

IDENTIFICATION AND EVALUATION OF THE FACTORS AFFECTING APPLICANTS' CHOICE OF UNIVERSITY FOR EDUCATION: A CASE STUDY OF QAZVIN ISLAMIC AZAD UNIVERSITY

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Abstract- Everyone has tried choosing many times, since the choice is one of the most important of the human activities. Choosing a proper university is one of the most important decisions in the life of each university applicant. The present paper aims at identification and evaluation of the factors affecting applicants' choice of university for education. In this paper, the effects of different factors on the university choice have been studied that some factors affecting enrolment and entering students into universities has predominated the others. For example, in this paper, among several indicates, providing the prospect job opportunities and academic validity and quality of the university have been the priorities of the students. This research has been conducted on the basis of multiple criteria decision making via 10 experts.

Key words- College choice, Higher education, Qazvin Azad University, Career aspirations, Applicants' Choice of University

I. INTRODUCTION

University, as a home for different sciences and a center of thought emergence as well as the heart of the country and a comprehensive model for societies, always has had outstanding features by which human characters become meaningful and are prepared to achieve a higher goal. Unfortunately, since twenty eight years ago when Azad University was established aimed at helping Iranian higher education, the students of this university have faced with many difficulties due to problems and deficiencies resulted from wrong and non-expert policies legislated by some decision makers in higher education area. Policies quantitatively resulted from a kind of strict competitive thought are used for development and supporting more people and this causes that attention to the qualitative growth, considering the standards and having outstanding features are ignored. Currently, a wide range of university students face with difficulties such as unemployment, deficiency of proper education facilities, deficiency of laboratory instruments, lack of equipped libraries, deficiency of educational aid instruments and lack of sufficient computer sites. On the other hand, credits which public universities receive from government is 7 times more than credit received by Azad University which is seven billion rials and actually, it is seven times less than credit received by public universities. In order to quality improvement, Azad University, comparing with other universities, requires more space, equipment, board of faculty, facilities and informing system. Today, Azad University should be able to identify properly higher education applicants' motives for choosing a university in order to be survived, because the less entrants results in less revenues and it prevents growth, development and survival (Hesabi, 2009). Therefore, the higher

education applicants have confused to choose this university because of its many problems. The present paper aims at introducing proper university for education and seeks to present some techniques to increase applying for Azad University as a place for education and also to identify the effective factors that attract more and more students.

II. LITERATUREREVIEW

Two different perspectives to understanding the complex college selection decision have emerged. One approach focuses on how aspiring students develop a college choice set, decide where to apply considering admission criteria, and make their enrollment decisions (Hearn, 1984). The second approach emphasizes institutional characteristics such as cost, size, distance, the quality of programs, and availability of financial aid. The factors most commonly associated with a comprehensive college choice model include student background characteristic (Jackson, 1982), aspiration (Chapman, 1984; Jackson, 1982), educational achievement (Hanson & Litten, 1982; Jackson, 1982), social environment (Hossler & Gallagher, 1987), financial variables (St. John, 1990; 1991), net cost (St. John & Starkey, 1995), institutional climate (Chapman, 1984), and institutional characteristics (Hanson & Litten, 1982; Hossler et al., 1987). In addition, other indicators used in this study. The present study selected a conceptual framework for college choice with 15 factors that are: Tuition, reputation of university, proper training facilities, Location close to University, Support facilities (dormitories, transportation equipment and self-service, etc.), website, Training facilities, Employee behavior, Offering graduate, educational achievement and awarded

bonuses, Gender, Being influenced by the parent, The university near the center of town, Job opportunity, Advertise.

Many studies on college student decision-making use economic and sociologic Theoretical frameworks to examine factors of college choice (Hearn, 1984; Jackson, 1978; Tierney, 1983; Somers, Haines, & Keene, 2006). These frameworks have been used to develop three theoretical, conceptual approaches to modeling college choice: (a) economic models, (b) status-attainment models, and (c) combined models. First, the economic models focus on the econometric assumption that prospective college students think rationally and make careful cost-benefit analyses when choosing a college (Hosler, Schmitt, & Vesper, 1987). Second, the status-attainment models assume a utilitarian decision-making process that students go through in choosing a college, specifying a variety of social and individual factors leading to occupational and educational aspirations (Jackson, 1982).

Third, the combined models incorporate the rational assumptions in the economic models and components of the status attainment models. Most combined models divide the student decision-making process into three phases: aspirations development and alternative evaluation; options consideration; and evaluation of the remaining options and final decision (Jackson, 1982). One can point to the research relates indirectly to the subject that is the study of foresight preventive factors in decision making by executives who are studying in management programs aiming at identify and study of the foresight preventive factors in decision making and the analysis of variance test (ANOVA) has used to assess the individual variables (Hassani, 1999).

The organization of decision support was studied in Amirkabir Industrial University in order to measure and improve the human resource productivity in terms of knowledge management.

The problem this study dealt with is making a proper model for best choose of the products, under a group LP and AHP linear planning of the multi-purpose conditions to supply the products to the market (Zahirinia, 2001). The study of Tehran University students who tend to choose the majors of Tehran University was conducted which determined some effective factor in choosing the university majors (Alizadeh, 2001).

The study of entrance exams of the universities and higher education institutions to choose students (Mohseni, 2008), the analysis of factors affecting students' choice of university major (Golzar, 2009), the study of the approaches of the students and staff of Gilan state schools to preparation programs for university entrance exams (Yaghoubi, 2002) are among the researches related to the present paper. Such decisions are called unplanned or frivolous decisions (Masgerio, 2001).

III. METHODOLOGY

Data were collected through 10 experts volunteers who had successfully entered at the university. This article has been written by AHP approaches. Analytic Hierarchy Process (AHP) is one of Multi Criteria decision making method that was originally developed by Prof. Thomas L. Saaty. In short, it is a method to derive ratio scales from paired comparisons. The input can be obtained from actual measurement such as price, weight etc., or from subjective opinion such as satisfaction feelings and preference. AHP allow some small inconsistency in judgment because human is not always consistent. The ratio scales are derived from the principal Eigen vectors and the consistency index is derived from the principal Eigen value. Rather than prescribing a "correct" decision, the AHP helps decision makers find one that best suits their goal and their understanding of the problem. It provides a comprehensive and rational framework for structuring a decision problem, for representing and quantifying its elements, for relating those elements to overall goals, and for evaluating alternative solutions. (Saaty, Thomas L.; Peniwati, Kirti, 2008).

Table 1. Saaty range

Intensity of importance	Definition
1	Equal importance of both elements
3	Weak importance of one element over another
5	Essential or strong importance of one element over another
7	Demonstrated importance of one element over another
9	Absolute importance of one element over another
2,4,6,8	Intermediate values between two adjacent judgements

IV. DATA ANALYSIS

We observed that the number of comparisons was a combination of the number of things to be compared. Since we have 15 objects (job opportunities, reputation of university proper training facilities, ... advertise), we have 15 comparisons. Table below shows the number of comparisons.

Table 2. Number of comparison							
Number of things	1	2	3	4	5	6	7
number of comparisons	0	1	3	6	10	15	21
							$\frac{n(n-1)}{2}$
							2

The scaling is not necessary 1 to 9 but for qualitative data such as preference, ranking and subjective opinions, it is suggested to use scale 1 to 9.

We could make a matrix from the 15 paired comparisons. Because we have 15 comparisons, thus we had 15 by 15 matrix. The diagonal elements of the

matrix are always 1 and we only need to fill up the upper triangular matrix.

1. If the judgment value is on the left side of 1, we put the actual judgment value.

2. If the judgment value is on the right side of 1, we put the reciprocal value.

Comparing tuition and reputation of university, X believe that job opportunities is more important than tuition ,thus we put actual judgment 9 on the first row, last column of the matrix .Comparing tuition and reputation of university, reputation of university is dominate. Thus we put his actual judgment on the second row, last column of the matrix. Then based on his preference values above, we have a reciprocal matrix like this.

Table3. The pairedComparisons indicators

Indicator	tuition	Reputation of university	Proper training facilities
tuition	1	1/9	1/3
Reputation of university	9	1	9
Proper training facilities	3	1/9	1

After that, the normalized principle Eigen vector is also called priority vector. Since it is normalized, the sum of all elements in priority is 1.Finally we got the results that choice job opportunities is the best choice, followed by reputation of university the second choice and the worst choice is advertise. The composite weights are ratio scale. We can say that choice job opportunities are 18times more preferable than advertise .We can also check the overall consistency of hierarchy by summing for all levels. AHP using analytic Hierarchy process (AHP) , you can convert ordinal scale to ratio scale and even check its consistency.

Table4. The paired Comparisons indicators

Indicators	Tuition	Reputation of university	Proper training facilities	Location close to University	Support facilities	Web site	Training facilities	Employee behavior
Tuition	.041	.011	.023	.012	.007	.045	.069	.025
Reputation of university	.0691	.018	.0381	0.184	.27	.124	.234	.103
Proper training facilities	.126	.003	.0727	.104	.077	.079	.07	.088
Location close to University	.194	.005	.04	.058	.089	.069	.071	.096
Support facilities	.021	.025	.033	.023	.036	.049	.024	.051
Web site	.0129	.021	.012	.011	.0104	.0142	.005	.006
Training facilities	.0022	.0028	.038	.0204	.037	.093	.037	.016
Employee behavior	.048	.005	.0023	.017	0.14	.059	.065	

Table5. The pairedComparisons indicators

Indicators	Offering graduate	Educational achievement and awarded bonuses	gender	Being influence by the parent	The university near the center of town	website Job opportunities	advertise
Tuition	.046	.041	.033	.029	.046	.037	.082
Reputation of university	.22	.138	.107	.117	.138	.217	.128
Proper training facilities	.11	.04	.098	.13	.054	.136	.085
Location close to university	.06	.07	.0903	.079	.14	.027	.076
Support facilities	.035	.06	.039	.056	.05	.034	.072
Web site	.012	.01	.01	.011	.007	.021	.023
Training facilities	.045	.033	.026	.045	.022	.049	.06
Employee behavior	.031	.023	.026	.024	.009	.025	.035

Table6. The pairedComparisons indicators

Indicators	Tuition	Reputation of university	Proper training facilities	Location close to university	Support facilities	website	advertise	Employee behavior
Offering graduate	.068	.0064	.0504	.048	.077	.089	.063	.0704
Educational achievement and awarded bonuses	.068	.009	.121	.055	.04	.092	.072	.083
gender	.034	.004	.02	.017	.025	.037	.038	.048
Being influence by the parent	.043	.0048	.017	.022	.019	.038	.025	.035
The university near the center of town	.033	.0051	.0509	.015	.026	.072	.062	.118
Job opportunities	.207	.016	.1002	.389	.197	.124	.14	.213
Advertise	.007	.0023	.0133	.009	.007	.009	.009	.012

Table7. The pairedComparisons indicators

Indicators	Offering graduate	Educational achievement and awarded bonuses	gender	Being influence by the parent	he university near the center of town	Job opportunities	advertise
Offering graduate	.076	.067	.122	.059	.179	.07	.035
Educational achievement and awarded bonuses	.069	.022	.082	.123	.025	.071	.077
gender	.017	.016	.027	.013	.01	.034	.069
Being influence by the parent	.039	.1003	.065	.0306	.021	.026	.035
The university near the center of town	.016	.176	.105	.052	.037	.027	.051
Job opportunities	.204	.015	.152	.236	.25	.188	.107
Advertise	.015		.012	.007	.005	.0315	.015

Indicators	Sum	Average
Tuition	.61	.040667
reputation of university	2.458	.163867
proper training facilities	1.272	.0848
Location close to University	1.164	.0776
Support facilities (dormitories, transportation equipment and self-service, etc.)	.585	.039
website	.1865	.012433
Training facilities	.5462	.0364
Employee behavior	.458	.030533
Offering graduate	1.193	.0795533
educational achievement and awarded bonuses	1.054	.070267
Gender	.415	.027667
Being influenced by the parent	.436	.029067
The university near the center of town	.7703	.051353
Job opportunity	2.708	.180533
. Advertise	.169	.011267

The study identified 15 factors of college choice. This research compared the differences in the factors among Qazvin Islamic Azad University with William F. Harrah College of Hotel Administration University of Nevada Las Vegas. The result indicated students in University of Nevada Las Vegas consider cost, facilities, and family support as significantly factors when choosing university.

CONCLUSION

According to current situation, it necessary to study how students choose their prospect university and how they think about bachelor degree and higher education.). The analytical study of quality and amount of the quantitative application of the accountant data in management decision making aiming at achievement the desired quality, considering social responsibilities, optimal using of facilities, desired spending the budget, has conducted and their effects on the operation were confirmed (Taleghani, 2006). After a statistical analysis, all 15 indicators of the present paper were studied. According to experts' ideas we concluded these results. The results indicated job opportunities indicator as significantly important factors when choosing Qazvin Azad University, followed by

reputation of university the second choice and the worst choice is advertise.

Rank	Indicators	Eigen-value
1	job opportunities	0.1805
2	reputation of university	0.1639
3	proper training facilities	0.084
4	Offering graduate	0.0795
5	Location close to University	0.0776
6	educational achievement and awarded bonuses	0.0703
7	The university near the center of town	0.051
8	Tuition	0.041
9	Support facilities (dormitories, transportation equipment and self-service, etc.)	0.039
10	Training Facilities (Tuition and financial aid)	0.036
11	Employee behavior	0.0305
12	Being influenced by the parent	0.029
13	gender	0.027
14	website	0.012

6. Suggestion

If the president of the university wants to increase enrolment significantly, he must be pay attention to blow suggestions. Study shows that, job opportunities are the first criteria for selecting university. He must provide strong links between companies, organizations, banks and other places with university. The second criteria are reputation of the university. Using qualified masters, strong faculty, interact with international universities and other factors help to improve quality of the university. Providing proper training is the third criteria. Creating good atmosphere, using laboratory, have meeting class, have video projector in each class and etc, are the most factors to impress on students. If they are more comfortable in the class, they will enjoy in their class and won't leave the class early. In the study the most important criterion were distinguished, therefor the present of universities must know about them and use them correctly.

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