

**The Role of Information Sources and Requirements
in Students' Choice of Higher Education Destination:
A Study from a New Emerging Higher Education
Hub**

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ABSTRACT

Attracting and enrolling international students have become the primary concern of marketing efforts of higher education institutions. For this purpose, understanding the decision-making process of students is vital. Beside much research about factors affecting international students' choice available in literature, little is known about what international students seek to acknowledge and prioritize in terms of information sources and requirements. This study, examines the information sources, requirements, and choice factors of international students who study their higher education in an emerging higher education destination.

This study is conducted through a quantitative approach, based on both Exploratory Factor Analysis (EFA) and the Analytic Hierarchy Process (AHP). A survey was conducted with first-year overseas students. These students were targeted since they have the most recent experience on how they took the decision to choose the university to study. Data for the survey is collected by two sets of questionnaires (A & B). Questionnaire A is designed to gather data about information sources and requirements of first-year overseas students studying in a state university of North Cyprus. Questionnaire B is used for prioritizing information sources and requirements of overseas students.

University websites are identified as the most used sources of information. According to the study's findings, job and scholarship opportunities are identified as the first and most crucial concern of international students. This study is of particular significance for universities in newly emerging higher education destinations to gain a better

understanding of decision-making process of students that will enable them to design effective recruitment and communication strategies.

Keywords: international students, higher education, information requirements, information sources.

ÖZ

Uluslararası öğrencileri çekme ve üniversite bünyesine katma, yüksek öğretim kurumlarının pazarlama çabalarının birincil önceliği haline gelmiştir. Bu amaçla, öğrencilerin karar verme süreçlerini anlamak büyük önem taşımaktadır. Literatürde uluslararası öğrencilerin seçimini etkileyen faktörlerle ilgili çok sayıda araştırma bulunmasına rağmen, uluslararası öğrencilerin bilgi kaynakları ve bilgi ihtiyaçlarının ne olduğu ve hangi bilgi kaynaklarına ve bilgi ihtiyaçlarına öncelik verdikleri ile ilgili çok az şey bilinmektedir. Bu çalışma, yüksek öğrenimlerini geliştirmekte olan bir yüksek öğretim destinasyonunda okuyan uluslararası öğrencilerin bilgi kaynaklarını, bilgi ihtiyaçlarını, ve seçim faktörlerini incelemektedir.

Bu çalışma hem Açıklayıcı Faktör Analizi (AFA) hem de Analitik Hiyerarşi Prosesine (AHS) dayanan nicel bir yaklaşımla yürütülmüştür. Deniz aşırı ülkelerden gelen birinci sınıf öğrenciler ile anket yapılmıştır. Bu öğrenciler, okumak için üniversiteyi seçme kararını nasıl adıklarına dair en taze deneyime sahip oldukları için hedef alınmıştır. Çalışma için veriler iki anket seti (A ve B) tarafından toplanmıştır. Anket A, Kuzey Kıbrıs'ta bir devlet üniversitesinde öğrenim gören denizaşırı birinci sınıf öğrencilerinin bilgi kaynakları ve bilgi ihtiyaçları hakkında veri toplamak için tasarlanmıştır. Anket B, denizaşırı öğrencilerin bilgi kaynakları ve bilgi ihtiyaçları açısından önceliklerini belirlemek için kullanılmıştır.

Üniversite web siteleri en çok kullanılan bilgi kaynakları olarak tespit edilmiştir. Araştırmanın bulgularına göre, iş ve burs olanakları uluslararası öğrencilerin ilk ve en önemli önceliği olarak tespit edilmiştir. Bu çalışma, özellikle yeni ortaya çıkan

yükseköğretim destinasyonlarındaki üniversitelerin, öğrencilerin karar verme süreçlerini daha iyi anlamaları ve etkili tanıtım ve iletişim stratejileri tasarlamaları açısından büyük önem taşımaktadır.

Anahtar Kelimeler: uluslararası öğrenciler, yüksek öğretim, bilgi ihtiyaçları, bilgi kaynakları.

DEDICATION

To My Family

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LIST OF ABBREVIATIONS

AAS	Accommodation, Access and Shopping Facilities
AD	Advertisements
AHP	Analytic Hierarchy Process
API	Academic Program Issues
DM	Direct Marketing
EFA	Exploratory Factor Analysis
EPS	Electronic and Published Sources
ER	Entry Requirements
GEO	Graduates' Employment Opportunities
GRI	General Reputation of the Institution
IMC	Integrated Marketing Communication
IRs	Information requirements
IRI	Institution Recognition and Interaction
ISs	Information Sources
IS	Informal Sources
JSO	Job and Scholarship Opportunities
LL	Local Life
MTE	Medium of Teaching and Educational Issues
OF	On-Campus Facilities
SAI	Students and Academics' Interaction
SS	Social Life
QL	Quality
WOM	Word-of-mouth communication

Chapter 1

INTRODUCTION

Over the past decade, the higher education landscape has undergone significant transformation. Prospective university students often go outside of their own country for the best higher education opportunities in today's increasingly globalized world. As a result, there is more student mobility in higher education institutions. This trend resulted in changes relatively in the social, political, and economic forces of globalization. Attracting and recruiting international students has evolved into an important priority for many higher education institutions (Wilkins and Huisman, 2011b; Alebeek and Wilson, 2019).

Over the past 20 years, there has been a constant increase in the mobility of overseas students. In 2020, around 6.4 million overseas students were studying worldwide and the majority of the overseas students were from developing countries (67%) (OECD, 2021). According to data from the Institute of International Education (2022), the United States was a popular study destination for foreign students in 2021–2022, hosting 948,519 of them. The United Kingdom, Canada, France, Australia, and Russia were the next most popular study destinations. For instance, 15% of all international students globally studied in the United States in 2021. This is followed by the United Kingdom (10%), Canada (9%), France (6%), Australia (6%), and Russia (6%) respectively. As stated by the Institute of International Education (2020), the top two countries of origin for international students are still China and India in the United

States. The majority (52%) of all foreign students studying in the United States are from China and India. With 290,086 students enrolled in United States universities in 2021/22, China is still the leading sending nation. In 2021/22, India, the second-largest sending nation, sent 199,182 overseas students, a rise of 19% from the previous year. Although these nations have received the majority of international students, others, including Malaysia, Singapore, and the Middle East, have been tailoring their policies to position themselves as new, developing centers for higher education (Wilkins, Balakrishann, and Huisman, 2012) and actively marketing themselves to attract more international students. This has further intensified the competition in the global higher education landscape.

Universities are more eager than ever to compete on global markets, while competition within their own countries has intensified due to diminishing or stagnant local demand. The host countries consider international student recruitment as a significant source of income (OECD, 2021). International students contribute significantly to the economy and create a large amount of revenue. As indicated by the United States Department of Commerce, students from abroad made \$32 billion in economic contributions to the United States in 2021 (Institute of International Education, 2022). In the similar vein, according to the report of the Universities UK International (UUKi) and the Higher Education Policy Institute (HEPI), the contributions of international students to the United Kingdom economy is £28.8 billion during the years of 2018-2019 (Higher Education Policy Institute, 2021). Valero and Van Reenen (2019), by using UNESCO dataset on universities which included approximately 15,000 higher education institutions in roughly 1500 regions across 78 countries, found a strong correlation between future growth in the GDP per capita and an increase in the number of

universities. Furthermore, Valero and Van Reenen (2019) reported that an area's GDP per capita rises by over 0.4% for every 10% increase in the number of universities in the area. As indicated by Altbach and Knight (2007) and Wilkins and Huisman (2011), international students are significant not only in terms of the financial contributions they made, but also in terms of the valuable cultural and social contributions they made to the host nations. Additionally, international students in the long-term, are likely become part of domestic labor markets, fostering innovation and contributing economic performance (OECD, 2021).

1.1 Problem of the Study

Based on the applicants' perspective, selecting a university and a programme of study is a highly interactive, risky and complex process (Moogan, Baron and Harris 1999; Briggs and Wilson 2007), partly due to the vast number of institutions and degree courses being offered. Due to the competitive environment and variety of alternatives available, identifying information requirements and examining the sources of students, along with the crucial choice factors, is of extreme importance. Higher education institutions, in addition to concentrating on recruiting more students, also try to attract high-calibre learners, so it is vital to disseminate information via the appropriate channels and disseminate the correct content to meet potential students' expectations. As suggested by Briggs and Wilson (2007) and Briggs (2006), the availability of adequate information is essential in order to make a well-informed decision. Marketing activities should avoid overloading students with information regarding certain specific issues that play minor role in their decisions whilst ensuring that sufficient information is provided on critical issues. Furthermore, marketing activities would be much more effective if the students receive this information from the right sources rather than sources that they do not rely on.

Even though there have been numerous research investigating what factors affect overseas students' selections of universities, little is known about what information these students seek to obtain, the information sources they make use of and choice factors in emerging higher education destinations. The majority of studies, as noted by Wilkins et al. (2012), focused on students moving to Western nations which includes "Australia, the United Kingdom, and United States" (Wilkins et al., 2012, p.415).

1.2 Purpose of the Study

The main aims of this study are; (a) to identify and examine sources that students use to find information about higher education institutions and to prioritize information sources and (b) to identify and examine information requirements and prioritizing factors that are perceived as significant by students when making higher education destination decision.

1.3 Research Questions

The research questions that this thesis aims to address are;

- 1- What are the sources of information students rely on to obtain information when making higher education decision?
- 2- Which information sources students rely on more to obtain information when making higher education decision?
- 3- What are the information requirements of students when making higher education decision?
- 4- What are the most important choice factors influencing students' choice of higher education institution?

1.4 Significance of the Study

North Cyprus is a newly emerging higher education destination in the Eastern Mediterranean. Since the 1990s, North Cyprus' higher education market has

developed into a significant industry that boosts the country's economic growth. Katircioğlu (2010) reported that “international tourism and the higher education sector are catalysts for economic growth in North Cyprus” p.1970. Universities in North Cyprus recently introduced a variety of initiatives aimed to boost the enrolment of international students and market themselves as a knowledge and education center in the Eastern Mediterranean. There are around 103,108 students studying at the universities in North Cyprus, and around 47,000 overseas students are from Turkey whilst the remaining which is around 43,118 are from third countries (State Planning Organization (SPO), 2020). Internationally recognized and accredited higher education institutions and quality education in a safe, friendly environment at an affordable cost increased the demand for university education in North Cyprus. However, in the case of North Cyprus as a higher education destination, there is little research on the students' information needs, sources, and choice factors. To the author's knowledge, little empirical research has focused explicitly on the decision-making process of students in North Cyprus. The perceptions of service quality in higher education institutions have been the focus of prior studies on students enrolled in higher education institutions in North Cyprus (Nadiri, Kandampully, and Hussain 2009; Nadiri 2006). Through this study, we intend to contribute to the filling of this gap. Knowing about the different requirements of students, whose choice is made with various priorities in mind, is crucial for the provision of the appropriate information to the right target. Considering the significant potential for higher education in this major, Mediterranean education destination with close ties to Europe and the surrounding regions, research on the information needs and the sources of students would provide a valuable contribution to the literature. Research results may support higher education institutions to design more effective communication and recruitment strategies and

tailor promotional and marketing campaigns to better address overseas students' information needs.

1.5 Methodology

The study followed a quantitative research approach as a primary methodology and gathered data via survey questionnaires. Two sets of Questionnaires (A&B) are designed to gather data. Questionnaire A is designed to gather data about information sources and requirements of first-year overseas students studying in a state university of North Cyprus. Data for identifying information sources and requirements is obtained from surveying 700 first-year students. Questionnaire B is used for prioritizing information sources and requirements of overseas students. Data for prioritizing information sources and requirements obtained from surveying 40 first-year undergraduate and postgraduate students.

In order to identify information requirements (IRs), and information sources (ISs), exploratory factor analysis (EFA) has been carried out on the students' responses obtained through a survey using SPSS 23.0. To calculate the priority ratings of the information requirements and sources dimensions' factors, the Analytic Hierarchy Process (AHP) is employed.

1.6 Structure of the Thesis

There are six chapters in this thesis. Starting with a statement of the problem, this chapter discusses the main motivation for carrying out the study. Next, Chapter 1 discusses the purpose of the study and by discussing the significance of the study, this chapter reveals the potential contribution of the study to the literature on higher education decision. Finally, this chapter provides the research methodology.

Chapter 2 gives literature review on services marketing theory by discussing characteristics of services, information search and information sources, and perceived risk. This chapter continues with marketing communications and communication theory of personal influence and two-step flow of information. This chapter also includes a literature review on models for higher education selection, decision-making process, and choice determinants, as well as students' information sources.

Chapter 3 explains the methodology of the research by providing the sample design, the development of the questionnaires and the data collection process. Data analysis is also provided in this chapter.

Chapter 4 provides the data analysis and findings regarding the information sources and requirements. This chapter continues with the development of the hierarchical structure and provides the Analytic Hierarchy Process (AHP) models for prioritizing information sources and requirements. Finally this chapter provides the results of the AHP.

The primary findings of the study are addressed in Chapter 5.

Chapter 6 is the conclusion and implications section of this thesis. Limitations of the present study and opportunities for future studies are also presented in this chapter.

Chapter 2

LITERATURE REVIEW

This research is built on both services marketing and consumer behavior perspective. This chapter presents the literature review on services marketing theory by discussing the characteristics of services, the information search, the information sources, and the perceived risk. Literature review continues with marketing communications and communication theory of personal influence, and two-step flow of information. Literature review on the models of the higher education selection process are also presented. Finally, decision-making process, information sources, and the choice factors are reviewed in this chapter.

2.1 Services Marketing Theory

From the marketing perspective, higher education is classified within the service sector (Zeithaml, Bitner, and Gremler, 2017). Businesses that operate in the service industries have more difficulties in understanding the decision-making behavior of their customers than those manufacturing goods. Decision-making behavior is a complex process. The process begins with the awareness of a need and ends with a purchase decision. Consumers facing with different alternatives, have difficulties while evaluating and selecting products and services. In the case of a service, the decision-making process is not that simple since services are intangible and by virtue of their very nature, may be viewed as more risky. Similarly, Simões and Soares (2010) stated that because of their essential nature and the distinctive features of services (inseparability, intangible nature, variability, and perishability), purchases of services

are thought to be riskier than those of products. Zeithaml (1981) claims that “services are more difficult to evaluate than goods and that, as a consequence, consumers may be forced to rely on different cues and processes when evaluating services” (cited in Murray, 1991, p.11). The characteristics of services create “significant differences in the way in which customers purchase and use services” (Doole, Lancaster, and Lowe, 2005, p.169) and need to be understood by businesses. The following part gives the literature review regarding marketing of services including distinctions between goods and services, information search, information sources, and perceived risk.

2.1.1 Characteristics of Services

The development and growth in the services sector have increased the scholars’ attention on studying services marketing. There have been long debate among scholars about the differences between goods and services and several authors have argued that the marketing discipline had been dominated primarily with marketing of physical goods (Shostack, 1977; Grönroos, 1978; and Gabbott and Hogg, 1994) and may not entirely suited to the marketing of services. Many scholars argued that new concepts and a clear understanding of the problems of marketing of services required for effective and successful services marketing (Grönroos, 1978; Shostack, 1977). Generally, characteristics of services identified and cited by several authors as perishability, simultaneity of production and consumption, nonstandardization, and intangibility (Murray, 1991; Zeithaml et al., 2017). These characteristics have been identified as the distinguishing characteristics of services (Writz and Lovelock, 2021). One of the most significant differentiating features of services is acknowledged to be intangibility. “Because services are performances, rather than objects, they cannot be seen, felt, tasted, or touched in the same manner in which goods can be sensed” (Zeithaml, Parasuraman, and Berry, 1985, p.33). For instance, Rushton and Carson

(1989) reported that a key factor affecting how customers evaluate a product is its basic nature—specifically, how tangible or intangible it is. Hartman and Lindgren (1993) found close association between intangibility and difficulty of evaluation. Similarly, Murray (1991) reported intangibility as a basis for difficulty in pre-purchase evaluations. Simultaneity of production and consumption means that services are consumed as they are produced thus service delivery is inseparable from the customer. Heterogeneity characteristic of services related with the variability of a service performance and thus services “cannot be standardized in the way that goods can” (Rushton and Carson, 1989, p.26). Perishability and absence of ownership are two further traits of services. Since services cannot be kept, resold again, or returned like products can, they are considered perishable. The concept of ownership identified by Judd (1964) and Wyckham, Fitzory, and Mandry (1975) and concerns the lack of ownership. “What is owned is the benefit of service, not the service itself, i.e. in terms of a holiday the consumer has the benefit of the flight, hotel, and beach but does not own them” (Gabbott and Hogg, 1994, p.313). Wyckham et al. (1975) argued that lack of ownership is general to all services but not to all product purchases.

Products and services are also distinguished according to the ease of evaluation and difficulty of evaluation continuum as search, experience and credence qualities (Lovelock and Wright, 2002, p.83). The search and experience qualities are identified by Nelson (1970). Search attributes are the product attributes that consumers can assess and identify before making a purchase such as price, size, and so on. Most tangible products carry search attributes in which consumers can evaluate products prior to purchase (e.g. clothing, furniture, and motor vehicle). Experience qualities are those aspects of a product that can only be assessed after being purchased or while

being consumed. Many services carry experience attributes (e.g. restaurant meals, haircut, and entertainment). Gabbott and Hogg (1994) indicated that “the more tangible the product the more dominant are the search qualities and the more intangible the less information is available before consumption” p.315. Services therefore have high experience attributes while having low search attributes. The third quality dimension was added by Darbi and Karni (1973) (cited in Mitra et al., 1999) as credence qualities. Credence qualities are the attributes that can’t be assessed by consumers even after a product has been purchased and consumed (e.g. education, computer repair, and legal services) and they are the most difficult to evaluate (Zeithaml et al., 2017). As indicated Patti and Chen (2009), higher education is considered as a credence based service which involves high involvement, high intangibility, and complexity. As stated by Chocarro, Cortinas, and Villanueva (2021), the perception of risk is greater when purchasing credence services as opposed to experience or search service purchases.

2.2 Information Search and Information Sources

Information search is an important phase of consumer decision-making process and considerable attention have been given by several authors. Consumers collect variety of information and rely on different information sources to arrive at a final purchase decision. Thus, types of information and information sources play essential role in their purchase decision process. Understanding this process is very essential for effective communication and marketing. Consumers primarily employ two categories of information sources: internal and external. These sources are utilized by consumers to conduct information search and manage perceived risk (Murray, 1991). Internal search identified by Bettman (1979a, b, cited in Murray 1991) as a scan of memory. Internal search emphasizes that consumers first scan their memory when they engage

in a purchase decision. Therefore, initially the consumer looks over knowledge they have stored in their minds regarding previous purchases. For instance, Jacoby, Chestnut, and Fisher (1978) found positive correlation between past purchase experience and search behavior. If the internal search is not available which means consumer hasn't got any past experience with the product or service, or information is insufficient a consumer gather information from external sources. Andreasen (1968, cited in Mitra et al., 1999) recognized information sources as "(1) impersonal advocate; (2) impersonal independent (3) personal advocate; and (4) personal independent" p.212. While information from popular articles and television programming are examples of impersonal independent source, print media and broadcast advertising are examples of impersonal advocate sources. Personal independent sources contained information gained from friends and family, whereas personal advocate sources included information obtained from salespeople. Cox, (1967, cited in Mitra et al., 1999) classified information sources as consumer dominated sources that marketer has little control such as interpersonal information channels, marketer dominated sources that controlled by marketer such as adverting promotion...etc., and neutral sources that neither marketer nor consumer have control over them such as consumer reports. Information sources also categorized as impersonal sources (marketer generated and non-marketer generated) and personal sources (recommendation or information from friend, family, and peers) (Simões and Soares, 2010).

2.2.1 Perceived Risk

Perceived risk defined by Schiffman and Kanuk (2007) as "the uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions" (p.187). "The concept of risk implies that most individuals make purchase

decisions under some degree of uncertainty about a particular product and / or brand” (Murray, 1991, p.11). The main types of risks that consumers may face while making product decisions includes “functional, physical, financial, social, psychological, time risk” (Schiffman and Kanuk, 2007, p.187), and sensory (Wirtz and Lovelock, 2021).

As stated by Wirtz and Lovelock (2021), services having high experience and credence attributes usually face with greater perceived risk. The characteristics of services imply that services are difficult to evaluate before purchasing since all services carry either experience qualities or credence qualities and “the difficulty of obtaining pre-purchase information and knowledge increases as one moves from search-based to credence-based services” (Mitra, et al. 1999, p.211). The difficulty of evaluation creates pre-purchase uncertainty and carries greater degree of risk, since the consequences of consumption are often uncertain and unknown. According to Mitra et al. (1999) “the heightened uncertainty resulting from the lack of knowledge and information implies higher perceived risk on the part of the consumer” (p.211). As a consequence, consumers look for information in order to reduce risk. Murray (1991) found positive correlation between perceived risk and information search. “To cope with the hazards of buying, consumers tend to develop risk-handling strategies” (Perry and Hamm, 1969, p.351). They may stay brand loyal in order to reduce risk associated with buying or they may use several sources of information such as advertising. WOM communication from family, from friends, from salespeople, and the information from the media are some of the information sources consumers use (Schiffman and Kanuk, 2007). The other strategies for reducing risk include brand loyalty, brand image, store image, buying the most expensive brand, and seeking reassurance (Schiffman and Kanuk, 2007).

For instance, Perry and Hamm (1969) investigated the relationship between the significance of personal influence and the level of risk in purchasing decisions. Their study findings revealed that “the higher the risk involved in a particular purchase decision, the greater the importance of personal influence” p.354.

Mitra et al. (1999) examined information search, information sources, perceived risk, and behavioral intentions of consumers when services are classified into experience, search, and credence attributes. The findings of Mitra et al. (1999) indicated that risk associated with purchase of service varied across search, experience, and credence attributes. Thus, credence, experience, and search qualities had different levels of perceived risk. For instance, services having credence attributes had higher levels of perceived risk. Conversely, services having search attributes perceived as having lower perceived risk by the consumers. Mitra et al. (1999) also reported that “high risk credence services are associated with greater reliance on personal information sources” p. 223. Thus, the findings of the study supported that personal sources were preferred by the consumers than impersonal sources of information for all service categories. Finally, the study done by Mitra et al. (1999) reported that the same service providers were more likely used by satisfied customer for experience services than for search services.

2.3 Marketing Communications

Building and maintaining relationships with target customers depends heavily on marketing communications. Kotler and Keller (2012) defined marketing communications as “the means by which firms attempt to inform, persuade, and remind consumers -directly or indirectly- about the products and brands they sell” p.476. Moreover, according to Kotler and Keller (2012) marketing communications

serve as the company's and its brands' voice, providing a platform for interaction and relationship-building with customers. In order to persuade, inform and build long term profitable relationships with targeted customers marketers are using variety of promotional tools which is called the marketing communications mix. The promotion mix includes events and experiences, sales promotion, direct marketing, advertising, WOM marketing, personal selling, public relations, and interactive marketing (Kotler and Keller, 2012). Among the marketing communications mix elements interactive marketing, WOM marketing, and personal selling considered as personal communication channels. On the other hand, events and experiences, public relations, sales promotions, and advertising are considered as nonpersonal (mass) communication channels. However, as indicated by De Pelsmacker, Geuens, and Van den Bergh, (2007) effective marketing requires integration and coordination of various promotional tools. "The promotion mix is the marketer's bag of tools for engaging and communicating with customers and other stakeholders. To deliver a clear and compelling message, each tool must be carefully coordinated under the concept of integrated marketing communications (IMC)" (Kotler and Armstrong, 2018, p.424). According to Percy (2023), IMC needs to be built on a precise planning process that identifies the right audience segments, establishes clear communication goals for these audiences, creates marketing communication that will achieve those goals consistently, and determines the best means of message delivery. Consequently, as the consumers are at the focus of marketing communication strategies understanding how consumers behave and make decisions is necessary for IMC. In the process of strategic planning, this plays extremely significant role. The planning process begins with an overview of the marketing plan, eventually leading to the choice of the target audience, modeling of the brand decision process, identification of the best brand

positioning, development of the communication strategy, and selection of media that is consistent with the communication strategy for effectively communicating the message (Percy, 2023).

Higher education institutions may use variety of marketing communications tools such as advertisements, websites, word-of-mouth marketing, and public relations and so on to communicate and market their offerings to targeted students. Several researchers, for instance, highlighted the web sites, (Brigg, 2006; Lehmann 2017; Lubbe and Petzer 2013), word-of-mouth communications (Lehmann, 2017; Amani, 2022; Briggs, 2006), exhibitions/fairs (Bodycott, 2009), and open days (Briggs, 2006; Veloutsou, Lewis, and Paton, 2005) as being the top significant sources taken into account by students. Thus, the information needs and sources, and choice factors of students can be considered as the main ingredients as well as are the crucial elements that university marketers need to know in order to design and develop effective marketing communications strategies.

2.4 Communication Theory of Personal Influence and Two-Step Flow of Information

The part that personal sources play in influencing the decisions of individuals was documented by Lazarsfeld during 1940 voting study which led to the formulation of original two-step flow of communication hypothesis. The 1940 voting study reported that personal sources such as family and friends were more influential than mass media in influencing voting decisions of individuals (Katz, 1957). Thus, voting study indicated the significance of personal sources in changing people's opinion. The theory of personal influence which was developed by Elihu Katz and Paul Lazarsfeld in 1955 (Baran and Davis, 2003) suggests that personal sources significantly affects the

communication process. Katz and Lazarsfeld argued that “the audience member was in some way *influenced* by his or her ties with others in the interpretation of mass media messages and in making decisions whether to act one way or another on the basis of such messages” (Lowery and DeFleur, 1983, p.180). In addition, they concluded that information does not flow directly from mass media to target audiences. Instead, there is a two-step flow of information in the communication process. The two-step flow hypothesis postulated that information would spread via interpersonal networks, from the media to individuals and then to others, rather than directly from the media to the general public. “The two-step flow hypothesis suggests that marketer controlled communication flows to opinion leaders who in turn communicate it through WOM to their peers, thereby influencing their attitudes and behaviours” (Buttle, 1998, p.248).

In 1955, Katz and Lazarsfeld published the findings of their Decatur study which was conducted to explore the role of influential people in four areas of decision making of consumers and found that personal influence had a bigger impact on people’s decision to change their usage patterns or adopt something new than did official media in the areas of fashion, politics, product brands, and movie choice (Lowery and De Fleur, 1983). Katz (1957) reviewed the study of Merton’s interpersonal influence and communication behavior in Rovere, the Decatur study by Katz and Lazarsfeld, the Elmira study by Berelson, Lazarsfeld and McPhee, and the diffusion of new drug study by Coleman, Katz and Menzel in order to extend the theory of two step flow of communication. Interpersonal relations were seen as networks of communication in the two-step flow theory of communication. According to the findings of these four studies Katz (1957) concluded that, interpersonal relations affect the decision-making

behavior of individuals and acts as a sources of social support, channels of information, and sources of social pressure. The personal influence and two-step flow studies had a significant effect in directing new research studies in the areas of diffusion of information and adoption of innovations.

2.4.1 Personal Influence and Word-of-Mouth Communication

Word-of-mouth communications (WOM) have been identified as the most significant personal sources of information throughout several studies and considerable attention on its importance have been well documented by several researchers (e.g. Katz and Lazarsfeld, 1955; Herr, Kardes and Kim, 1991; Bansal and Voyer, 2000; Murray,1991). WOM communication is “oral person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, concerning a brand, a product, or a service” (Arndt, 1967 cited in Bolen, 1994, p.11). Indeed, it is considered as the most credible sources of information by the receivers. According to Silverman (2001) the power of WOM communication lies on its independence and credibility. Further, it is perceived as sources of experience delivery mechanism. WOM can be negative and positive, and the findings of several studies reported that although the negative events are spread more likely than positive ones both negative and positive WOM communications have a significant role in influencing decisions, attitudes, and preferences regarding products and services (Silverman 2001).

Several studies reported that consumers increasingly turn to personal sources of information to lower the risk involved with service purchases. (Murray, 1991; Mitra et al. 1999). Furthermore, the intangible nature of services creates difficulty of evaluation thus consumers seek opinions of experienced customers and depend greatly

on word-of-mouth. For instance, Friedman and Smith (1993) analyzed consumer evaluation processes for child-care providers and provided evidence on the role of personal sources of information. In their study, they found that “consumers sought and relied more on information from personal sources than from non-personal sources when evaluating services prior to purchase” p.53. Likewise, Bansal and Voyer (2000) investigated the processes of WOM communication within a services purchase decision context and provided evidence on the influence of word-of-mouth information on the receiver’s purchase decision of services. In the same vein, Murray (1991) examined information acquisition of service buyers and provided statistical evidence on the role of personal sources. Murray’s (1991) study found that “for services, personal sources are preferred over impersonal sources of information, more so than for goods” p.19.

In terms of educational services, several studies reported the personal sources of information or WOM as more influential source in the enrolment decisions of the students than traditional marketing tools (Lehmann, 2017; Collins, Şimşek, and Takır, 2022; Johnston, 2010; Lubbe and Petzer, 2013; Pimpa, 2003; Amani, 2022). Thus, WOM is recognized as one of the most useful information source in the field of higher education when it comes to helping prospective students make decisions (Patti and Chen, 2009; Moogan, Baron, and Harris, 1999; Wilkins and Huisman, 2015). As noted by several studies students rely more on information that comes from WOM sources such as parents, teachers, friends and carrier advisors as higher education decision is considered as risky and high involvement decision (Murray 1991; Wilkins and Huisman, 2015; Simões and Soares, 2010).

2.5 Models of the Higher Education Selection Process

Number of student college selection models exists in the literature that explains various factors that affects student's higher education selection process. The early research on college choice models developed from economic and sociological theories. Recently, the models that combined economic and sociological models were developed. Accordingly, student college choice models can be grouped as sociological models on status attainment, economic models on investment decision making, and combined models (Hossler, Hu, and Schmit, 1998; Vrontis, Thrassou, and Melanthiou, 2007).

Economic models also called econometric models view college choice from the perspective of investment decision making (McDonough, 1994). According to this model students behave rationally (Hossler, Schmit, and Vesper, 1999; Lee, 2008) and students compare the benefits against to the costs in order to determine which college to choose (Simões and Soares, 2010; Hossler et al. 1999). Consequently, students' choice will be on the institution who offers the highest value (Simões and Soares, 2010; Obermeit, 2012). In general, these models focus on the students' decision regarding whether or not to pursue further education and how student's narrow down their choice of colleges to reach a final decision. In economic models, students first rule out alternatives before evaluating them. The exclusion criteria are generally determined by a combination of academic, social, and economic aspects, while the evaluation criteria depend on the background of the students' family, academic experiences, and social situations. Economic models typically focused on cost (tuition, financial aid, living expenses), student background (student ability), and parental income. For instance, Fuller, Manski, and Wise's (1982) research based on an econometric model, investigated the impacts of financial aid, tuition, and individual

attributes on the postsecondary education decision of high school students. Their research revealed that a key factor influencing high school students' participation at postsecondary institutions is financial support. The model which is introduced by Kotler and Fox (1995) is considered a typical example of an economic model (Hossler et al., 1999) and consist of "need arousal, information gathering, evaluation of alternatives, decision, decision implementation, and post purchase evaluation" p.251.

Sociological models, which are also known as status attainment models, highlight the influence of variety of factors such as socioeconomic status, teachers and peers, and academic ability on college aspirations of students (Jackson, 1982; Palmer et al., 2004). The literature on status attainment addresses the impact of parental status on their children's future plans. Parental factors and the characteristics of the student's background are considered significant from a sociological standpoint. For instance, Sewell and Shah (1968) studied the influence of intelligence, parental encouragement, and socioeconomic status on high school graduating seniors' college plans. The analysis of the study revealed that parental encouragement, socioeconomic status, and intelligence had considerable relationships to college plans of students. Parental encouragement was found as the powerful intervening variable between socioeconomic status and intelligence of the student and the student's educational aspirations. Parental encouragement had exerted strongest influence on the students who scored high on intelligence and whose families had high socioeconomic positions. In their model Hossler and Stage (1992) focused on students' predisposition to attend a college. Predisposition refers to the initial stage of the college selection process while students decide whether or not to pursue formal education. According to the Hossler and Stage's (1992) study findings, parents' educational expectations for their children,

background information about the students and their family, level of student involvement in school, and student achievement were the major determinants in students' predisposition to attend a university. Among these influences parents' educational expectations for their children found to be the most significant influence. Another study by Davis, Noland, and Deaton (2001) found academic ability, family income, and parents' educational levels as important factors that determined post-secondary education decision of high school students.

Combined college choice models draw from sociological and economic perspectives and combine both processes. Economic models which reflects the impact of cost on the students' decision-making and sociological models which shows the impact of interrelated variables influencing college aspirations were combined to reflect a more broad view of students' college aspirations and represent the most thorough framework for understanding students' choice (Simões and Soares, 2010; Hossler et al. 1989). More specifically, the goal of the integrated models is to pinpoint variables that influence decision-making from a policy analysis standpoint (Bateman and Spruill, 1996). The literature reveals that Chapman's (1981) model for student college choice, Jackson's (1982) student college choice model, Litten's (1982) model for the selection of college, and the Hossler and Gallagher (1987) three stage model are considered as combined models of college choice (Schmit, 1991).

2.5.1 Chapman's Model of College Choice

A model of students' college selection was created by Chapman (1981). This model states that "student college choice is influenced by a set of student characteristics" p.492 (level of aptitude and aspiration) as well as a series of external factors, including significant others (friends and family), college characteristics (the availability of

desired programs, campus environment, cost, and location), and institution's own efforts to communicate with prospective students (see Figure 1).

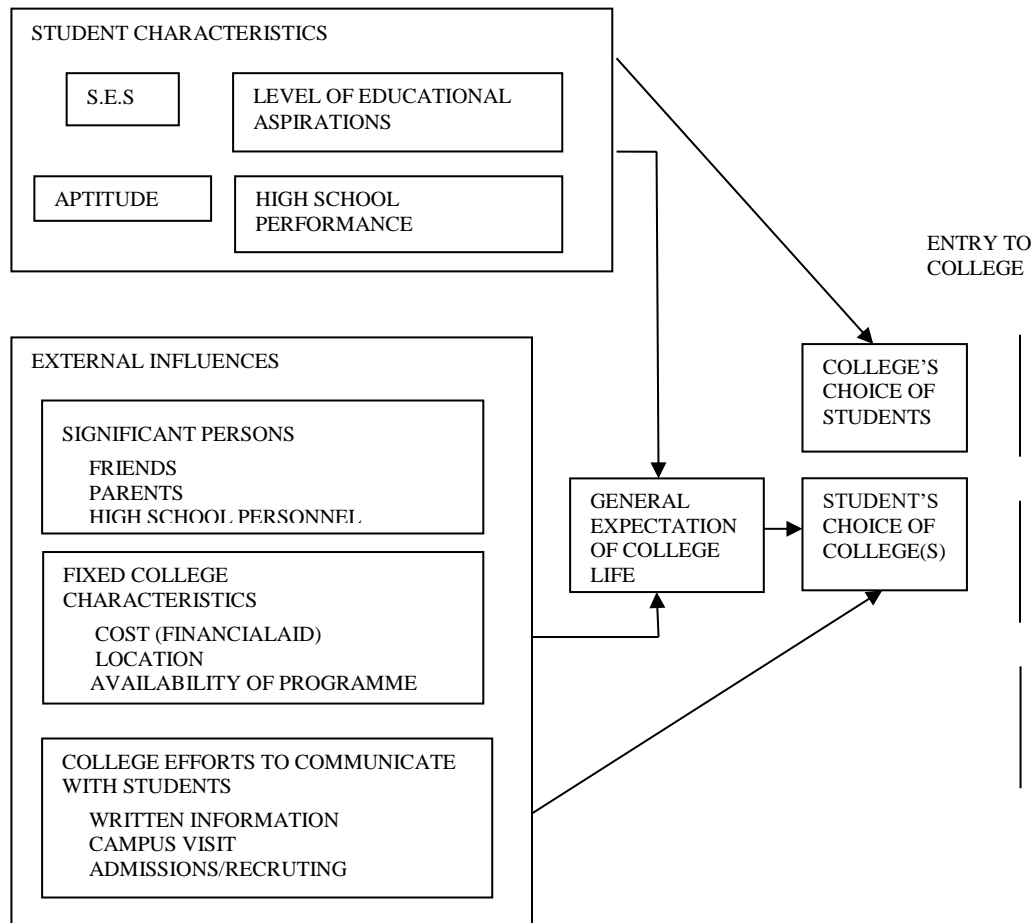


Figure 1: Influences on student college choice (Chapman, 1981)

2.5.2 Litten's Expanded Model of the College Selection Process

Litten (1982) argued that, Chapman's literature review and the model derived from the literature review provided incredibly significant information however the models were highly generalized. A framework of the college decision-making process created by Litten (1982) relies on both social and individual variables that influence students' college decisions (see Figure 2). A wide range of factors impacting the college selection process are included in Litten's (1982) enlarged framework of the college choice. The model has three major components. The first component includes

sociological variables such as background, high school attributes, personal attributes, and environment. The second and third components include economic variables such as influences/media used, college actions, public policy, and college characteristics. Fernandez (2010) stated that the five steps of Litten's (1982) model -college aspirations, search, information collecting, applications, and enrolment- view the student selection process as an ongoing process. According to Bateman and Spruill (1996), Litten's (1982) model presents variables within categories in a more thorough manner than earlier models, and highlights the concept of funnel and segmenting student populations on the basis of gender, race, ability level, parent's geographic location, and educational levels.

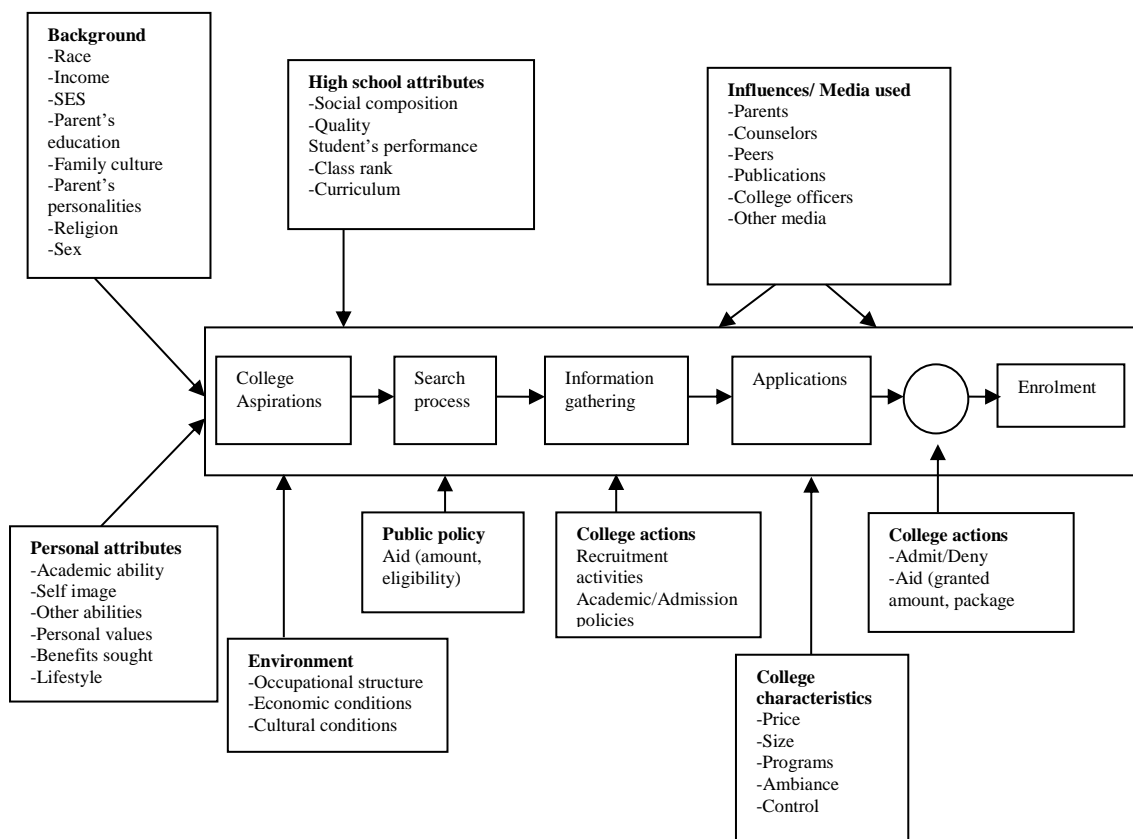


Figure 2: An expanded model of the college selection process (Litten, 1982)

2.5.3 Jackson's Combined Student Choice Model

Three phases—preference, exclusion, and evaluation—are included in Jackson's (1982) integrated model of student choice (see Figure 3). Derived from the sociological model in phase 1 preference, Jackson pointed that student's educational aspirations are strongly correlated with family background, social context, and their academic achievement. In the phase 2 exclusion, economic model is applied in students' college selection decision. In this stage, student gathers information about all available colleges and develops a choice set that involves various colleges to choose from. "Location exerts the strongest influence followed by the availability of accurate information, and finally by family, academic and vocational background and the criteria they entail" (Jackson, 1982, p.240) in the phase of exclusion. In the final phase evaluation, students evaluate colleges in their choice set to make a final decision. According to Jackson (1982), college and job attributes, cost, family background and academic experience are the important variables that affect student's choice.

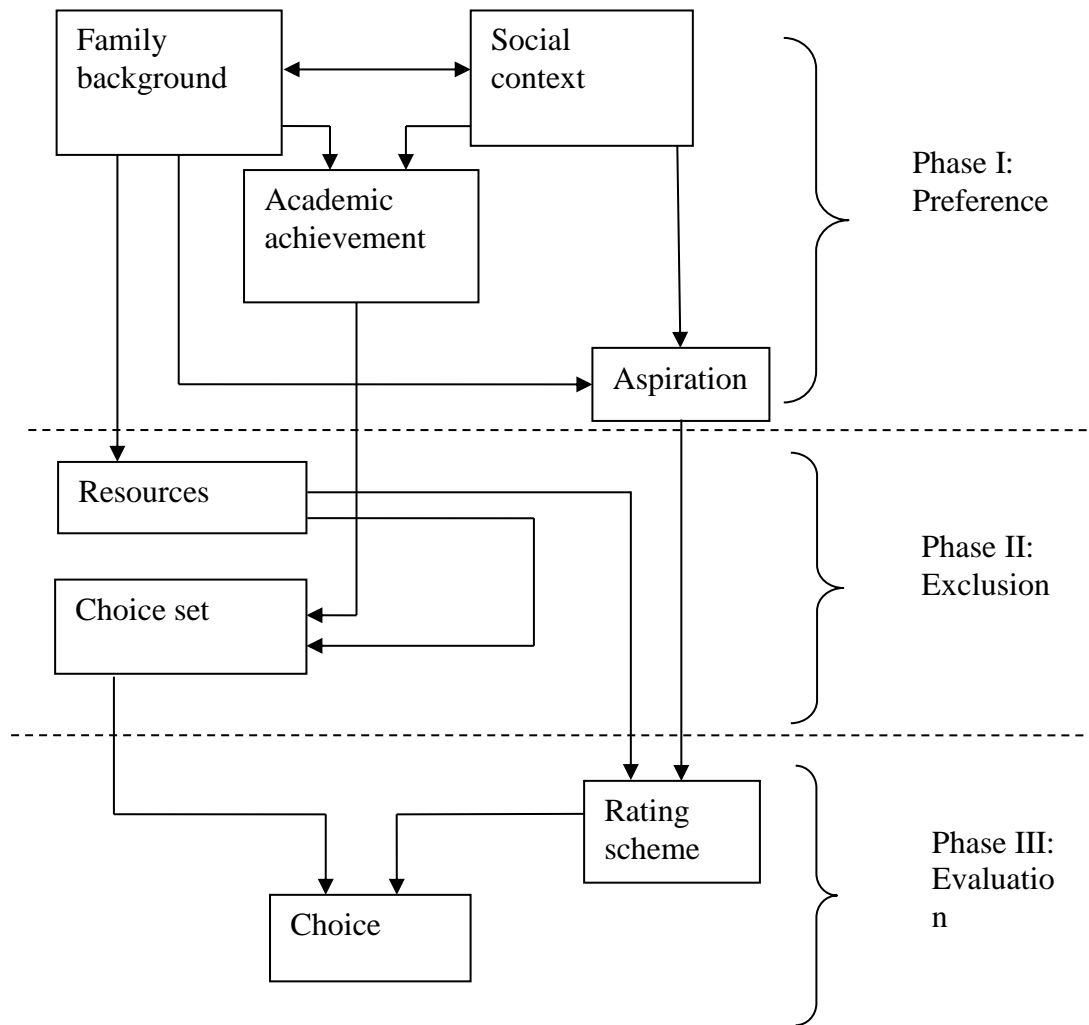


Figure 3: Combined student choice model (Jackson, 1982)

2.5.4 Hossler and Gallagher’s Three Phase Model of College Choice

Three stages were presented in Hossler and Gallagher’s (1987) model of the student college selection process (Cited in Hossler and Stage, 1992). This model incorporated the work of Chapman (1981), Litten (1982), and Jackson (1982) and considered as the “most famous comprehensive model for understanding the college choice process” (Alebeek and Wilson, 2019, p.294). The first stage includes predisposition that focuses on factors affecting students’ decisions whether or not to continue their education after high school. In the second stage search, students identifies their top priorities and look for information about colleges. Finally, in the choice stage students evaluates colleges

and selects a college to attend. In this stage student narrows down his/her choices to a set of specific institutions (see Figure 4). A number of variables impacts the students' choice process including student characteristics such as attitudes and expectations, race and ethnicity, socioeconomic status, and ability as well as some external factors including significant others (e.g. parents and peers), high school background, the communication activities and the attributes of the universities (Hossler et al. 1989). Bergerson (2009) stated that Hossler and Galagher's (1987) model included economic and sociological factors as well as the influence of actions taken by universities on students' decisions such as recruitment activities and financial aid.

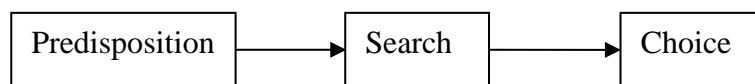


Figure 4: A three phase model of college choice (Cited in Hossler and Stage, 1992)

2.5.5 Push-Pull Model

The Push-Pull model “was first introduced by Lee (1966)” (Alfattal, 2017, p.33). This model utilized in the theory of migration to shed light on the forces impacting the migration of people (Chen, 2007). The model consisted of the combination of push factors, which are regarded to be the driving forces behind leaving one's country of origin, and pull factors, which are regarded to be the driving forces behind moving to another country. This model evolved into the most popular conceptual framework for comprehending the movements of foreign students, students' choice of higher education institutions, and students' decision-making process. Mazzarol and Soutar (2002) stated that push/pull approach can be employed to understand the global pattern of overseas student flows to examine their choice process. According to these authors push factors “operate within the source country and initiate a student's decision to

undertake international study” (p.82). However, “pull factors operate within a host country to make that country relatively attractive to international students” (pg.82). Several researchers examined the movement of overseas students by employing the combination of push-pull factors (e.g. Mazarol and Soutar, 2002; Chen, 2007; Maringe and Carter, 2007; Yang, 2007; Eder, Smith, and Pitts, 2010; Wilkins, Balakrishnan, and Huisman 2012; Bodycott, 2009; Ahmad, Buchanan, and Ahmad, 2016; Alebeek and Wilson, 2019; Moreira and Gomes, 2019).

2.5.6 Marketing Mix Model

Today, it is widely accepted that marketing is essential to all types of businesses, including for-profit and non-profit ones. “Marketing is the process by which companies engage customers, build strong customer relationships, and create customer value in order to capture value from customers in return” (Kotler and Armstrong, 2018, p.29). Perhaps the most essential concepts in marketing is the marketing mix. Marketing mix defined as a “set of controllable marketing tools that an institution uses to produce the response it wants from its various target markets” (Ivy, 2008, p. 289). The conventional marketing mix, which is first proposed by McCarthy (1960), consist of the 4Ps are place, product, promotion, and price. As reported by Zeithaml, Bitner and Gremler (2017), Ivy (2008), and Wirtz and Lovelock (2018), the traditional 4Ps model is best suited for tangible products. On the other hand, for the service industry as the services are intangible and usually produced and consumed simultaneously the service marketers adopt the concept of an extended marketing mix called the 7Ps of services marketing. The 7Ps of marketing mix was originally introduced by Booms and Bitner (1981) (Ho and Law, 2022) and advanced by Kotler and Fox (1995) involves the extension of the traditional 4Ps (Zeithaml, et al. 2017) as people, product, physical evidence, place, promotion, price, and process. The education specific 7Ps

marketing mix approach provided by Kotler and Fox (1995) consist of “program, price, place, promotion, processes, physical facilities, and people” (Al-Fattal, 2010, p.21). Since higher education is considered as a service, several researchers adopted the 7Ps model to examine students’ choice of higher education and their decision making process. For instance, Ivy (2008) conducted a study to determine whether the traditional 7Ps used by students when choosing Master of Business Administration (MBA) programme. The study carried out with 500 newly registered MBA students. According to the findings of the study, Ivy (2008) argued that the traditional 7Ps may not be the ideal strategy for marketing MBA programs and suggested another 7Ps as programme, prominence, price, prospectus, people, promotion, and premiums. Moreover, Ho and Law (2022) by employing the 7Ps of the marketing mix and the five stage consumer decision making process model, examined the variables that impact students while choosing their higher education. Their study found product, price, process, and promotion as the most important factors on the student’s choice, whilst physical facilities, people (teaching faculty), and distance from home considered as less important. Furthermore, the study by Liu, Kamnuansilpa, and Hirofumi (2018) investigated the factors affecting the choice of international students’ destination decisions by utilizing the 7Ps marketing mix framework. Liu et al. (2018), conducted a qualitative study by interviewing 75 international students studying at public universities in China. Based on the study’s findings, the factors affecting the students’ choice categorized as 1- Cost of study (Price), 2- Geographic location (Place), 3-University personnel (People), 4- Administrative service (Process), 5- Information sources (Promotion), 6- Quality of education (Product), and 7- Educational environment (Physical evidence). Among these factors geographical

location (place) was considered the most influential factor affecting the international education destination followed by cost of study (price) (Liu et al. 2018).

2.6 Students' Information Sources and Choice Factors

The consumer decision-making process has formed the basis for research in consumer buying behaviour. When making a purchase, consumers go through a series of stages for decision making to purchase any goods or services. The basic five-stage process comprises “need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behaviour” (Kotler, 2018, p.175). The buying process begins when a customer faces a need or a problem, and it finishes by making a purchase and engaging in post-purchase behavior or evaluation. Once the consumer recognizes a problem or a need, they then move into the information search stage. This search may range from performing a simple memory scan to extensive search during which a consumer collects a wide range of information and consults a variety of sources (Solomon, 2018). In the evaluation of the alternatives stage, information is used to carefully evaluate alternatives to arrive at the overall best choice. Once the consumer makes a choice, a consumer engages in post-purchase behaviour in which a consumer evaluates the product or service' performance considering his or her own expectations.

The buying behavior theory was originally applied to education by Chapman (1986). According to this model students will pass through series of stages as they search for an institution or a subject of study. The stages are “Pre-Search Behavior; Search Behavior; Application Decision; Choice Decision; and, Matriculation Decision” (Chapman, 1986, p.246). When a student realizes the need to pursue higher education, pre-search behavior starts. Parental influences may cause a student to come to this awareness long before the high school years (Chapman, 1986). Students gather

information during the Search Behavior stage about the possible college alternatives from variety of information sources. Maringe (2006) imply that, “the key for institutions here is to know when this happens among groups of students and maximise information opportunities to facilitate the search process” (p.468). Information sources may include family members, relatives, friends, high school teachers, college alumni, and knowledgeable friends attending particular higher education institution (Chapman, 1986). Students at the Application Stage apply to a set of higher education institutions that they are interested. The next step in the student college selection is the Choice Decision. In this stage, students receive acceptance from various institutions and need to decide which one to attend. Choice decision stage ends with the decision selection of particular institution. Finally, in the Matriculation Decision stage students turn up for registration. This model highlights the importance of understanding the underlying reasons students choose particular institution.

2.6.1 Information Search

When a customer searches for relevant information to make a wise decision, they are engaging in information search. There are internal and external information searches. Consumers usually search his or her own memory before obtaining information from external sources to make a decision. Internal searches rely on information already stored in one’s mind or knowledge gained from prior experiences. When internal search is deemed insufficient, external search is required and involves acquiring “new information from both personal and non-personal sources” (Simões and Soares, 2010, p.375). Consumers often look for further information when they face with complex and involved decision. Given its perishability, variability, intangibility, and simultaneity, higher education is viewed as a service (Le, Dobele, and Robinson 2020; Brown, Varley, and Pal 2009). Additionally, higher education can be considered as a

credence service having the characteristics which makes it difficult for students to evaluate (Le et al. 2020; Patti and Chen 2009). As higher education decision is a risky and complicated process, students look for information from various information sources. Based on the previous research, the information sources students use can be categorized into different categories as personal and impersonal (Patti and Chen 2009) and social normative sources, media sources, and direct sources (Goff, Patino, and Jackson 2004). The following part gives the literature review regarding the previous research on students' information sources.

2.6.2 Students' Decision-Making Process and the Information Sources (ISs)

Institutions of higher education need to be aware of and understand the information sources that students utilize while making decisions in order to develop effective communication strategies (Areces et al. 2016; Veloutsou et al. 2004; Le et al. 2020).

This study's literature review revealed that researchers have extensively examined students' decision-making process regarding the ISs students use to obtain information about alternative universities. The primary ISs of students were examined by Goff, Patino, and Jackson (2004) and classified as media, social normative, and direct sources. The latter two categories were shown to be more significant for students who intended to enroll in four-year colleges, whereas media sources were found to be less significant for both two-year and four-year students. Bonnema and Van der Waldf (2008) studied the preferred information sources and the needs of high school students regarding their higher education institution choices and found the same three categories of sources as Goff et al. (2004). Meanwhile, Wiese et al. (2009) examined the information sources that university students, which are enrolled at the universities in South Africa, take into account while making decisions. Their study determined that

visits to university campuses and open days were found to be the most valuable sources, on the other hand advertisements on printed media or television were not identified as significant.

With today's technology, the transmission of multimedia marketing messages via the internet and social media platforms has become increasingly simpler and more adaptable, contributing to the ongoing evolution of the higher education marketing landscape. Social media marketing and its potential benefits as a recruitment strategy for universities has been highlighted through research. Numerous studies in the area of higher education have looked at how social media can be used to attract and retain students. For instance, Nevzat, Amca, Tanova, and Amca (2016) examined whether social media as a communication tool helps universities enhance brand trust and brand loyalty. Nevzat et al. (2016) study found strong association between the strength of the social media presence of the university and brand identity, trust, and loyalty. Similarly, Rutter, Roper, and Lettice (2016) provided evidence on the role of social media in student recruitment and retention performance of universities. Several studies also examined how social media influences student' choices. For instance, the study by Lehmann (2017) reported "word-of-mouth, college web sites, college planning/ranking websites, online reviews/comments, campus tours, and college e-mail" p.10 as the sources which are considered as more influential than social media on students' college choice. In addition, the study reported that electronic WOM was a more influential information source during the search stage. Lehmann (2017) concluded that traditional word-of-mouth had a greater perceived influence on the enrolment decisions of students than electronic word-of-mouth. Similarly, Shields and Peruta (2019) examined the function of social media and traditional forms of

marketing in students' decision-making. Shields and Peruta (2019) reported website of the institutions as the primary source while social media sites such as Facebook page and Instagram account of the institutions considered as least used source to obtain information about universities. In contrast, Shields and Peruta (2019) noted that almost all of the students who participated in interviews said they used social media sites to learn more about the universities they were considering. Shields and Peruta (2019) concluded that although students considered social media as not an influential source in their enrollment decisions "it is still important to recognize that the social media presence is important as students either solidify their decisions or look to reassure themselves that they've made the right choice" p.79. In the same vein, Amani (2022) aimed to investigate how word-of-mouth communications were perceived to be helpful in influencing students' decision-making regarding which university to attend. The study findings of Amani (2022) indicated that students do not select universities using conventional communication methods for marketing like advertising, but instead through word-of-mouth messages spread by people they have a high level of trust for. Furthermore, Amani (2022) observed that not all communications have an impact on students' university decisions; rather, the message should come from a knowledgeable, trustworthy, and individual who has a close relationship with the potential student.

Veloutsou, Lewis, and Paton (2005) examined information sources used by students when choosing a university and the perceived reliability of these sources of information. Their study revealed that the most often used ISs are university websites, open days, and university prospectuses. In terms of reliability, open days, the students in university, university prospectuses, and university web sites are regarded as the most trustworthy information sources. Lee (2008) reported the Internet, advertisements, and

brochures as the commonly used sources among international students to obtain information about the higher education institutions. In contrast to female students, Lee's (2008) research showed that male students relied greater on their acquaintances as a source of knowledge. Another study by Bodycott (2009) examined the sources Chinese students and their parents relied on most to learn about studying abroad. The study found that both students and their parents considered exhibitions and fairs to be the most crucial sources, followed by friends and relatives and the Internet. In the early phase of data collection, university brochures were among the most popular sources of information on the courses, according to a research by Harker, Slade, and Harker (2001). Harker et al. (2001) stated that open-days at universities are considered as a valuable source of more detailed information in the secondary phase of data gathering. James-MacEachern and Yun (2017) examined international students' information sources and helpfulness of the information in choosing a small university. According to the study's results, the university's website was regarded as the most trustworthy source by overseas students. When deciding on a higher education institution, direct communication from the university received the highest rating for information's usefulness. Further, Collins et al. (2022) noted that friends and family were the primary sources overseas students looked to while selecting a university. Vrontis, El Nemar, Ouwaida and Shams (2018) examined information source preference of international students and found traditional sources as the most preferred sources compared to social media sources. Their study reported that students relied more on university website, friends and family during their search. To better understand how potential students make decisions about what and who affects their decision to attend a certain university, Lubbe and Petzer (2013) examined their primary information sources. According to their research, university websites, parents, relatives, and friends of the students, as

well as brochures, were the information sources that had the greatest influence on the students' decision to attend a particular university. The advertisements and the school's visit to a university found to be the least influencing sources on the students' decision making. Similarly, Johnston (2010) investigated students' choice to find out the relative impact of the different information sources on the choice of a university and reported parents, visit to the institution, friends, and information provided by the faculty staff as the most crucial information sources. In the same vein, Joseph, Mullen and Spake (2012) investigated the ISs students utilize for learning about universities and the findings revealed that campus visits and recommendation from family members and friends were the top used sources followed by university representatives. On the other hand, university advertising efforts were considered as the least important source to obtain information. A study by Brown et al. (2009) reported current university students and university staff as the most influential sources affecting the purchase decision of students. Finally, prospectus were identified by Briggs (2006) as the most vital information source. Briggs's study also reported Open days, word of mouth and web sites as influential sources of information.

2.6.3 Students Decision-Making Process and the Choice Factors

The review of the literature for the present study showed that researchers have thoroughly studied the students' decision-making behaviors. Hemsley-Brown (1999) investigated how students choose their colleges and how marketing and promotional information affects their choices. The study indicated that decision-making process of students were influenced by marketing and promotional activities of colleges, peers, teachers, and parents. In the early stages of selecting which college to attend, parental and peer pressure were found to be more significant than the impact of teachers. Maringe (2006) identified programme, place, prominence, and price as the top vital

factors for students while considering a university. Additionally, Moogan et al. (1999) found that the course content, reputation, location and social considerations were the most influential variables. Moogan and Baron (2003) examined students' decision-making behaviour and concluded that career development, self-motivation and parents' input were the most important variables in the problem recognition phase; course content, reputation and location were the key criteria in the information search stage; and expectation of entry grades and social atmosphere were the core factors in the evaluation of alternatives stage. Simões and Soares (2010) found that websites were the most significant information sources and that proximity to one's home was the most significant deciding factor. Joseph and Joseph (1998) whereas noted location and recreational facilities, the cost of education, academic and programme issues, and academic resources as the most significant variables that influenced the students' choices. Peer and family influences were not considered as important by the potential students studied. In another study, Joseph and Joseph (2000) analyzed the perceptions of students regarding their choice criteria. The important considerations when selecting an institution were recognized as career and course information as well as facilities and physical characteristics. The influences of the family on students' decisions to pursue overseas education were examined by Pimpa (2003); selection of academic program was found to be the most important factor. In addition, contrary to the findings of Maringe (2006) and Joseph and Joseph (1998), the family influence was discovered to be multidimensional as it impacted the following choices: studying abroad, country, city, course, and the university itself. By contrast, another research conducted by Pimpa (2005) reported that family expectations had less of an impact on the students' university and course choices. In another study, Pimpa (2005) examined factors underpinning Thai students' perception regarding the quality of the Australian

universities. Pimpa's study (2005) found reputation of the university as the top crucial quality element impacting the destination considerations. The two least significant quality factors, on the other hand, were the reputation of alumni, agent recommendations, and tuition and service fees. The first-year students' selection of the international branch campus in Malaysia was the focus of a Sim et al. (2020) study, which also investigated the factors influencing students' decisions. Safety and graduate employability were listed as the two most significant variables influencing students' choice of university in Sim et al.'s study (2020). Additionally, their research found that male and female students had different priorities when it came to information sources, with male students placing a larger value on peers, the media, and family. Further, Nafari, Arab, and Ghaffari (2017) examined the variables that affects Iranian students' decision to pursue higher education abroad. Nafari et al.'s (2017) study findings indicated aids and scholarships (e.g., job placements and financial support), cost (e.g., living costs and cost of education), and environment (e.g., lack of opportunities at home country) as the primary elements affecting Iranian students' decision to pursue higher education abroad. In another study, Beine, Noël, and Ragot (2014) examined the aspects affecting the destination decisions of overseas students. Beine's et al. (2014) study gathered data from students studying in 13 OECD countries. According to the study's findings, the presence of locals in the host nation is the main pull factor taken into account by foreign students. Additionally, Beine's et al. (2014) noted costs (such as housing prices), quality of higher education, and higher education capacity of the destination country as the other variables impacting the decision of international students, while tuition is not considered as important by international students. Chen (2008) examined the variables impacting overseas students' choice of Canadian universities. The study findings revealed that although graduate students'

top reason for choosing to study abroad was personal motivation, family decision was the most important factor for undergraduate students. Additionally, Chen (2008) noted that among the three key factors including influences relating to internationalization, marketing, and significant others, internationalization was considered as the most significant element affecting the university choice of international students. From the internationalization perspective students considered university reputation and quality more important than program reputation and quality. Further, the findings of Chen (2008) reported the characteristics of Canada as the main drivers of choosing Canada as a study destination.

An investigation of the push-pull elements impacting the decision of overseas students was conducted by Mazzarol and Soutar (2002). The main push reasons, according to their analysis, were higher educational standards, difficulty in enrolling in domestic institutions, a lack of particular courses at home, a greater understanding of the West, and a desire to immigrate after graduation. Whilst, the popularity and standing of the host nation and its institutions were identified as the key pull factors, Mazzarol and Soutar (2002) study found “personal recommendations or word-of-mouth referrals of former alumni” p.90 as the key influencers. According to Mazzarol and Soutar’ (2002) study, “quality and reputation of the institution, recognition of the institution’s qualifications in their own country, its international strategic alliances, and the quality of its staff, its alumni base as well as its existing international student population” p.87 were the most crucial variables for international students. Similarly, Chen (2007) by using the push-pull approach and examining the decision-making process of overseas graduate students, particularly students from East Asia, developed a “synthesis model” to explore the elements impacting students’ choice of Canada as a study destination.

According to Chen (2007), the decision to study abroad, the selection of a host nation, and the choice of a host institution are the three steps that make up the process of choosing an overseas program. Moreover, Chen (2007) stated that students' decisions are affected from three factors as "Student Characteristics, Significant Others, and External Push-Pull Factors" p.760. The study findings indicated "student characteristics" as the main crucial element impacting study abroad decision of students. Chen (2007) also reported the positive push factors as the other important factor influencing study overseas decision of students. On the other hand "significant others" reported as the least important factor. Moreover, the top crucial factor impacting students' choice of Canada as study destination reported as "pull factors from Canada" such as the atmosphere of Canada, issues relating to the cost, and visa. Finally, Chen's (2007) study findings revealed that characteristics of the institutions/academic pull factors considered crucial elements affecting the students' choice of a university and among them institution quality, reputation and ranking considered the most crucial factor followed by cost issues and availability of financial aid. In their study, Eder, Smith, and Pitts (2010) evaluated the motivating and restraining variables that students consider when deciding whether to study abroad. They discovered that the most important motivating elements were college-related and personal growth-related, while the main restraining one was visa-related. Eder et al. (2010) concluded that pull considerations have an impact in students' decision to study abroad. Ahmad, Buchanan and Ahmad (2016) researched the decision making process of foreign students who enrolled at universities in the United Arab Emirates (UAE). Ahmad et al.'s study (2016) reported safety and pleasant country as the top crucial elements influencing the choice of UAE as a study destination. According to the study findings, overseas students also considered better employment and higher salary as

another important factor influenced their choice of study destination. In addition, their research revealed that choosing a university is most heavily influenced by the program's reputation, which is then determined by the institution's ranking, prestige, and international recognition. The push and pull variables that affect African students' decisions to seek higher education in the UK were examined by Maringe and Carter (2007). Political instability, economic ambiguity in the home nation, and a lack of capacity for higher education in the country of origin were found to be the study's key push factors. The main pull factors that the students consider were noted as being the availability of part-time jobs, the ease of the application procedure, excellent teaching and learning settings, and international recognition. Bodycott (2009) investigated the least and most significant aspects when considering studying abroad with a focus on Chinese students and their parents. Students viewed quality and foreign experience as the most significant push factors when considering studying abroad. On the other hand, parents identified immigration prospects and a lack of college availability in mainland China as the two most significant motivators for their children to pursue study overseas. In addition, Bodycott's (2009) study revealed that on-site accommodation, the variety of programs offered, and an atmosphere where English is spoken were the top three criteria that attracted and influenced students' decisions to study abroad. Contrary to previous research findings, Bodycott (2009) stated that factors such as reputation, tuition fees and cost of living, geographical proximity, and future employment prospects were not rated as important. By utilizing a push and pull model, Wilkins, Balakrishnan, and Huisman (2012) evaluated the selection criteria of international students enrolled at branch campuses in the United Arab Emirates. Wilkins et al. (2012) study found differences among the motivations of students who study at branch campuses and who study at home campuses. In a different study,

Wilkins and Huisman (2011a) listed program quality, departmental and university rankings, program content, and faculty reputation/expertise as the variables impacting students' choice. Additionally, the study identified highest rankings, the standard of education, and chances for employment as the influencing factors of destination choice. Alebeek and Wilson (2019) carried out a case that addressed the factors impacting the college decision of international students by integrating the Hossler and Gallagher's (1987) approach with the pull and push dimensions. The study's results demonstrated that a number of elements, including advisors, family, environment, prospects, quality, academic programs, language, admission, and cost had a substantial impact on the overseas students' choices. Foster (2014) employed push-pull approach to explore the crucial elements impacting Brazilian students' decision-making regarding the destination choice and the perceived barriers. The most crucial selection characteristics, according to Foster's (2014) study, were advancing one's English language skills, having international study experience, and conducting research at the graduate or postgraduate level. The main barriers identified by the study were cost and distance (being away from home). Shanka, Quintal, and Taylor (2006) studied overseas students' top selection criteria for their destination for higher education. Their research revealed that proximity to home, safety and the educational quality were the most important reasons.

Several studies investigated the international students' primary motives of choosing Turkish universities as a study destination. Turkey was primarily known as a sending country for overseas students on the international market for higher education, but as a result of the enormous changes that have taken place over the past ten years, Turkey is now regarded as a receiving country for overseas students (Karakaya-Özyer and

Yildiz, 2020). Collins, Şimşek, and Takır (2022), for instance, carried out a study to assess the perspectives of overseas students studying at one of the private university in Turkey. Collins' et al. (2022) study indicated that scholarships, institution quality, and university overall ranking were the main choice factors of overseas students. In the similar vein, a study by Özoğlu, Gür, and Coşkun (2015) reported the availability of scholarships, cost of living, family/friends recommendations, and quality of education as the main factors. Further, Kondakci (2011) examined the factors influencing the decision-making process of international students who were studying at the universities in Turkey by using two frameworks as public and private rationales. Study findings of the Kondakci (2011) demonstrated that private rationales were the main motives of students coming from Western and wealthy nations. On the other hand, the study indicated that academic and economic reasons are the main motives of students coming from Eastern and economically developing nations. Moreover, the findings demonstrated that for students who were from Ukraine, Russia, and Baltic countries considered obtaining a job as their top reason for selecting Turkey as study destination. Conversely, students from Central Asia and Azerbaijan indicated geographical proximity, academic quality and scholarships as the main choice factors.

A study by Calitz, Cullen, and Jooste (2020) focused on both the local and foreign students enrolled at a public institution in South Africa. The study indicated that when choosing where to study, both local and international students gave top priority to safety and security on campus. This is consistent with Gong and Huybers' (2015) findings that safety concerns influence the destinations that Chinese students choose for their higher education and also consistent with Shanka et al. (2006) who reported that safety is one of the important reason influencing Asian students' destination

choices. In another study, Perez-Encinas and Rodriguez-Pomeda (2018) investigated the needs of overseas students and the particular services they require when they visit new countries. Their research identified five common topics: sound teaching, good university, living expenses, finances, and city offerings. The authors concluded that universities might strengthen their standing in the global market for higher education if they include overseas students' perceptions and their needs within their strategies. Abubakar, Shanka, and Muuka (2010) analysed variables that affect where overseas students choose to study. Their study revealed that "quality of education, recommendations (word-of-mouth), cost of living, proximity, and safety were among the main reasons students chose to study in Australia" p.58. Whatley (2017) investigated how financial considerations affected students' decisions to pursue study abroad. The study revealed that grants have a positive effect on students' decision to study abroad, whereas student loans have a negative impact. Soutar and Turner (2002) investigated the factors influencing high school students' university preferences and the weight of each aspect in making their choice. Their study revealed that the course or program they want to attend, academic reputation, teaching quality, campus atmosphere, closeness to home, friends who enrolled in the same university and family suggestions were the most vital factors, along with the course suitability and job prospects. Price, Matzdorf, Smith, and Agahi (2003) investigated the influence of facilities on the decision and concluded that higher quality environments are shown to have an effect on preference. According to Sojkin, Bartkowiak, and Skuza (2015), the types of courses offered, the university reputation, financial help, and the cost of education were all significant variables. Elsewhere, the study findings of Wiese, Heerden, Jordaan, and North (2009) revealed teaching quality, job prospects, and campus security and safety as the three key determining variables. Wang and Ho

(2014) by employing Analytic Hierarchy Process (AHP) examined the primary variables that impact Taiwanese students' decision about where to pursue further education and the relative significance of each variable. According to Wang and Ho's (2014) research, the academic aspect was deemed to be the primary dimension, with the economic and living aspects coming in second and third. Their study revealed that "teacher quality, future job prospects, university prestige, and tuition and living costs" p.9 considered as set of criteria while choosing a destination country. Years to graduate, ease of travel, and cultural adaptation were the least significant variables. Overseas students' perceptions of the significance of the 4P's marketing mix were examined in a study by Binsardi and Ekwulugo (2003). The study found educational standards and internationally recognized credentials, along with, immigration procedures, ease of university admissions, job opportunities both during and after the study, and living costs were the most significant choice factors that are associated with price and product mixes. Lee (2008) investigated the factors affecting the choice of international students. College reputation, tuition, and availability of work/assistantship were reported as the most significant concerns affecting the students' choice. Furthermore, Hung and Yen (2022) carried out a research in Taiwan to develop inventive marketing techniques for attracting overseas students and also examined international students' perceptions toward innovative marketing strategies. The inventive marketing techniques for attracting overseas students included two dimensions as the 4Cs of the marketing mix elements (customer needs, cost, convenience, and communication) and innovative strategy. Hung and Yen's (2022) study indicated that costs (financial considerations) are the major priority of overseas students followed by brand image. Further, Elsharnouby (2016) carried out a research to determine how international students' satisfaction with university augmentation

services affects their perception of the university as a whole. Elsharnouby (2016) study findings indicated that international students' satisfaction is found to be greatly influenced by campus life and maintenance augmenters. Additionally, Elsharnouby (2016) concluded that because parents and students devote a lot of time and energy to assessing universities and "find it difficult to evaluate the core of education service prior to admission, universities could integrate the key campus life and maintenance augmentation elements into their offerings to influence the final decision choices" p.692. Finally, Sabir, Ahmad, Ashraf, and Ahmad (2013) found that higher education ranking, the institution's reputation, and opportunities for employment and a career were the central choice factors.

There have been very few published studies on the elements impacting the university selection process of Turkish students. In one of the studies, Yamamoto (2006) examined the influence of marketing communication tools on students' decisions. The primary source was determined to be university websites. Among the more traditional promotional tools, TV was found to be the most crucial. Employment after graduation, proximity to home, easy transportation, fees, post-educational benefits, and the quality of departments and campus were highlighted as the most crucial issues for choosing a university.

Past research has mostly concentrated on the decision-making process and the variables impacting students' choices, with little emphasis paid to IRs and the value of the particular type of information acquired by students that determine their decision to enrol in a university. Veloutsou et al. (2004), for instance, identified career opportunities, infrastructure of the university, local social life, local infrastructure, university reputation, business contacts, social life, campus, and courses studied as the

information most commonly required by potential students. Among these factors, university reputation, courses and campus were found to be the most important. Meanwhile, Bonnema and Van der Waldt (2008) identified key needs as information related to employment, course content, student experience, sports, and finance. Wong, Lee, and Ng (2018) examined the information that students look for online on the higher education decision-making process. Wong et al. (2018) reported four constructs that students believed were crucial to their online search behaviour: “university reputation, eligibility and affordability, teaching and learning, and university tangibility” p.519. In a similar study, Le, Dobebe, and Robinson (2019) analyzed online questions to explore information requested by potential students on the social media and found reputation, career prospects, learning, administration, and student life as significant dimensions.

Chapter 3

METHODOLOGY

This study is conducted through a quantitative approach. Information on research methodology provided in this chapter. Sample design and development of questionnaires are also discussed. This is followed by information about EFA and AHP. Finally, data analysis is presented in this chapter.

3.1 Sample Design

Two sets of Questionnaires (A & B) and two sets of sample designs were utilized in this research. Data for the survey, which is gathered by Questionnaire A and is discussed below, gather data about information sources and requirements, including the first-year overseas students studying in a state university of North Cyprus. First-year students were chosen because they had recently made a decision about which university to attend. The participants of the survey to identify information requirements and sources were selected through the stratified sampling method, according to their area of study and nationality. Data for the survey was obtained through the distribution of questionnaires to 700 first-year students who were randomly chosen from each stratum. The response rate was 98%. The average age of the participants was 21, and 59.8% of them were male.

In the next stage of the study, the target respondents for Analytic Hierarchy Process (AHP) for prioritizing information sources and choice factors (information requirements) were analyzed, which consisted of first-year state university overseas

students. Data for prioritizing information sources and requirements, which is collected by Questionnaire B, is obtained from surveying 40 first-year undergraduate and postgraduate students. The judgmental sampling approach was used to select the respondents. “Judgmental sampling is a form of convenience sampling in which the population elements are selected based on the judgement of the researcher” (Malhotra, 2010, p.347). 35 responses were obtained from the 40 questionnaires that were distributed to gather data for pairwise comparisons, resulting in an 87.5% return rate. According to the AHP methodology perspective, a small sample size is appropriate (Cheng and Lie 2001). Consequently, the sample size of 35 respondents has been determined to be appropriate for the current study. The vast majority of participants in the sample were from undergraduate degree (72.5%), were male (62.9%), and the average age was 24.

3.2 Questionnaire Development

Two sets of questionnaires (A & B) were used in this study. Questionnaire A (which is used for Exploratory Factor Analysis) consisted of 57 items relating to information requirements and 19 items relating to information sources. Focus group interviews with first-year students were carried out to design the survey instrument relating to information requirements. The participants selected for the focus group study were chosen using convenience sampling. Convenience sampling is a “nonprobability sampling technique that attempts to obtain a sample of convenient elements. The selection of sampling units is left primarily to the interviewer” (Malhotra, 2010, p.345). The focus group interviews were carried out with 50 first-year students. There were 10 participants in each focus group interview. A pilot study with 50 freshmen students, a marketing department expert, and two academics in the relevant field was conducted before the survey instrument was finalized in order to increase the

questionnaire's validity. In the final instrument, 57 items developed from focus group interviews were measured on a 5-point Likert-type importance scale. The items relating to information sources were adapted from the survey conducted by Bonnema and Waldt (2008) because it is a few valuable research articles on students' information source preferences. These items were updated to reflect local responses. These changes included "advertisements on social media", "advice from private tutors", "education fairs", "liaison offices personnel", "university presentations at high schools", and "university presentations at tutor schools". 19 items relating to information sources were measured on a 5-point Likert-type importance scale. In this study, Questionnaire A was used to identify the IRs of students and to identify the sources they obtain information from when making higher education destination decision.

Consequently, the standard AHP Questionnaire B was developed for organizing and quantifying the weights of decision criteria for the students' choice of higher education destination. The extracted factors from Questionnaire A which is determined by EFA, have been implemented in order to structure Questionnaire B. Each of the respondent is required to evaluate the relative relevance of the two items at the same level of the model. The questionnaire was created using a 9 to 1 to 9 scale, as suggested by Saaty (1980), shown in Table 1. The participants were asked to assess the relative relevance of 13 information requirements criteria and the related 51 sub-criteria, in addition, to assess the relative relevance of 4 information sources criteria and the related 19 sub-criteria.

Table 1: Saaty's Scale of Measurement in Pairwise Comparison

Intensity of importance	Definition	Explanation
1	Equal importance	Two criteria contribute equally to the objective
3	Moderate importance	Judgement slightly favour one over another
5	Strong importance	Judgment strongly favor one over another
7	Demonstrated importance	A criterion is strongly favored and its dominance is demonstrated in practice
9	Extreme importance	Importance of one over another affirmed on the highest possible order
2,4,6,8	Intermediate values	Used to represent compromise between the priorities listed above

Source: Saaty (1980).

3.3 Exploratory Factor Analysis (EFA)

Factor Analysis “is a statistical approach that can be used to analyze interrelationships among a large number of variables and to explain these variables in terms of their common underlying dimensions (factors)” (Hair, Black, Babin, and Anderson 2014, p.16). The highly intercorrelated groups of variables are presumed to represent dimensions within the data. Exploratory Factor Analysis (EFA) has been carried out to identify information requirements of students and to identify the sources they obtain information from when making higher education decision, to minimize and to classify data to a limited number of factors.

3.4 Analytic Hierarchy Process (AHP)

AHP is a multi-criteria decision method that was developed by Saaty in the 1970s (Saaty, 1980). Since its invention, AHP received wider attention in various fields. Over the years, AHP has been employed extensively in a variety of industry contexts and in a number of different fields, though rarely in the field of higher education. “The

choice of which university to attend has been characterised as a highly complex decision” (Simões and Soares, 2010, p.373). For the vast majority of students, choosing a university and a programme of study is a difficult and complex task. Students seek information to reduce the anxiety they are experiencing while choosing a higher education institute. They might obtain a variety of information from various sources. Each factor’s significance will be different. “AHP provides a prioritizing for the various aspects in the hierarchy” (Ahmad and Hussain, 2017, p.7); thus, it helps to focus on the most crucial issues. It is a flexible and powerful tool that incorporates quantitative and qualitative research within a simple empirical inquiry (Cheng, Li, and Ho 2002). Because the AHP produces more accurate and insightful findings, it has been effectively applied and used in a variety of fields (Cheng and Li 2001; Tümer, Aghaei, and Lasisi, 2019). Consequently, AHP is considered appropriate for this study owing to its suitability in evaluating multi-criteria decision-making problems.

3.5 Data Analysis

In order to identify information requirements (IRs), and information sources (ISs), EFA has been carried out on the students’ responses obtained through a survey using SPSS 23.0. AHP is employed to determine the priority ratings of the information requirements and sources dimensions’ factors. “Expert Choice” software was used to calculate weightings for each element and the consistency of individual responses. Expert Choice provided both global and local weights of each element of information requirements and sources at each level of the hierarchy. For each matrix, inconsistency ratios were determined. Saaty (1980) asserts that consistency is acceptable if the consistency ratio is less than or equal to 0.10. The findings showed that all consistency ratios are 0.02 or lower; the inconsistency is therefore acceptable.

Chapter 4

DATA ANALYSIS AND FINDINGS

The study's findings are covered in Chapter 4 along with the data analysis. In order to identify information requirements (IRs) and information sources (ISs), exploratory factor analysis (EFA) has been carried out. The findings of the EFA are presented. This chapter continues with the development of the hierarchical structure and provides the Analytic Hierarchy Process (AHP) models for prioritizing information sources and requirements. Finally this chapter presents the results of the Analytic Hierarchy Process (AHP).

4.1 Information Sources

EFA has been carried out to identify the sources students obtain information from when making higher education decision.

The information sources scale was subjected to the principal components of factor analysis. Based on the results, which are summarized in Table 2, the sampling adequacy must exceed 0.50, which is confirmed by Kaiser-Meyer-Okin (KMO) value for information sources (0.84). According to the statistically significant Bartlett's test of sphericity ($\text{sig.} < 0.05$), there are sufficient correlations among the variables to move further (Hair et al., 2010). In this study, four factors emerged with Eigenvalues greater than 1.0 following factor analysis, which shows a total variance explained of 64.28% relating to information sources, namely advertisements, informal sources, direct marketing and electronic and published sources. Cronbach's coefficient alpha was

used to measure the internal consistency of the scale, which showed the degree to which the items that made up the scale measured the same underlying construct (Pallant 2001). Robinson, Shaver, and Wrightman (1991) indicated that Cronbach's Alpha values, which are above 0.6 in exploratory research studies, are also acceptable (Hair et al., 2000 p. 137). A Cronbach's coefficient alpha value of 0.6 or above indicates that the scale has internal consistency. Accordingly, in this study, alpha values above 0.6 or above were treated as acceptable. The Cronbach's Alpha value for information sources used by the students was 0.86.

Table 2: Information Sources

Factors (Dimensions)	Eigen value	Mean	Standard Deviation	Factor Loading	Cronbach's Alpha
Advertisements (AD)	5.64	3.11	1.00		0.71
Advertisements on billboards (AD 1)				0.74	
Advertisements on television (AD 2)				0.85	
Advertisements on social media (AD 3)				0.82	
Advertisements in magazines (AD 4)				0.85	
Advertisements in newspapers (AD 5)				0.78	
Informal sources (IS)	2.24	3.68	0.77		0.74
Advice from a close friend (IS 1)				0.60	
Advice from past or current students of universities (IS 2)				0.61	
Advice from school counsellors / guidance teachers (IS 3)				0.60	
Advice from private tutors (IS 4)				0.67	
Advice from parents (IS 5)				0.67	
Advice from family members (other than parents) (IS 6)				0.70	
Direct marketing (DM)	1.80	3.84	0.76		0.76
Education fairs (DM 1)				0.67	
Liaison offices personnel (DM 2)				0.56	
Open days at universities (campus visit, high school visits) (DM 3)				0.47	
University presentations at high schools (DM 4)				0.84	
University presentations at tutor schools (DM 5)				0.79	
Free publications distributed at high schools (DM 6)				0.64	
Electronic and published sources (EPS)	1.19	3.95	0.88		0.89
University websites (EPS 1)				0.66	
Information brochures / prospectuses from universities (EPS 2)				0.62	

Rotation Technique: Varimax

4.2 Information Requirements

The 57 items in the information requirements were also subjected to the principal components of exploratory factor analysis. According to Table 3, the adequacy of sampling information requirements, which is measured through Kaiser-Meyer-Okin (KMO) value (0.89), is greater than 0.50. A statistically significant Bartlett's test of sphericity (sig. < 0.05) shows that satisfactory correlations are amid the factors.

The results supported the factorability of the correlation matrix. As shown in Table 3, 13 factors emerged from the analysis, with Eigen values exceeding 1.0 relating to information requirements, which shows a total variance explained of 60.72%. Factor loadings greater than 0.40 were accepted as significant (Stevens 1992; Hair, Bush, and Ortinau, 2000). In the current study, the overall reliability of the scale was satisfactory, as it had a Cronbach's coefficient alpha value of 0.925 for the types of information students collect about universities which is greater than 0.6.

As shown in Table 3, the component factors for information requirements were categorized as academic program issues (AP), quality (QL), accommodation, access and shopping facilities (AAS), on-campus facilities (OF), local life (LL), general reputation of the institution (GRI), medium of teaching and educational issues (MTE), job and scholarship opportunities (JSO), social life (SL), graduates' employment opportunities (GEO), entry requirements (ER), students' and academics' (faculty) interaction (SAI), and institution recognition and interaction (IRI).

Table 3: Information Requirements

Factors (Dimensions)	Eigen value	Mean	Standard Deviation	Factor Loading	Cronbach's Alpha
Academic program issues (AP)	12.738	3.99	0.79		0.84
Availability of exchange program				----	
The specific academic courses that are offered (AP 1)				0.66	
The amount of practical content in the programme (AP 2)				0.74	
The amount of academic content in the programme (AP 3)				0.77	
Course contents (AP 4)				0.72	
The curriculum of the programme (AP 5)				0.68	
Quality (QL)	4.00	4.56	0.65		0.82
Faculty (teaching staff of the university) (QL 1)				0.57	
Quality of education (QL 2)				0.70	
Teaching quality (QL 3)				0.78	
Teaching method (QL 4)				0.67	
Accommodation, access and shopping facilities (AAS)	2.54	4.09	0.79		0.64
The attractiveness of the campus (architecture, buildings, landscape) (AAS 1)				0.50	
The accommodation of the university (AAS 2)				0.71	
Private dormitories or flats (AAS 3)				0.77	
Availability of bookstore				----	
Student life at the institution (AAS 4)				0.55	
The distance of the institution from home town				----	
Local transportation (AAS 5)				0.43	
Shopping amenities (AAS 6)				0.55	
On-campus facilities (OF)	2.09	4.27	0.69		0.83
Library facilities (OF 1)				0.62	
Computing facilities (OF 2)				0.71	
The availability of university medical care/healthcare (OF 3)				0.67	
The availability of counselling office				----	
The sports facilities at the institution (OF 4)				0.60	
The cultural activities at the institution (OF 5)				0.47	
Safety on campus (OF 6)				0.56	
Local life (LL)	1.89	4.05	0.78		0.76
Climate (LL 1)				0.62	
The culture and lifestyle of people (LL 2)				0.74	
Interaction between students and locals (LL 3)				0.76	
The cost of living in the area (LL 4)				0.52	
General reputation of the institution (GRI)	1.82	3.66	0.76		0.69
Years of service in higher education (GRI 1)				0.44	
The population of the students at the university (GRI 2)				0.63	
Presence of international students at the university (GRI 3)				0.64	
Presence of students from respondent's country at the university (GRI 4)				0.62	
Alumni association (GRI 5)				0.53	
The opinions of university alumni or current students (GR 6)				0.51	
Medium of teaching and educational issues (MTE)	1.60	4.55	0.58		0.73
The language of teaching at the institution (MTE 1)				0.66	
The type of degree granted (MTE 2)				0.69	
Availability of specific academic programme (field of study) (MTE 3)				0.49	
The accreditation/recognition of the university (MTE 4)				0.46	

Job and scholarship opportunities (JSO)	1.56	3.94	0.97		0.79
The availability of financial aid and scholarships at the institution (JSO 1)				0.64	
Summer job opportunities (JSO 2)				0.85	
Part-time job opportunities (JSO 3)				0.84	
Social life (SL)	1.44	4.07	0.91		0.84
Extracurricular activities (SL 1)				0.79	
Social activities (SL 2)				0.78	
Night life				----	
Graduates' employment opportunities (GEO)	1.31	4.50	0.68		0.74
The institution's ability to place graduates in a job (GEO 1)				0.71	
Availability of employment opportunities after graduation (GEO 2)				0.69	
The companies that graduates find jobs in (GEO 3)				0.70	
Entry requirements (ER)	1.26	4.10	0.88		0.74
Entry requirements (ER 1)				0.75	
University entrance examination scores (ER 2)				0.77	
Students' and academics' (faculty) interaction (SAI)	1.19	3.95	0.87		0.75
Small class sizes (SAI 1)				0.77	
Student faculty ratio (SAI 2)				0.67	
Interaction between students and lecturers				----	
The quota of the programme (SAI 3)				0.51	
Institution recognition and interaction (IRI)	1.12	4.18	0.71		0.63
Interaction between local students and foreign students (IRI 1)				0.68	
Academic reputation of the institution (IRI 2)				0.47	
University ranking (IRI 3)				0.51	

Rotation Technique: Varimax

4.3 Developing the Hierarchical Structure

Based on the EFA, information sources of students were classified under 4 major dimensions. These are namely Electronic and Published Sources (EPS), Direct Marketing (DM), Informal Sources (IS), and Advertisements (AD). These dimensions have been further divided into 19 sub-dimensions (Table 2). As depicted in Figure 5, a simple three-level hierarchical structure is created.

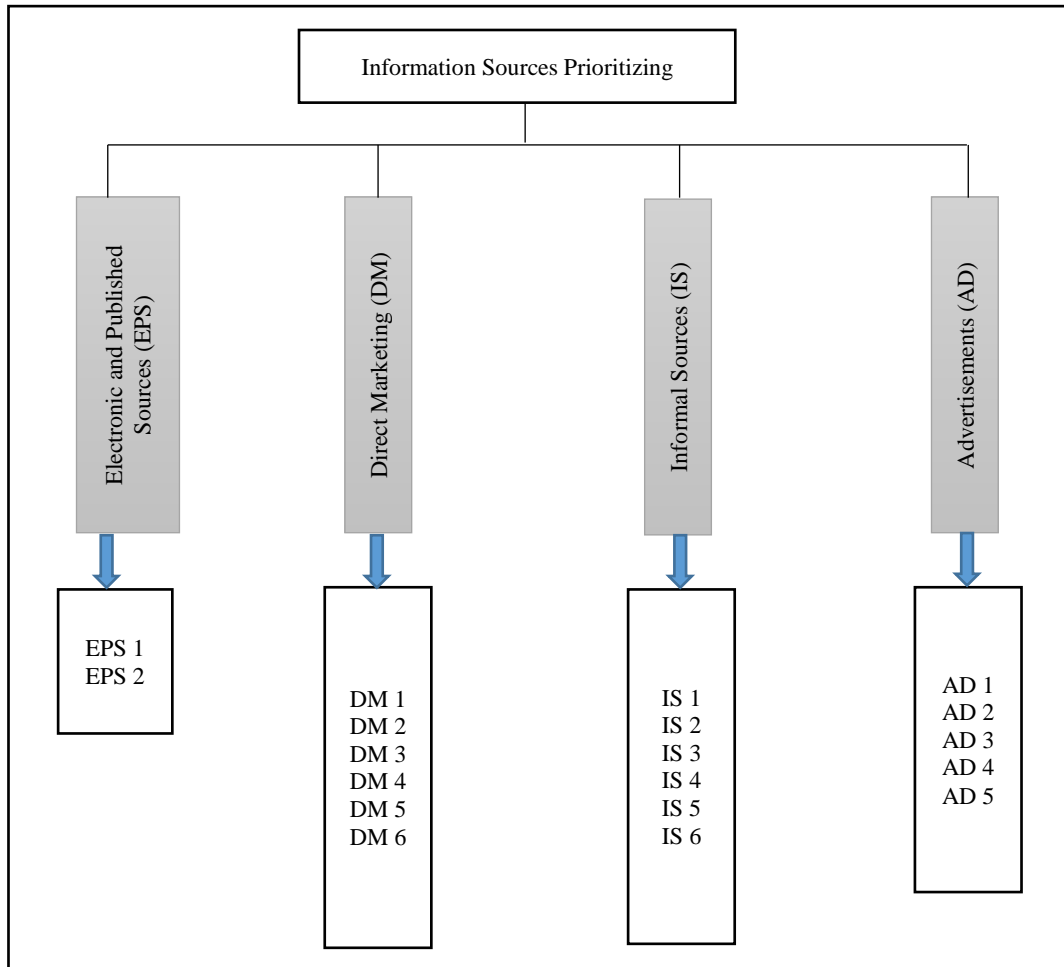


Figure 5: AHP model for prioritizing students' sources of information

Based on the EFA, the IRs of students were classified under 13 major dimensions. These are Academic Program Issues (API), Quality (QL), Accommodation, Access and Shopping Facilities (AAS), On-Campus Facilities (OF), Local Life (LL), General Reputation of the Institution (GRI), Medium of Teaching and Educational Issues (MTE), Job and Scholarship Opportunities (JSO), Social Life (SL), Graduates' Employment Opportunities (GEO), Entry Requirements (ER), Students' and Academics' (faculty) Interaction (SAI) and Institution Recognition and Interaction (IRI). These dimensions have been further divided into 51 sub-dimensions (Table 3). As shown in Figure 6, a simple three-level hierarchical structure is created.

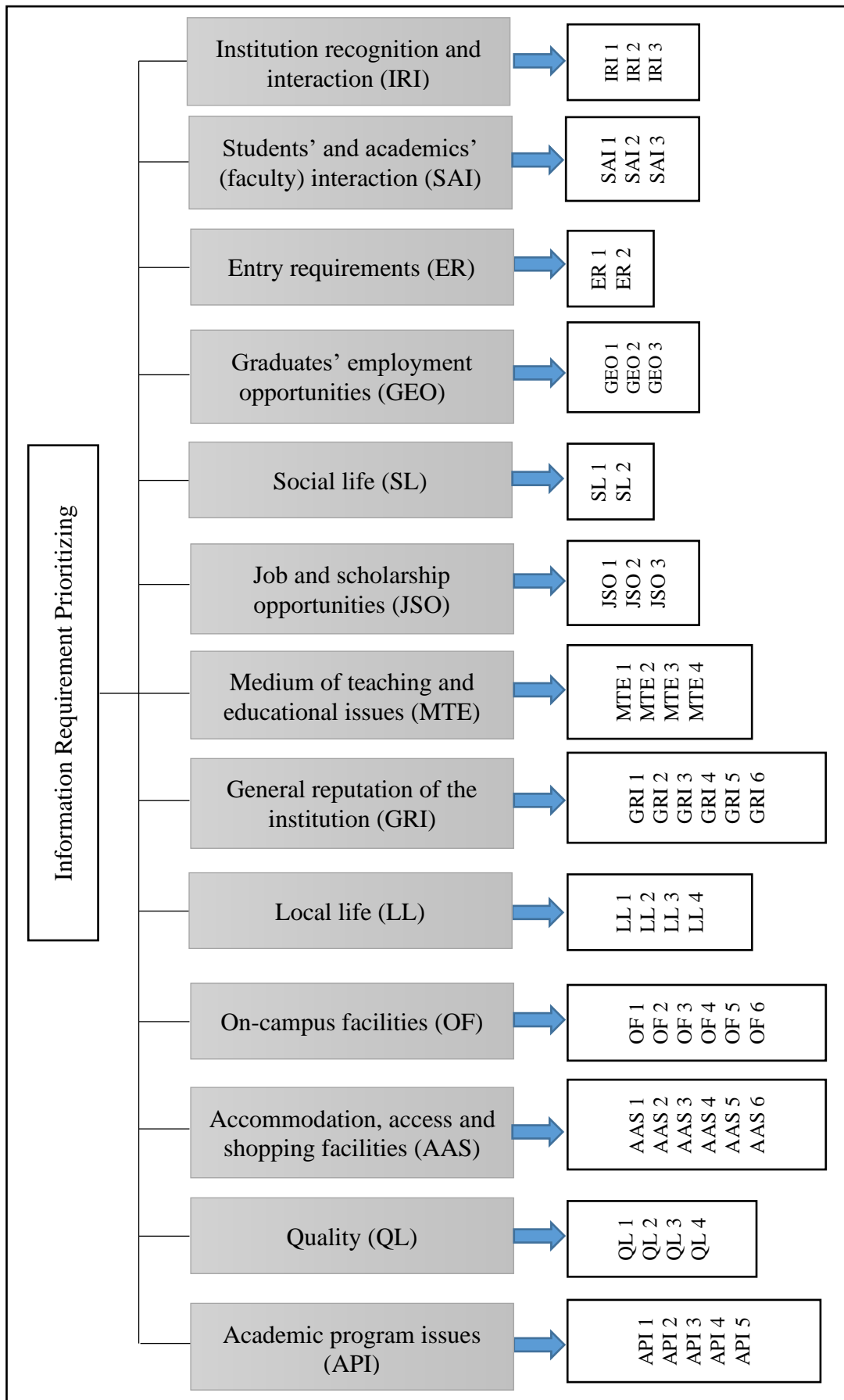


Figure 6: AHP model for prioritizing students' information requirements

4.4 AHP Results

Based on the computed weights of the four choice factors of the information sources AHP model (Figure5), which are shown in the second column of Table 4, electronic and published sources (0.294) are considered as the most important source to obtain information about an institution followed by informal sources (0.242) and direct marketing sources (0.237), whereas advertisements are (0.226) considered as the least important source.

The fourth column of Table 4 shows the weight of each sub-factor locally in its own cluster. In order to find out the importance of each sub-factor among all items in the lowest level of information sources AHP model, the global weight of each sub-factor is calculated by multiplication of its local weight into the weight of the relevant factor. Thus, the top three ranking information sources are identified as university web sites (.2058), which is under electronic and published sources, advertisements on social media (.0897), which is under advertisements, and information brochures/prospectuses (.0882), which is under electronic and published sources, whereas advice from private tutors (.0261), which is under informal sources, university presentations at tutor schools which is under direct marketing (.0201), and advertisements in the newspapers (.0072), which is under advertisements found as the least three important sources.

Table 4: Element Weights to Determine Information Sources

Factors/Sub-Factors	Weight	Rank	Local Weight	Rank	Global Weight	Rank
Electronic and Published Sources	0.294	1				
University websites			.70	1	.2058	1
Information brochures/prospectuses from universities			.30	2	.0882	3
Direct Marketing	0.237	3				
Education fairs			.23	1	.0545	6
Liaison offices personnel			.20	2	.0474	8
Open days at universities (campus visit, high school visits)			.133	5	.0315	15
University presentations at high schools			.182	4	.0189	10
University presentations at tutor schools			.085	6	.0201	18
Free publications distributed at high schools			.18	3	.0431	11
Informal Sources	0.242	2				
Advice from a close friend			.233	1	.0564	4
Advice from past or current students of universities			.138	4	.0334	14
Advice from school counsellors / guidance teachers			.194	3	.0469	9
Advice from private tutors			.108	6	.0261	17
Advice from parents			.109	5	.0264	16
Advice from family members (other than parents)			.217	2	.0525	7
Advertisements	0.226	4				
Advertisements on billboards			.169	3	.0382	12
Advertisements on television			.244	2	.0551	5
Advertisements on social media			.397	1	.0897	2
Advertisements in magazines			.159	4	.0359	13
Advertisements in newspapers			.032	5	.0072	19

Based on the computed weights of the thirteen choice factors of the information requirements AHP model (Figure 6), which are shown in the second column of Table 5, the most significant factor influencing students' decision to pursue higher education is considered to be the job and scholarship opportunities dimension (0.123), followed by local life (0.109), entry requirements (0.104), accommodation (0.102), academic program issues (0.098), on-campus facilities (0.096), social life (0.075), institution recognition and interaction (0.065), medium of teaching and educational issues (0.062), quality (0.054), students' and academics' interaction (0.049), whereas general reputation of the institution (0.032) and graduates' employment opportunities (0.032) are the least important issues for consideration.

The fourth column of Table 5 also shows the weight of each sub-factor locally in its own cluster. In order to find out the importance of each sub-factor among all items in

the lowest level of the information requirements of the AHP model, the global weight of each sub-factor is calculated by multiplication of its local weight into the weight of the relevant factor. Thus, the highest three ranking factors are the availability of financial aid and the scholarships (0.0755), which is under job and scholarship dimension, entry requirements (0.0640) which is under entry requirements dimension, and the cost of living in the area (0.0557) which is under local life dimension, whereas alumni association (0.0055), years of service in higher education (0.0045), presence of international students at the university (0.0045), and the opinions of university alumni or current students (0.0037), which are under general reputation of the institution, are the lowest three ranking factors.

Table 5: Element Weights to Determine Information Requirements

Factors/Sub-Factors	Weight	Rank	Local Weight	Rank	Global Weight	Rank
Academic program issues	.098	5				
The specific academic courses that are offered			.219	2	.0215	17
The amount of practical content in the programme			.148	5	.0145	28
The amount of academic content in the programme			.194	3	.0190	21
Course contents			.149	4	.0146	27
The curriculum of the programme			.290	1	.0284	9
Quality	.054	10				
Faculty (teaching staff of the university)			.439	1	.0237	14
Quality of education			.219	2	.0118	36
Teaching quality			.176	3	.0095	40
Teaching method			.166	4	.0090	41
Accommodation, access and shopping facilities	.102	4				
The attractiveness of the campus (architecture, buildings, landscape)			.272	1	.0277	10
The accommodation of the university			.187	2	.0191	20
Private dormitories or flats			.138	4	.0141	30
Student life at the institution			.128	5	.0131	32
Local transportation			.106	6	.0108	39
Shopping amenities			.168	3	.0171	23
On-campus facilities	.096	6				
Library facilities			.066	5	.0063	44
Computing facilities			.257	1	.0247	12
The availability of university medical care/healthcare			.207	3	.0199	19
The sports facilities at the institution			.064	6	.0061	45
The cultural activities at the institution			.252	2	.0242	13
Safety on campus			.155	4	.0149	25
Local life	.109	2				
Climate			.058	4	.0063	44
The culture and lifestyle of people			.313	2	.0341	7
Interaction between students and locals			.118	3	.0129	33
The cost of living in the area			.511	1	.0557	3
General reputation of the institution	.032	12				
Years of service in higher education			.140	5	.0045	47
The population of the students at the university			.236	1	.0076	43
Presence of international students at the university			.142	4	.0045	47
Presence of students from respondent's country at the university			.192	2	.0061	45
Alumni association			.173	3	.0055	46
The opinions of university alumni or current students			.117	6	.0037	48
Medium of teaching and educational issues	.062	9				
The language of teaching at the institution			.187	4	.0116	37
The type of degree granted			.237	3	.0147	26
Availability of specific academic programme (field of study)			.327	1	.0203	18
The accreditation/recognition of the university			.249	2	.0154	24
Job and scholarship opportunities	.123	1				
The availability of financial aid and scholarships at the institution			.614	1	.0755	1
Summer job opportunities			.178	3	.0219	16
Part-time job opportunities			.209	2	.0257	11
Social life	.075	7				
Extracurricular activities			.435	2	.0418	5
Social activities			.565	1	.0542	4
Graduates' employment opportunities	.032	12				
The institution's ability to place graduates in a job			.246	3	.0079	42
Availability of employment opportunities after graduation			.359	2	.0115	38
The companies that graduates find jobs in			.395	1	.0126	34
Entry requirements	.104	3				
Entry requirements			.615	1	.0640	2
University entrance examination scores			.385	2	.0400	6
Students' and academics' (faculty) interaction	.049	11				
Small class sizes			.457	1	.0224	15
Student faculty ratio			.294	2	.0144	29
The quota of the programme			.249	3	.0122	35

Institution recognition and interaction	.065	8				
Interaction between local students and foreign students	.511	1	.0332	8		
Academic reputation of the institution	.286	2	.0186	22		
University ranking	.203	3	.0132	31		

Chapter 5

DISCUSSION

This chapter presents the findings of the study by providing a discussion on the key findings of the information sources and the choice factors.

5.1 Key Findings

The key findings of the study are as follows: First, the results of this study indicated that electronic and published sources are the ones that students rely on the most to obtain information about an institution. This result is consistent with what Veloutsou et al. (2004) and Lehmann (2017) found in their study.

Second, as reported by other researchers (Mazzarol and Souter 2002; Cubillo, Sanchez, and Cervino 2006), the results of this study also revealed that not all factors that affect students' choice decisions about higher education institutions are equally significant.

Thirdly, in this study, job and scholarship opportunities are considered as the most important factor influencing the choice of international students. The high importance put on this dimension is not surprising. As stated by Eder et al. (2010), it is significantly more expensive to spend a year outside the home country than it is to do so at home. Higher education institutions in North Cyprus and the Turkish Republic of Northern Cyprus Ministry of Education award scholarships for international students studying in an undergraduate or graduate program. For instance, the Ministry of Education awards scholarships, including tuition, dormitory fees, plus allowance (pocket money).

Financial aid or scholarships may overcome financial barriers by minimizing the impact of higher tuition fees. This may explain the substantial rise in the demand of international students choosing North Cyprus as an overseas study destination.

Fourth, in choosing a university entry requirements are also considered very important. This results is consistent with that of Binsardi and Ekwulugo's findings (2003), who found that choosing a destination country was influenced by a variety of factors, including the ease of entering a university. Likewise, Maringe and Carter (2007) found an easy application process as a significant factor affecting their choices. Studies done by Pimpa (2005) and Bourke (2000) found entry requirements as one of the benchmarks for students to judge the quality of universities. Pimpa (2005) stated that decreasing entrance requirements might damage the reputation and weaken the quality of institutions in the eyes of students. Institutions of higher education that seek to attract international students should emphasize the benefits to prospective students, such as an easy application process, while also maintaining and improving entry requirements.

Fifth, most of the students found local life as an important criterion that influenced their choice. This result is consistent with both Calitz et al. (2020) and Gong and Huybers (2015), who reported safety and security as the most important factor influencing international students' decision when deciding where to study. North Cyprus is a safe and hospitable country to study where the petty crime rate is very low. North Cyprus might seem an appealing country to study given that the island is a comfortable country in which international students can easily adjust their lifestyle.

Sixth, accommodation is another important influencing factor for the choice of higher education destination. This finding of the study supports those found in the literature. For instance, Wilkins and Huisman (2011b) found that accommodations were one of the major determinants in choosing an institution. Similarly, studies done by Bodycott (2009) and Binsardi and Ekwulugo (2003) reported accommodation provided by the institutions as important. Soutar and Turner (2002) found attractiveness and campus atmosphere as one of determinants for selecting an institution.

Seventh, the academic program issues dimension is also considered very significant. This means that the curriculum of the programmes and the variety of the courses offered by the institutions are other critical issues that should be considered by higher education institutions. As suggested by Joseph and Joseph (2000), institutions can strengthen their positions in the overseas markets by giving information about the variety of courses offered to potential overseas students through appropriate sources of information.

Finally, unlike prior studies, graduates' employment opportunities are among the least important issue affecting the choice of students. This result is in contrast with prior research such as Bodycott (2009), Maringe and Carter (2007), Pimpa (2005) and Soutar and Turner (2002), in that employment opportunities after graduation identified as important.

Chapter 6

CONCLUSION AND IMPLICATIONS

The purpose of this study was to examine the information sources, information requirements, and choice factors of international students when making higher education destination decision. In order to specify the research steps, the initial questionnaire for information sources and information requirements are refined and grouped by using Exploratory Factor Analysis. Then, according to the extant literature and previous significant studies, explored factors were labelled. However, due to the research purpose, which is prioritizing information sources and requirements criteria, AHP was implemented. Based on the variables and the revealed factors from EFA, a hierarchical model was developed. In order to rank the selection criteria for information sources and information requirements, the AHP approach has finally been used.

Results reported in this study suggest electronic and published sources as the most crucial source to consult when making an enrolment decision. This result is consistent with the findings of Veloutsou et al. (2004), who claimed that students primarily relied on information sources created and distributed by the institution. (Briggs and Wilson 2007; Yamamoto 2006; Lehmann 2017 and Le, Dobele, and Robinson 2020). The study findings revealed that, informal sources considered as the second most important source used by the overseas students to obtain information. This result is consistent with Katz and Lazarsfeld's (1955) study, which reported personal information sources

as having greater impact on the decisions of individuals than mass media and as well as with several studies which indicated WOM communication as more influential in the enrolment decisions of students than traditional marketing tools (Lehmann, 2017; Amani, 2022; Collins, Şimşek, and Takır, 2022). The top five ranking choice factors (information requirements) are identified as job and scholarship opportunities, local life, entry requirements, accommodation, and academic program issues. Regarding the choice factors, job and scholarship opportunities are identified as the top crucial aspect influencing overseas students' choice. Availability of financial aid and the scholarships, which is under the job and scholarship opportunities dimension, ranked as the most vital choice factor. This finding is in line with findings of Le, Dobele, and Robinson (2020) study, who reported scholarship opportunities as the most commonly discussed choice factor in WOM information sources and also reported scholarships opportunities as a key factor considered when deciding whether to study at home or overseas. Similarly, Drewes and Michael (2006) stated that students are attracted by scholarships and Agrey and Lampadan (2014) reported scholarships provided by higher education institutions significantly impacts students' choice of a higher education institution. Contradicting to prior research, results of this study shows that general reputation of the institution (Simões and Soares 2010; Mazzarol and Soutar 2002; Veloutsou et al. 2004; Sojkin et al. 2015; Briggs 2006; Ahmad and Hussain 2017; Briggs and Wilson 2007) and graduates' employment opportunities (Soutar and Turner 2002; Bodycott 2009; Maringe and Carter 2007 and Le, Dobele, and Robinson 2020) were relatively unimportant.

By focusing on the factors that influence students' decision-making process while selecting a higher education institution, particularly overseas students' choice

considerations and information sources, this study adds to the body of literature that exists on the subject of higher education. As indicated by Alebeek and Wilson (2019), previous researchers frequently examined domestic students' college choice preferences and created extensive college choice models (e.g., Chapman's (1981), Litten' (1982), and Hossler and Gallagher' (1987)) to provide an understanding of the students' choice process. The higher education market in Eastern Mediterranean Region is growing, and this growth seems to continue. However, empirical studies investigating the experiences of overseas students in that region is limited. This study is the first study to examine ISs, IRs and choice factors of overseas students studying in North Cyprus. This study used AHP analysis to investigate both ISs, IRs, and choice factors. Previous studies on the decision-making process of students with AHP analysis have mainly focused on choice factors (Lee, 2014). This research contributes to the body of knowledge by concentrating on group of overseas students studying in a small island nation, North Cyprus. The experiences of students in this study may support other newly emerging higher education destinations, primarily those in developing nations, to redesign their communication and recruitment strategies to draw more overseas students. This research can be deepened and supplement prior studies in this area of research, which will assist higher education institutions to effectively build and customize marketing communication strategies for potential students.

The implications of the study findings are as follows: First, higher education institutions should know the ISs, information needs, and choice factors of international students to gain a better understanding of the decision-making process of students. It would be beneficial for marketing communication managers at universities to know

more about information sources and requirements, as well as choice factors of students, to develop an integrated marketing communication (IMC) strategy. Second, job and scholarship opportunities, local life, entry requirements, accommodation, and academic program issues dimensions should be the key elements when designing information strategies to inform potential students as these dimensions are considered most important. If institutions wish to recruit more and better students, they must attain good ratings on these dimensions. Third, when informing and recruiting students from international markets, the information should be made available on the Website of universities, given that the Websites of the universities are identified as the most used source to gather information. Accordingly, well-designed, user-friendly, and attractive Webpages play a vital role. In addition, the information provided by the institutions should be clear, accurate and informative. Fourth, the expense of living and rising tuition are major concerns and challenges for most students when selecting a university. This may explain why financial aid and scholarships were considered as the first and most important concern of international students. Accordingly, higher education institutions and policy-makers should provide detailed information on scholarships or any form of aids in order to address prospective students' main concern. Fifth, given that the local life is considered as another important concern of international students, higher education institutions in North Cyprus should design promotional materials that emphasize attributes of North Cyprus such as its safe, secure, and friendly environment, comfortable climate, perceived cultural compatibility, and capability to meet diverse needs of students from different cultures. Institutions should work to improve their position in the global marketplace by presenting information about local life in North Cyprus. Finally, in order to address the main concerns, student recruitment and communication strategies should be

tailored in accordance with the most significant concerns of international students. For instance, since the results of this study revealed that job and scholarship opportunities, local life, entry requirements, accommodation, and academic program issues as the main concerns of the international students, these factors should be addressed by extensive promotional activities.

6.1 Limitations and Opportunities for Future Studies

Although the research has reached its aims, there were some unavoidable limitations. This research study was conducted in a state university in North Cyprus. In North Cyprus, there are twenty universities in total, containing around 100,913 students of more than 70 nationalities. As a result, it is not possible to generalize the results to fit all. Extension of this research should include students from other universities that enrol a significant number of overseas students to ensure that this study's results are consistent. Second, this study has examined first-year undergraduate and postgraduate students' responses to prioritize choice factors of ISs and requirements. However, choice factors of postgraduate students may differ, which could be the primary focus of future study. Third, this study has examined and highlighted several influencing factors. However, there might be other factors that are under-researched or not found as significant that are influencing international students' decision to study abroad, such as visa and immigration policies and the influence of parents. As stated by Alebeek and Wilson (2019), Pimpa (2003), and Mazzarol and Soutar (2002), parents mainly influence students' decision to study abroad. For the future studies, it is suggested that research on such topics will profoundly contribute to the existing literature and knowledge on the factors that influence the international students' decision-making process. Fourth, one of the newest platforms being used for student recruiting is social media. It is suggested that users of social media are more receptive to the advice of

their friends, are more likely to believe them, and are therefore more likely to let them influence their choices. Future studies might examine the effects of social media-based electronic word-of-mouth on how students choose their universities. Finally, this study could be extended in the future by prioritizing the choice factors of overseas students using the criteria of nationality and gender.

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APPENDICES

Appendix A: Questionnaire A

Survey of Information Sources and Requirements of Students

Dear Respondent

This survey aims to identify the information requirements of students and to identify the sources they obtain information from when making higher education destination decision.

Your answers will be treated confidentially and be used for research purposes only. Participating in this survey is entirely voluntary, you are free to choose whether or not you wish to participate. Please answer the questions as accurately and as fully as you can.

If you have any questions about completing the survey please ask the researcher to help you.

Please circle the degree of importance to the following statements.

How important are the following sources for obtaining information about where to study?					
Very unimportant	Unimportant	Neither	Important	Very Important	INFORMATION SOURCES
1	2	3	4	5	
1	2	3	4	5	1.Websites of Universities
1	2	3	4	5	2.Information brochures, prospectuses from Universities (paper copy, not from web)
1	2	3	4	5	3.Advertisements on billboards
1	2	3	4	5	4.Advertisements on television
1	2	3	4	5	5.Advertisements on social media
1	2	3	4	5	6.Advertisements in magazines
1	2	3	4	5	7.Advertisements in newspapers
1	2	3	4	5	8.Education fairs
1	2	3	4	5	9.Liaison offices personnel
1	2	3	4	5	10.Open days in Universities (campus visit, high school visits)
1	2	3	4	5	11.University presentations at your high school
1	2	3	4	5	12.University presentations at your tutor school
1	2	3	4	5	13.Free publications distributed at high schools
1	2	3	4	5	14.Advice from a close friend
1	2	3	4	5	15.Advice from past or current students of Universities
1	2	3	4	5	16.Advice from school counsellors / guidance teachers
1	2	3	4	5	17.Advice from private tutors
1	2	3	4	5	18.Advice from parents
1	2	3	4	5	19.Advice from family members (other than parents)

Which of the following are important when you <u>collect</u> information about a university?					
Very unimportant	Unimportant	Neither	Important	Very Important	INFORMATION REQUIREMENTS
1	2	3	4	5	1. The institution's ability to place you in a job after graduation
1	2	3	4	5	2. Availability of employment opportunities after graduation
1	2	3	4	5	3. The language of teaching at the institution
1	2	3	4	5	4. The type of degree granted
1	2	3	4	5	5. Availability of specific academic programme (field of study)
1	2	3	4	5	6. Availability of exchange program
1	2	3	4	5	7. The specific academic courses that are offered
1	2	3	4	5	8. The amount of practical content in the programme
1	2	3	4	5	9. The amount of academic content in the programme
1	2	3	4	5	10. Course contents
1	2	3	4	5	11. The curriculum of the programme
1	2	3	4	5	12. Faculty (teaching staff of the university)
1	2	3	4	5	13. Quality of education
1	2	3	4	5	14. Teaching quality
1	2	3	4	5	15. Teaching method
1	2	3	4	5	16. Small class sizes
1	2	3	4	5	17. Student faculty ratio
1	2	3	4	5	18. The quota of the programme (the number of students that the University will accept into a programme)
1	2	3	4	5	19. Extracurricular activities
1	2	3	4	5	20. Social activities
1	2	3	4	5	21. Interaction between students and lecturers
1	2	3	4	5	22. Entry requirements
1	2	3	4	5	23. University entrance examination scores
1	2	3	4	5	24. Age of the university
1	2	3	4	5	25. The distance of the institution from home town
1	2	3	4	5	26. The attractiveness of the campus (architecture, buildings, landscape)
1	2	3	4	5	27. The accommodation of the university
1	2	3	4	5	28. Private dormitories or flats
1	2	3	4	5	29. Student life at the institution
1	2	3	4	5	30. Interaction between local students and foreign students
1	2	3	4	5	31. Academic reputation of the institution
1	2	3	4	5	32. The accreditation/recognition of the university
1	2	3	4	5	33. University ranking

1	2	3	4	5	34. The population of the students at the university
1	2	3	4	5	35. Presence of international students at the university
1	2	3	4	5	36. Presence of students from my country at the university
1	2	3	4	5	37. Alumni association
1	2	3	4	5	38. The companies that graduates find jobs in
1	2	3	4	5	39. The library facilities
1	2	3	4	5	40. Computing facilities
1	2	3	4	5	41. The availability of university medical care/ health care
1	2	3	4	5	42. The sports facilities at the institution
1	2	3	4	5	43. The cultural activities at the institution
1	2	3	4	5	44. Safety on campus
1	2	3	4	5	45. The cost of tuition at the institution
1	2	3	4	5	46. The availability of financial aid and scholarships at the institution
1	2	3	4	5	47. Summer job opportunities
1	2	3	4	5	48. Part-time job opportunities
1	2	3	4	5	49. Night life
1	2	3	4	5	50. Local transportation
1	2	3	4	5	51. Safety, lack of crime
1	2	3	4	5	52. Shopping amenities
1	2	3	4	5	53. Climate
1	2	3	4	5	54. The culture and lifestyle of people
1	2	3	4	5	55. Interaction between students and locals
1	2	3	4	5	56. The cost of living in the area
1	2	3	4	5	57. The opinions of university alumni or current students

Please state your:

1. Gender: _____

2. Age: _____

3. Nationality: _____

Thank you very much for completing this questionnaire.

Appendix B: Questionnaire B

Prioritizing Information Sources and Requirements of Students Survey

Dear Respondent

This survey aims to prioritize information sources and to prioritize choice factors (information requirements) that are considered important by students when making higher education decision.

Your answers will be treated confidentially and be used for research purposes only.

Participating in this survey is entirely voluntary, you are free to choose whether or not you wish to participate.

Please answer the questions as accurately and as fully as you can.

If you have any questions about completing the survey please ask the researcher to help you.

In light of the Analytical Hierarchy Process (AHP), this questionnaire is designed by pairwise comparison for factors and decision options in 9-point intensity of relative importance scale as follow:

9-POINT INTENSITY OF RELATIVE IMPORTANCE SCALE		
Intensity of Relative Importance	Definition	Explanation
1	Equal importance	Two activities contribute equally to objective 1.
3	Moderate importance of one over another	Experience and judgment slightly favor one activity over another.
5	Essential or strong importance	Experience and judgment strongly favor one activity over another.
7	Demonstrated importance	An activity is strongly favored, and its dominance is demonstrated in practice.
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation.
2, 4, 6, 8	Intermediate values between the two adjacent judgments	When a compromise is needed.
Reciprocals of the above nonzero numbers	Reciprocal for inverse comparison	

Definition of Terms:

Academic program issues	Issues relating to specific academic courses, amount of practical content, amount of academic content, course contents, and curriculum
Quality	Teaching staff, quality of education, teaching quality, and teaching method
Accommodation and Access	Attractiveness of the campus, accommodation, private dormitories or flats, student life at the institution, local transportation, and shopping amenities
On Campus Facilities	Library, computing, medical care, sports, cultural activities, and safety
Local Life	Climate, culture and lifestyle, interaction between students and locals, and cost of living
General Reputation of the Institution	Years of service in higher education, population of the students at the university, presence of international students at the university, presence of students from respondent's country, alumni association, and opinions of university alumni or current students
Medium of Teaching and Educational Issues	Language of teaching, type of degree granted, availability of specific academic programme, and accreditation/recognition of the university
Job and Scholarship Opportunities	Financial aid and scholarships, summer job, and part-time job
Social Life	Extracurricular activities and social activities
Graduates Employment Opportunities	The institution's ability to place graduates in a job, employment opportunities after graduation, and companies that graduates find jobs in
Entry Requirements	Entry requirements and university entrance examination scores
Students and Academics Interaction	Small class sizes, student faculty ratio, and quota of the programme
Institution recognition and interaction	Interaction between local students and foreign students, academic reputation of the institution, and university ranking
Advertisements	Advertisements on billboards, television, social media, in magazines and newspapers

Informal Sources	Advice from a close friend, past or current students of universities, school counsellors / guidance teachers, private tutors, parents, and family members (other than parents)
Direct Marketing	Education fairs, liaison offices personnel, open days at universities, university presentations at high schools, university presentations at tutor schools, and free publications distributed at high schools
Electronic and Published Sources	University websites and information brochures / prospectuses

Please indicate the degree of importance by placing a tick (✓) to the following statements.

Information Requirements

Dimension	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Dimension
Academic Program issues																		Quality
Academic Program issues																		Accommodation and Access
Academic Program issues																		On Campus Facilities
Academic Program issues																		Local Life
Academic Program issues																		General Reputation of the Institution
Academic Program issues																		Medium of Teaching and Educational
Academic Program issues																		Job and Scholarship Opportunities
Academic Program issues																		Social Life
Academic Program issues																		Graduates Employment Opportunities
Academic Program issues																		Entry Requirements
Academic Program issues																		Students and Academics Interaction
Academic Program issues																		Institution recognition and interaction
Quality																		Accommodation and Access
Quality																		On Campus Facilities
Quality																		Local Life
Quality																		General Reputation of the Institution
Quality																		Medium of Teaching and Educational
Quality																		Job and Scholarship Opportunities
Quality																		Social Life
Quality																		Graduates Employment Opportunities
Quality																		Entry Requirements
Quality																		Students and Academics Interaction
Quality																		Institution recognition and interaction
Accommodation and Access																		On Campus Facilities
Accommodation and Access																		Local Life

General Reputation of the																			Graduates Employment Opportunities
General Reputation of the																			Entry Requirements
General Reputation of the																			Students and Academics Interaction
General Reputation of the																			Institution recognition and interaction
Medium of Teaching and																			Job and Scholarship Opportunities
Medium of Teaching and																			Social Life
Medium of Teaching and																			Graduates Employment Opportunities
Medium of Teaching and																			Entry Requirements
Medium of Teaching and																			Students and Academics Interaction
Medium of Teaching and																			Institution recognition and interaction
Job and Scholarship																			Social Life
Job and Scholarship																			Graduates Employment Opportunities
Job and Scholarship																			Entry Requirements
Job and Scholarship																			Students and Academics Interaction
Job and Scholarship																			Institution recognition and interaction
Social Life																			Graduates Employment Opportunities
Social Life																			Entry Requirements
Social Life																			Students and Academics Interaction
Social Life																			Institution recognition and interaction
Graduates Employment																			Entry Requirements
Graduates Employment																			Students and Academics Interaction
Graduates Employment																			Institution recognition and interaction
Entry Requirements																			Students and Academics Interaction
Entry Requirements																			Institution recognition and interaction
Students and Academics																			Institution recognition and interaction

Information Sources

Dimension	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Dimension
Advertisements																		Informal Sources
Advertisements																		Direct Marketing
Advertisements																		Electronic and Published Sources
Informal Sources																		Direct Marketing
Informal Sources																		Electronic and Published Sources
Direct Marketing																		Electronic and Published Sources

Academic program issues

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Specific academic courses that are																		Amount of practical content in the program
Specific academic courses that are offered																		Amount of academic content in the program
Specific academic courses that are offered																		Course contents
Specific academic courses that are offered																		Curriculum

Amount of practical content in the program																		Amount of academic content in the program
Amount of practical content in the program																		Course contents
Amount of practical content in the program																		Curriculum
Amount of academic content in the program																		Course contents
Amount of academic content in the program																		Curriculum
Course contents																		Curriculum

Quality

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Teaching staff																		Quality of education
Teaching staff																		Teaching quality
Teaching staff																		Teaching method
Quality of education																		Teaching quality
Quality of education																		Teaching method
Teaching quality																		Teaching method

Accommodation and Access

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Attractiveness of the campus																		Accommodation
Attractiveness of the campus																		Private dormitories or flats
Attractiveness of the campus																		Student life at the institution
Attractiveness of the campus																		Local transportation
Attractiveness of the campus																		Shopping amenities
Accommodation																		Private dormitories or flats
Accommodation																		Student life at the institution
Accommodation																		Local transportation
Accommodation																		Shopping amenities
Private dormitories or flats																		Student life at the institution
Private dormitories or flats																		Local transportation
Private dormitories or flats																		Shopping amenities
Student life at the institution																		Local transportation
Student life at the institution																		Shopping amenities
Local transportation																		Shopping amenities

On Campus Facilities

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Library facilities																		Computing facilities
Library facilities																		Availability of medical care
Library facilities																		Sports facilities
Library facilities																		Cultural activities
Library facilities																		Safety on campus
Computing facilities																		Availability medical care
Computing facilities																		Sports facilities
Computing facilities																		Cultural activities

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Computing facilities																		Safety on campus
Availability of medical care																		Sports facilities
Availability of medical care																		Cultural activities
Availability of medical care																		Safety on campus
Sports facilities																		Cultural activities
Sports facilities																		Safety on campus
Cultural activities																		Safety on campus

Local Life

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Climate																		Culture and lifestyle
Climate																		Interaction between students and locals
Climate																		Cost of living
Culture and lifestyle																		Interaction between students and locals
Culture and lifestyle																		Cost of living
Interaction between students and																		Cost of living

General Reputation of the Institution

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Year of service in higher education																		The population of the students at the university
Year of service in higher education																		Presence of international students at the university
Year of service in higher education																		Presence of students from my country at the university

Year of service in higher education																		Alumni association
Year of service in higher education																		The opinions of university alumni or current students
The population of the students at the university																		Presence of international students at the university
The population of the students at the university																		Presence of students from my country at the university
The population of the students at the university																		Alumni association
The population of the students at the university																		The opinions of university alumni or current students
Presence of international students at the university																		Presence of students from my country at the university
Presence of international students at the university																		Alumni association
Presence of international students at the university																		The opinions of university alumni or current students
Presence of students from my country at the university																		Alumni association
Presence of students from my country at the university																		The opinions of university alumni or current students
Alumni association																		The opinions of university alumni or current students

Medium of Teaching and Educational Issues

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Language of teaching																		The type of degree granted

Language of teaching																		Availability of specific academic program
Language of teaching																		The accreditation/recognition of the university
Type of degree granted																		Availability of specific academic program
Type of degree granted																		Accreditation/recognition of the university
Availability of specific academic program																		Accreditation/recognition of the university

Job and Scholarship Opportunities

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Availability of financial aid and scholarships at the institution																		Summer job opportunities
Availability of financial aid and scholarships at the institution																		Part-time job opportunities
Summer job opportunities																		Part-time job opportunities

Social Life

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Extracurricular activities																		Social activities

Graduates Employment Opportunities

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Institution's ability to place you in a job after graduation																		Employment opportunities after graduation
Institution's ability to place you in a job after graduation																		Companies that graduates find jobs in
Employment opportunities after graduation																		Companies that graduates find jobs in

Entry Requirements

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Entry requirements																		University entrance examination scores

Students and Academics (Faculty) Interaction

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Small class sizes																		Student faculty ratio
Small class sizes																		Quota of the program
Student faculty ratio																		Quota of the program

Institution recognition and interaction

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Interaction between local students and foreign students																		Academic reputation
Interaction between local students and foreign students																		University ranking
Academic reputation																		University ranking

Advertisements

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Advertisements on billboards																		Advertisements on television
Advertisements on billboards																		Advertisements on social media
Advertisements on billboards																		Advertisements in magazines
Advertisements on billboards																		Advertisements in newspapers
Advertisements on television																		Advertisements on social media

Advertisements on television																		Advertisements in magazines
Advertisements on television																		Advertisements in newspapers
Advertisements on social media																		Advertisements in magazines
Advertisements on social media																		Advertisements in newspapers
Advertisements in magazines																		Advertisements in newspapers

Informal Sources

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Advice from a close friend																		Advice from past or current students of Universities
Advice from a close friend																		Advice from school counsellors / guidance teachers
Advice from a close friend																		Advice from private tutors
Advice from a close friend																		Advice from parents
Advice from a close friend																		Advice from family members (other than parents)
Advice from past or current students of																		Advice from school counsellors / guidance teachers
Advice from past or current students of																		Advice from private tutors
Advice from past or current students of																		Advice from parents

Advice from past or current students of																		Advice from family members (other than parents)
Advice from school counsellors / guidance																		Advice from private tutors
Advice from school counsellors / guidance																		Advice from parents
Advice from school counsellors / guidance																		Advice from family members (other than parents)
Advice from private tutors																		Advice from parents
Advice from private tutors																		Advice from family members (other than parents)
Advice from parents																		Advice from family members (other than parents)

Direct Marketing

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Education fairs																		Liaison offices personnel
Education fairs																		Open days in Universities
Education fairs																		University presentations at your high school
Education fairs																		University presentations at your tutor
Education fairs																		Free publications distributed at high
Liaison offices personnel																		Open days in Universities
Liaison offices personnel																		University presentations at your high school
Liaison offices personnel																		University presentations at your tutor school
Liaison offices personnel																		Free publications distributed at high schools
Open days in Universities																		University presentations at your high school
Open days in Universities																		University presentations at your tutor school
Open days in Universities																		Free publications distributed at high schools
University presentations at your high school																		University presentations at your tutor school
University presentations at your high school																		Free publications distributed at high schools
University presentations at your tutor school																		Free publications distributed at high schools

Electronic and Published Sources

Factor	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Factor
Websites of																		Information brochures, prospectuses from Universities

Please state your:

- 1. Gender:** _____
- 2. Age:** _____
- 3. Nationality:** _____

Thank you very much for completing this questionnaire.