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Ranking countries attractiveness in terms of postgraduate education: an evaluation through the eyes of Turkish students

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Abstract

Attracting international students is crucial for a country's economy as well as tourism, culture and country brand. When international students choose a university for their education, they consider the quality of the university and the image created by the country where the university is located. However, country image can often be overshadowed by the quality of the university. Therefore, university selection studies cannot rank countries' attractiveness impartially. There are many studies regarding university selection. Nevertheless, not many studies can be found in the literature focusing on country selection/attractiveness regardless of university features. The present study aims to explore the attractiveness of countries for international postgraduate students.

On the other hand, country selection for students is a difficult decision-making problem because a variety of criteria exists to consider. In this study, ten criteria have been compiled from the literature on studying abroad. They have been weighted with the opinions of the students in the Department of Industrial Engineering at Istanbul Technical University, Turkey. These criteria are scholarship opportunities, safe environment, tuition fees and subsistence costs, employment during and after studying, country popularity and awareness, quality of life, distance, language, ease of entry, and culture. Finally, thirteen countries that host the highest number of foreign students were evaluated by means of the Analytical Hierarchy Process. Results reveal that the UK is the most attractive country, while Canada comes second and Australia comes third for international students. The least attractive countries are South Korea, China and Japan.

Key words

Postgraduate education, country attractiveness, AHP.

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Introduction

Students in less developed countries, with limited access to education in their own countries, have caused a significant rise in the number of international students studying overseas. Underdeveloped and developing countries also aimed at knowledge and technology transfer by sending students to developed countries, especially since the 1960s. That is why developed countries have invested in their higher education sector since then in order to attract more international students. Moreover, many countries that previously only used to send students abroad, aimed to improve the quality of their higher education and to develop strategies and policies to attract international students (Becker and Kolster 2012).

Hosting international students makes a significant contribution to the respective country, not only economically, but also in many different areas. International students improve the quality of education in educational institutions, increase their international project partnerships and contribute to the development of tourism and culture. After graduation, when students return to their home country, they establish commercial partnerships and become volunteer advertisers of the host countries (Bayyurt, 2019). Economic contributions are measurable, while others are somewhat subjective. International students contributed US$300 billion to the global economy in 2016. The contribution of international students to the national economy was $13.3 billion in the USA in 2004 and increased to $57.3 billion in 2016. International students contributed $25.5 billion to the UK; $19.8 billion to Australia; $14.5 billion to France; $14.4 billion to Germany; $11.1 billion to Canada; $5.3 billion to the Netherlands' national economy (https://monitor.icef.com). In 2018, the contribution of higher education to the US economy ranked fourth after the following sectors: automobile, commercial aircrafts, and pharmaceuticals exports (visualcapitalist.com).

According to the UNESCO Institute for Statistics, the global number of international mobile students was 2.1 million in 2000, it reached 3 million in 2005, 4.1 million in 2012 and 5.3 million in 2017 (Table 1). It is estimated that this number will exceed 7 million by 2020. Globally, around 25% of international students have been studying in North America and 40% in European countries. The five countries that accept the highest number of international students are the USA, the UK, France, Australia and Germany. Nearly half of international students prefer English-speaking countries. Turkey sends a significant number of students abroad (Bayyurt, 2019).

Table 1

Total inbound internationally mobile students

Country	2014	2015	2016	2017
US of America	842384	907251	971417	984898
UK	428724	430833	432001	435734
Australia	266048	294438	335512	381202
Germany	210542	228756	244575	258873
France	235123	239409	245349	258380
Russian Federation	213347	226431	243752	250658
Canada	164274	171603	189478	209979
Japan	132685	131980	143457	164338
China	108217	123127	137527	157108
Netherlands	70692	86189	89920	96289
Republic of Korea	52451	54540	61888	70796
Switzerland	49552	50591	51911	53368
South Africa	42594	43305	45142	45334
Northern America	1006888	1079025	1161056	1195027
Europe	1877356	1953179	2033887	2107299
High income countries	3317145	3508257	3722696	3886512
World	4495169	4786192	5091894	5309240

http://data.uis.unesco.org/index.aspx?queryid=172

There were 1.71 million students from abroad who were undertaking postgraduate level studies across the EU-28 in 2017 (www.ec.europa.eu/eurostat). Around 51% of foreign students in the EU countries, 44% of foreign students in the UK (www.universitiesuk.ac.uk) and 37% of foreign students in the USA (opendoors 2019) are enrolled in postgraduate programs. Relying on these statistics, it is possible to say that a considerable number of international students are attending postgraduate programs. Foreign students have numerous expenses, not limited to tuition fees but also consisting of accommodation, health, nutrition, travel and entertainment costs. The expenditures can vary across countries and universities. However, from an economic point of view, the total value created by 7 million mobile students is important. Postgraduate students create nearly half of the total value. The statistics reveal that hosting international students is indispensable for a country's economy.

On the other hand, the educational attractiveness of countries is a decision-making problem for students. Students need to find out which country meets their expectations the most. While international students make the decision to choose a university for education, they consider university-specific features like the quality of the

university and tuition fees (Kolster, (2010), Kolster (2014)) and the image created by the country where the alternative universities are located. The present study aims to find out the criteria considered important by postgraduate students for them to study abroad, and rank the countries that meet students' expectations. Top ranking countries are the most preferred countries for postgraduate education. Initially, the most important criteria for studying abroad were determined by a literature review. Then, a decision group of 17 fourth year students in the Industrial Engineering Department at Istanbul Technical University (ITU), Turkey was selected to evaluate the importance of the criteria and compare the countries according to these criteria. Thirteen countries that receive the highest number of foreign students were evaluated in this study by using the Analytic Hierarchy Process (AHP). The rest of the paper is organized in the following way: we have conducted a literature review in section 2. In section 3, AHP is briefly described. The construction of the model and the application is in section 4. Finally, section 5 presents the conclusion of the study.

Literature Review

When students decide to study abroad, they have trouble choosing the right country for them. The potential of each country is different for each individual. There are many studies regarding university selection. However, unfortunately, not many studies can be found in the literature focusing on country selection/attractiveness regardless of university features. University selection studies cannot rank countries' attractiveness unbiasedly, since a country's image can often be overshadowed by the quality of the university. Below is a literature review showing countries' characteristics used in university selection studies.

According to Moogan and Baron (2003), the large number of universities operating, the presence of similar departments, the distance between the university and the place of residence, inexperience, and inadequate help with university selection are just a few of the issues that make it difficult for students to choose a university. Mazzarol and Soutar (2002) assessed the social, economic and political factors that encourage students to study overseas by a combination of "push" and "pull" factors. The "push" factors operate within the home country and cause the student to leave the country, and the "pull" factors operate within a host country to make that country relatively attractive to international students. The "pull" factors include (Mazzarol and Soutar (2002), Fam and

Gray (2000), Hiu (2001), Hung et al. (2005), Mei (2007), Wilkins and Huisman (2014)) the following:

1. Scientific quality and university rankings.
2. Environment, perceptions about the study "climate" in the host country.
3. Costs, including tuition fees, living expenses, travel and social costs.
4. Distance of the university from the home country.
5. Geographical proximity, climate.
6. Recommendations of students' relatives.
7. Social links, if student has family or friends in the host country.
8. Work and immigration opportunities after and during study.
9. Scholarship opportunities.
10. Visa facilitation.

Oikarinen and Antti (2016) classify the behavior of students with regard to country selection into three different models: economic models, sociological models and combined models. The most important factors that students consider when they need to make a university selection to study abroad are as follows: cost and quality of higher education programs, degree or value of professional reference for future occupations, existence of some specialties, access to the education system and country (including but not limited to obtaining a visa for entry) and historical, language and geographical connections between the home and destination countries. Usher and Cervenan (2005) ranked the countries with the best higher education under the main criteria of affordability and accessibility. Accessibility was defined as the ability of people from all backgrounds to access higher education on a reasonably equal basis and affordability was defined as "net costs", which is costs minus supports. In his study, Akar (2012) investigated which criteria are in the forefront of university selection for Turkish students. Saka and Yaman (2011) analyzed university ranking systems and the criteria used for that. Hazelkorn (2013) criticizes the rankings in higher education and discusses which policies states should follow. Kolster (2014) examined the academic attractiveness of countries based on the following criteria: living expenses, tuition fees, scholarship opportunities, visa facilitation, environment provided to students, prestige of higher education system and employment opportunities during and after study.

Becker and Kolster (2012) discussed local governments' international student recruitment policies in their report. They argued that global international student mobility has changed in two ways, in particular. Firstly, with the effect of shifting the

economic and political balance to the east, international student mobility starts to change in this direction. Secondly, the regionalization of international student mobility is accelerating. This means that more students studying abroad do this in another country in their region.

The correctness of an individual's decision when choosing a university is very important, as it affects their whole life. The main reason that makes such a decision difficult for students is that there are many criteria to consider. The importance of the criteria varies for each individual. Such a strategic decision-making problem of selecting a country needs to be based on a model. In the selection of university, country characteristics as well as university features are taken into account. However, since the university is not definite in the country selection, only the features related to the country are in the account. The present paper describes an attempt at using a formal procedure for host country selection, based on the Analytical Hierarchy Process (AHP).

Analytical Hierarchy Process

If multiple criteria should be considered in a decision process, the problem is named a multi-criteria decision-making (MCDM) problem. The large number of criteria makes it difficult to make decisions in general. MCDM methods provide an opportunity for evaluation of large-scale quantitative and qualitative criteria problems. Determining the weight, importance and superiority of the criteria to be used in decision-making is the most important problem in the MCDM. Pairwise comparisons, ranking methods and grading methods are some of the methodologies used in MCDM. The pairwise comparison technique is based on AHP, which was originally proposed by Thomas Saaty in the 1980s. It represents one of the best known and the most commonly used MCDM methods. The AHP can be implemented in a few simple consecutive steps. It is an eigenvalue approach and is based on building a hierarchy of weighted criteria. AHP compares elements pairwise using a 9 point scale that is defined by Saaty as follows:

Value	Explanation
1	Unable to decide between elements or of equal importance.
3	The first element is a bit more important or a bit more preferable than the second element.
5	The first element is more important or more preferred than the second element.
7	The first element is too important or too much preferred than the second element.

9	The first element is extremely important or overly preferred compared to the second element.
2,4,6,8	Intermediate values

Briefly, the steps of AHP are the following: construct the pairwise comparison matrix of alternatives for each criterion separately using the 9 point scale as defined. $a_{ii} = 1, a_{ij} = k, a_{ji} = 1/k$. Normalize the matrix dividing the entries by the sum of the columns. Find the average of the rows for scaling the alternatives. This final vector shows the extent to which the alternatives meet the criteria. Construct the pairwise comparison matrix for criteria using the 9 points scale for weighting the criteria. Normalize the matrix dividing the entries by their column sum. Find the average of the rows to determine the weight of each criterion. Multiply the total scores of the alternatives by the weight of the criteria. The best alternative is the one with the highest score.

To understand if any inconsistency has been done in the comparisons, consistency ratios (CR) have to be calculated. CR=CI/RI where CI is the consistency index and RI is the random index. CI = (λmax – n)/(n−1). Where λmax is the maximum eigenvalue of the comparison matrix; n is the size of the measured matrix; CI provides a measure of departure from consistency. Perfect consistence means zero value of CI (CI = 0), while accepted consistence ratio CR is less than 0.1, which means the subjective judgment is acceptable.

Construction of the Model and Application

Determining the criteria to be used in the analysis is one of the most critical points of such MCDM studies. There are many criteria to consider in making a country selection decision for education. In the present study, we determined ten criteria from the literature. These criteria together with their brief descriptions are given below.

- Scholarship Opportunities: How student assess countries' scholarship opportunities.
- Costs: Cost of living index is used (lower is better). This index is a relative indicator of consumer goods prices, including groceries, restaurants, transportation and utilities. Values compiled from www.numbeo.com
- Safe Environment: Safe environment index is used (lower is better). This safety score for countries is the average of the three factors: war and peace, personal

security, and natural disaster risk. It presents a comprehensive view of safety for countries. Data is collected from www.gfmag.com

- Language: Which language students prefer in postgraduate education
- Ease of Entry (Visa): The number of passports countries accept visa-free, with visa on arrival or with eTA. Data is collected from www.passportindex.org
- Country Awareness / Popularity and Suggestions: How students assess the popularity of the country
- Quality of Life (Social Life, Climate): Quality of Life Index (higher is better) is used. This index is an estimation of the overall quality of life by using an empirical formula which takes into account purchasing power index, pollution index, house price to income ratio, cost of living index (lower is better), safety index, health care index, traffic commute time index and climate index. (www.numbeo.com)
- Employment During and after Studying: Employment rates are defined as a measure of the extent to which available labour resources (people available to work) are being used. They are calculated as the ratio of the employed to the working age population. Data is collected from https://data.oecd.org/emp and https://data.worldbank.org
- Culture: Which country's culture do students feel close to themselves?
- Distance: The distance between Turkey and the host country (lower is better)

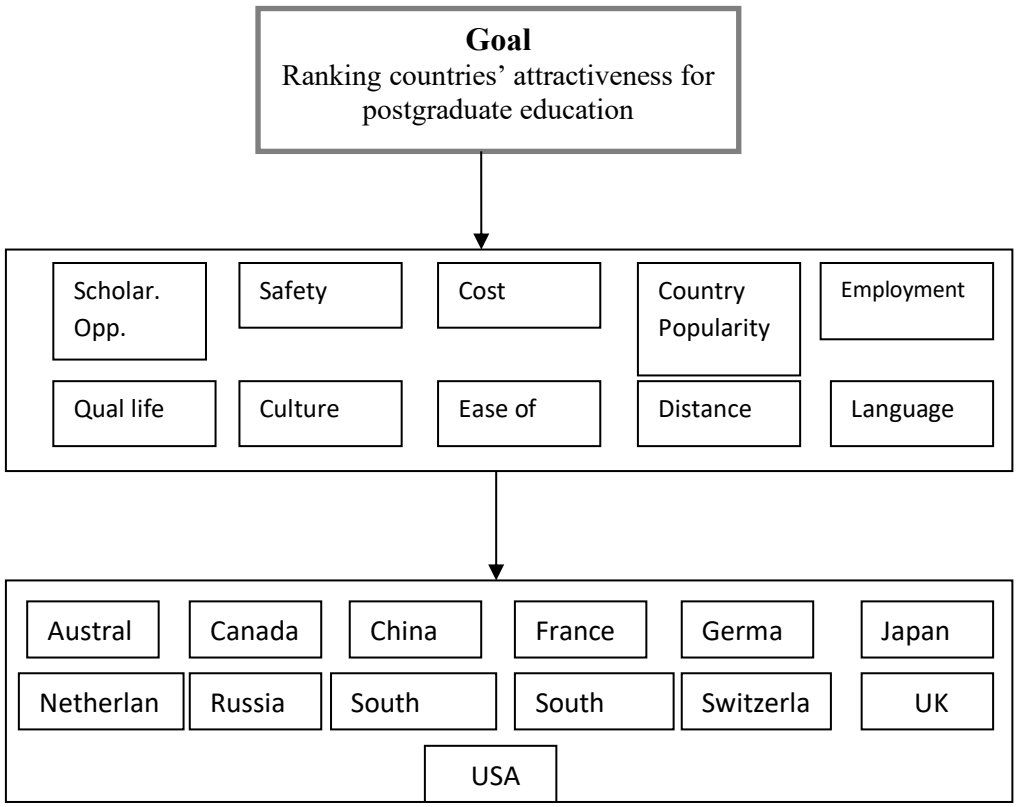
There are many countries students can choose from for postgraduate studies. Thirteen of the countries that have hosted the highest number of international students in 2017 have been selected as the alternatives for the study. These are the USA, the UK, Germany, France, Canada, Australia, Japan, China, South Africa, Russia, South Korea, the Netherlands and Switzerland (Table1). The model to be analyzed is shown in Figure 1.

A group of 17 fourth grade students from the Industrial Engineering Department of Istanbul Technical University in Turkey was selected for the evaluation. Fourth year students will graduate shortly, after a semester, and will have to choose a path between postgraduate education and entering the job market. Our assessor group consists of students who are strongly interested in pursuing postgraduate education abroad. They are asked to evaluate the 10 determined criteria which were described above, as well as the alternatives, pairwise as suggested in AHP. Then, the geometric mean of these 17

evaluations was calculated for a single value. The Super Decision Software program is used to solve the problem. The consistency level of all the pairwise comparisons was calculated and the result "consistent" (CR <10%) has been obtained.

Four of the ten criteria are subjective criteria that need students' opinion. These are country popularity, language, culture, and scholarship opportunities. That is why students are asked to compare the countries pairwise according to these criteria. However, the remaining six criteria are more objective and students may not know the values of each country for these criteria. So, we used the real values of countries for these criteria. These are cost of living, safe environment, employment during and after studying, quality of life, distance and ease of entry criteria (Table 2). Cost, distance and safe environment (the higher the score the less the safety) values are negative factors in the model. Therefore, we took the inverse of these values in the evaluation.

Figure 1: The AHP model analyzed in the study



Firstly, a pairwise comparison matrix was established to determine the weights of the criteria. Students compared the criteria with each other as suggested by AHP with a 9 point scale. Secondly, matrices comparing the countries pairwise were created for the

subjective criteria. Students filled these matrices. For the other objective criteria, we entered the real values of alternatives into the Super Decision software program.

When the results are examined, the criterion "Employment During and After Studying" with a weight of 0.16 was the most influential criterion in country selection for postgraduate education. The second most influential criterion was "Cost" with 0.15 weight and the third was "Scholarship Opportunities" with 0.14 weight. "Quality of life" came fourth with 0.13 weight. The least influencing criteria were "Distance" with 0.03 weight and "ease of entry" with 0.04 weight. "Safety", "country popularity", language" and "culture" have the same weight, 0.09. Since the consistency ratio (CR) of the formed matrix is 0.7% which is less than 10%, the matrix is consistent (Table 3).

Table 2

Real values of countries for six objective criteria

Country	QoL	Cost	Emp	Distance	Visa	Safety
Australia	186,21	72,08	74,4	12434	47	7,95
Canada	163,47	65,01	74,5	8832	54	7,42
China	102,81	39,24	75,0	7531	19	11,11
France	153,95	74,85	66,1	3415	93	9,01
Germany	179,78	67,62	76,7	3012	93	8,09
Japan	167,99	83,33	77,8	8522	68	9,49
Netherlands	183,67	74,83	78,0	3438	93	8,82
Russia	102,31	35,52	72,0	5248	52	12,94
South Africa	131,97	42,49	43,1	7998	76	12,33
South Korea	139,02	76,93	66,9	7785	111	8,93
Switzerland	192,01	121,16	637,6	2969	93	7,01
UK	162,71	65,28	80,5	3931	91	9,21
USA	172,11	69,91	75,1	8953	43	10,3

After the weights of the criteria were determined, 13 alternative countries were scored according to each of the criteria one by one. Again, the geometric means of the scoring matrices formed as a result of the questionnaires taken from 17 students to form the last matrix.

Table 3
Comparison matrix and the weights of criteria

Criteria	ScOp	Sec	Cost	Emp	CP	Qlife	Dis	Lan	EE	Cult	Weights
ScOp	1	1,16	0,96	0,7	1,84	1,04	5,29	1,65	3,12	1,75	0,14
Saf	0,86	1	0,47	0,62	0,96	0,58	3,48	1,13	2,57	0,85	0,09
Cost	1,05	2,11	1	1,32	1,98	1	4,26	1,63	3,25	1,97	0,15
Emp	1,43	1,62	0,76	1	2,13	1,5	4,23	1,88	3,47	2,11	0,16
CP	0,54	1,04	0,51	0,47	1	0,6	3,5	0,96	2,8	0,97	0,09
Qlife	0,97	1,72	1	0,67	1,68	1	3,74	1,5	3,19	1,29	0,13
Dis	0,19	0,29	0,23	0,24	0,29	0,27	1	0,32	0,79	0,36	0,03
Lan	0,61	0,89	0,61	0,53	1,05	0,67	3,09	1	2,47	1,18	0,09
EE	0,32	0,39	0,31	0,29	0,36	0,31	1,27	0,4	1	0,44	0,04
Cult	0,57	1,18	0,51	0,47	1,03	0,77	2,81	0,84	2,25	1	0,09

λmax=10,09, CR=0,7%
ScOp: scholarship opportunities**, Saf:** safety, **Cost:** tuition fees and subsistence costs, **Emp:** Employment During and After Studying, **CP:** country popularity**, Qlife:** quality of life, **Dis:** Distance**, Lan:** language**, EE:** easy of entry**, Cult:** culture

The software program consistently generated the criteria weights of the criteria for each alternative. According to the scholarship opportunities criterion, the best countries are Canada (0.13), Germany (0.13), Australia (0.11) and the USA (0.11). The most popular and culturally closest to students are the same countries: Switzerland, the UK, the USA and Australia. English is the preferred language for postgraduate education by far compared to other languages. The countries that best meet the remaining criteria are as follows: the best country according to the visa criterion is Korea, Switzerland for employment, Russia for costs, Australia, Germany, the Netherlands and Switzerland for quality of life, Switzerland for distance and safe environment. All the consistency values of the matrices were calculated within the acceptable limits (CR <10%, Table 4).

Table 4
Priorities of countries according to the criteria

Country	ScOp	CP	Cult	Lan	EE	Emp	Cost	Qlife	Dis	Saf
Australia	0,11	0,10	0,10	0,16	0,05	0,080	0,08	0,09	0,03	0,09
Canada	0,13	0,08	0,08	0,16	0,06	0,080	0,08	0,08	0,04	0,09
China	0,04	0,04	0,05	0,04	0,02	0,081	0,08	0,05	0,05	0,06
France	0,07	0,06	0,06	0,04	0,10	0,071	0,07	0,08	0,12	0,08
Germany	0,13	0,09	0,08	0,07	0,10	0,082	0,08	0,09	0,13	0,09
Japan	0,05	0,07	0,06	0,02	0,07	0,084	0,06	0,08	0,05	0,07
Netherlands	0,08	0,09	0,08	0,03	0,10	0,084	0,06	0,09	0,12	0,08
Russia	0,04	0,04	0,06	0,03	0,06	0,077	0,13	0,05	0,08	0,05

S. Africa	0,04	0,03	0,03	0,02	0,08	0,046	0,11	0,06	0,05	0,06
S. Korea	0,05	0,05	0,06	0,04	0,12	0,071	0,06	0,07	0,05	0,08
Switzerland	0,09	0,12	0,13	0,07	0,10	0,086	0,04	0,09	0,14	0,10
UK	0,07	0,12	0,11	0,16	0,10	0,081	0,07	0,08	0,10	0,08
USA	0,11	0,12	0,10	0,16	0,05	0,075	0,07	0,08	0,04	0,07
	λmax	λmax	λmax	λmax				λmax		
	13,34	13,41	13,25	9,18				13		
%	CR=1,8	CR=2,2	CR=1,	CR=2				CR = 0		

ScOp: scholarship opportunities**, Saf:** safety, **Cost:** tuition fees and subsistence costs, **Emp:** Employment During and After Studying, **CP:** country popularity**, Qlife:** quality of life, **Dis:** Distance**, Lan:** language**, EE:** easy of entry**, Cult:** culture

As a result of the overall analysis, the ranking of alternatives under weighted criteria is obtained. The best country according to the opinions of the ITU Department of Industrial Engineering Students is the United Kingdom (0.0934). Canada (0.0916) ranked 2nd, Australia (0.0905) 3rd and Germany (0.0904) 4th. South Africa (0.0561) was the last country meeting the expectations of the students, after China (0.0613) and Japan (0.0614). The first three countries are English-speaking countries (Table 5).

Table 5
Final rankings of the countries

Country	Ideals	Normals
UK	1,000	0,0934
Canada	0,981	0,0916
Australia	0,969	0,0905
Germany	0,968	0,0904
Switzerland	0,962	0,0899
USA	0,961	0,0898
Netherlands	0,846	0,0790
France	0,744	0,0695
Russia	0,697	0,0651
South Korea	0,664	0,0620
Japan	0,657	0,0614
China	0,656	0,0613
South Africa	0,600	0,0561

Conclusions, Limitations and Future Research

Students who come to study in a country provide economic and social benefits to that country. Countries, when they give scholarships to send their students abroad for postgraduate education, try to select the students with the best exam scores. Universities

also ask for certificates of achievement from students, especially when accepting foreign postgraduate students. Therefore, international students are usually the best students in their countries. That's why they help improve the quality of education, increase international project partnerships, contribute to culture, art, peace, tourism and commercial partnerships (Bayyurt, 2019). The present study tries to find an answer to the problem of ranking countries according to their attractiveness for postgraduate education by using AHP, which is one of the most preferred MCDM methods. 17 Industrial Engineering students at Istanbul Technical University, Turkey, constitute the sample of decision makers. 13 of the countries that host the highest number of international students were presented as the alternatives for students. The country selection criteria that was selected was the criteria that was most frequently discussed in different studies collected from literature. University-specific criteria are excluded from the study.

Data were analyzed using Super Decision Software. All the comparison matrices were consistent with the condition of consistency ratio (less than 10%). As a result, the most suitable country for postgraduate study abroad within the scope of ITU Industrial Engineering students is the United Kingdom (and then Canada, Australia and Germany).

Among the criteria evaluated by students, the most important three criteria are those related to livelihood. These are employment during and after studying, tuition fees, subsistence costs and scholarship opportunities. These are the most important measures to consider for countries in order to host foreign students. As a result, increasing part-time opportunities and financial support mechanisms for international students would be the best way to attract foreign students.

English is the most preferred language for foreign students in postgraduate education. In this respect, English-speaking countries have an important advantage when it comes to attracting foreign students. Ease of entry (visa) and distance are the least important criteria for students. Students think that they can get their student visa easily after receiving their acceptance from a university. Students must be perceiving the distance as a not so significant problem that can be solved with a little effort and a few extra hours by plane.

Countries' competition to attract international students is increasing. There are different duties that governments and university administrations need to perform for that reason. Universities must increase the number of programs taught in foreign languages,

especially in English. Since quality is an important factor (Bayyurt, 2019), they might obtain quality certificates from international organizations. Universities can provide scholarships as well as achievement grants in order to attract more students. International students' offices need to be well-structured. All the documents and information students may need should be available on the university website in multiple languages. The Netherlands, Germany, France, Hungary, Ireland, Luxembourg, Malta and Sweden in the EU region were reported to be facing a shortage of affordable housing for international students (EMN report, 2019). Governments can develop projects for the solution of cheap accommodation problems of students so as to attract more international students. They should address the funding, infrastructure and personnel problems of higher education. They can make higher education institutions more visible by making exchange agreements between countries and opening representative offices in the countries that send students abroad. Responding to students' visa applications quickly and allowing their residence permits to last longer, past the end of their education, may also create attractive opportunities for international students.

Due to the nature of the research questions and the AHP method, the present study has some limitations. MCDM methods, of which AHP is an example, are subjective methods. The results can change according to the weights of the criteria that are determined by the needs of the person who applied the method. Contrary to statistical methods, they do not give statistical significance values. Although we tried to keep our sample wide compared to other studies of a similar kind, in order to reduce the subjectivity, students who are assessing the criteria and alternative countries were selected from one department in a university in Turkey. Research can be improved by adding students from different departments and universities**.** Using statistical techniques rather than AHP method can enrich the results.

References

Akar, C. (2012). Factors Affecting University Choice: A Study on Students of Economics and Administrative Science Eskişehir, *Osmangazi Üniversitesi Dergisi*, 7(1), 97–120.

Bayyurt, N. (2019). Evaluation of the Service Quality and Satisfaction in the Turkish Higher Education in Terms of International Students, *Global Economic Observer*, Vol. 7, Issue 1, p.1-8.

Becker, R. & Kolster, R. (2012). International student recruitment policies and developments in selected countries, NUFFIC, January 2012, Available on https://www.academia.edu/8483300/International-student-recruitment_policies_and_developments_in_selected_countries.

European Migration Network (2019). Attracting and Retaining International Students in the EU. Brussels: European Migration Network. Available on https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00_eu_international_students_2018_synthesis_report.pdf.

Fam, K. S. & Gray, B. (2000). Asian values and education promotion: an empirical study. *Marketing in a Global Economy Proceedings*: 431–38.

Hazelkorn, E. (2013). World-Class Universities or World- Class Systems? Rankings and Higher Education Policy Choices. In UNESCO Forum on Rankings and Accountability in Higher Education (pp. 1–23).

Hiu, L. (2001). Chinese cultural schema of education: implications for communication between Chinese students and Australian educators, *Issues in Educational Research* 15(1): 17–36.

Hung, F. S., Chung, Y. P. & Ho, S. C. (2000). To work or to continue to higher education? The choice of senior secondary students in Shenzhen, China, *Higher Education* 39: 455–67.

Kolster, R. (2010). Academic attractiveness of countries to students: Explaining and measuring a countries' academic X factor. University of Oslo. Available on https://www.duo.uio.no/bitstream/handle/10852/30477/AcademicxAttractivenessxofxcountriesxxR.xKolster.pdf?sequence=1.

Kolster, R. (2014). Academic attractiveness of countries: A possible benchmark strategy applied to the Netherlands. *European journal of higher education*, *4*(2), 118-134. https://doi.org/10.1080/21568235.2013.879835.

Mazzarol, T. & Soutar, G. N. (2002) 'Push-pull factors influencing student destination choice'. International Journal of Education Management 16(2): 82–90.

Mei Li (2007) 'Mainland Chinese students in Hong Kong and Macau'. International Higher Education 46: 15–16.

Moogan, Y. J. & Baron, S. (2003). An analysis of student characteristics within the student decision making process. Journal of Further and Higher Education, 27(3), 271-287.

Oikarinen, & Antti. (2016). Factors Influencing International Degree Students' Study Destination Choice -A Micro Level Research on University Of Oulu.

Saaty, T. L. (1994) 'How to make a decision: the analytic hierarchy process', Interfaces, Vol. 24, No. 6, pp.19–43.

Saka, Y. & Yaman, S. (2011). University ranking systems; criteria and critiques. Yükseköğretim ve Bilim Dergisi, 1(2), 72–79. https://doi.org/10.5961/jhes.2011.012.

Usher, A. & Cervenan, A. (2005). Global Higher Education Rankings. Educational Policy Institute, Toronto.

Wilkins, S. & Huisman, J. (2014). Factors affecting university image formation among prospective higher education students: the case of international branch campuses. Studies in Higher Education, pp. 1–17.

https://monitor.icef.com/2019/08/international-students-generate-global-economic-impact-of-us300-billion/ (Accessed Jan. 10, 2020)

https://www.numbeo.com/quality-of-life/rankings_by_country.jsp (Accessed Jan. 12, 2020)

https://data.oecd.org/emp/employment-rate.htm (Accessed Jan. 12, 2020)

https://data.worldbank.org/indicator/SL.EMP.TOTL.SP.NE.ZS?view=chart (Accessed Jan. 12, 2020)

https://www.gfmag.com/global-data/non-economic-data/worlds-safest-countries-2019 (Accessed Jan. 10, 2020)

https://www.passportindex.org/byWelcomingRank.php (Accessed Jan. 15, 2020)

https://www.visualcapitalist.com/international-students-impact-u-s-economy/ (Accessed Jan. 15, 2020)

https://www.universitiesuk.ac.uk/International/Documents/2019/International%20facts%20and%20figures%20slides.pdf (Accessed Jan. 15, 2020)

https://ec.europa.eu/eurostat/statistics-explained/index.php/Learning_mobility_statistics#Number_and_share_of_graduates_from_abroad (Accessed Jan. 17, 2020)

http://www.opendoors.iienetwork.org, (Accessed Jan. 17, 2020)

http://data.uis.unesco.org/index.aspx?queryid=172 (Accessed Jan. 17, 2020)