Where to go and why? Motivational factors in the choice of higher education institutions: the example of a university in Central Eastern Europe

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Abstract

The aim of our study is to examine the factors that influence the choice of higher education institutions (HEIs). To this end, we have explored the evolution and current challenges of marketing in higher education. By conducting an empirical survey of students (n=2330) admitted in 2023 at a Central-Eastern European university, we identified the factors that influenced students' decision to apply. The initial 19 variables, then 15 variables included in the factor analysis, eventually resulted in four factors, which are "education and reputation", "dormitory and services", "opinion of others" and "city". The factors and factor weights were used to identify the strategically important factors that can help HEIs to achieve a more effective market presence and, accordingly, more precise targeting.

Keywords: HEI, factors, marketing in higher education, decision to apply

1. Introduction

Nowadays, the term "enrolment marketing" or "higher education marketing" is increasingly used. The admission process itself is the result of a lengthy decision-making process, thanks to the diversity and variety of factors involved. The topicality of the subject is demonstrated by the fact that every year there is increasing competition to attract students, while at the same time there are many over-applications for the most popular courses. Accordingly, the aim of the present study is to examine higher education marketing in general, its challenges and to verify the motivational factors through a survey of students at a Western-Hungarian institution. First, the rationale for marketing in higher education is presented, followed by the challenges facing current institutions. Thereafter a discussion of the factors that influence the decision is presented. These factors are tested by the empirical research that is the focus of this paper. To highlight the novelty and importance of our research in terms of empirical evidence; by

conducting a survey of 2330 students admitted in 2023, our study provides empirical evidence specific to the Central-Eastern European context. This localised data enriches the existing literature. In terms of methods the reduction from 19 initial variables to 4 key factors - namely "education and reputation", "dormitory and services", "opinion of others" and "city" - is novel. This streamlined approach allows universities to focus on the critical issues. In terms of strategic implications, our study goes beyond simply identifying factors. It strategically prioritises these factors, enabling institutions to allocate resources effectively. About the contextual relevance the study's focus on Central and Eastern Europe recognises the unique challenges and opportunities faced by HEIs in this region. It fills the gap in understanding localised decision-making dynamics. This research makes both methodological and practical contributions to assist HEIs in their pursuit of effective marketing strategies and competitive positioning.

2. The evolution of marketing in higher education

In the literature section, we highlight the main status of higher education, then the marketing orientation, followed by the evaluation criteria of the institutions. In today's environment, both businesses and higher education institutions face intense competition fueled by globalization. This competition transcends geographic boundaries and includes not only regional and national competitors, but also foreign institutions. As universities vie for prominence, understanding the fundamentals of competition becomes paramount. These foundations, which can influence student choice and market dynamics, often revolve around educational and research standards (de Haan, 2015). Identifying these critical factors is essential in the current competitive environment. Accreditation standards serve as a valuable lens through which to evaluate common focal points that warrant attention. By comparing these standards, institutions gain insight into areas that require improvement and alignment (Reddy et al., 2023). At the same time, the evolution of higher education institutions remains a pressing concern. Researchers such as Ayhan-Özdemir (2023), Cheng et al. (2023), and Olanya et al. (2023) examine the functions, operations, and efficiency of universities. Notably, the convergence of higher education and marketing theory has occurred in recent years, merging these two fields. To understand the metamorphosis of universities, we need to explore their unique characteristics. Four distinct university generations emerge from this exploration (Piskóti – Morva, 2022), like (1) first-generation, or mid-century, universities: Pioneers in education, these institutions laid the groundwork for subsequent generations. The second-generation universities (2): These institutions adapted to changing times by emphasizing research and specialization. Market-oriented universities (3): Focused on practical applications, they responded to the needs of industry. Society-oriented universities (4): Committed to societal impact, they address pressing global challenges. Currently, developed universities are gravitating toward the latter two models. However, their transformation remains a work in progress. The shift toward third-generation universities-most evident in Western European and North American contexts-

reflects efforts to modernize operations in the face of dwindling public funding and rising student enrollments. These phenomena are forcing universities to explore alternative funding sources and adapt strategically to thrive in a constantly evolving educational landscape. (Simai, 2018)

2.1. Challenges in higher education marketing

Universities must navigate a complex landscape of external and internal factors to maintain a competitive market position (Figure 1).
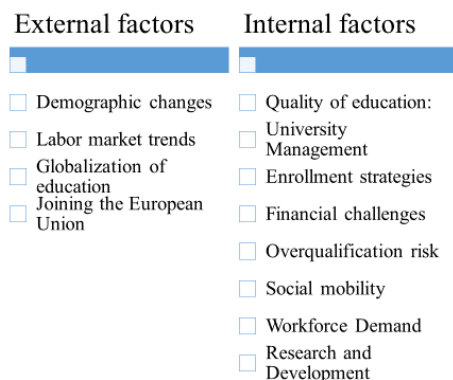
External factors

☐ Demographic changes
☐ Labor market trends
☐ Globalization of education
☐ Joining the European Union

Internal factors

☐ Quality of education:
☐ University Management
☐ Enrollment strategies
☐ Financial challenges
☐ Overqualification risk
☐ Social mobility
☐ Workforce Demand
☐ Research and Development

Figure 1. Challenges in higher education. Source: Own compilation.

In terms of external factors, demographic changes such as shifting population dynamics affect student enrolments. Institutions need to adapt to changing age groups, birth rates and migration patterns. In terms of labour market trends, aligning academic programmes with market needs ensures that graduates have relevant skills. Anticipating industry shifts is crucial. In the context of the globalisation of education, internationalisation drives student mobility. Universities compete globally for diverse student populations (Minor, 2023). In terms of joining the European Union, EU membership facilitates student exchange programmes but also increases competition between institutions. In terms of internal factors, the quality of education - maintaining high standards - attracts students. The quality of teaching, research and infrastructure is essential. In terms of university management, effective governance, resource allocation and strategic planning are essential. Effective management enhances competitiveness. In terms of enrolment strategies, targeted marketing, outreach and retention efforts are critical. Attracting the right audience ensures sustainable growth. In terms of financial challenges, universities are affected by reduced public funding due to economic crises. Budgetary constraints require innovative sources of income. The risk of over-qualification is a major concern; matching educational attainment to labour market needs prevents over-qualified graduates. Due to social mobility (Simai 2018), degrees as pathways to upward mobility drive enrolment. Financial accessibility expands opportunities. Through workforce demand, meeting

workforce needs drives programme development. Industry partnerships enhance employability. Research and development as a theme drives universities and contributes to innovation. R&D enhances reputation and relevance. The universities of the future must keep pace with critical trends - such as demographic, social, geopolitical or technological - that affect education. Individually and cumulatively, these will influence the future of higher education.

2.2. Criteria for choosing an institution

Students' choices of higher education institutions are influenced by a complex interplay of factors ranging from educational quality and financial accessibility to social mobility and occupational demand. These studies provide valuable insights into the field of higher education decision-making. According to Headcote et al (2020), a number of factors have been identified that influence student choice in the UK higher education system. These factors go beyond mere performance data and encompass a wide range of considerations that ultimately shape student preferences. In some cases, the reputation of the university and access to financial benefits are important factors in the students' decision-making process (Zuniga-Jara et al, 2019). Students' choice of university is influenced by factors such as geographical proximity, employment opportunities in the area and university reputation (Azzone & Soncin, 2020). Similarly, electronic word of mouth, peer influence and university reputation are important factors influencing students' choice of university (Wut et al, 2022), using different marketing tools like sources (Schimmel et. al, 2010). Like another motivator, course accreditation, location and parental influence are also confirmed as influential factors in students' choice of university (Bosah, 2020); and future career expectations, individual capacity and group references also play a role in influencing university choice (Ngan & Khoi, 2021).

2.3. The circumstances of the survey

The university is located in Western Hungary, it has nine faculties and approximately 15,000 students. The aim of the research is to assess the motivational factors of currently active, enrolled students, with the help and knowledge of which a more accurate positioning can be implemented using STP marketing. Some questions will assess students' sources of information, motivations and decision influences, but it will also look at students' enrolment by faculty, training, level and funding. The questionnaire was launched on 27 July 2023, after the publication of the 2023 admission thresholds by the Education Office. A total of 2,330 students were reached, with the last completion received on 7 September. The query was made through an online platform on the website of the Admissions Office, which was completed anonymously. The influencing factors were measured on a metric scale, while the other grouping variables were measured on a categorical scale.

2.3.1. Sample composition

The gender ratio in the sample is 48.7% female, 51.3% male; by generation, 6.4% are Generation X, 14.1% Generation Y, while the vast majority 79.5% are Generation Z. 97.5% of the respondents are resident in Hungary, the rest are foreigners. The majority, further broken down by place of residence, came from villages (64.6%), 30.3% from cities, 28.1% from cities with county status and 7% from the capital. 84.2% are publicly funded and 16.8% are self-funded students. The majority of respondents, 77.4%, were enrolled in bachelor's degree courses, 10.9% in master's degree courses, 6.1% in higher vocational education and 5.6% in postgraduate courses.

2.3.2. Examination of motives

The variables (see in Table 1.) are measured on a Likert scale with 5 points, the extreme points being 1 - not at all influenced, 5 - fully influenced. In order to maximize the Cronbach's alpha value run on the variables and in the light of the results of the initial factor analysis run (taking into account the correlation between factors and variables), four variables were excluded. Thus, the Cronbach's alpha value was 0.875 and the coefficients between factors and variables exceeded 0.5. The null hypothesis of the Bartlett's Test of Sphericity, an indicator of model fit and appropriateness, was rejected (Chi-Square 15107.337, Sig. 0.000), and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.860, also suggesting appropriateness. The method used is Principal Component Analysis, and the Rotation method is Varimax with Kaiser Normalization. Four factors were distinguished from the 15 motivators (based on the factor scores) explaining 64.2% of the total variance: education and reputation (37.85%); dormitory and services (10.12%); opinion of others (8.8%) and finally the city (7.43%).

2.3.3. Explaining the factors

The *first factor* includes practice-oriented courses, university-industry links, scholarships available, the reputation of the institution, free language learning opportunities and the level of reimbursement. On this basis, since in the majority of cases the values associated with the university itself were identified, the factor was named "education and reputation". The variance explained by this factor is the largest, 37.849%. The *second factor* includes the chances of being in a dormitory, the price of dormitory rooms and the sports facilities, i.e. the services that the university can offer based on its infrastructure. This factor has been labelled "dormitory and services" and explains a variance of 10.124%. The *third factor* includes the opinion of friends and family members, and also the fact that the friends are already students of the present institution, so the decision was based on their experience and their personalities. The factor is called opinion of others and the variance explained by it is 8.799%. The *fourth factor* includes the variables that consider the city itself, the distance from the place of residence and the

location; i.e. all geographical aspects that can be linked to the city as an entity. The factor is called City and the variance explained by it is 7.341%.

Table 1. **Results of the factor analysis** Source: Own compliation (2024).

Variable	education and reputation (37.85%)*	dormitory and services (10.12%)*	opinion of others (8.8%)*	city (7.43%)*
practical training	0.774			
university-industry link	0.765			
available scholarships	0.656			
reputation of the institution	0.637			
free language learning opportunities	0.621			
tuition fees	0.619			
better chance of getting into collage		0.925		
low college fees		0.918		
sport facilities		0.557		
opinions of friends			0.812	
friends			0.735	
opinions of family members			0.718	
city				0.736
distance from home				0.686
job opportunities				0.664

*Note: explained variance

3. Conclusions and proposals

The theory and empirical results in the provided search results both discuss the factors influencing students' choice of higher education institutions, but they differ in their focus and specificity.The theory, as presented by Headcote et al. (2020) and Zuniga-Jara et al. (2019), emphasizes a broad range of factors that influence students' choices, including educational quality, financial accessibility, social mobility, occupational demand, university reputation, geographical proximity, employment opportunities, electronic word of mouth, peer influence, course accreditation, location, parental influence, future career expectations, individual capacity, and group references. This theory highlights the complexity of students' decision-making processes and the interplay of various factors that shape their preferences.On the other hand, the empirical results, as presented in the study findings, focus on more specific factors that are categorized into distinct groups. The most influential factors are related to the educational structure, organization, and integration of the institution, including reputation, free language learning, and course costs. Secondary yet significant factors include college places, admission processes, costs, and sporting facilities, influenced by the institution's location and external environmental factors. Housing provision and quality of life services are also considered essential. The opinion of reference groups, while less influential than before, still plays a role in decision-making, particularly among friends and family. The city's characteristics, such as distance and location opportunities, represent a factor beyond the

institution's direct control.In summary, the theory provides a broader and more comprehensive view of the factors influencing students' choice of higher education institutions, while the empirical results focus on more specific and categorized factors. Both perspectives highlight the importance of factors such as reputation, location, and financial considerations, but the empirical results also emphasize the significance of educational structure, organization, and integration. The theory also includes factors such as social mobility, occupational demand, and individual capacity, which are not explicitly mentioned in the empirical results.

Overall, understanding students' motivational factors that help them make decisions is information that enables more precise targeting and more effective operations in strategy development. In this study, we have examined primarily the marketing tools and challenges facing higher education institutions and their related higher education marketing. Through empirical research targeting students at a Central - Eastern European institution, we have verified and identified the factors influencing the decision, distinguishing and grouping the factors that are related to the institution and can be influenced by it (hard and soft), as well as identifying the influence of reference groups and the less influential existence of the city as an entity. Knowing and using these factors will make the strategy for attracting students more precise and effective.

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