

# DECISION-MAKING PROCESSES IN HIGHER EDUCATION: A SYSTEMATIC LITERATURE REVIEW

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**Abstract:** *The topic of student decision-making in higher education has gained relevance due to its wide diversity. This research aims to systematize the theoretical references that address the student decision-making process in Higher Education using the PRISMA 2020 methodology. A general model based on push and pull factors was identified, which integrates economic, quality, communication and internationalization factors, as well as the need to conceive the student as a "consumer" by combining the micro-level and personal aspects to personalize the process with appropriate and integrated information, managing deeper relationships. In addition, these results can be used as a reference for decision-making and meeting the needs of students.*

**Key words:** *Decision-Making Process, Higher Education, Student as Consumer, Economic Factors, Higher Education Internationalization.*

## 1. Introduction

Higher education has been subject to globalization, which has characterized society in the present century. Higher education institutions (HEIs) are increasingly forced to apply theories and practices from the business sector due to the reduction in government funding and the decline in university enrolment in many countries. Marketing is applied in higher education to enhance the quality of university processes and institutions. Therefore, the strategies designed must be aligned with the needs of the institution. It is appropriate to study and interpret students' decision-making processes and preferences to adequately segment groups based on specific characteristics. This is to subsequently direct the designed marketing strategies in accordance with their needs and goals.

There is a consensus that student choice is influenced by multiple factors, recognizing the importance of selecting a university. Therefore, the student decision-making process must be supported and characterized by as much information and transparency as

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possible. HEIs strive to meet student expectations, emphasizing the importance that this process should be given (Briggs and Wilson, 2007).

According to (Ahmad and Buchanan, 2017, p. 3): “Although there is a fairly substantial body of literature on the internationalization of higher education, very little is known about students’ decision criteria in their choice of selecting higher learning institutions, in particular international branch campuses in Malaysia”.

Different authors have addressed the issue of the student decision-making process from the perspective of studying outside their countries of residence (Zheng, 2014; Ahmad and Buchanan, 2016; 2017; Cebolla-Boado, Hu and Soysal, 2018; Sim *et al.*, 2021). Likewise, some research studies have highlighted (Verghese and Kamalanabhan, 2015; Ajibola *et al.*, 2017; Bartkute, 2017; Le *et al.*, 2022; Roslina Wan Othman *et al.*, 2024) the comparison of the main factors that interact in the decision-making of students according to regions such as Asia and English-speaking countries.

It is important to understand the factors that most influence students' selection of universities and academic programs. However, research of this type is insufficient in the case of higher education (Kalimullin and Dobrotvorskaya, 2016).

Based on the above, it is necessary to systematize the theoretical references that determine students' decision-making process for admission to HEIs. This will enable them to design and implement the most appropriate marketing strategies. Therefore, the overall objective of this article is to systematize the theoretical references that address the decision-making process of students in the evaluation, selection and admission to HEIs.

A selection and review of 35 articles from the scientific database "SCOPUS" that addressed the student decision-making process for admission to HEIs was carried out to meet the above objective. The data collection process followed the methodology used in Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), which made it possible to address the following research questions:

RQ1. What are the theoretical references that address the decision-making process of students in the evaluation, selection and admission to a HEI?

RQ2. Is it appropriate to view the student as a “consumer” in higher education?

By answering the previous RQs, the findings can be used by government officials, university administrators and professors regarding decision-making and marketing strategies that could be applied to the university realm.

This paper is structured into 4 sessions. Section 1 is for the introduction, followed by the material and methods in Section 2. Section 3 presents the results and their discussion. The conclusions are addressed in Section 4.

## **2. Materials and Methods**

This study employs a Systematic Literature Review (SLR), providing a landscape of the literature on the decision-making process in HEIs from 1981 to 2024. The 2020 PRISMA Statement is adopted (Page *et al.*, 2021) for conducting the SLR.

The search strategy includes the following three sub-processes identified by Page *et al.* (2021): identification, selection and eligibility. First, a search was conducted in the

Scopus database until 2024. In the initial phase, a search for keywords was carried out, referring to the article title, abstract and keywords. The following Boolean patterns were defined for the interest of researchers “Marketing Strategies” and “Higher Education”. Some criteria of inclusion and exclusion were also defined.

Criteria of inclusion:

1. The review covers all articles appearing in the Scopus search, without distinction of a specific year or period,
2. Only the articles were included,
3. The studies are written in English,
4. The study's focus is limited to the student decision-making process and higher education,
5. The full text is available.

Criteria of exclusion:

1. Excluding research on early years, primary and secondary education,
2. Articles about topics such as online libraries, student shopping behaviour, online shopping and teaching-learning,
3. The full text is not available.

Figure 1 shows the information flow of PRISMA 2020 for the selection of the documents analysed.

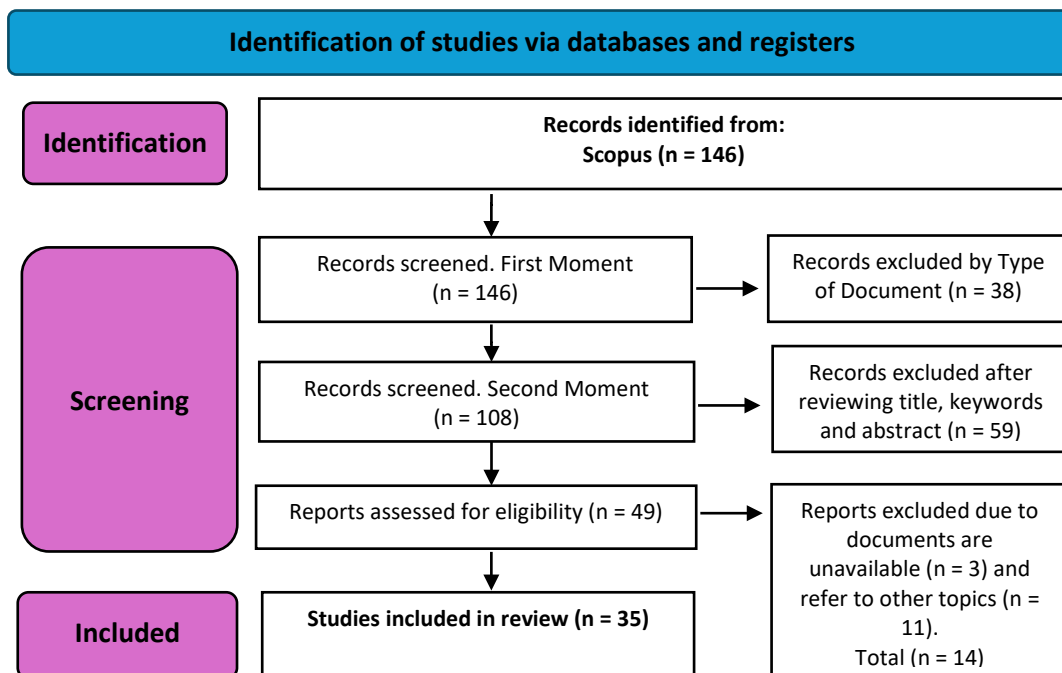


Fig. 1. *The information flow of SLR according to the PRISMA Statement*

In total, 146 documents were obtained (Article 103, Conference Paper 14, Book Charter 16, Review 5, Book 3, Conference Review 5). Subsequently, in the first screening, the documents of the following types were excluded: Conference Paper (14), Book

Letter (16), Book (3), Conference Review (5). Therefore, the screening was completed with 108 documents.

In the second screening of 108 documents, a review of the title, abstract and keywords was conducted to discard those unrelated to the topic or those which are not of interest. According to the criteria of the researchers, a total of 59 documents were excluded, which represents 54.62%, generally because they were not about the decision-making process.

Later in the eligibility stage of the 49 documents, it was decided to exclude 3 documents first, which were impossible to download in full, despite trying different ways. The remaining 46 documents were read in full, then 11 documents were excluded, since they are referred to other topics, focused on the teaching and learning process and on the online shopping decision-making process. Therefore, at the end of this process, the researchers obtained a total of 35 documents, which represents 23.97% of the initial total to be fully analysed.

The next section will show, analyse and discuss the results obtained in the study.

### 3. Results and Discussions

#### 3.1. The theoretical references of the student decision-making process in the HEIs

The subsection will address the obtained results of RQ1. Therefore, the publication period covers the years 1998-2024, with a total of 35 documents. As shown in Figure 2, the study carried out by Rosen, Curran and Greenlee (1998) was the first and it is about the most important factors in higher education for high school students and their relationship with branding. The next publication was conducted by (Briggs and Wilson, 2007). An increase in publications is observed over the next decade, with a total of 22 articles distributed fairly evenly; this trend has continued until 2020. Logically, no publications were published in 2020 due to the COVID-19 pandemic, which practically paralyzed higher education globally. In the year 2024, there were four publications, matching the highest number obtained in previous years. This demonstrates the importance of studying the decision-making process in higher education.

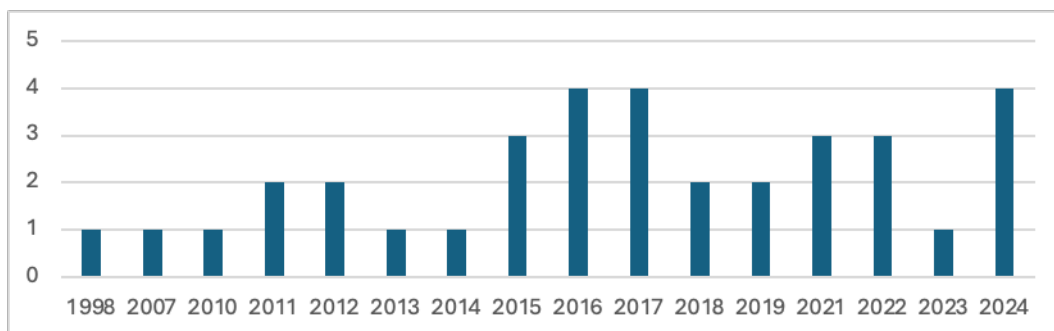


Fig. 2. *Number of Publications per Year (1998-2024)*

The systematization of aspects about the student decision-making process in the evaluation, selection and admission to HEIs will allow us to answer RQ1 and RQ2. Research conducted until the 1990s generally focused marketing on a strict definition of communications. Subsequently, hypotheses began to emerge that, in order for any HEI to achieve success, it should examine the interests concerning potential students' information seeking. Therefore, studies were conducted on the content of printed communications available to applicants (Mortimer, 1997 in Hemsley-Brown and Oplatka, 2006).

According to statistics from the United States Department of Education, there were more than 25,000 HEIs worldwide in 2024. The United Nations Educational, Scientific and Cultural Organization (UNESCO) estimates that there are approximately 254 million students enrolled in different modalities designed according to the needs of each audience.

It is common to view students as autonomous individuals who make their own decisions about selecting a university. Some studies challenge this perception, pointing out that the students are selected by institutions (Maringe, 2005).

Many scholars (Mazzarol, Norman Soutar and Sim Yaw Seng, 2003; Maringe, 2005; Zheng, 2014; Ahmad and Buchanan, 2016, 2017; Kalimullin and Dobrotvorskaya, 2016; Ahmad and Hussain, 2017; Li, 2020; Sim *et al.*, 2021; Yue, Gong and Ma, 2024) support the idea that the student's decision-making process is determined by push and pull factors that influence their decisions.

The Push factors appear in the country of residence and force them to evaluate other alternatives abroad. Push factors are the quality of the program, the academic reputation, the period of study, the expectations on good facilities and employment prospects. In contrast, Pull factors represent the tangible characteristics of countries that can attract students (Maringe, 2005).

Among most students' decision-making factors, based on studies conducted on this diverse topic, there are factors related to economic issues: the cost of academic programs (Briggs and Wilson, 2007; Moogan, 2011; Verghese and Kamalanabhan, 2015; Ahmad and Buchanan, 2016, 2017; Singh, 2016; Ahmad and Hussain, 2017; Bartkute, 2017; Krishnapratap Pawar, Dasgupta and Oleksiyenko, 2024; Roslina Wan Othman *et al.*, 2024), employment opportunities and scholarships (Ahmad and Hussain, 2017; Kusumawati, Perera and Yanamandram, 2019; Li, 2020; Sim *et al.*, 2021; Krishnapratap Pawar, Dasgupta and Oleksiyenko, 2024; Roslina Wan Othman *et al.*, 2024).

The topic of the quality of higher education has been highlighted by the students in the decision-making process. The analysed papers have addressed: the reputation of HEIs (McLeay and Wesson, 2014; Verghese and Kamalanabhan, 2015; Kalimullin and Dobrotvorskaya, 2016; Ahmad and Hussain, 2017; Bartkute, 2017; Cebolla-Boado, Hu and Soysal, 2018; Kusumawati, Perera and Yanamandram, 2019; Le *et al.*, 2022; Nuseir and El Refae, 2022), the quality of academic programs and the physical evidences of universities (Al-Fattal and Ayoubi, 2013; Shah *et al.* 2013 in Ahmad and Buchanan, 2016; Kalimullin and Dobrotvorskaya, 2016; Ajibola *et al.*, 2017; Li, 2020; Krishnapratap Pawar, Dasgupta and Oleksiyenko, 2024), and the category of the faculty (Verghese and Kamalanabhan, 2015; Kalimullin and Dobrotvorskaya, 2016; Singh, 2016; Bartkute, 2017).

The opinion and support of parents in the decision-making process are also highlighted (Briggs and Wilson, 2007; Ajibola *et al.*, 2017; Kusumawati, Perera and Yanamandram, 2019; Nuseir and El Refae, 2022), the appropriate information at the decision-making stage (Moogan, 2011; Bartkute, 2017; Le *et al.*, 2022) and the word of mouth (WOM), which has been studied by (Ajibola *et al.*, 2017; Kusumawati, Perera and Yanamandram, 2019; Nuseir and El Refae, 2022). This set is more related to the topic of integrated marketing communications.

The phenomenon of internationalization mobilizes a large number of students in different study modalities within the higher education sector. For example, the decision to study abroad is increasingly present in the alternatives evaluated by students. By 2024, UNESCO estimated that around 2.4 million students will be studying outside their country of residence. Therefore, special attention must be paid to factors related to internationalized programs and institutions (Zheng, 2014; Ahmad and Buchanan, 2016; Krishnapratap Pawar, Dasgupta and Oleksiyenko, 2024), facilities in the emigration process (Singh, 2016), culture and stability in the host country (Verghese and Kamalanabhan, 2015; Ahmad and Buchanan, 2016; Singh, 2016; Bartkute, 2017; Li, 2020; Sim *et al.*, 2021; Roslina Wan Othman *et al.*, 2024) and location and proximity (Nuseir and El Refae, 2022).

The study conducted by Chadee and Naidoo (2009) highlights social factors, including the affinity between the host and home countries, institutional and academic reputation, geographic and cultural proximity and migration opportunities. Economic factors refer to tuition fees and the cost of living. Political factors include the promotion of international education through foreign policy and development aid programs related to higher education and universities.

The authors (Krishnapratap Pawar, Dasgupta and Oleksiyenko, 2024) conducted their study using a convenience and intentional sample, ensuring the diversity of international students. Therefore, they identified the following factors: the internationalization of education combined with affordable access, physical evidence, employment opportunities and cultural experience as the most outstanding factors. The study conducted by Mazzarol *et al.* (2003) addressed how university image, academic performance, satisfaction and loyalty jointly influenced the decisions of international students.

However, Bartkute (2017) has expressed the need to focus more on studies of both genders to understand the common and differentiating factors, as well as some specific characteristics to focus their marketing strategies.

Among the most recent research is Roslina Wan Othman *et al.* (2024) identifying nine important factors for Malaysian students: cost and program-specific factors, reputation, social factors, campus physical evidence, employment prospects, Alumni, location and the institutional marketing.

An increasingly popular trend is the creation of International Branch Campuses (IBCs) spread around the world. According to (Mazzarol, Norman Soutar and Sim Yaw Seng, 2003; Ahmad and Buchanan, 2017; Sim *et al.*, 2021) it is a widely used international positioning method today. However, it is important to know students' criteria when choosing IBCs in Malaysia. In addition, other factors such as economic, political, social and personal factors determine the decision of students in an integrated way.

Regarding personal factors, Yue, Gong and Ma (2024) highlighted the need to consider micro and personal aspects, including the institution and the communication channels for various audiences. The personal aspects of each student must be combined with the wide range of factors that determine push and pull models when referring to the decision-making process. The authors agree with the above approach, since it takes into account students' personal characteristics and preferences.

### **3.2. The vision of the student as a “consumer” in higher education**

The subsection will address the obtained results of the RQ2. The vision of considering the student as a “consumer” allows the design and implementation of more effective marketing strategies in higher education. A relationship is established between the student's needs and the strengths of the institution (Jaworski and Kohli, 1993 in Guilbault, 2018). This leads to the creation of an internal environment that supports student care for achieving more profitable results.

According to Conway, Mackay and Yorke (1994) the HEIs should support a market orientation in their objectives. This is a correct approach to developing successful strategies of Customer Relationship Management (CRM). These relationships will be approached from the students' perspective and for their benefit, meeting their needs, objectives and goals. It is considered appropriate to foster and strengthen Student Relationship Management (SRM) so that it continues even after the completion of their academic programs.

According to Guilbault (2018) the marketing of any product requires an understanding of the customer. Research on marketing and customer satisfaction in the higher education sector highlights the need to consider the student as a consumer.

The same author (Guilbault, 2018, p. 3) stated that: “Universities are recognizing that students are also customers and the need to provide an excellent customer experience across the student lifecycle”.

The study conducted by Cardoso, Carvalho and Santiago (2011) emphasizes that among the public sector reforms is the emphasis on consumer-oriented services. Hence, positioning the student as a “consumer” would facilitate relationship management with the university community. This would be a competitive advantage for targeting marketing strategies most appropriate to the context and students.

Therefore, according to (Cardoso, Carvalho, and Santiago, 2011; Guilbault, 2018), addressing the vision of conceiving students as “consumers” is considered an opportunity and an advantage. This will allow to obtain more personalized marketing plans and strategies, establishing deeper and more lasting relationships. The authors of the research agree with the previous approach.

## **4. Conclusions**

The decision-making process is generally determined by the Push and Pull model, which is determined by different issues. The economic factors are related to the influence of the cost of academic programs, employment opportunities and

scholarships. Considerable importance is placed on factors related to the quality of higher education, such as the reputation, the quality of the academic programs, the institutions' physical evidence and the relevance of the teaching staff. Furthermore, the opinions and support of parents in the process, appropriate information during the decision-making stage and WOM continue to be highly considered factors. This latter set of factors is more closely related to the topic of integrated marketing communications.

The globalization of higher education has enabled widespread university mobility. Therefore, special attention must be paid to factors related to internationalized programs and institutions, facilitating the emigration process, culture and stability in the host country, as well as location and proximity. One example is the IBCs, which have been continuously gaining popularity. This emphasizes the need to understand the preferences that the students evaluate when selecting a study modality and HEI.

It is necessary to combine the micro-level and personal aspects of students with the wide range of factors that comprise the Push and Pull model for personalizing the decision-making process. Therefore, it is considered an opportunity and advantage for HEIs to embrace the vision of conceiving students as “consumers”. This will allow more personalized plans and strategies, managing deeper and longer-lasting relationships through SRM and highlighting the relevance of marketing.

The results of this article can serve as a reference for government administrators, university managers and professors in their decision-making processes and the design of marketing strategies. Since 2010, there has been an increasing number of publications, demonstrating the interest of the university community in the topic.

This research presents limitations that can be overcome in future studies. Although the search for articles covered a broad period, from 1998 to 2024, it was only conducted in the Scopus database. Hence, future research should incorporate other databases to increase the number of documents analysed. Furthermore, it is recommended to study both genders (Bartkute, 2017), as well as different cultures, regions and countries to understand common factors and identify specific characteristics that allow comparisons.

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