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Evaluation of Criteria Affecting the Choice of Health Management Department Using Fuzzy Analytical Hierarchy Process Method *

Gözde Yeşilaydın [1♦]

[1] Assoc. Prof., Eskişehir Osmangazi University, Eskişehir, Türkiye / gyesilaydin@ogu.edu.tr.

Abstract: This study was carried out to rank the criteria according to their relative importance that influences the selection of health management department. A comprehensive literature review was conducted to determine the criteria. The opinions of 164 health manager candidates (70.39 % of the population) studying for undergraduate education in the health management department at a state university in Türkiye were considered in the weighting and ranking of the criteria. Chang's Extent Analysis Method was used to weigh the criteria using a fuzzy analytic hierarchy process (FAHP) method. The highest priority criterion affecting choice of the department was "personal characteristics and abilities", while the lowest criterion was "helplessness". It can be said that people are selective about choosing departments that they believe are best for them rather than choosing departments that are in demand on Türkiye's labor market when making career decisions.

Keywords: Career, Fuzzy Analytic Hierarchy Process, Health Management, Profession.

JEL Classification: I00, I10, J24

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Sağlık Yönetimi Mesleğinin Seçimini Etkileyen Kriterlerin Bulanık Analitik Hiyerarşi Prosesi Yöntemi ile Değerlendirilmesi

Gözde Yeşilaydın [1♦]

[1] Doç. Dr., Eskişehir Osmangazi Üniversitesi, Eskişehir, Türkiye / gyesilaydin@ogu.edu.tr.

Öz: Bu çalışma, sağlık yönetimi mesleğinin seçimine etki eden kriterleri göreceli önemlerine göre sıralamak amacıyla gerçekleştirilmiştir. Meslek seçimini etkileyen kriterleri belirlemek amacıyla kapsamlı bir literatür taraması yapılmıştır. Kriterlerin ağırlıklandırılması ve sıralanmasında Türkiye'de bulunan bir devlet üniversitesinin Sağlık Yönetimi bölümünde lisans eğitimi gören 164 sağlık yöneticisi adayının (%70,39) görüşleri dikkate alınmıştır. Kriterlerin ağırlıklandırılmasında bulanık analitik hiyerarşi prosesi (BAHP) yöntemi olarak Chang'in "Genişletilmiş Analiz Yöntemi" kullanılmıştır. Sağlık Yönetimi mesleğinin seçimine etki eden kriterler arasında önceliği en yüksek olan kriter "kişisel özellikler ve yetenekler" iken, en düşük kriter "çaresizlik"tir. Bireylerin kariyer kararları alırken Türkiye işgücü piyasasında talep gören meslekleri seçmek yerine kendilerine uygun olduğunu düşündükleri meslekleri seçme konusunda seçici davrandıkları söylenebilir.

Anahtar Kelimeler: Kariyer, Bulanık Analitik Hiyerarşi Prosesi, Sağlık Yönetimi, Meslek.

JEL Sınıflandırması: I00, I10, J24

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♦ ***Corresponding Author / Sorumlu Yazar***

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GENİŞLETİLMİŞ ÖZ

Araştırma Problemi

Bu araştırma, sağlık yönetimi bölümünün seçimine etki eden kriterlerin en önemliden itibaren sıralanması amacıyla yapılmıştır.

Araştırma Soruları

Sağlık yönetimi bölümünün tercih edilmesinde etkili olan en önemli kriter nedir? Sağlık yönetimi bölümünün tercih edilmesinde etkili olan ikinci kriter nedir? Sağlık yönetimi bölümünün tercih edilmesinde etkili olan kriterler arasında en son sırada yer alan faktör hangisidir?

Literatür Taraması

Bireylerin yaşamları boyunca vermeleri gereken en önemli kararlardan biri kariyer gelişiminin başlangıç noktası olan bölüm ve meslek seçimidir (Pekkaya ve Çolak, 2013: 799). Meslek seçimi; bireysel tercihlerden, geleceğe dair amaçlardan ve sosyal faktörlerden etkilenen bir dizi kararın sonucudur (Dimaki vd., 2005: 432). Kariyer gelişiminin ilk adımı olan bölüm seçiminde ne istediğini bilmek, akılcı davranmak, araştırma, planlama ve iş sahalarının analizini yapmak, bireyin ilgi duyduğu mesleğe yönelik avantaj ve dezavantajlar hakkında bilgi sahibi olmak, ilgili sektörde çalışanların deneyimlerinden yararlanmak ve kişilik özelliklerinin hangi mesleğe daha uygun olduğunu belirlemek gerekir (Çelik ve Üzmez, 2014: 95). Bölüm ve meslek seçimi ile kariyer tercihi sürecinde bireylerin tercihlerinin benimsenmesine katkıda bulunan çok sayıda faktör söz konusudur (Dimaki vd., 2005: 433; Kazi ve Akhlaq, 2017: 187; Querido vd., 2018: 333). Dolayısıyla bu seçim, bireylerin yaşamındaki önemli bir dönüm noktası (Erdem ve Kayran, 2013: 82) olmakla birlikte çok sayıda faktörden etkilenen karmaşık bir süreçtir (Genç vd., 2007: 50).

Metodoloji

Çalışmada bölüm seçimine ilişkin kriterlerin belirlenmesinde kapsamlı bir şekilde yapılan literatür taramasından yararlanılmış; kriterlerin ağırlıklandırılması ve en önemliden itibaren sıralanmasında çok kriterli karar verme yöntemlerinden biri olan "Bulanık Analitik Hiyerarşi Prosesi" yöntemi kullanılmıştır. Öncelikle kriterlere ilişkin ikili karşılaştırma matrisi üçgen bulanık sayılar kullanılarak hazırlanmıştır. Kriterlerin ağırlıklandırılmasında Chang'in Genişletilmiş Analiz Yöntemi'nden (Chang, 1996) yararlanılmıştır. Araştırmaya gönüllü olarak katılmayı kabul eden 164 sağlık yöneticisi adayının (%70,39) görüşleri değerlendirmeye alınmıştır.

Bulgular ve Sonuç

Sağlık yönetimi bölümünün seçiminde etkili olan ana kriterler kendi içinde en yüksek önceliğe sahip kriterden itibaren sıralandığında "*Kişisel Özellikler ve Yetenekler* > *Aile ve Çevrenin Etkisi* > *İş Avantajları* > *İlgi* > *Çaresizlik*" şeklinde bir sıralama söz konusudur. "*İş avantajı*" kriteri içerisinde en yüksek önceliğe sahip alt kriter "*meslekte ilerleme/kariyer imkanı*" iken; en düşük önceliğe sahip alt kriterler "*iş bulma kolaylığı*", "*esnek çalışma koşulları*" ve "*sağlık yönetiminin geçerli bir meslek olması*" dır. "*İlgi*" kriteri içerisinde en yüksek önceliğe sahip alt kriter "*sağlık ekibi üyesi olma isteği*" iken, en düşük önceliğe sahip alt kriter "*sağlık yönetimi mesleğini sevme*"dir. "*Çaresizlik*" kriteri içerisinde en yüksek önceliğe sahip alt kriter "*bir meslek sahibi olma isteği*" iken, en düşük önceliğe sahip alt kriter "*üniversite mezunu olabilme isteği*" dir. Kişisel özellikler ve yeteneklerin seçim kararında en önemli kriter olmasının araştırmada özgüvenleri yüksek, özgür ruhlu, bağımsız olma özelliği baskın olan ve kendi yollarını çizmek isteyen Z kuşağının görüşlerinin alınmasından kaynaklanabileceği düşünülmektedir. Dolayısıyla katılımcıların Türkiye'de işgücü piyasasında talep gören bölümleri doğrudan kabul etmek yerine, karar verirken kendilerine uygun olduğunu düşündükleri bölümleri seçme konusunda seçici davrandıkları söylenebilir.

INTRODUCTION

One of the most important decisions that individuals have to make throughout their lives is the selection of a department and profession which is the starting point of career development. Individuals will direct their whole life with the decision they make, and the choices they make will determine the environment in which they will live, the individuals with whom they will establish relationships, their income and livelihood, whether they will enjoy their job, and whether they will be happy in the future (Pekkaya and Çolak, 2013: 799).

The selection of a department and profession is the result of a series of decisions affected by individual preferences, future goals, and social factors (Dimaki et al., 2005: 432). It is necessary to know what one wants in selecting a department and profession, which is the first step of career development, act rationally, do a search, make plans, do an analysis of the job areas, know the advantages and disadvantages of the profession of interest, benefit from the experiences of the employees in the relevant sector, and determine which profession is more suitable for the personal characteristics of the individual (Çelik and Üzmez, 2014: 95). This is because the selection of a profession is of great importance for both the individual development of the person and the development of the country and social welfare (Korkut-Owen et al., 2012: 135; Saranapala and Devadas, 2020: 108-109).

The rapid and ever-increasing developments in science and technology have led to the emergence of new professions. One of the in-demand professions today is health management. Health management is the planning, direction, and evaluation of the resources and processes involved in the transformation of needs and demands into services offered to individuals and societies for the delivery of health services and the creation of a healthy environment (Austin, 1973: 74). It is a profession that deals with the management of human, financial, physical, and information resources to meet the objectives of health institutions (Lewis et al., 2011: 1).

When the historical development of the Health Management profession in the world and in Türkiye is examined, it is seen that it has been operating for more than 100 years in the world and 60 years in Türkiye. In the early 1900s, the idea of hospital management was introduced in the United States with the realization that special training was needed to manage hospitals. The work titled “Hospital Administration: A Career” was published by Michael Davis in 1929. The publication of this work is seen as an important development in the professionalization of health management. Healthcare Administration first emerged within graduate programs, and in 1934, the first program was founded at the University of Chicago. In subsequent years, Health Management programs were founded at undergraduate and graduate levels in many universities in the United States, contributing to the popularization of the field. In 1948, the Association of University Programs in Health Administration, AUPHA, was established in the

United States to guide health management education. In this way, an international organization has been established that encourages, guides and contributes to health management education and research of universities, individuals and institutions for the purpose of improving health. In Europe, developments in this field began in the 1950s. Especially under the leadership of England, training in the field of health management became widespread in Europe (Aydemir and Çetin, 2023: 157; Camuz Berber et al., 2023: 203; Çimen, 2010: 137; Karaşin and Tatlı, 2022: 58; Hilsenrath, 2012: 388).

In Türkiye the School of Health Administration, was established in 1963 under the General Directorate of Vocational Education of the Ministry of Health, is the first institution to provide education in the field of health management. In 1970, the School of Hospital Administration was established at Hacettepe University and graduate education was provided until 1975. In 1975, the undergraduate program was opened and the name of the school was changed to "School of Health Administration". In 1982, the programs established under the Ministry of Health and Hacettepe University were combined under Hacettepe University as the "Health Administration High School (SIYO)" (Aydemir and Çetin, 2023; Çimen, 2010; Güngör Önlen and Öngel, 2018; Karaşin and Tatlı, 2022; Kıroğlu Arslan and Akşahin, 2021). After this date, health management education continued to operate under different names in different faculties. In 2016, the name of the departments that provided education under different names was replaced to "Health Management" by the Council of Higher Education (YÖK, 2016). Health Management education has become increasingly important in Türkiye and has become a popular department preferred by universities (İnce and Söyük, 2020). As of May 2025, there are undergraduate programs in 78 universities and associate degree programs in 51 universities (YÖK, 2025).

Research shows that there are many factors that affect the decision-making process of an individual in selecting a department, profession and making a career choice (Dimaki et al., 2005: 433; Gokuladas, 2010: 146; Kazi and Akhlaq, 2017: 187; Ulas-Kilic et al., 2020: 14; Querido et al., 2018: 333;). Therefore, this choice is an important turning point in the lives of individuals (Erdem and Kayran, 2013: 82), yet it is a complex process influenced by many factors (Genç et al., 2007: 50). According to studies on the subject in literature, there are individual, social, economic, and cultural factors that affect the selection of a department, profession, and career choice. Factors that affect the choice include personal factors, such as the individual's personal characteristics, values, beliefs, attitudes, expectations, skills, competencies, abilities, self-interest, and cognitive style; interest factors, such as interest in the field and suitability of the job for the individual's abilities; job-related factors, such as good salary, good long-term earnings, job availability, interesting job, job security, workload, promotion and advancement opportunities, the

flexibility of career options, good job opportunities, professional independence, good physical working conditions, flexible working hours, promotion of creativity, employment opportunities, social acceptability of the profession, social status and prestige of the job, and opportunity to gain experience for advancement. On the other hand, peers' choices, peers influence, parents, relatives, teachers, friends, environment, career advisors, and referents also have an impact on the career choice decision (Ahmed et al., 1997; Akın and Onat, 2015; Akosah-Twumasi et al., 2018; Bruce and Quartey, 2017; Dalcı et al., 2013; Öztürk and Ilıman, 2015; Kazi and Akhlaq, 2017; Korkut-Owen et al. 2012; Özen, 2011; Pala, 2016; Soysal and Arıcıoğulları, 2021; Sugahara et al., 2008; Tan and Laswad, 2006; Uyar et al., 2011; Yetim, 2008; Yorulmaz, 2019). In order to make the right decision, it is very important to evaluate all the criteria together affecting the choice. According to Korkut-Owen et al. (2012: 135), it has become important to focus on the factors affecting the selection of a profession as the number of professions is gradually increasing and the process requires expertise. On the other hand, Dinç (2008: 91) stated that many studies conducted abroad revealed that student perceptions had a significant impact on the career choice process. According to Querido et al. (2018: 332), career choice is important in terms of human resources management in health services and shape the landscape of human resources in healthcare. In line with these considerations, this study was conducted to rank the criteria that are effective in the selection of the health management department.

2. LITERATURE REVIEW

The selection of a profession, department and career choice are important decisions that every individual across the world faces and which pose a dilemma (Akter et al., 2018: 91). This decision has a lasting effect on the individual. It leaves some traces on the personality, attitude, and perspective of the individual (Kazi and Akhlaq, 2017: 187). The right choice has critical importance on professional life, future success, and income levels of individuals (Ahmed et al., 2017: 1). On the other hand, a wrong choice or a choice that is not suitable for the individual can change the fate of individuals and negatively affect both the personal-social and career life of individuals (Ulas-Kilic et al., 2020: 14). This individually made wrong decision may also have negative effects on the economic prosperity of countries when it is viewed from a macro point of view. Individuals who are not in harmony with their profession will tend to be less productive and efficient, and there will be difficulty in reaching goals (Kazi and Akhlaq, 2017: 187). For this reason, individuals should focus on the job in which they can express themselves in the best way, which they will not get bored of dealing with throughout their lives, and which will be most suitable for their own level of interest and personality. In this way, it is thought that important gains will be achieved both individually and socially (Çelik and Üzmez, 2014: 95). A better understanding of the selection process and influencing factors will help ensure that

individuals' preferences and special needs are better matched (Querido et al., 2018: 332).

In literature there are many studies examining the selection criteria of students studying in different departments (accounting, business, econometrics, teaching, nursing, midwifery, medicine, etc.). Although Liaw et al. (2017) and Çiftçi et al. (2011) studied the opinions of health management students in studies conducted with healthcare students; Öztürk and Ilıman, 2015, Yorulmaz (2019), Soysal and Arıcıoğulları (2021) and Son (2022) directly examined the reasons for department preference of students studying in the health management department. Including these studies, the examination of studies on the determination of the criteria affecting the selection of a profession, department and career choice indicated that in the majority of the studies, data were collected using a questionnaire/scale-like form and evaluated with statistical methods (Ahmed et al., 1997; Çelik and Üzmez, 2014; Dalcı et al., 2013; Dinç, 2008; Erdem and Kayran, 2013; Genç et al., 2007; Korkmaz and Kırcı Çevik, 2014; Korkut-Owen et al., 2012; Omar et al., 2015; Tan and Laswad, 2006). However, selecting a profession, department and making a career choice, which is a lifelong decision-making process for those who seek major satisfaction from their work (Dibabe et al., 2015: 147), is a complex decision as it determines the type of profession that individuals plan to do throughout their lives (Edwards and Quinter, 2011: 81). Multi-Criteria Decision Making (MCDM) techniques have been developed, in which is the optimum decision-making process in the presence of various criteria (Kahraman et al., 2004: 33). Therefore, since the department and profession choice decisions are affected by more than one different criterion and the decision maker must consider many criteria when choosing the best among alternatives, it is thought that the selection of a profession, department and career choice decision can be considered as a multi-criteria decision-making problem. There are also studies that analyze the subject by using multi-criteria decision-making methods (Akın, 2017; Akın and Akyıldız, 2018; Göktolga and Gökalp, 2012; Kara and Karaca, 2010; Matsuda and Uehara, 1995; Özkoç et al., 2018; Pekkaya and Çolak, 2013). However, it is thought that it would be more appropriate to use fuzzy multi-criteria decision-making (FMCDM) methods so that the current situation can be expressed more realistically since students' opinions can include subjective judgments, and the words and knowledge that are used in the definition of criteria can contain uncertainty. Events or expressions encountered in real life can be ambiguous in many ways. The future status of the system may not be known exactly, especially due to the lack of information. This uncertainty is called "fuzziness" (Zimmermann, 2001: 3). One of the FMCDM methods handled under this uncertainty is the "Fuzzy Analytical Hierarchy Process (FAHP)" method. In cases where it is not always possible to decide with exact values in the face of real-life events, FAHP allows making judgments with values in certain intervals instead of working with exact values, and it is considered a very effective method for decision-

makers (Vatansever, 2013: 231). The selection of a department is also a decision process that creates uncertainty for individuals, in which a large size of information is handled together, and which cannot be known exactly and precisely. Reflecting on all these, the use of the FAHP method, one of the FMCDM methods, was found appropriate in the study. A limited number of studies using the FAHP method on the subject were found (Kartal et al., 2019; Pala, 2016). For this reason, it is thought that the use of the FAHP method in the study shows the originality of the study.

The FAHP method is one of the methods in which the weights of the criteria are determined using fuzzy numbers and the criteria rankings are made from the most important to the least. In this method, the order of importance is first determined within the main criteria and then within the sub-criteria belonging to each main criterion by using triangular fuzzy numbers. Triangular fuzzy numbers are represented by the parameters (l, m, u). The triangular fuzzy numbers used by Chou et al. (2019); Singh and Prasher (2019); Kumar and Kansara (2018); Paksoy et al. (2012) and Ho (2011) were used in the current study. The triangular fuzzy numbers used are given in Table 1.

Table 1. Definition of FAHP Scale

Saaty's Scale	**Definition**	Triangle fuzzy numbers	Reciprocal Triangle fuzzy numbers
1	Equally important	(1,1,1)	(1,1,1)
3	Weakly important	(2,3,4)	(1/4,1/3,1/2)
5	Fairly important	(4,5,6)	(1/6,1/5,1/4)
7	Strongly important	(6,7,8)	(1/8,1/7,1/6)
9	Absolutely important	(9,9,9)	(1/9,1/9,1/9)
2	Intermittent values between two adjacent scales	(1,2,3)	(1/3,1/2,1)
4		(3,4,5)	(1/5,1/4,1/3)
6		(5,6,7)	(1/7,1/6,1/5)
8		(7,8,9)	(1/9,1/8,1/7)

Chang's FAHP is a systematic method of choosing alternatives and solving problems by employing AHP that uses fuzzy set theory and triangular fuzzy numbers (Amini and Rezaeenour, 2016: 28). The mathematical background of the method is as follows (Amini et al., 2017; Kahraman et al., 2004).

Let $O=\{o_1,o_2,..., o_n\}$ be an object set,and $U=\{g_1,g_2,...,g_m\}$ be a goal set. (1)

According to the Chang's extent analysis, each object is considered one by one, and for each object, the analysis is carried out for each of the possible goals, *gi*. Therefore, m extent analysis values for each object are obtained and shown as follows:

$M^1_{gi}, M^2_{gi}, \ldots\ldots\ldots\ldots, M^m_{gi}, \quad i = 1,2, \ldots n$ (2)

where M^j_{gi} $(j = 1,2, \ldots m)$ are all triangular fuzzy numbers. The membership function of the triangular fuzzy number is denoted by $M(x)$. The steps of Chang's extent analysis are as follows:

Step 1: The value of fuzzy synthetic extent with respect to the i^{th} object is defined as:

$$S_i = \sum_{j=1}^{m} M^i_{gi} \otimes \left[\sum_{i=1}^{n}\sum_{j=1}^{m} M^i_{gi}\right]^{-1} \quad (3)$$

where × denotes the extended multiplication of two fuzzy numbers. In order to obtain $\sum_{j=1}^{m} M^i_{gi}$, the addition of m extent analysis values is applied.

$$\sum_{j=1}^{m} M^i_{gi} = \left(\sum_{j=1}^{m} l_j, \sum_{j=1}^{m} m_j, \sum_{j=1}^{m} u_j\right) \quad (4)$$

Then, the inverse of the vector is computed as,

$$\left[\sum_{i=1}^{n}\sum_{j=1}^{m} M^i_{gi}\right]^{-1} = \left(\frac{1}{\sum_{i=1}^{n} u_i}, \frac{1}{\sum_{i=1}^{n} m_i}, \frac{1}{\sum_{i=1}^{n} l_i}\right) \text{ where } \quad \forall\, u_i, m_i, l_i > 0 \quad (5)$$

Step 2: The degree of possibility of is defined as $M_2 (l_2,m_2,u_2) \geq M_1 (l_1,m_1,u_1)$ (6)

$V(M_2 \geq M_1) = \sup_{y \geq x} [\min (M_1 (x), M_2 (y))]$ which can be equivalently expressed as,

$V(M_2 \geq M_1) = hgt (M_1 \cap M_2) = M_2 (d)$ (7)

$$= \begin{cases} 1 & if \quad m_2 > m_1 \\ 0 & if \quad l_1 \geq u_2 \\ \dfrac{l_1 - u_2}{(m_2 - u_2) - (m_1 - l_1)}, & otherwise \end{cases} \quad (8)$$

To compare M_1 ve M_2, both of the values $V(M_2 \geq M_1)$ and $V(M_1 \geq M_2)$ are required.

Step 3: The degree of possibility for a convex fuzzy number to be greater than k convex fuzzy numbers $M_i = 1,2,\ldots,k$ is defined as

$V(M \geq M_1, M_2, \ldots\ldots, M_k) = \min V(M \geq M_i), i = 1,2,\ldots,k$ (9)

Step 4: Finally, normalized weight vector W is obtained by the normalization process.

$W = (\min V(S_1 \geq S_K) \min V(S_2 \geq S_K), \ldots\ldots\ldots, \min V(S_n \geq S_K))^T \; k = 1, \ldots\ldots, n$ (10)

where W is a nonfuzzy number

3. MATERIALS AND METHODS

This study was conducted to rank the criteria affecting the choice of health management department according to their relative importance. For this purpose, the literature was reviewed, and the criteria affecting the selection of a department, profession and career choice used in previous studies were determined. Pairwise comparisons were made regarding the criteria, and then they were weighted according to the participants' opinions and ranked in order of importance.

3.1. Population and Sample

The population of the study consisted of a total of 233 health management candidates studying undergraduate education from the Department of Health Management of a state university in Türkiye. In the study, no sampling procedure was implemented; instead, the entire population was targeted. Eventually, 164 students (70.39 % of the population) who volunteered to participate in the study made up the study sample and were included in the evaluation. There is a consensus in the literature that AHP does not require a large sample (Schmidt et al., 2015). Although there is no study on the appropriate sample size for the application of the AHP method, the method can be applied with a small number of participants. According to Kil et al. (2016), when the literature on the AHP method was examined, it was determined that the method was also applied in studies with small sample sizes by obtaining the opinions of a small number of experts (such as 5 experts, 18 experts, 25 experts). For these reasons, the sample size reached in the study is considered sufficient for the method.

3.2. Ethical Considerations

This study received ethical approval from the Committee for Research and Publication Ethics in the Social Sciences and Humanities at Eskişehir Osmangazi University (decision no: 64075176-299-E.46090; April 16, 2019).

3.3. Data Analysis

Fuzzy Analytic Hierarchy Process Method, which is one of the Fuzzy Multi Criteria Decision Making methods, was used in the current study. A comprehensive literature review was conducted to determine the criteria (Akın, 2017; Akın and Akyıldız, 2018; Bruce and Quartey, 2017; Çelik and Üzmez, 2014; Çiftçi et al., 2011; Dalcı et al., 2013; Dibabe et al., 2015; Erdem and Kayran, 2013; Gokuladas, 2010; Kartal et al., 2019; Korkut-Owen et al., 2012; Liaw et al., 2017; Ng et al., 2008; Omar et al., 2015; Özkoç et al., 2018; Öztürk and Ilıman, 2015; Pala, 2016; Pekkaya and Çolak, 2013; Saranapala and Devadas, 2020; Son, 2022; Soysal and Arıcıoğulları, 2021; Tan and Laswad, 2006; Uyar et al., 2011; Yorulmaz, 2019) and the FAHP method was employed to weight and rank the criteria. First of all, the pairwise comparison matrix regarding the criteria was prepared using triangular fuzzy numbers. Then Chang's Extent Analysis Method (Chang, 1996) was used to weigh the criteria.

4. RESULTS

Prior to the presentation of the research findings, Table 2 displays descriptive statistics pertaining to Health Management departments in Türkiye.

Table 2. Descriptive Statistics of Health Management Departments

	State University		Foundation University		Total	
Formal Education	**n**	**%**	**n**	**%**	**n**	**%**
Associate Degree of Health Management	46	90.20	5	9.80	51	100.0
Bachelor's Degree of Health Management	61	78.21	17	21.79	78	100.0

Referance: Council of Higher Education (2025)

In Türkiye, there are 51 universities offering associate degree programs in Health Management, 90.20% of which are in state universities. There are 78 universities offering undergraduate programs in Health Management, 78.21% of which are in state universities and 21.79% in foundation universities (see Table 2). Apart from these, there are also open education programs in Health Management in Türkiye. 2 state universities offer open education undergraduate programs, and 3 state universities offer open education associate degree programs in Health Management.

The synthetic extent and the lowest vector values calculated for the main criteria and sub-criteria of "interest", "helplessness" and "job advantage" are given in Table 3.

Table 3. The Synthetic Extent and The Lowest Vector Values of Main Criteria and Sub-Criteria

Main Criteria	$S_{\text{job advantage}} = (0.1458, 0.1968, 0.2646)$ $S_{\text{Interest}} = (0.1363, 0.1818, 0.2432)$ $S_{\text{effect of family and environment}} = (0.1589, 0.2123, 0.2844)$ $S_{\text{personal characteristics and abilities}} = (0.1704, 0.2295, 0.3079)$ $S_{\text{helplessness}} = (0.1352, 0.1796, 0.2391)$
Interest	$S_{\text{interest in health field}} = (0.2947, 0.3595, 0.4394)$ $S_{\text{desire to be a member of the healthcare team}} = (0.3082, 0.3792, 0.4634)$ $S_{\text{enjoying the health management profession}} = (0.2179, 0.2613, 0.3156)$
Helplessness	$S_{\text{compulsory selection of the health management field due to the university entrance test score}} = (0.3051, 0.3735, 0.4565)$ $S_{\text{desire to be a university graduate}} = (0.1595, 0.1846, 0.2191)$ $S_{\text{desire to have a profession}} = (0.3608, 0.4419, 0.5359)$
Job advantage	$S_{\text{ease of finding a job}} = (0.0728, 0.0935, 0.1230)$ $S_{\text{flexible working conditions}} = (0.0861, 0.1119, 0.1479)$ $S_{\text{salary}} = (0.1432, 0.1887, 0.2471)$ $S_{\text{the prestige/reputation of the job in society}} = (0.1517, 0.2040, 0.2721)$ $S_{\text{professional advancement/career opportunity}} = (0.1940, 0.2600, 0.3458)$ $S_{\text{health management being a valid profession}} = (0.1078, 0.1420, 0.1877)$
Main Criteria	
$\min V(S_{\text{job advantage}} \geq S_{\text{interest}}, S_{\text{effect of family and environment}}, S_{\text{personal characteristics and abilities}}, S_{\text{helplessness}}) = 0.742329$ $\min V(S_{\text{interest}} \geq S_{\text{job advantage}}, S_{\text{effect of family and environment}}, S_{\text{personal characteristics and abilities}}, S_{\text{helplessness}}) = 0.604301$ $\min V(S_{\text{effect of family and environment}} \geq S_{\text{job advantage}}, S_{\text{interest}}, S_{\text{personal characteristics and abilities}}, S_{\text{helplessness}}) = 0.86915$ $\min V(S_{\text{personal characteristics and abilities}} \geq S_{\text{job advantage}}, S_{\text{interest}}, S_{\text{effect of family and environment}}, S_{\text{helplessness}}) = 1.00000$ $\min V(S_{\text{helplessness}} \geq S_{\text{job advantage}}, S_{\text{interest}}, S_{\text{effect of family and environment}}, S_{\text{personal characteristics and abilities}}) = 0.579325$	
Interest	
$\min V(S_{\text{interest in health field}} \geq S_{\text{desire to be a member of the healthcare team}}, S_{\text{enjoying the health management profession}}) = 0.869532$ $\min V(S_{\text{desire to be a member of the healthcare team}} \geq S_{\text{interest in health field}}, S_{\text{enjoying the health management profession}}) = 1.00000$ $\min V(S_{\text{enjoying the health management profession}} \geq S_{\text{interest in health field}}, S_{\text{desire to be a member of the healthcare team}}) = 0.059402$	

Helplessness
min V ($S_{\text{compulsory selection of the health management field due to the university entrance test score}} \geq S_{\text{desire to be a university graduate}}, S_{\text{enjoying the health management profession}}$) = 0.58334
min V ($S_{\text{desire to be a university graduate}} \geq S_{\text{compulsory selection of the health management field due to the university entrance test score}}, S_{\text{enjoying the health management profession}}$) = 0.00000
min V ($S_{\text{enjoying the health management profession}} \geq S_{\text{compulsory selection of the health management field due to the university entrance test score}}, S_{\text{desire to be a university graduate}}$) = 1.00000
Job Advantage
min V ($S_{\text{ease of finding a job}} \geq S_{\text{flexible working conditions}}, S_{\text{salary}}, S_{\text{the prestige/reputation of the job in society}}, S_{\text{professional advancement/career opportunity}}, S_{\text{health management being a valid profession}}$) = 0.00000
min V ($S_{\text{flexible working conditions}} \geq S_{\text{ease of finding a job}}, S_{\text{salary}}, S_{\text{the prestige/reputation of the job in society}}, S_{\text{professional advancement/career opportunity}}, S_{\text{health management being a valid profession}}$) = 0.00000
min V ($S_{\text{salary}}, \geq S_{\text{ease of finding a job}}, S_{\text{flexible working conditions}}, S_{\text{the prestige/reputation of the job in society}}, S_{\text{professional advancement/career opportunity}}, S_{\text{health management being a valid profession}}$) = 0.427028
min V ($S_{\text{the prestige/reputation of the job in society}} \geq S_{\text{ease of finding a job}}, S_{\text{flexible working conditions}}, S_{\text{salary}}, S_{\text{professional advancement/career opportunity}}, S_{\text{health management being a valid profession}}$) = 0.582315
min V ($S_{\text{professional advancement/career opportunity}} \geq S_{\text{ease of finding a job}}, S_{\text{flexible working conditions}}, S_{\text{salary}}, S_{\text{the prestige/reputation of the job in society}}, S_{\text{health management being a valid profession}}$) = 1.00000
min V ($S_{\text{health management being a valid profession}} \geq S_{\text{ease of finding a job}}, S_{\text{flexible working conditions}}, S_{\text{salary}}, S_{\text{the prestige/reputation of the job in society}}, S_{\text{professional advancement/career opportunity}}$) = 0.00000

The weights calculated for the main criteria, namely, "interest", "helplessness", and "job advantage" sub-criteria are given in Table 4.

Table 4. The Weights of The Main Criteria and Sub-Criteria

Criteria	Weight	Sub-criteria	Global weights
Job advantage	0,196	Ease of finding a job	0,000
		Flexible working conditions	0,000
		Salary	0,084
		The prestige/reputation of the job in society	0,114
		Professional advancement/career opportunity	0,196
		Health management being a valid profession	0,000
Interest	0,159	Interest in health field	0,138
		Desire to be a member of the healthcare team	0,159
		Enjoying the health management profession	0,009
Helplessness	0,153	Compulsory selection of the health management field due to the university entrance test score	0,089
		Desire to be a university graduate	0,000
		Desire to have a profession	0,153
Effect of family and environment	0,229		
Personal characteristics and abilities	0,263		

When the main criteria were ranked in order of importance, the following order was obtained: *Personal characteristics and abilities > The Effect of Family and Environment > Job Advantage > Interest > Helplessness* (Table 4).

The sub-criterion with the highest priority under the "*job advantage*" criterion was "*professional advancement/career opportunity*", and the lowest priority sub-criteria were "*ease of finding a job*", "*flexible working conditions*", and "*health management being a valid profession*". The sub-criterion with the highest priority under the

"*interest*" criterion was "*desire to be a member of the healthcare team", and the sub-criterion with the lowest priority was "enjoying the health management profession*". The highest priority sub-criterion within the "*helplessness*" criterion was "*desire to have a profession*", and the lowest priority sub-criterion was "*desire to be a university graduate*" (see Table 4).

CONCLUSION AND DISCUSSION

The selection of a department, profession and career choice, which is the most important decision in one's life, is one of the dilemmas and difficulties experienced by individuals. This decision, which consists of the interaction of many intertwined factors, becomes more difficult with the existence of newly emerging, developing, and current prestigious professions (Kazi and Akhlaq, 2017: 188, 194). This process has become even more complex, especially with the developments in information technologies and the increase in competition (Edwards and Quinter, 2011: 81). Considering this complexity, how this decision is made is a point of consideration (Kazi and Akhlaq, 2017: 187). Reflecting on all this, this study was conducted to rank the criteria that affect the selection of the health management department in order of importance.

Many studies have been conducted in various countries, such as New Zealand, Türkiye, Iran, South India, Sri Lanka, Singapore, Ethiopia, USA, Malaysia, and Ghana, to examine the criteria affecting the selection of a department, profession and career choice. Cultural similarities and differences play a part in determining these criteria. For example, in this study on the selection of the health management department in Türkiye, "*personal characteristics and abilities*" was found to be the highest priority criterion. Similarly, in the study conducted by Saranapala and Devadas (2020) on the choices of management and commerce undergraduates at national universities in Sri Lanka, it was concluded that personal factors were quite effective. In the study conducted by Son (2022) on Health Management students, the fact that the field is suitable for personality traits and that it allows students to improve themselves were stated as the highest reasons for preference. However, in a study by Uyar et al. (2011) on students in business programs at a university in Türkiye, the three variables with the highest frequency were found as good job opportunities, interest in the field, and a good fit with respondent abilities. On the other hand, Gokuladas (2010) found that in South India, engineering students' decisions regarding their choices were influenced by internal, rather than external or interpersonal factors (interest in the job, job satisfaction, working environment, good training and internship facilities, career growth, etc.). Similarly, Dibabe et al. (2015), in their study on the students of business and economics at a university in Ethiopia, concluded that factors, such as ability, desire to run a business, and the need for a dynamic and challenging environment, had a positive effect. In their study conducted to determine the

motivation factors that affected the preferences of students at a university in Ghana, Bruce and Quartey (2017), on the other hand, found that external values (such as wealth, fame, and attractiveness) influenced the preferences more than internal values (affiliation, generativity, and personal development). It is thought that "personal characteristics and abilities" was the most important criteria in the selection decision may be because the study investigated the opinions of the Z generation, who are self-confident, free-spirited, independent, and want to draw their own path. Therefore, it can be said that the participants acted selectively in choosing the departments that they thought were suitable for them, instead of directly accepting the departments that are in demand in the labor market in Türkiye.

In the study "*the effect of family and environment*" was found to be the second most important criterion in the selection of the health management department. Similarly, according to the study conducted by Tan and Laswad (2006) with students of business administration in New Zealand, it was found that references that are considered important in the selection decision, especially parents, had a very strong influence. Dalcı et al. (2013) stated that Iranian students were sensitive to the opinions of references when choosing the accounting department. On the other hand, Ng et al. (2008), in their study with a sample of MBA students in the USA, concluded that family and environment had no effect. The fact that the second most important criterion in the selection of the health management department in the current study was "the effect of family and environment" can be explained by the possibility that this department is recommended by peers and career counselors because of the rapid quantitative increase in the health management profession in Türkiye, especially in recent years. According to Ahmed et al. (2017), individuals need to turn to emerging trends and future opportunities. In line with this idea, the orientations of the environment may be effective in choosing the rapidly developing and increasing number of health management departments.

In the study, the "*job advantages*" criterion in the selection of the health management department was the third most important criterion after the "personal characteristics and abilities" and "the influence of the family and environment" criteria. The intra-evaluation of the sub-criteria of job advantages criterion indicated that "*professional advancement/career opportunity, prestige/reputation of the job in society, and salary*" were the top three factors. In their study on the selection of a profession and career choice among individuals between the ages of 20 and 50 and living in Istanbul, Kartal et al. (2019) similarly found the variable of "reputation of the job in society" as the highest priority criterion. In the study conducted by Öztürk and Ilıman (2015) on Health Management students, the social prestige of the field, the idea that the department is important in terms of service and benefit to society, and career opportunities were found to be important reasons for students to choose the field. According to Tan and Laswad

(2006), no matter which country students come from, they consider high initial salary, future earnings, and greater job opportunities factors. Similarly, Ahmed et al. (1997) examined students' preferences for the accounting profession in New Zealand and found that they gave priority to financial and job-related factors. Also, Dalcı et al. (2013) found that financial and job-market factors were given significantly higher priority by students studying accounting in Iran. Omar et al. (2015) found that three factors, namely, initial salary, employer reputation, and work environment, had a significant relationship with the preferences of students studying accounting at private universities in Malaysia. On the other hand, in the study conducted by Yorulmaz (2019) on Health Management students, the percentage of selection due to having job opportunities (3%) is quite low.

In the current study, "*interest*" was found to be the fourth most important criterion in the selection of health management department. However, in their study on the career choices of healthcare students including healthcare management students conducted in Singapore, Liaw et al. (2017) determined that the sub-criteria under the "personal interest" criterion, namely, "making a difference in someone's life, a desire for a fulfilling career, a desire to help others, contributing to the society, and wanting parents to be proud", were the criteria with the highest scores. While "enjoying the health management profession" was the lowest priority sub-criterion under the interest criterion in the study, the "enjoying the job" criterion was found to be one of the important criteria in the study conducted by Pala (2016) with the students of the econometrics department at a state university in Türkiye.

In the study, it was found appropriate to add the "*helplessness*" criterion, which includes "compulsory selection of the field due to the university entrance test score, the desire to be a university graduate, and the desire to have a profession" sub-criteria, to the main criteria list. However, this variable was found to be the least effective criterion in the selection of the health management department. On the other hand, Yetim (2008) studied the criteria that were effective in choosing the primary school mathematics teaching department at a state university in Türkiye and found that the criterion of "compulsory choice of the field due to the university entrance test score" was one of the first three criteria. Similarly, in the study conducted by Yorulmaz (2019) with students of the Health Management department, it was stated that 41.3% of the students chose the department because their scores were sufficient for the department. As can be seen, the factors affecting the selection of a department and profession have been extensively studied in many countries around the world (Akter et al., 2018: 93).

Limitations and Future Directions: This study has several limitations. One of them is that the results of the study cannot be generalized to all health management students due to the limited sample population. Another limitation is that the study cannot be analyzed from a longitudinal point of view due to time constraints. In addition, it

is possible that the views of the students with dual career interests could not be fully reflected since only the views on the health management profession were analyzed in the study. Despite these limitations, this study is thought to be original in terms of examining the factors affecting the selection of a department in health management with the FAHP method.

This study was conducted to examine the current situation and help policymakers, health management educators, career counselors, and individuals who are considering selecting a department and profession. The study revealed the need for developing strategies to raise occupational awareness in individuals who will carry out the health management profession to present job-related information and hold conferences, conduct studies on the topic, increase the collaboration between universities and the business world, develop applications that will help individuals to understand their personal characteristics and abilities better, add new courses on the topic to the curriculum, and obtain appropriate student supply. It is thought that knowing the criteria that are important in the selection decision will help better understand the trends related to the profession, and thus, will be a guide for the health managers to be employed in health institutions in terms of applying different human resources strategies.

According to Ng et al. (2008: 346) and Akosah-Twumasi et al. (2018: 13), national cultures and values are very important in the selection of a profession and career choice. In future research, it is recommended to make country-based comparisons to reveal the cultural differences regarding the criteria that are effective in choosing the health management department. In this way, it will be possible to determine whether there are cross-cultural differences between health management students and whether the culture affects this selection process. Thus, the study will become more global and generalized. In addition, as Tan and Laswad (2006) stated, future research may focus on longitudinal studies to reveal whether students' perceptions change over time and whether other factors affect this process. On the other hand, with the widespread use of the Internet and social media in today's world, where the pandemic has been overcome throughout the world, it is thought that the study can be expanded by adding the criteria related to the role of social media and the Internet and the socioeconomic status of the families in the preferences of individuals for the health management department.

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CONFLICT OF INTEREST STATEMENT

There is no conflict of interest with any institution or person within the scope of the study.

REFERENCES

Ahmed, K. A., Sharif, N,. & Ahmad, N. (2017). Factors influencing students' career choices: empirical evidence from business students. *Journal of Southeast Asian Research*, *2*, 1-15. https://doi.org/10.5171/2017.718849

Ahmed, K., Alam, K. F., & Alam, M. (1997). An empirical study of factors affecting accounting students' career choice in New Zealand. *Accounting Education*, *6*(4), 325-335. https://doi.org/10.1080/096392897331398

Akın, N.G. (2017). İşletme Bölümü öğrencilerinin meslek seçimini etkileyen faktörlerin bulanık Dematel yöntemi ile değerlendirilmesi. *Uluslararası Yönetim İktisat ve İşletme Dergisi, 13*(4), 873-890. https://doi.org/10.17130/ijmeb.2017433413

Akın, N.G., & Akyıldız, M. (2018). Fen Lisesi öğrencilerinin meslek seçimini etkileyen faktörlerin bulanık Topsis yöntemi ile analizi. *Yönetim ve Ekonomi Araştırmaları Dergisi, 16*(1), 77-97. https://doi.org/10.11611/yead.359180

Akın, O., & Onat, O. K. (2015). Muhasebe eğitimi alan öğrencilerin bölüm seçimini etkileyen faktörler: Mehmet Akif Ersoy Üniversitesinde bir araştırma. *Ordu Üniversitesi Sosyal Bilimler Enstitüsü Sosyal Bilimler Araştırmaları Dergisi*, *5*(13), 243-254.

Akosah-Twumasi, P., Emeto, T. I., Lindsay, D., Tsey, K., & Malau-Aduli, B. S. (2018). A systematic review of factors that influence youths career choices - the role of culture. *Frontiers in Education*, *58*, 1-15. https://doi.org/10.3389/feduc.2018.00058

Akter, S., Jabbar, A., & Khatun, T. (2018). Factors affecting career choice of the female secondary students in Khulna district of Bangladesh. *Khulna University Studies, 15*(1&2), 91-103. https://doi.org/10.53808/KUS.2018.15.1and2.1706-S

Amini, F., & Rezaeenour, J. (2016). Ranking healthcare centers using fuzzy analytic hierarchy process and TOPSIS: Iranian experience. *International Journal of Applied Operational Research, 6*(1), 25-39.

Amini, M. T., Keshavarz, E., Keshavarz, A., & Bagheri, S. M. (2017). Evaluating the non-financial performance of state-owned, semi-private and private universities using FAHP technique. *International Journal of Business Innovation and Research*, *12*(2), 152-174. https://doi.org/10.1504/IJBIR.2017.081399

Austin, C. J. (1973). A national study of educational programs in Health Administration. *Administration in Mental Health*, *1*, 73–75. https://doi.org/10.1007/BF02249540

Aydemir, İ., & Çetin, B. (2023). Türkiye'deki Sağlık Yönetimi lisans programları profilinin değerlendirilmesi. *Uluslararası Sağlık Yönetimi ve Stratejileri Araştırma Dergisi*, *9*(2), 155-170.

Bruce, D., & Quartey, F.A. (2017). Motivation for occupational preference among students of Regional Maritime University in Nungua, Accra-Ghana. *International Journal of Research-Granthaalayah, 5*(8), 158-174. https://doi.org/10.5281/zenodo.885061

Camuz Berber, İ., Çandereli, Z.Ö., & Arslan, E.T. (2023). Sağlık Yönetimi eğitimi: Cumhuriyet'in 100. yılındaki durum. *Süleyman Demirel Üniversitesi Vizyoner Dergisi, 14*(100. Yıl Özel Sayısı), 200-212.

Çelik, N., & Üzmez, U. (2014). Üniversite öğrencilerinin meslek seçimini etkileyen faktörlerin değerlendirilmesi: çağrı merkezi hizmetleri örneği. *Elektronik Mesleki Gelişim ve Araştırma Dergisi, 2*(1), 94-105.

Chang, D. Y. (1996). Applications of the extent analysis method on fuzzy AHP. *European Journal of Operational Research, 95*(3), 649-655. https://doi.org/10.1016/0377-2217(95)00300-2

Chou, Y. C., Yen, H. Y., Dang, V. T., & Sun, C. C. (2019). Assessing the human resource in science and technology for Asian countries: application of fuzzy AHP and fuzzy TOPSIS. *Symmetry, 11*(2), 251. https://doi.org/10.3390/sym11020251

Çiftçi, G.E., Bülbül, S.F., Bayar Muluk, N., Çamur Duyan, G., & Yılmaz, A. (2011). Sağlık Bilimleri Fakültesini tercih eden öğrencilerin, üniversite ve meslek tercihlerinde etkili olan faktörler (Kırıkkale Üniversitesi örneği). *J Kartal TR, 22*(3), 151-160.

Çimen, M. (2010). Sağlık Yönetimi ve Sağlık Yönetim eğitimi. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi, 1*(3), 136-139.

Council of Higher Education (YÖK) (2016). Yükseköğretim Kurulu Karar No. 75850160-101.03.01-50633.

Council of Higher Education (YÖK) (2025). https://yok.gov.tr/

Dalcı, I., Araslı, H., Tümer, M., & Baradarani, S. (2013). Factors that influence Iranian Students' decision to choose accounting major. *Journal of Accounting in Emerging Economies*, *3*(2), 145-163. https://doi.org/10.1108/20421161311288866

Dibabe, T. M., Wubie, A. W., & Wondmagegn, G. A. (2015). Factors that affect students' career choice in accounting: a case of Bahir Dar University students. *Research Journal of Finance and Accounting, 6*(5), 146-153.

Dimaki, K., Kaminioti, O., Kostaki, A., Psarakis, S., & Tsourti, Z. (2005). Educational and occupational preferences of high school students in Greece. *Education + Training*, *47*(6), 432-446. https://doi.org/10.1108/00400910510617051

Dinç, E. (2008). Meslek seçiminde etkili faktörlerin incelenmesi: meslek yüksek okulu- Muhasebe Programı öğrencileri üzerine bir araştırma. *Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 16*(2), 90-106.

Edwards, K., & Quinter, M. (2011). Factors influencing students career choices among secondary school students in Kisumu Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies, 2*(2), 81-87.

Erdem, B., & Kayran, M. F. (2013). Balıkesir Üniversitesi Turizm İşletmeciliği ve Otelcilik Yüksekokulu öğrencilerinin meslek seçimini etkileyen faktörler üzerine bir araştırma. *C.Ü. İktisadi ve İdari Bilimler Dergisi, 14*(1), 81-106.

Genç, G., Kaya, A., & Genç, M. (2007). İnönü Üniversitesi Tıp Fakültesi öğrencilerinin meslek seçimini etkileyen faktörler. *İnönü Üniversitesi Eğitim Fakültesi Dergisi, 8*(14), 49-63.

Göktolga, Z.G., & Gökalp, B. (2012). İş seçimini etkileyen kriterlerin ve alternatiflerin AHP metodu ile belirlenmesi. *C.Ü. İktisadi ve İdari Bilimler Dergisi, 13*(2), 71-86.

Gokuladas, V. K. (2010). Factors that influence first-career choice of undergraduate engineers in software services companies: A South Indian Experience. *Career Development International, 15*(2), 144-165. https://doi.org/10.1108/13620431011040941

Güngör Önlen, B., & Öngel, V. (2018). Türkiye'de Sağlık Yöneticiliği eğitimi ve yüksek lisans öğrencilerinin öz değerlendirmeleri. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, *23*(Geybulla Ramazanoğlu Özel Sayısı), 887-903.

Hilsenrath, P. E. (2012). Healthcare management education settings in the United States. *Journal of Management History, 18*(4), 386 – 401. https://doi.org/10.1108/17511341211258738

Ho, C. C. (2011). Optimal evaluation of infectious medical waste disposal companies using the fuzzy analytic hierarchy process. *Waste Management*, *31*(7), 1553-1559. https://doi.org/10.1016/j.wasman.2011.02.020

İnce, Ö., & Söyük, S. (2020). Sağlık Yönetimi bölümlerinin akademik performanslarının çok kriterli karar verme yöntemleriyle sıralanması. *Uluslararası Sağlık Yönetimi ve Stratejileri Araştırma Dergisi, 6*(3), 443-461.

Kahraman, C., Cebeci, U., & Ruan, D. (2004). Multi-attribute comparison of catering service companies using fuzzy AHP: The case of Turkey. *International Journal of Production Economics, 87*(2), 171-184. https://doi.org/10.1016/S0925-5273(03)00099-9

Kara, M., & Karaca, Y. (2010). Üniversite öğrencilerin İşletme Bölümünü seçmelerinde etkili olan öncelikli faktörlerin Analitik Hiyerarşi Prosesi metodu ile analizi: Bozok Üniversitesi İktisadi ve İdari Bilimler Fakültesinde Bir Uygulama. *Organizasyon ve Yönetim Bilimleri Dergisi*, *2*(1), 133-140.

Karaşin, Y., & Tatlı, E. (2022). Sağlık Yönetimi bölümünün akademik profili. *Sağlık Bilimleri ve Yaşam Dergisi*, 6(1), 55-65.

Kartal, K.S., Ayyıldız, E., & Alp, S. (2019). Meslek seçimini etkileyen faktörler ile kariyer planlama/tercih kriterleri arasındaki ilişkinin incelenmesi. *İstanbul Ticaret Üniversitesi Girişimcilik Dergisi, 3*(5), 29-50.

Kazi, A. S., & Akhlaq, A. (2017). Factors affecting students' career choice. *Journal of Research & Reflections in Education, 11*(2), 187-196.

Kil, S. H., Lee, D., Kim, J. H., Li, M. H., & Newman, G. (2016). Utilizing the analytic hierarchy process to establish weighted values for evaluating the stability of slope revegetation based on hydroseeding applications in South Korea. *Sustainability, 8*(1), 1-17, 2016. https://doi.org/10.3390/su8010058

Kıroğlu Arslan, I., & Akşahin, A. (2021). Türkiye'deki Sağlık Yönetimi bölümlerinin başarılı sağlık yöneticisi yetiştirme bakımından müfredatlarının değerlendirilmesi. *International Journal of Disciplines Economics & Administrative Sciences Studies, 7*(35), 973-981. https://doi.org/10.26728/ideas.525

Korkmaz, O., & Kırcı Çevik, N (2014). Üniversite son sınıf öğrencilerinin iş seçim kriterlerinin belirlenmesine yönelik bir araştırma. *Business and Economics Research Journal*, *5*(3), 167-186.

Korkut-Owen, F., Kepir, D. D., Özdemir, S., Ulaş, O., & Yılmaz, O. (2012). Üniversite öğrencilerinin bölüm seçme nedenleri. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, *8*(3), 135-151.

Kumar, R., & Kansara, S. (2018). Information technology barriers in Indian sugar supply chain: an AHP and fuzzy AHP approach. *Benchmarking: An International Journal, 25*(7), 1978-1991. https://doi.org/10.1108/BIJ-01-2017-0004

Lewis, J.B., McGrath, R.J., & Seidel, L.F. (2011). Essentials of applied quantitative methods for health services managers. USA: Johns and Bartlett.

Liaw, S. Y., Wu, L. T., Chow, Y. L., Lim, S., & Tan, K. K. (2017). Career choice and perceptions of nursing among healthcare students in Higher Educational Institutions. *Nurse Education Today, 52*, 66-72. https://doi.org/10.1016/j.nedt.2017.02.008

Matsuda, S., & Uehara, S. (1995). An AHP analysis on factors associated with the career choice of medical students of UOEH. *Journal of UOEH, 17*(4), 279-285. https://doi.org/10.7888/juoeh.17.279

Ng, E. S., Burke, R. J., & Fiksenbaum, L. (2008). Career choice in management: findings from US MBA Students. *Career Development International*, *13*(4), 346-361. https://doi.org/10.1108/13620430810880835

Omar, M. K., Zakaria, A., Ismail, S., Sin, J. S. L., & Selvakumar, V. (2015). Job selection preferences of accounting students in Malaysian Private Universities. *Procedia Economics and Finance,* 31, 91-100. https://doi.org/10.1016/S2212-5671(15)01135-1

Özen, Y. (2011). Kişisel sorumluluk bağlamında kariyer seçimini etkileyen sosyal psikolojik faktörler. *Eğitim ve İnsani Bilimler Dergisi: Teori ve Uygulama, 2*(3), 81-96.

Özkoç, H. H., Marangoz, M., & Aydın, A. E. (2018). Öğrencilerin kariyer alternatiflerini etkileyen faktörler ve girişimcilik eğitimi. *Uluslararası İktisadi ve İdari Bilimler Dergisi*, *4*(1), 98-119. https://doi.org/10.29131/uiibd.413610

Öztürk, Z., & Ilıman, E. Z. (2015). Sağlık Yönetimi ve İşletmeciliği bölümünde okuyan öğrencilerin bölümü tercih nedenleri ile beklenti ve motivasyon düzeyleri üzerine bir araştırma. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 8*(1), 71-93. https://doi.org/10.17218/husbed.28790

Paksoy, T., Pehlivan, N. Y., & Kahraman, C. (2012). Organizational strategy development in distribution channel management using fuzzy AHP and hierarchical fuzzy TOPSIS. *Expert Systems with Applications, 39*(3), 2822-2841. https://doi.org/10.1016/j.eswa.2011.08.142

Pala, O. (2016). Bulanık Analitik Hiyerarşi Prosesi ve meslek seçiminde uygulanması. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 18*(3): 427-445. http://dx.doi.org/10.16953/deusbed.09845

Pekkaya, M., & Çolak, N. (2013). Üniversite öğrencilerinin meslek seçimini etkileyen faktörlerin önem derecelerinin AHP ile belirlenmesi. *The Journal of Academic Social Science Studies, 6*(2), 797-818. http://dx.doi.org/10.9761/JASSS_643

Querido, S., van den Broek, S., de Rond, M., Wigersma, L., & Ten Cate, O. (2018). Factors affecting senior medical students' career choice. *International Journal of Medical Education, 9,* 332-339. https://doi.org/10.5116/ijme.5c14.de75

Saranapala, I. S., & Devadas, U. M. (2020). Factors influencing on career choice of management and commerce undergraduates in National Universities in Sri Lanka. *Kelaniya Journal of Human Resource Management, 15*(2), 108-128. https://doi.org/10.4038/kjhrm.v15i2.81

Schmidt, K., Aumann, I., Hollander, I., Damm, K., & Von der Schulenburg, J. M. G. (2015). Applying the analytic hierarchy process in healthcare research: a systematic literature review and evaluation of reporting. *BMC Medical Informatics and Decision Making, 15*(1), 112. https://doi.org/10.1186/s12911-015-0234-7

Singh, A., & Prasher, A. (2019). Measuring Healthcare service quality from patients' perspective: using fuzzy AHP application. *Total Quality Management & Business Excellence, 30*(3-4), 284-300. https://doi.org/10.1080/14783363.2017.1302794

Son, K. (2022). *Sağlık Yönetimi öğrencilerinin bölümü tercih nedenleri ve akademik motivasyon düzeylerinin belirlenmesi*. Yayımlanmamış Yüksek Lisans Tezi, İstanbul Medipol Üniversitesi, İstanbul.

Soysal, A., & Arıcıoğulları, K. (2021). Meslek seçiminde yeterlilik ve meslek seçimini etkileyen faktörler: Sağlık Yönetimi öğrencileri üzerinde bir araştırma. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi, 18*(3), 2138-2153. https://doi.org/10.33437/ksusbd.968647

Sugahara, S. Boland, G., & Cilloni, A. (2008). Factors influencing students' choice of an accounting major in Australia. *Accounting Education: An International Journal*, *17*(S1), S37-S54. https://doi.org/10.1080/09639280802009199

Tan, L. M., & Laswad, F. (2006). Students' beliefs, attitudes and intentions to major in accounting. *Accounting Education: An International Journal*, *15*(2), 167-187. https://doi.org/10.1080/09639280600787194

Ulas-Kilic, O., Demirtas-Zorbaz, S., & Kizildag, S. (2020). University students' perceptions of unplanned events as a factor in the process of career choice. *Canadian Journal of Career Development, 19*(1), 14-24.

Uyar, A., Güngörmüş, A. H., & Kuzey, C. (2011). Factors affecting students career choice in accounting: the case of a Turkish University. *American Journal of Business Education*, *4*(10), 29-38. https://doi.org/10.19030/ajbe.v4i10.6061

Vatansever, K. (2013). Kamu hastanelerinde mal alım kararlarının Bulanık AHP yöntemiyle değerlendirilmesi ve Gediz Devlet Hastanesi uygulaması. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 18*(3), 225-244.

Yetim, S. (2008). Gazi Üniversitesi Gazi Eğitim Fakültesi İlköğretim Matematik Öğretmenliği Programı birinci sınıf öğrencilerinin bu programı seçmelerinde etkili olan öncelikli faktörlerin Analitik Hiyerarşi Prosesi Metodu ile analizi. *Kastamonu Eğitim Dergisi*, *16*(2), 589-606.

Yorulmaz, M. (2019). Sağlık Yönetimi Bölümü öğrencilerinin bölümü tercih etme nedenlerinin incelenmesi. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi, 22*(1), 74-82.

Zimmermann, H.J. (2001). Fuzzy set theory-and its applications. New York: Springer Seience+Business Media.