

University Choice Process: A Literature Review on Models and Factors Affecting the Process

Üniversite seçim süreci: Modeller ve süreci etkileyen faktörler üzerine bir literatür taraması

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Özet

Yükseköğretim alanında artan rekabet, son yıllarda birçok akademik çalışmaya konu olmuştur. Bu konuda yapılan araştırmalarda, genellikle, yükseköğretim kurumları arasındaki rekabetin, öğrenci sayısını ve araştırma fonlarını arttırmak, nitelikli öğretim görevlileri bulmak ve mali kaynaklar elde etmek üzerine olduğu vurgulanmıştır. Bu çalışma ile üniversiteler arasındaki rekabetin önemli bir parçası olan “öğrenci sayısındaki artış” konusuyla bağlantılı olarak, yükseköğretime aday öğrenciler için zor ve önemli bir dönem olan üniversite seçim sürecine odaklanılmıştır. Makalede, konuyla ilgili yazın olabildiğince ayrıntılı bir şekilde taranmıştır. İlk olarak, aday öğrencilerin üniversite seçim kararı, “*ekonomik modeller, sosyolojik modeller, karma modeller ve pazarlama yaklaşımı*” başlıkları altında dört modelle açıklanmıştır. Ardından, süreçte etkili olan dokuz ana faktör (*referans grupları, aileler, üniversitenin ünü ve özellikleri, kişisel faktörler, üniversitenin yeri, mezuniyet sonrası iş bulma olasılığı, üniversitenin ücreti, üniversitenin sağladığı burs imkânları ve üniversite hakkında bilgi toplanan kaynaklar*) modellerden bağımsız olarak ortaya konulmuştur. Çalışmanın sonunda ilgili yazın temel alınarak kavramsal bir çerçeve elde edilmiştir. Elde edilen bu kavramsal çerçevenin, öğrenci sayılarını arttırmak için izleyecekleri politikalar ve geliştirecekleri stratejiler konusunda, üniversite yöneticilerine yardımcı olması beklenmektedir.

Anahtar sözcükler: Faktörler, modeller, üniversite seçim süreci, yükseköğretim.

In recent years, the environment of higher education has dramatically changed. For a long time, higher education was regarded as a luxury rather than a necessity (Gonchar, 1995; Tansel and Bircan, 2006). Many people even considered higher education as an elitist activity. Over the course of time, as people clearly observed the importance of higher education, the demand for it increased exponentially. To meet an increasing social demand for higher education, the inabilities of state

Abstract

In recent years, many studies have discussed the increasing competition in higher education. They have emphasized that the aim of the growing competition between universities was to increase the number of students, get research support, find faculty members, and receive financial contributions. In connection with the “increase in the number of students” which is a significant part of the competition among the universities, this article aims to investigate the factors affecting the university choice process which is a challenging and significant period. Relevant literature has been reviewed to provide an extensive compilation of these factors. First, the university choice process was explained in terms of the following four models: *economic models, sociological models, combined models, and the marketing approach*. Then, the study investigated the nine main factors (*reference groups, families, reputation and attributes of universities, personal factors, location, postgraduate job prospects, university fees, financial aid/scholarship, and information sources*) that have an impact on the choices of students independent from the models. Lastly, the models and factors are presented in a conceptual framework. At the end of the study, a conceptual framework that will be useful for all university managers determining strategies and policies for student recruitment is provided.

Keywords: Factors, higher education, models, university choice process.

universities have led to the establishment of private and foundation universities (Aydın, 2014).

In such a dynamic environment, students are now carefully choosing their higher education institution. However, as there are many alternatives, the university choice process is highly complicated for candidates. In addition, the increase in alternatives has resulted in growing competition among universities (Lindong, 2007; Marginson, 2006; Sabir, Ahmad, Ashraf, and

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Ahmad, 2013). Therefore, to develop effective recruitment strategies, university managers need to have a clear understanding of how and why the students choose a higher education institution. They should consider many factors in order to be selected by a student.

Even though understanding the university choice process is not easy, determining the factors that influence the process can be seen as a necessary activity for university managers. Through the analysis of this process, higher education institutions can develop a comprehensive understanding of how and why the students select a higher education institution. Understanding of choice process is very important for improving their student recruitment strategies.

This article examines the literature on the university choice process in detail. First, the models of the university choice process are categorized under the following categories: economic models, sociological models, combined models, and marketing approach models. Second, this article identifies the main factors that affect students' choice decisions. Reference groups, families, reputation and attributes of universities, personal factors, location, postgraduate job prospects, cost of university education, financial aid/scholarship, and information sources have been determined as factors that students consider in choosing a university. Finally, a conceptual framework is presented, based on relevant literature. These findings will be useful for higher education institutions to plan and further develop their student recruitment strategies.

The Models of University Choice Process

Most of the studies explain the university choice process based on the following four models: economic models, sociological models, combined models and marketing approach.

Economic models

These kinds of models are generally based on an assumption that a student wants to maximize his or her utility and minimize the risks. The limitation of the economic models is that they only focus on students' rationality as influences of choice. Economic models of university choice are based on the assumption that students act rationally by evaluating all the information available to them according to their preferences at the time of the decision (DesJardins and Toutkoushian, 2005). According to Fernandez (2010), individuals act rationally in ways that maximize their utility, given their personal preferences. His research indicates that individuals will select a higher education institution if the benefits of attending it outweigh the perceived benefits of attending other higher education institution. Students realize their possible choices and evaluate them by determining whether a university education is worth-

while by comparing the expected benefits with the expected costs associated with an investment in a college education (Paulsen, 2001). Hence, students are supposed to choose the university with the highest utility of net expected benefits (DesJardins and Toutkoushian, 2005).

Sociological model

Sociological approaches focus on the influence of the cultural and social capital, such as the socioeconomic background, prospects, and the academic achievements of students, when choosing a university (Perna, 2006). The limitation of the sociological models is that it only focuses on social factors as influences of choice. For example, Jackson's model (1982) proposes that a student has three stages to make selection. The first of one is the preference stage where the academic achievement has the strongest effect. The second is the exclusion stage where students are involved in the elimination process. The last one is the evaluation stage where the students get their final decision. To say more specifically; he emphasizes the academic achievement as the first step in university choice process. Another research states that sociological models of college choice have focused on three variables: the identification and interrelationship of factors including parental encouragement influence of significant others and academic performance (Hossler, Braxton, and Coopersmith, 1989). It is a kind of process focuses on socialization, academic conditions, the role of the family, and social networks. This model rejects the assumption of students and their families being rational deciders.

Combined models

These approaches use indicators that are more powerful in the decision-making process than economic and social models. Hossler and Gallagher's (1987) three-stage model emphasizes the stage of predisposition, search, and choice. The predisposition phase is the first step where students decide whether they will continue their education. The search stage is where students obtain information about universities. The last step is the choice stage in which students select the university that they will enroll in it. They said that the students use both economic and social models in these steps. Perna (2006) is another important person who explains the university choice process with a combined model. Her ideas focus on the decision of which university to choose and specifically include sociological as well as economic approaches. She says those calculations of expected costs and earnings are nested within several layers of context. She classifies these layers as follows: the individual habitus such as demographic characteristics, cultural effects; the organiza-



tional habitus such as the support of college teachers; the higher education context; the comprehensive social, economic, and policy context such as demographic changes and unemployment rates. In general, the combined model, which explains university choice process, consists of both sociological aspects and rational decisions.

Marketing approach

This view claims that we must mention the marketing approach to understand the models of university choice process. The concept of marketing approach for education, such as considering prospective students as consumers, is not easily accepted. However, over the course of time, it has gained acceptance (Obermeit, 2012). This approach is not directly referring to sociological and econometric concepts. Nonetheless, it is incorporated into the consumer choice models in terms of internal (cultural, social, personal, psychological characteristics) as well as external (social, cultural, product and price stimuli) influences, supplemented by communication efforts of the provider (Obermeit, 2012). Therefore, consumer behavior models can be included in marketing approach of university choice process. Communication technologies, web page properties, using catalogues can be considered, as effective tools for students. Yamamoto (2006) says that brochures, posters, meetings, sponsorships, billboards, web pages, and TV and newspaper advertisements are mostly used as communication tools for university selection.

The Main Factors of University Choice Process

In order to regulate the recruitment strategies, universities need to know factors that determine the decision to choose a higher education institution. Many studies mention various criteria. Webb (1993) claims that academic reputations, accreditations, proximity, costs, and potential marketability of the degree are important factors. Chapman (1993) proposes that quality of faculty and degrees, overall academic reputation are significant, as well. Whereas Coccari and Javalgi (1995) show these factors as follows: quality of faculty, degree programs, costs, variety of offerings, and classroom instruction. Kallio (1995) emphasizes that residency, academic environment, reputation and institution quality, course diversity, size of the institution, and financial-aid are those elements that are of profound significant importance. Donnellan (2002), on the other hand, examines the influence of personal contacts, parents, location, and social life.

Shanka, Quintal, and Taylor (2005) state that close proximity to home, the quality and variety of education, cost of

living and tuition, family recommendation, and safety greatly affect the university choice process. Holdsworth and Nind (2006) emphasize the importance of quality and flexibility degree/course combinations, availability of accommodation, costs and close proximity to home. Kaynama and Smith (1996) emphasize the influence of others is important for pre-business students and they mention to the job availability that determine student's university choice. Findings from the research based on a survey that involved 20,000 people and was conducted in England (Connor, Burton, Pearson, Pollard, and Regan, 1999; Connor, Pearson, Court, and Jagger, 1996) show that the availability of the subject of interest is the most important determinant while choosing university, followed by tuition and other costs. Strasser, Ozgur, and Schroeder (2002) state that these factors are classified into three groups: interest of study, influence of others, and career prospects. Soutar and Turner (2002) assort the factors into two categories; the first is university related factors and the second is personal factors. The university related factors are as follows: type of course, academic reputation of the institution, campus, quality of the teaching staff and type of university; personal factors are distance from home, family's opinion, and their friends' university choice. Mazzarol and Soutar (2002) identify seven broader categories: institution characteristics, knowledge and awareness of the host country, recommendation from friends and relatives, environment, cost, social link and geographic proximity. Belanger, Mount, and Wilson (2002) say that campus staff, students, and other networking are other important factors that influence students' choice of university. Hoyt and Brown (2003) listed the most important choice factors as academic reputation, quality of faculty and instruction, location, cost, scholarship offers, financial aid, and student employment opportunities. Other important factors found from their studies are size of institution, surrounding community, friendly service, availability of graduate program, variety of course offered, extracurricular programs, admission requirements, admission to graduate school, affiliation, attractiveness of campus facilities, class size, and quality of social life.

Price, Matzdorf, Smith, and Agahi (2003) conducted face-to-face interviews with 87 students from four different universities in England. They emphasized the quality of education, academic prestige, availability of major, library, and information technology facilities as determinants for university choice. Another research by Sidin, Hussin, and Soon (2003) states five factors: personal, academic quality and facilities, campus, socialization, and financial aids. According to Donaldson and McNicholas (2004), the reputation, nature of



the courses, location and address, financial considerations, facilities, social climate of the department, program structure and accreditation factors are defined as important factors influencing students' choice. In the study of Maringe (2006), the factors related with job prospects are defined as the most important criteria in university choice process. Veloutsou, Lewis, and Paton (2004) surveyed high school seniors in Scotland, Northern Ireland and England. They found that the programs, academic prestige of departments, academic prestige of the university, dormitory and campus facilities, and job placement of graduates are the major choice factors. Briggs (2006) identifies ten factors that influence student choice of higher education. These factors include academic reputation, distance from home location, own perception, graduate employment, social life nearby, entry requirements, teaching reputation, quality of the faculty, and information supplied by university and research reputation.

Alves and Raposo (2007) conducted a survey among 1024 freshmen in Portugal. They listed academic excellence, job market prospects and location matter as the most significant factors that determine their academic choices. Strayhorn, Blakewood, and DeVita (2008) suggest that three sets of factors influence university choice decisions: academic, financial, and individual traits or experiences. Foskett, Roberts, and Maringe (2006) find flexibility of fee payment, availability of financial aid, and reasonable accommodation costs exert a significant influence on students' choice of a higher education institution. Ho and Hung (2008) determine fourteen decisive factors. These factors can be classified into five categories. These factors include living conditions (location, convenience, and campus), learning environment (faculty, curriculum, and research), reputation (academic reputation and alumni reputation), economy (tuition fee, subsidies, and employability) and strategy (exam subjects, exam pass rate, and graduation requirements). Employability, curriculum, academic reputation, faculty, and research environment are the most important elements found in this study.

All of the above-mentioned factors on university choice process can be listed as following items:

Reference groups

Reference groups such as siblings, friends, peers, relatives, and teachers influence students' academic choices. Many studies show that students decide on where to study based on their peers' choice. In some studies, this group is wider and includes siblings, friends, relatives, teachers and other people that play an important role in a student's life (Kusumawati, Yanamandram, and Perera, 2010). The results of Fletcher's

study (2012) are consistent with those of Pimpa (2005) who states that Thai students apply to Australian universities because of suggestions made by their peers. According to Fletcher (2012), peers' preferences create a social norm, which is called "acceptable choice" among high school students. This means that peers might constrain university options of an individual. Counselors or teachers have a major effect on students. They assist and support candidates in selecting process (Kim and Gasman, 2011; McDonough, 1998). In Thailand, the teachers from secondary schools can exert a strong influence on students' decision-making process (Pimpa and Suwannapirom, 2008). Yamamoto (2006) uses the term of "external influence" while referring to friends' impact on prospect university students and their decisions. The reference groups certainly influence university choice decision of students but they do not have any limitation related to their choice that has a great effect on their life. Siblings, friends, peers, relatives, or teachers can only make suggestion; they do not impose any obligation.

Family

Many researches show that there is a certain relation between the students' university choice and their family. Families extend their influences in the following areas: finance, information, expectation, persuasion, and competition. Financial support from one's family might result in limitation his or her decisions concerning their academic future (Pimpa, 2004). To say more specifically, if students' families have enough budget, they support them. If they do not, they can constrain their child's choice. Students noted that financial support from parents or family might limit the choice of the university, as their financial sponsors may influence them to study in certain destinations or study programs (Kusumawati et al. 2010). Shanka et al. (2005) discuss about that family influence is a major factor in higher education selection. Because almost all students consult with their parents about their higher education plans, parents have a strong influence on the choice process.

Reputation and attributes of universities

The reputation of an institution is another major factor in university selection process. Isherwood (1991) found reputation of the university as one of the major determinants. Soutar and Turner (2002) state that one of the major criteria of university choice is the reputation of an institution. Many studies (Briggs, 2006; Hillenbrand and Money, 2007; Hoyt and Brown, 2003; Veloutsou et al., 2004; Walsh and Beatty, 2007) highlight on the importance of university's reputation



in choice process. Ming (2010) asserts that reputation of the institutions is the strongest criteria in students' selection process.

Many researches have showed that students' university choice decision is influenced by university attributes. These attributes are identified as staff quality, type of institutions, availability of desired programs, curriculum, international reputation, quality of facilities such as library, computing facilities and social facilities, campus and class size and availability of financial aid. Many studies demonstrate that academic factors, availability of desired program, academic reputation and quality of teaching are the main reasons affecting students to select a university. For instance, Tavares, Justino, and Amaral (2008) specify the main institutional characteristics as influential factors: teaching quality, scientific research quality, prestige, infrastructure, computer facilities, library, location, quality of the curricula, administrative support, extra-curricular factors such as sports, leisure or canteens, and availability of exchange programs with foreign universities. McDuff (2007) indicates that quality is an important determinant of school choice. He says that students are willing to accept large tuition fee increases in exchange for a higher quality education. Quality is certainly a broad concept in higher education area. The perceived quality of a university can be related to the services offered or the quality of teaching and research programs. If a university offers services of better quality, they are more likely to be preferred by applicants. As Soo and Elliot (2010) said that, the quality service of education is related positively to number of applicants.

Personal factors

Personal factors mean that every student has his/her own set of circumstances quite independent from the others. Age, gender, family background or ethnicity is considered as such. Many studies on choosing a university explore the influence of these kinds' of personal factors. Dawes and Brown (2002) say that before choosing university, students went through three decision sets namely the students' awareness set, consideration set, and choice set. Sidin et al. (2003) state the personal factor as an important part of students' university choices criteria. Nora (2004) identifies that all students, regardless of their ethnicity, are more likely to re-enroll if they feel accepted, safe, and happy at their universities. Yamamoto (2006) shows that personal preference is the most influential factor in university selection for Turkish students. Alves and Raposo (2007) note that personal factors have the most positive influence on students' choice of a university in Portugal.

Location

This factor refers to where a university is located geographically, and close proximity to home or city center. Veloutsou et al. (2004) say that the location of the university and the geography of its surroundings are characteristics that are of pivotal importance for students. The proximity to home is one of significant effects on university choice process (Alves and Raposo, 2007; Dawes and Brown, 2005). The distance from home is important for both American and German students (Briggs, 2006; Kim and Gasman, 2011). Studies show that students especially prefer socially active and big cities such as London, Amsterdam or Istanbul, as well as locations where they have family and friends (Keskinen, Tiuraniemi, and Liimola, 2008). Yamamoto (2006) says that in a large city with more than 10 million people, close proximity to home, easy transportation are critical factors in selecting a university. Lindong (2007) emphasizes that if the location of any university is close to a housing area, it will be a considerable advantage for this institution. In a study of Hacifazlıoğlu and Özdemir (2010), a half of the participants stated that the location of a university affected their decision on their place of study.

Job prospects for a good career

Preferring one university over the other alternatives also includes factors related to career choice. A crucial aspect of the university choice is job prospects for a good career. The young people's career exploration and actual career selection influence their university choices. Every student wants to maximize his or her utility and minimize risks in the selection process. The increasing job prospect can be seen as the most important element to maximize students' utility. Strasser et al. (2002) say that job availability, employment opportunity, and job requirements are very important for students. A similar situation was found in Australia (Soutar and Turner, 2002) and in Turkey (Tatar and Oktay, 2006). Veloutsou et al. (2004) surveyed high school seniors in Scotland, Northern Ireland and England. They found that job placement of graduates to be one of the most important determinants in their university choice. Chapman (1993), Coccari and Javalgi (1995), Donnellan (2002), Holdsworth and Nind (2006), Kallio (1995), Lin (1997), Shanka et al. (2005) and Webb (1993) also reported similar findings. Sezgin and Binatlı (2011) discuss the importance of job prospect in the university choice process. Whitehead, Raffan, and Deaney (2006) say that according to post-16-year-old students the most popular reasons for university enrollment are enjoyment of the subject, need for a degree, job requirements, better job, new sub-

ject areas, and the enjoyment of student life. Alves and Raposo (2007) conducted to the job prospect to measure factors that may influence student's university choice.

Cost of university education

Students base their decision on university cost. Before making any choice, they estimate how much money they will have to spend on a descent education. It does not only mean university fees but also it can include accommodation and transportation costs. Distance from home also adds up to that cost, which can have a negative impact on actual preferences and force students to limit the choices. (Briggs and Wilson, 2007). Many researchers have examined the influence of cost in the selection of university process. For example, Coccari and Javalgi (1995), Donnellan (2002), Holdsworth and Nind (2006), Shanka et al. (2005), and Webb (1993) validate the importance of costs on university choice process. Wagner and Fard (2009) propose that the cost of education has a direct and significant relation with student's intention to study at a university. Foskett et al. (2006) state that flexibility of fee payment and reasonable accommodation costs exert a significant influence on students' choice of a higher education institution. Many researchers have demonstrated a negative relation between fees and demand of institutions (Leslie and Brinkman, 1988). However, there are also studies that indicate a different result about costs. For instance, Soo and Elliot (2010) found that the fees charged do not influence students' decision or Briggs and Wilson (2007) indicated that the costs ranked only twenty in order of importance among twenty-two factors. Long's (2004) study displays that the role of cost decreased and the importance of cost depends on the income and student quality. Heller (1997) shows another important point related with cost of education: low-income students are more sensitive to price changes than those with a higher income.

Financial aid-scholarship

Financial aid reduces the costs borne by students. Therefore, the impact of financial aid is another significant factor affecting students' university choice. For some students the choice of an institution is constrained by financial aspects and financial aid-scholarship can be necessary to expand their choices. Kallio (1995) emphasizes financial-aid. Hoyt and Brown (2003) claim that financial aid is a considerable factor that influences student choice of a university. Financial aid-scholarship, loans or grants are very important for students (Hoyt and Brown, 2003). Foskett et al. (2006) say that availability of financial aid exerts a significant influence on students' choice of a higher education institution.

Information sources

Based on the relevant literature, information sources are identified as influential factors on the choice process. They are listed as follows:

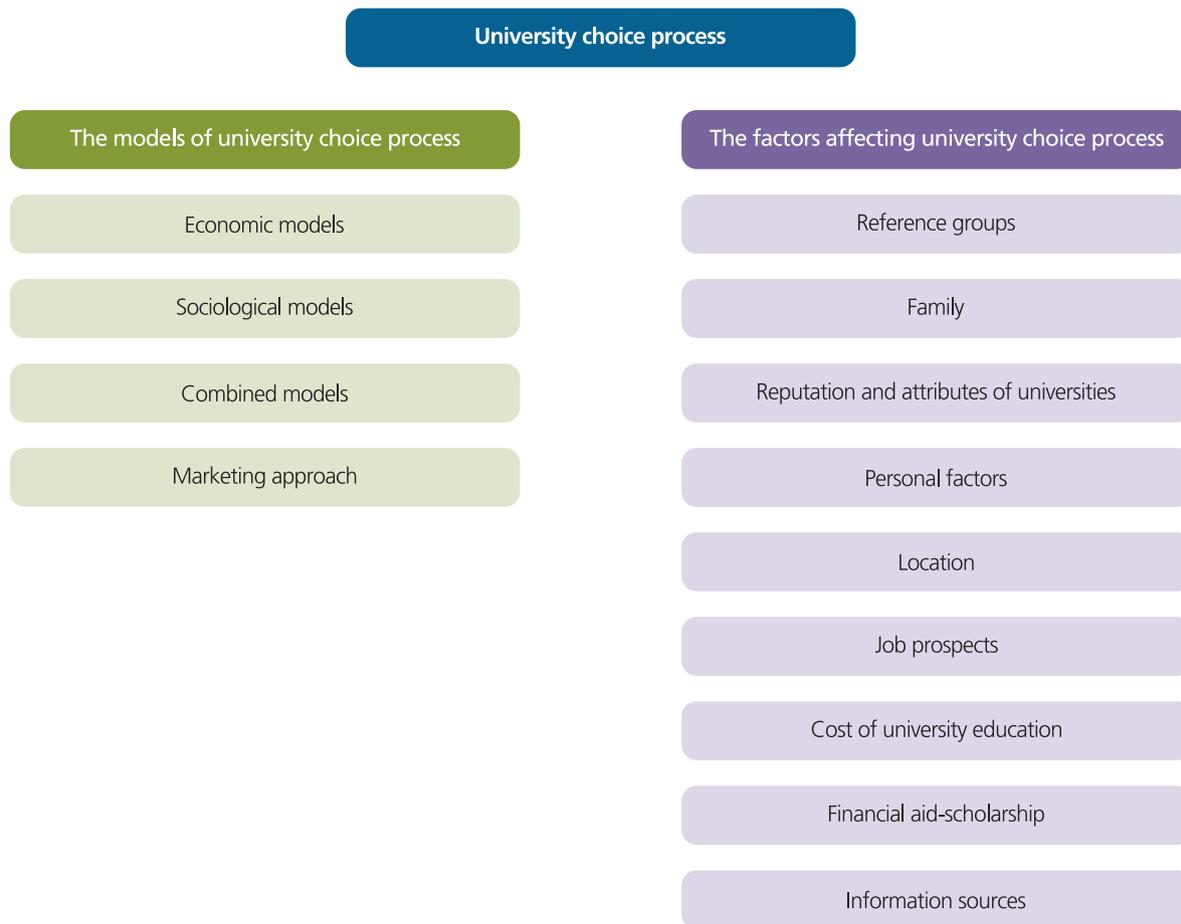
- **Internet and websites:** The Internet is definitely the main source of information nowadays. If the universities use online social networks effectively and host their websites, they can positively affect the candidates. Many researches emphasize that websites and social networks have an important influence on students' university choice (Hoyt and Brown, 2003; Kim and Gasman, 2011; Yamamoto, 2006).
- **Publications:** Another effective information source for students are publications. Despite the Internet's significance, they remain a reliable source of information (Hoyt and Brown, 2003; Moogan and Baron, 2003; Veloutsou, Paton, and Lewis, 2005).
- **Media:** Media such as television, newspapers and magazines are used by universities to place their advertisements that include information on education, social facilities, contact information or job prospects (Palmer, Hayek, Hossler, Jacob, Cummings, and Kinzie, 2004). This means that media can be used by universities by not only advertisement but also giving some information about their facilities.

The Conceptual Framework for University Choice Process

The article examined the literature on university choice process. Firstly, the models of university choice process are examined in following categories: economic models, sociological models, combined models and marketing approach. Secondly, the article identifies the main factors that have an effect on the decisions of students' university selection. At the end of the study, a conceptual framework is provided which is shown in ■ Figure 1.

Conclusion

The university choice process has long-term implications related to financial costs as well as psychological costs of any student. What and where to study for higher education has always been significant, but increasing competition in higher education coupled with a difficult employment market has made the students' university choice process more crucial and complex. The transformation of higher education from dependency on government funding to the competitive environment means that universities have to compete for stu-



■ ■ ■ **Figure 1.** University choice process.

dents. That is why, for every higher education institution, understanding the university choice process has become an instrument for developing a recruitment strategy to establish a strong position against competitors.

In this article, first, the university choice process was explained in terms of the following four models: economic models, sociological models, combined models, and the marketing approach with consumer behavior. Then, by means of a literature review, the study investigated the factors that have an impact on the choices of students. As outlined in this article, the students are affected by several factors when selecting a university. Reference groups, families, reputation and attributes of universities, personal factors, location, job prospects, university fees, financial aid/scholarship, and information sources are important factors when a candidate is selecting a university. Lastly, the models and factors are pre-

sented in a conceptual framework (Figure 1). This framework will be useful for higher education institutions for planning and developing their strategies for recruiting students.

As proposed by Kotler and Fox (1985), institutions of higher education need to understand how students select colleges and universities in order to attract the best students. Moreover, as Plank and Chiagouris (1997) posited, understanding the choice process of a university is an instrument that facilitates the development of university strategies. The findings of this study will provide ideas for the universities to understand the key issues involved in the university choice process by clarifying what is important for students. The results can be used to develop an effective recruitment plan. This study also encourages other researchers to discuss and explore this topic to develop university choice models and criteria.

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