

DETERMINANTS OF CHOOSING A UNIVERSITY IN THE CONTEXT OF SHAPING ITS IMAGE

Sebastian SKOLIK^{1*}, Archana YADAV²

¹ Czestochowa University of Technology, Faculty of Management; sebastian.skolik@pcz.pl,
ORCID: 0000-0003-2364-4442

² University of Delhi; archanayadav2008@gmail.com, ORCID: 0000-0002-9171-6973

* Correspondence author

Purpose: The aim of the research presented in the article was to indicate what factors determine the choice of higher education in the context of image building within the local environment. The authors tried to determine what peripheral factors may contribute to making technical universities more attractive to women.

Design/methodology/approach: The hypotheses concerning the factors determining the choice of higher education were based on previous research results of making an educational offer. The choice of methodology was dictated by local conditions. The study used a diagnostic survey prepared as part of creating a perspective for developing the Czestochowa University of Technology for the period up to 2030. It was conducted among 1039 high school students based in Czestochowa.

Findings: The research has shown that prestige, one of the effects of building an organisation's image, may be less important for universities that have less recognition and need to use other assets to attract candidates for studies. Despite various actions organised by technical universities, women continue to focus on education in the fields of social sciences and humanities, at the expense of technical and applied sciences, although peripheral factors are important to them when choosing the appropriate university.

Research limitations/implications: The conclusions of the study refer to a specific local system. Further research in this area would require a meta-analysis of research results, taking into consideration the specific nature of the research area and to what extent it is saturated by various types of universities.

Social implications: The results of the research work may enable the educational package to be better suited to the relevant category of candidates which, in this case, is women who are less likely to choose a given type of university.

Originality/value: A comparison of the results with other studies made it possible to determine the importance of adapting the relevant methodology to local conditions.

Keywords: image management, educational preferences, creating of educational offer, higher education.

Category of the paper: Research paper.

1. Introduction

In modern society, image is becoming an increasingly important attribute of any organisation (Gołata, Sojkin, 2020, p. 41). Until recently, it was perceived as an element of the marketing activities of enterprises. In the case of universities, this action has made it necessary to compete for student acquisition, which has led to a more subjective approach to people studying at universities (Azoury, Daou, El Khoury, 2014). This is because students are not only passive recipients of the offer, but their relationship with the university is transformed into the quality of the teaching and scientific staff of the future. At the same time, relations with the local environment have also become more important. Universities use various strategies to promote their own brand within the local environment, including cooperation with local primary and secondary schools (Mioduchowska-Jaroszewicz, Hawran, Kowalik, 2018, p. 91). Other forms of promoting the university also include various types of events addressed to young people, such as open days, science festivals and a number of other events during which an educational offer is presented.

The issue of subjectivity is also taken into consideration by involving university employees in building and maintaining the quality of their own image. Attention is also paid to shaping relations with other institutions within the local environment. The reputation of the university and possible ways of attracting students depend on relations with external stakeholders (Lafuente-Ruiz-de-Sabando, Forcada, Zorrilla, 2018). On the other hand, presenting one's own potential within the local environment can increase clarity, and thus also prestige (Duarte, Alves, Raposo, 2010). It is worth emphasising that the scope of activities aimed at building the reputation of the university will depend on the scale of its recognition within the local, regional and global environment.

The aim of this article is to indicate the factors of choosing a university in relation to promotional activities undertaken by the university. For this purpose, research was carried out within the local environment of one Polish university, which was the Czestochowa University of Technology. This was part of research performed as part of creating a perspective for developing the Czestochowa University of Technology for the period up to 2030. The research method used was a diagnostic survey addressed to high school students. The discussion in this article presents discrepancies resulting from the methodological approach used in various studies and the consequences for the strategy of image building applied by universities.

2. Literature review

In Poland, during the 1990s, the number of people taking up higher education began to increase, which went hand in hand with the development of the educational market and the emergence of new universities, most of which were private. In later decades, however, demographic processes led to universities having to make marketing efforts to effectively compete for university candidates. The educational offer began to be treated as a simple commercial offer, which led to the "trap of marketizing activities". This was accompanied by a focus on short-term effects rather than long-term goals, which include building a network of relations (see Arum, Roksa, 2011; Dziewanowska, 2016). The authors argue that education is increasingly treated as a private good, which is associated with the perception of students as consumers of knowledge, and not as subjects guided by critical thinking (Taylor, Judson, 2014; Dziewanowska, 2016). At the same time, students are treated as clients who are unable to clearly define their own expectations of services provided by universities (Ryńca, Miśko, 2016). Even if we do not regard the process of marketizing activities as a form of privatising knowledge, it can be said that universities are becoming closed institutions, generating not so much private goods as club goods. These goods are divisible, inexhaustible. Nevertheless, access to them is institutionally limited (cf. Kukowska, Skolik, 2016).

The second problem related to university image building or reconstruction is a tendency to commercialise activities, focusing on conducting research while marginalising teaching activity (Del-Castillo-Feito, Blanco-González, González-Vázquez, 2019). This trend is also visible in Poland as a result of the need to reduce the distance between Polish and Western universities in terms of scientific potential. In a parametric assessment, research and publications are important, while from the point of view of students, their relations with academic teachers are more important, not the publications produced by these teachers (Adamska, Dymek, 2018). Dziewanowska (2016) points out that building relations between the university and students is the right approach to creating the university's image.

Some authors also highlight the problems related to how universities are expected to serve society, a duty which universities are moving away, leading to a decline in trust in them (see Khurana, Nohria, 2008). Although a positive image of a university is not enough to consolidate its reputation, this reputation is created on the basis of its image. This requires consistent and long-term action, not short-term media actions (Del-Castillo-Feito et al., 2019). Advertising published in the media is regarded as a weak factor influencing the decision to choose a university (Wasiluk, Markowska, 2015). Candidates first look for information on the Internet on websites not directly related to the university in order to form an opinion. In surveys conducted among students of Poznań high schools, only 6.4% of students declared that they did not look for information about their future university on the Internet (Michalak, Mruk-Tomczak, 2018).

If active promotion in the media, especially traditional media, is not a sufficient activity aimed at increasing recognition among candidates for studies, it becomes necessary to recognise the factors of choosing a university. These factors can change over time, which leads to the need for continuous research in this area. In the case of choosing to study abroad, university rankings are less important than before, and the possibility of receiving scholarships is more important, while the geographical proximity and prestige of the university also remain important factors (Simões, Soares, 2010; Azzone, Soncin, 2020).

Some researchers point out that the impact of university staff is more important than relationships with friends and family (Johnston, 2010; Michalak, Mruk-Tomczak, 2018). Nowacka (2016), citing research conducted among administrators of Polish and English universities, states that the teaching staff and the quality of teaching have the greatest impact on the image of the university. This may mean that these are mainly factors in creating the image and thus the reputation of the university, which in turn translates into the choice of candidates for studies. D'Uggento et al. (2023) pointed out that pride in the university's brand is a key factor in deciding whether to choose a university, which is why the image of a university is an important decision-making factor. In Iran, it has been noted that if students identify with a university, strong ties do not fade even after graduation (Chen, 2016, p. 26). However, it seems that this applies mainly to universities that already have high prestige. In surveys conducted among students of the University of Euroregional Economy in Józefów, only 7% of students claimed that they were guided by prestige when choosing a university, while the most important factor for 48% of them was a convenient location, while the desire to obtain a diploma was the decisive factor for 38% of them (Antczak et al., 2016).

In the study of the selection factors of Polish universities, it was noted that the possibility of finding employment after graduating from a given university, or obtaining better earnings, compliance of the offer with market needs and the quality of education are often taken into consideration (Wroczyńska, 2013; Wasiluk, Markowska, 2015; Michalak, Mruk-Tomczak, 2018). Such utilitarian evaluation of universities may, however, result from the construction of questions in questionnaires. In Western literature, non-economic factors are emphasised more. The influence of such factors as gender, race, and social class is emphasised, while taking into consideration the influence of family, classmates and the reputation of the relevant college (Patlán Pérez, Martínez Torres, 2017). Martin-Gamez et al. (2022) indicate that girls are more likely to choose professions related to social sciences and humanities, which have an impact on society, while boys are more likely to pursue science. Peripheral aspects are also taken into account, such as university facilities used by students, such as canteens and areas where they can find accommodation (Erdoğan, Ergun, 2016).

Different studies have seen different results on factors for choosing colleges. This may result from different methodologies (e.g. the cafeteria for closed questions), socio-cultural conditions of the regions in which the research is conducted as well as the selection of respondents for the survey. When choosing American universities, candidates are guided by

such factors as university rankings, and the problem in this case is the availability of these rankings and what is they take into consideration when grading (Dearden, Grewal, Lilien, 2019). After all, surveys can be conducted among different categories of respondents: students or even graduates, which is easier from the point of view of entities interested in such research, candidates applying for admission to studies (which limits these surveys to people who have already made a choice) or among schoolchildren who make decisions about choosing an institution of higher education. Moreover, results may vary due to different experiences. It has been observed that the image of the university deteriorates in line with the level of studies (Azoury, Daou, El Khoury, 2014).

At Polish universities, research on the needs of candidates for studies began relatively late and there is a lack of nationwide research in this area; the University of Warsaw began conducting such research in 2010 (Wroczyńska, 2013). In 2022, a decision was made to conduct such research among Częstochowa high schools to determine the needs of candidates for studies and the image of local universities, in particular the Czestochowa University of Technology.

3. Methods

The quantitative research presented was carried out as part of creating a perspective for developing the Czestochowa University of Technology for the period up to 2030. The chosen research method was a diagnostic survey in the form of an online survey addressed to high school students based in Częstochowa. It was completed in June 2022, and the participants were 1039 students coming mainly from Częstochowa or towns belonging to the Częstochowa subregion. However, 250 students that started the study did not actually answer any of the questions.

The vast majority of candidates for studies at the Czestochowa University of Technology are graduates of Częstochowa high schools who become students immediately after graduating from high school. For this reason, the research was limited to local high school students. Since there has been a lack of research among candidates for universities located in Częstochowa, the survey asked about both the main factors of choosing a university and peripheral factors.

The following research hypotheses were formulated:

H1. For high school students, the most important factors for choosing a university are: the attractiveness of the chosen field of study, the location of the university and the suggestions of friends.

An indicator of the main factors taken into consideration when choosing a university were answers to a semi-open question. The three factors indicated in the hypothesis appeared most often in the case of graduates of the Faculty of Management of the Czestochowa University of Technology (Przewoźna-Krzemińska et al., 2020), which is chosen by the largest number of candidates applying for admission to this university.

H2. There are statistically significant differences between the educational preferences of male and female high school pupils.

Taking into account the general objectives of the study, it was assumed that, from the point of view of Czestochowa University of Technology, it was important what subjects students intend to take in their Matura examinations, as this may be associated with their subsequent choice of university. Therefore, the indicator of educational preferences were declarations of Matura subjects chosen, and research was conducted among students who in a few months were to make decisions on their choice of subjects for the Matura. Considering previous research results (Martín-Gómez et al., 2022), it was assumed that women would choose subjects related to social sciences and humanities.

H3. There are statistically significant differences between the choices of peripheral factors by male and female high school pupils.

The peripheral factor preference indicator was the answers to two questions with lists of factors relating to social security and those related to cultural offer and "student life". These questions took the form of a five-point scale on which each of the elements listed could be evaluated. As indicated in the publications cited above, one of the factors determining the choice of universities is gender. It was assumed that this factor could be important; in Czestochowa, apart from the University of Czestochowa, there is another large university, Jan Długosz University, offering more subjects related to social sciences and humanities. Therefore, it was assumed that if technical courses were less attractive to women, it would be possible to determine other factors that they take into consideration when choosing courses of study.

4. Results

Of the 609 students who completed the birth certificate, there were 386 women and 168 men, while another 55 people indicated that they did not want to specify their gender. 300 students were residents of Czestochowa, while the remaining 309 lived outside the city.

To some extent, H1 was assessed positively. Most people indicated the attractiveness of the chosen field of study (67%), followed by the costs involved in studying (39%), the professionalism of teaching staff (37%), a favourable location (36%) and the attractiveness of the city in which the university is located (36%). Suggestions from friends were only chosen

by only 5%, as were suggestions from family. On the other hand, 20% indicated the reputation of the university. It can be said that, before the start of their Matura classes, high school students are greater individualists with regard to university preferences. Nevertheless, it is worth noting that the main factor is an attractive educational offer. Low indications of the university's reputation may be related to the fact that students have become aware of how difficult it is to be accepted by universities with high prestige.

In the case of H2, significant statistical relationships were noted between gender and the declared choice of some additional subjects for the Matura examination. Women were more likely to choose Polish language, a foreign language, biology and physics, while men were more likely to choose mathematics and computer science (Table 1).

Table 1.

Correlations between gender and the choice of additional subjects for the Matura examination made by students of Częstochowa high schools

Chosen subject	Proportion		
	ϕ	χ^2	p
Polish Language	0.261	37.678	0.000
Foreign Language	0.138	10.488	0.001
Mathematics	-0.099	5.395	0.020
Geography	-0.041	0.941	0.332
History	0.055	1.700	0.192
Biology	0.086	4.124	0.042
Physics	0.208	24.047	0.000
Chemistry	-0.021	0.243	0.622
Information Technology	-0.268	39.819	0.000
Social Studies	0.022	0.269	0.604

Note. Results showing significant statistical relationships are marked in bold.

Source: own work.

It can be said that women are more oriented towards humanities, social sciences and natural sciences, while men are more geared towards technical faculties, although physics is also a subject required in most polytechnic faculties. Therefore, despite organised initiatives such as "Girls at Polytechnics", there is still a clear division between subjects that prepare people for "male" and "female" professions.

When assessing H3, it was first predetermined how important individual peripheral factors were when choosing a high school for all respondents. In the case of factors related to social security and accessibility of infrastructure, the ratings were quite similar and ranged from 2.92 to 4.16 on a five-point scale, with convenient access and parking spaces indicated as the most important factor, while the least important factor was access to sports facilities and provision of facilities for the disabled. Figure 1 shows detailed data obtained from the survey.

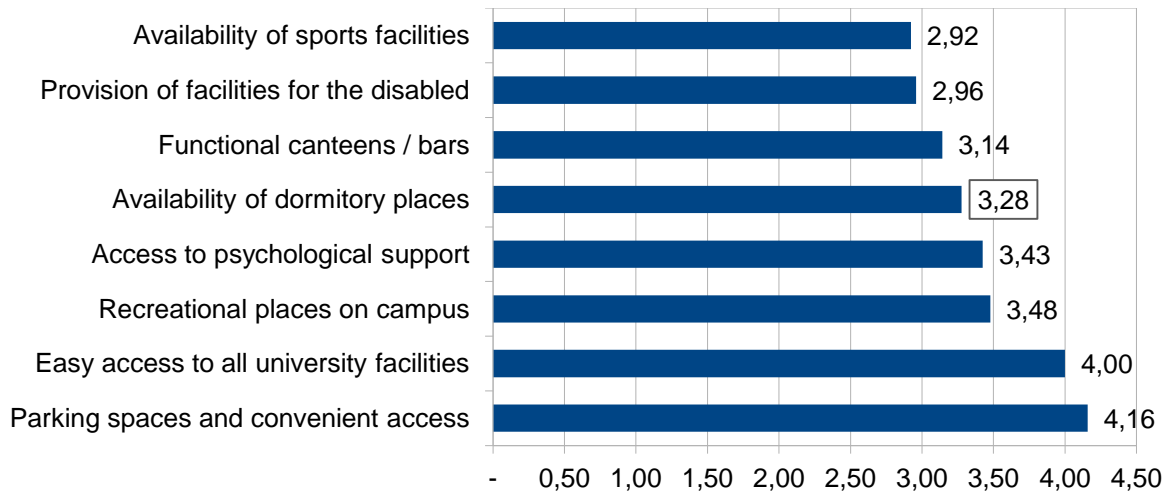


Figure 1. Assessment of peripheral factors for high school students when choosing a university. Social security and access to infrastructure. N = 545.

Source: own work.

The situation was similar when assessing factors related to student life and the range of cultural facilities. In this case, the most popular choice was the possibility of pursuing one's own passions. However, these were different from those listed in the cafeteria. At the same time, no one indicated what these passions were, although it was possible to give an additional answer. This may indicate a greater need to protect one's own privacy, especially important for the Z generation. In turn, the least popular choices were sports clubs operating at the university, the range of events held at theatres and a large number of foreign students. Figure 2 shows detailed data obtained from the survey.

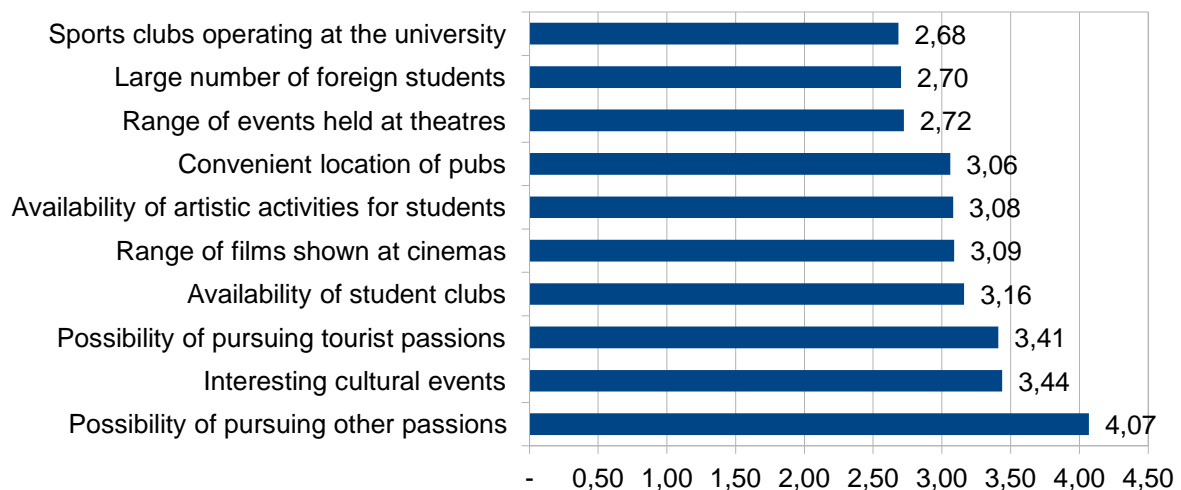


Figure 2. Assessment of peripheral factors for high school students choosing a university. Cultural offer and student life N = 543.

Source: own work.

Although the differences in the assessment of individual factors were not great, significant statistical relationships were found between gender and the method of assessment. Thus, H3 was positively assessed. Most factors were rated higher by women; men only rated

the availability of sports facilities higher. However, the level of correlation was low, reaching only an average level in the case of access to psychological support and pursuing artistic activities and tourist passions. These three factors may be considered potentially important for making universities more attractive to women. The correlations obtained are shown in Tables 2 and 3.

Table 2.

Correlations between gender and peripheral factors of university choice – social protection and access to infrastructure

Factor evaluated	Proportion		
	φ	χ^2	p
Availability of dormitory places	0.063	1.326	0.250
Functional canteens / bars	0.171	9.074	0.003
Recreational places on campus	0.139	5.785	0.016
Availability of sports facilities	-0.146	6.777	0.009
Parking spaces and convenient access	0.060	1.430	0.232
Easy access to all university facilities	0.041	0.623	0.430
Provision of facilities for the disabled	0.160	8.622	0.003
Access to psychological support	0.308	33.815	0.000

Note. Results showing significant statistical relationships are marked in bold.

Source: own work.

Table 3.

Correlations between gender and peripheral factors for choosing a university – cultural facilities and "student life"

Factor evaluated	Proportion		
	φ	χ^2	p
Availability of student clubs	0.186	9.991	0.002
Sports clubs operating at the university	-0.055	0.938	0.333
Convenient location of pubs	0.089	2.497	0.114
Interesting cultural events	0.274	23.977	0.000
Range of films shown at cinemas	0.183	10.119	0.001
Range of events held at theatres	0.281	24.555	0.000
Large number of foreign students	0.175	8.288	0.004
Availability of artistic activities for students	0.307	29.896	0.000
Possibility of pursuing tourist passions	0.335	36.257	0.000
Possibility of pursuing other passions	0.054	1.159	0.282

Note. Results showing significant statistical relationships are marked in bold.

Source: own work.

The study presented was a pilot project. The answers obtained in the cafeteria were created on the basis of literature and experience in working with students but without previous interviews with candidates for studies. Therefore, semi-open questions were asked, assuming that it would be possible to modify the questionnaire for a further stage of the research on the basis of additional answers. However, respondents, omitted the possibility of entering their own answer. In the next stages of the study, it will therefore be necessary to obtain information in this area using another research tool.

5. Discussion

Previous studies in various countries have indicated that one of the most important factors for choosing a university is its reputation and prestige (Simões, Soares, 2010; Dearden, Grewal, Lilien, 2019; Azzone, Soncin, 2020; D'Uggento et al., 2023). However, the results presented in this article as well as other research conducted at a smaller Polish university (Antczak et al., 2016) indicate that this is not necessarily the norm. Indeed, if students choosing a university are aware of the reduced chance of entering a prestigious university, they may not take this factor into consideration at all. However, it is important for creating the image of the university. In further research, it would be appropriate to ask candidates whether they would choose a university knowing that its prestige is lower than other universities located in the same region or subregion. On the other hand, emphasising the importance of the university's reputation in research primarily serves universities with high prestige as this factor dominates media discourse.

Differences in the choice of matriculation subjects for women and men, which affect the choice of future studies, are an indicator of the global trend. In general, in the European Union, women are less likely to complete their studies in the fields of physical sciences, mathematics and statistics or Information Technology. This is particularly true for the last two categories. The situation is similar in the United States (see Martín-Gámez et al., 2022). In the research presented, it is somewhat surprising that women more often chose physics than men, although it was the least frequently chosen subject (only 31 people declared that they would choose it as a Matura subject). This may possibly be due to local conditions. The Jan Długosz University, which previously functioned as a teacher training university, provides courses in both social sciences and humanities, as well as natural sciences. Although only 6.2% of respondents declared studying in Częstochowa and at the same time specified the choice of university, the Częstochowa University of Technology was chosen by 11 men and four women, while the Jan Długosz University was chosen by one man and 22 women. If stereotypes about "male" and "female" universities persist within the local environment, this may also influence choices.

It is indicated that the ability to identify factors influencing the choice of students enables services to be better adapted to the expectations and needs of students (Azzone, Soncin, 2020). However, if the decision-making process is time-protracted, it is difficult to determine precisely which category of respondents would be most appropriate. Nowadays, the choice of secondary school is often associated with increasing the chance of beginning a specific course of study. Surveys involving the same people at several stages of decision-making would be more beneficial. However, they may discourage respondents from participating in the research at all. Although they may be rather tiring, extensive cafeterias may also enable other conditions to be determined. In our research, it turned out that it was possible to identify a number of peripheral factors that are rated higher by women. Investing in these elements of the educational package may lead to more women being attracted to technical universities.

6. Summary

In societies where candidates including university rankings have become the norm, as is the case in the United States, the methodology for their development becomes a problem (Dearden, Grewal, Lilien, 2019). Different methodologies may give different results, which makes it important to choose the right questions in the questionnaire which, due to the type of respondents, should not be too extensive. Finally, the results may also be influenced by whether only candidates for studies who will only make binding decisions about choosing a field of study are examined or whether students already at university are also involved in the research.

For universities that do not have a high position on the prestige scale, it would be important to invest in other elements of the educational package. At the same time, it is important for them not to lose the clarity of their own image. Although this factor is not always chosen by respondents, it may still remain important. Here, there is a risk of losing crucial assets, which is well described by the paradox of the Red Queen, formulated in the context of the evolutionary "arms race". Paraphrasing the original version, organisations that do not improve adaptive features and do not take part in this race on the market are lagging behind and may even go off the market (see Krzanowska et al., 2002, p. 355). Universities lower in the rankings should therefore take a more multifaceted approach to building their own brand and making themselves more attractive to potential future students.

References

1. Adamska, M., Dymek, Ł. (2018). Kadra dydaktyczna jako czynnik warunkujący zarządzanie wizerunkiem uczelni publicznej. *Zeszyty Naukowe. Organizacja i Zarządzanie, Vol. 124*. Politechnika Śląska, pp. 7-18, doi: 10.29119/1641-3466.2018.124.1.
2. Antczak, B., Pyra, A., Malinowska, K., Wiącek, P. (2016). Wpływ działań promocyjnych na wybór uczelni wyższej. Raport z badań. *Journal of Modern Science, Iss. 4(31)*, pp. 237-260.
3. Arum, R., Roksa, J. (2011). *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press.
4. Azoury, N., Daou, L., M. El Khoury, C. (2014). University image and its relationship to student satisfaction- case of the Middle Eastern private business schools. *International Strategic Management Review, Vol. 2*, pp. 1-8, doi: 10.1016/j.ism.2014.07.001.
5. Azzone, G., Soncin, M. (2020). Factors driving university choice: A principal component analysis on Italian institutions. *Studies in Higher Education, Vol. 45, Iss. 12*, pp. 2426-2438, doi: 10.1080/03075079.2019.1612354.

6. Chen, C.-T. (2016). The Investigation on Brand Image of University Education and Students' Word-of-Mouth Behavior. *Higher Education Studies*, Vol. 6, Iss. 4, pp. 23-33, doi: 10.5539/hes.v6n4p23.
7. D'Uggento, A.M., Petruzzellis, L., Piper, L., Gurrieri, A.R. (2023). In the name of the University: The choice to promote as a tool to influence decision-making. *Quality & Quantity*, Vol. 57, Iss. 4, pp. 3151-3164, doi: 10.1007/s11135-022-01475-w.
8. Dearden, J.A., Grewal, R., Lilien, G.L. (2019). Strategic Manipulation of University Rankings, the Prestige Effect, and Student University Choice. *Journal of Marketing Research*, Vol. 56, Iss. 4, pp. 691-707, doi: 10.1177/0022243719831258.
9. Del-Castillo-Feito, C., Blanco-González, A., González-Vázquez, E. (2019). The relationship between image and reputation in the Spanish public university. *European Research on Management and Business Economics*, Vol. 25, Iss 2, pp. 87-92, doi: 10.1016/j.iedeen.2019.01.001.
10. Duarte, P.O., Alves, H.B., Raposo, M.B. (2010). Understanding university image: A structural equation model approach. *International Review on Public and Nonprofit Marketing*, Vol. 7, Iss. 1, pp. 21-36, doi: 10.1007/s12208-009-0042-9.
11. Dziewanowska, K. (2016). Doświadczenia relacyjne w szkolnictwie wyższym i ich wpływ na wizerunek uczelni oraz lojalność studentów. *Handel Wewnętrzny*, Vol. 3, pp. 126-137.
12. Erdoğmuş, İ., Ergun, S. (2016). Understanding University Brand Loyalty: The Mediating Role of Attitudes towards the Department and University. *Procedia - Social and Behavioral Sciences*, Vol. 229, pp. 141-150, doi: 10.1016/j.sbspro.2016.07.123.
13. Gołata, K., Sojkin, B. (2020). Determinants of Building Image and Reputation of University Towards Its Stakeholders. *Marketing of Scientific and Research Organizations*, Vol. 35, pp. 29-56, doi: 10.2478/minib-2020-0008.
14. Johnston, T.C. (2010). Who And What Influences Choice Of University? Student And University Perceptions. *American Journal of Business Education (AJBE)*, Vol. 3, Iss. 10, pp. 15-24, doi: 10.19030/ajbe.v3i10.484.
15. Khurana, R., Nohria, N. (2008, October 1). *It's Time to Make Management a True Profession*. Harvard Business Review. Retrieved from: <https://hbr.org/2008/10/its-time-to-make-management-a-true-profession>.
16. Krzanowska, H., Łomnicki, A., Rafiński, J., Szarski, H., Szymura, J.M. (2002). *Zarys mechanizmów ewolucji*. Warszawa: PWN.
17. Kukowska, K., Skolik, S. (2016). Evolutionary Conditions of Goods Flow in the Different Forms of Social Organization. In: S. Bezdekova, T. Klusak (Eds.), *Management Trends Into Turbulent Environment* (pp. 42-49). Brno: Mendel University in Brno.
18. Lafuente-Ruiz-de-Sabando, A., Forcada, J., Zorrilla, P. (2018). The university image: A model of overall image and stakeholder perspectives. *Cuadernos de Gestión*, Vol. 19, pp. 63-86, doi: 10.5295/cdg.160720al.

19. Martín-Gámez, C., García-Durán, D., Fernández-Oliveras, A., Torres-Blanco, V. (2022). Factors to consider from education to promote an image of science and technology with a gender perspective. *Heliyon*, Vol. 8, Iss. 10, pp. 1-6, doi: 10.1016/j.heliyon.2022.e11169.
20. Michalak, S., Mruk-Tomczak, D. (2018). Komunikacja oferty edukacyjnej uczelni wyższej w świetle potrzeb kandydatów na studia. *Handel Wewnętrzny*, Iss. 4(375), No. I, pp. 227-240.
21. Mioduchowska-Jaroszewicz, E., Hawran, K., Kowalik, J. (2018). Strategiczny marketing jako narzędzie budowania wizerunku uczelni wyższych w Szczecinie. *Studia i Prace WNEiZ US*, Iss. 53, No. 3, pp. 89-99, doi: 10.18276/sip.2018.53/3-08.
22. Nowacka, M. (2016). Kreowanie wizerunku szkoły wyższej wśród wybranych grup docelowych. *Pedagogika. Studia i Rozprawy*, Vol. 2, Iss. 25, pp. 85-100.
23. Patlán Pérez, J., Martínez Torres, E. (2017). Evaluation of the organizational image of a university in a higher education institution. *Contaduría y Administración*, Vol. 62, Iss. 1, pp. 123-140, doi: 10.1016/j.cya.2016.01.007.
24. Przewoźna-Krzemińska, A., Kukowska, K., Randak-Jezińska, M., Skolik, S., Chrapek, E. (2020). *Raport z badań losów zawodowych absolwentów Wydziału Zarządzania Politechniki Częstochowskiej, rok akademicki 2019/2020*. Częstochowa: Politechnika Częstochowska.
25. Ryńca, R., Miśko, R. (2016). Ocena wizerunku uczelni z uwzględnieniem instrumentów public relations na przykładzie szkół wyższych. *Finanse, Rynki Finansowe, Ubezpieczenia*, Iss. 4 (82), No. 1, pp. 223-237, doi: 10.18276/frfu.2016.4.82/1-19.
26. Simões, C., Soares, A.M. (2010). Applying to higher education: Information sources and choice factors. *Studies in Higher Education*, Vol. 35, Iss. 4, pp. 371-389, doi: 10.1080/03075070903096490.
27. Taylor, S., Judson, K. (2014). The Nature of Stakeholder Satisfaction with Marketing Education. *Higher Education Studies*, Vol. 4, Iss. 4, pp. 89-107, doi: 10.5539/hes.v4n4p89.
28. Wasiluk, A., Markowska, E. (2015). Wpływ działań promocyjnych na wybór uczelni przez maturzystów. *Zeszyty Naukowe Polskiego Towarzystwa Ekonomicznego w Zielonej Górze*, Iss. 2, pp. 98-109.
29. Wroczyńska, A. (2013). Oczekiwania współczesnych studentów wobec uczelni wyższych – prezentacja wyników prowadzonych badań. *Studia BAS*, Iss. 3(35), pp. 249-272.