vol. 3, pp. 407–440).

<sup>4</sup> Many authors call for using the term brand interchangeably with the term image with regard to the perception of the employer (among them there are: D. Kucherov, E. Zavyalova, HRD practices and talent management in the companies with the employer brand, "European Journal of Training and Development" 2012, vol. 36, no. 1, pp. 86–104), however, it is hard to agree with this, as brand is not a synonym of image. Nevertheless, D. Kucherov and E. Zavyalova correctly emphasize that the image of an employer belongs to his symbolic attributes, which are important for the potential employees.

<sup>5</sup> This may become an important element of competitive advantage (see: P. Popoli, Linking CSR strategy and brand image: Different approaches in local and global markets, "Marketing Theory" 2011, vol. 11, no. 4, pp. 419–433), while the lack of such compatibility may irreversibly damage the reputation and image of an organization.

<sup>6</sup> Attractive employers are discussed by, among others, A. Wolak-Tuzimek in the context of socially responsible companies (A. Wolak-Tuzimek, Benefits of introducing the concept of corporate social responsibility to enterprises, "Central European Review of Economics & Finance" 2016, vol. 14, no. 4, pp. 5–23); A.M. Gould in the context of image-related actions taken by a particular company (A.M. Gould, Working at McDonalds: Some redeeming features of McJobs, "Work, Employment and Society" 2010, vol. 24, no. 4, pp. 780–802); P. Berthon, M. Ewing et. al. in the context of the effects of image-related actions (P. Berthon, M. Ewing, et al., Captivating company: Dimensions of attractiveness in employer branding, "International Journal of Advertising" 2005, vol. 24, no. 2, pp. 151–172); or P. Caligiuri, S. Colakoglu, J.L. Cerdin and M.S. Kim in the context of effects of a particular reputation of the employer (P. Caligiuri, S. Colakoglu, J.L. Cerdin, M.S. Kim, Examining cross-cultural and individual differences in predicting employer reputation as a driver of employer attraction, "International Journal of Cross Cultural Management" 2010, vol. 10, pp. 137–151).

<sup>7</sup> Surveys among students as potential employees are conducted above all in the context of the decision-making process concerning their choice of their future employer, but it is companies which are taken into consideration in this role. Such surveys have been conducted by, among others, B.J.H. Arachchige and A. Robertson (Business student perceptions of a preferred employer: A study identifying determinants of employer branding, "TUP Journal of Brand Management" 2011, vol. 8, no. 3, pp. 25–46).

<sup>8</sup> Associations with the university as an employer were the subject of a research conducted by A. Baruk and A. Goliszek (Zewnętrzny wizerunek uczelni w roli pracodawcy a plec młodych potencjalnych pracowników, "Marketing Instytucji Naukowych i Badawczych" 2017, vol. 25, iss. 3, p. 79–96), however, in course of the project statistically significant differences between sexes weren't analysed. Only the structure of associations in case of women and men was investigated.

<sup>9</sup> In this context it was investigated by, among others, M.L. Huffman, P.N. Cohen and J. Pearlman (Engendering Change: Organizational Dynamics and Workplace Gender Desegregation, "Administrative Science Quarterly" 2010, vol. 55, no. 2, pp. 255–277), or E.H. Gorman and J.A. Kmec (Hierarchical Rank and Women's Organizational Mobility: Glass Ceilings in Corporate Law Firms, "American Journal of Sociology" 2009, vol. 114, no. 5, pp. 1428–1474).

<sup>10</sup> In this context it was discussed by, among others, M.J. Bidwell i F.S. Briscoe (The Dynamics of Inter Organizational Careers, "Organization Science" 2010, vol. 21, no. 5, pp. 1034–1053).

<sup>11</sup> In this context gender was analysed by, among others, L. Miller and P. Ubeda (Are Women More Sensitive to Decision-Making Context? "Journal of Economic Behavior & Organization" 2012, vol. 83, pp. 98–104), or by S. Robinson and H.A. Stubberud (Gender Differences in Entrepreneurs' Perceived Problems, Profit and Plans, "International Journal of Entrepreneurship" 2011, vol. 15, pp. 25–44).

<sup>12</sup> Literature on the subject points above all to discrimination against women in terms of the level of their salaries, compared to the salaries paid to men in analogous positions (this is discussed by, among others, J. Schieder and E. Gould ("Women's work" and the gender pay gap. How discrimination, societal norms, and other forces affect women's occupational choices — and their pay?, Report of Economic Policy Institute 2016, <https://www.epi.org/files/pdf/110304.pdf> (viewed on 15.04.2018)), which to a large extent arises from the stereotypical attribution of "worse" predispositions for many professional functions to women.

<sup>13</sup> The first edition of the survey was conducted in the first half of 2016. It was preceded by non-structured interviews with 50 people.

<sup>14</sup> Non-random choice of the sample was applied.

<sup>15</sup> See. H. Abdi, L.J. Williams, Principal component analysis, "Wiley Interdisciplinary Reviews: Computational Statistics" 2010, vol. 2, iss. 4, pp. 433–459; M. Szttemberg-Lewandowska, Analiza czynnikowa w badaniach marketingowych, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław 2008, p. 29.

<sup>16</sup> <http://www.statystyka.az.pl/test-anova-kruskala-wallisa.php> (viewed on 10.04.2018); [http://www.statystyka.pl/t4997\\_1\\_test\\_rangowy\\_kruskala-wallisa.php](http://www.statystyka.pl/t4997_1_test_rangowy_kruskala-wallisa.php) (viewed on 10.04.2018).

<sup>17</sup> It is necessary here to recall the fact that carrying out a factor analysis of data collected during the first edition of research made it possible to distinguish as a key segment women who have clearly negative associations with the university as a workplace. They concerned above all associations with the lack of the feeling of professional and financial security (see: A. Baruk, A. Goliszek, Zewnętrzny wizerunek uczelni w roli pracodawcy a plec młodych potencjalnych pracowników, "Marketing Instytucji Naukowych i Badawczych" 2017, vol. 25, iss. 3, p. 79–96), which is a completely different perception of the university. This confirms the fact that certain changes are taking place in the associations with universities evoked among potential employees. At the same time associations with the

certainty of employment were typical of the formerly basic segment of surveyed men. They were accompanied by associations with shame of your workplace, which wasn't found among the representatives of any of the currently distinguished segments of men, even though among women such associations distinguished the representatives of the third segment.

<sup>18</sup> See: M. Walesiak, *Metody analizy danych marketingowych*, PWN, Warszawa 1996, pp. 145–150.

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