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DETERMINATION OF THE RELATIONSHIP BETWEEN QUALITY OF TEACHING PROCESSES AND LEARNING RESOURCES WITH STUDENT ACHIEVEMENT: THE CASE OF GAZIANTEP UNIVERSITY[1]

ÖĞRETİM SÜREÇLERİ VE ÖĞRENME KAYNAKLARININ KALİTESİNİN ÖĞRENCİ BAŞARISIYLA İLİŞKİSİNİN BELİRLENMESİ: GAZİANTEP ÜNİVERSİTESİ ÖRNEĞİ

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Abstract

The purpose of present study is to determine the relationship between the quality of teaching processes and learning resources of a higher education institution and academic achievement of B. A. students in Gaziantep University. With this purpose in mind, students' perceptions about the following sub-dimensions are determined: Integration and teaching processes, career guidance services, library facilities and services, communication with the faculty administration and the academics, student affairs, physical learning conditions, campus life, research activities, assessment and evaluation, course contents and classroom conditions. The study is designed with the correlational survey model and the data are obtained by administering a scale to randomly selected 796 students in 2014-2015 educational year. In data analysis, SPSS 20.0 software package is used and Independent Samples T Test and Multiple Linear Regression are applied to the normally distributed data set. According to research results, the participants' views differ significantly in four of the sub-dimensions according to their gender and these sub-dimensions - career guidance services, teaching processes, campus life and assessment and evaluation - are found to predict about 15% of students' academic achievement. It is extrapolated that some variables relevant with teaching processes and learning resources of a higher education institution have substantial impact upon student achievement. The paper concludes by offering some implications.

Keywords: Academic Achievement, Higher Education Quality Indicators, Student Evaluation.

Öz

Bu çalışmanın amacı Gaziantep Üniversitesi'nde lisans eğitimi alan öğrencilerin akademik başarıları ile yükseköğretim kurumlarındaki öğretim süreçleri ve öğrenme kaynaklarının kalitesine ilişkin görüşleri arasındaki ilişkinin belirlenmesidir. Bu genel amaç doğrultusunda katılımcıların bütünleşme, öğretim süreçleri, kariyer yönlendirme hizmetleri, kütüphane hizmetleri, öğretim elemanları ve yönetim kadrosuyla iletişim, öğrenci işleri, fizikî öğrenme koşulları, kampus yaşamı, araştırma faaliyetleri, ölçme ve değerlendirme, ders içerikleri hakkında bilgilendirme ve derslik koşulları alt boyutlarına ilişkin görüşleri tespit edilmiştir. İlişkisel tarama modeli ile desenlenen araştırmanın verileri 2014-2015 eğitim öğretim yılında evrenden rastgele örneklem yoluyla seçilen 796 öğrenciye ölçek uygulanması yoluyla elde edilmiştir. Verilerin analizinde SPSS 20 paket programı kullanılmış olup, normal dağılım gösterdiği tespit edilen veri setine Bağımsız Örneklem T Testi ve Çoklu Doğrusal Regresyon Analizi uygulanmıştır. Araştırma bulgularına göre; katılımcıların görüşlerinin öğretim süreçleri, kariyer yönlendirme, kampus yaşamı ve sınav beklenti alt boyutlarında cinsiyet değişkenine göre anlamlı derecede farklılaştığı ve bu 4 alt boyutun birlikte öğrencilerin akademik başarılarının yaklaşık %15'ini yordadığı tespit edilmiştir. Bu doğrultuda yükseköğretim kurumunda öğretim süreçleri ve öğrenme kaynaklarına ilişkin ilgili değişkenlerin öğrenci başarısında önemli pay sahibi olduğu sonucuna ulaşılmıştır. Elde edilen bulgular doğrultusunda çeşitli önerilere yer verilmiştir.

Anahtar Kelimeler: Akademik başarı, öğrenci değerlendirmesi, yükseköğretim kalite göstergeleri.

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Introduction

Universities are among the most important and prestigious institutions of a society and they have been largely affected by developments in the 21st century. It is pointed out that most of these changes stem from technology, competition, internationalization, information society and globalization (Altbach, Reisberg & Rumbley, 2009). In this period, the purpose of higher education has changed to a great extent and differentiation in roles and missions has been experienced (Ağıralioğlu, 2012; Erdem; 2013). Higher education institutions have become one of the top agenda issues of international organizations with the notion of information society (United Nations Educational, Scientific and Cultural Organization, 2003), and these organizations have assumed universities the responsibility of taking active part in solving fundamental problems in global, regional and local levels such as the maintenance of peace, fight against hunger and poverty, improving intercultural understanding and harmony beyond social development (World Bank, 1998; Organization for Economic Co-operation and Development, 1996). Meanwhile, globalization has eliminated temporal and spatial factors one by one (Brown, 1999); internationalism has brought about regional cooperation initiatives in higher education (Erdem, 2012; Rehber, 2007) and harsh competition and accountability procedures have necessitated higher education institutions to develop new forms of relationships with all kinds of stakeholders including industry (Çetinsaya, 2014). These factors not only alter expectations from the universities but also require restructuring in higher education (Burgaz & Şentürk, 2008; Erdem, 2012; Rehber, 2007). The expectations of contributing to development of the countries and adding value to the world as a result of interactions at the international level (Mishra, 2006) make it inevitable for higher education institutions to achieve certain standards in terms of quality, effectiveness, transparency and so on (Çetinsaya, 2014; Mishra, 2006; Özer, Gür & Küçükcan, 2010). By means of international comparisons and accreditation, quality standards have started to be handled with the objectives of international integration and cohesion by going far beyond the national viewpoints (Gültekin & Şengül 2006). It is obvious that characteristics of the 21st century shape the structure, roles and missions of higher education and drive the quality process.

The notion of quality has been defined by several researchers in different ways such as fitness for purpose and use (Juran & Godfrey, 1998); complying with the requirements (Crosby, 1979) and meeting expectations (Parasuraman et al., 1985). However, the fact that the origin of today's quality concept is based on the disciplines of business and industry poses a major challenge as the objectives and stakeholders of higher education institutions differ from business enterprises and other public institutions (Stensaker, 2007). Different needs of stakeholders together with the diversity in higher education make the quality content dissimilar, as well (Bandevica & Ligotne, 2014). There seems to be a consensus in the literature on Harvey and Green's (1993) five-dimensional classification with regard to quality in higher education (Bandevica & Ligotne, 2014; Lagrosen et al., 2004; Wittek & Kvernbekk, 2011; Zou et al., 2012). In this classification, quality is defined as *exceptional, perfection or consistency, fitness for purpose, value for money* and *transformation.* Westerheijden, Stensaker & Rosa (2007) indicate that there is a consensus on "fitness for purpose" for the concept of quality in higher education in practice. In this respect, while some researchers attribute subjective features to the concept through the stakeholders' perspectives, the others see it as an objective entity named indicators that can be divided into specific components. Apart from these, there are researchers available who consider the concept as institutional assessment, comparability, learning process and personal transformation of academic staff and students.

There are a number of methods to assess and evaluate higher education teaching processes and learning resources. Sarrico et al. (2010) point out that quality indicators, selfassessment and quality assurance are commonly used to evaluate universities. In addition, total quality management, accreditation and university rankings serve similar purposes. The primary concern of this study is about “higher education quality indicators”. Arslan (2002) argues that they present an objective evaluation of educational institutions. Quality indicators provide not only an evaluation of the outcomes of training program but also assessment of all units involved in the functions of educational institutions (Tezsürücü & Bursalıoğlu, 2013). However, Ischinger (2006) points out that they also have some limitations. To illustrate, it may not be appropriate to use same quality indicators when higher education institutions/faculties have different basic functions.

It has been observed that there are a variety of perspectives related to the quality of higher education teaching processes and learning resources. According to Vazzana et al. (2000) higher education quality comprises curriculum, non-academic jobs and academic governance. Zineldin (2000 cited in Zineldin et al., 2011) proposes that the following dimensions should be taken into consideration in higher education quality:

- *Quality of object*; technical quality related to university services.
- *Quality of processes*; functional quality on how educational services are provided.
- *Quality of infrastructure*; quality of resources for educational services.
- *Quality of interaction;* quality for students to be informed.
- *Quality of atmosphere;* quality of the relationship and interaction between students and academic staff.

According to Stukalina (2010) educational setting of higher education institutions can be examined under a four-dimensional framework and she identifies potential indicators for each dimension as follows:

- *Physical & technological environment:* Laboratory equipment facilities, library services, and so on.
- *Administrative environment:* Availability and quality of information, quality of skills and competencies, quality of the courses at faculties.
- *Educational environment:* Student course content, availability and quality of teaching materials, the availability and quality of educational network resources.
- *Psychological environment:* Peace and security environment, collaboration and teamwork with other students, support of the academic and administrative staff.

The quality of higher education teaching processes and learning resources is a matter of concern in the last several decades. There are also various studies in Turkey (Deveci, 2012; Hacıfazlıoğlu, 2006; Meraler, 2011; Yüksel, 2011) to elaborate and list the specific dimensions related to higher education quality. In his study, Deveci (2012) proposes that educational resources, academic staff, faculty administration, university services and quality of education are directly related to higher education teaching processes and learning resources. According to Meraler (2011) they are composed of students, academic staff, teaching-learning process, facilities, library and technology centers, scientific and social activities. In a more detailed study, Hacıfazlıoğlu (2006) has extrapolated that higher education quality comprises integration and teaching processes, career guidance services, library facilities and services, communication with the faculty administration and the academics, student affairs, physical learning conditions, campus life, research activities, assessment and evaluation, course contents and classroom conditions. Similar dimensions have been identified in Yüksel’s (2011) qualitative research. Moreover Mishra (2006) indicates that the indicators of several accreditation bodies have also in common with the former ones.

Student achievement is an outcome of teaching and learning processes and it can be claimed that it is relevant with the quality of higher education quality indicators to some extent. Although it hasn't been encountered a specific research associating higher education quality with student achievement, there are a number of studies investigating the factors that affect student achievement. In his work, Hattie (2009) makes a synthesis of over 800 meta-analyses in order to determine the relative impact of factors on student achievement and he reveals that five kinds of variables have impact upon student achievement. They are students, families, schools, teachers and curriculum. Yamchuti (2002) analyzes the difference between successful and unsuccessful students and concludes that engagement, effort, parents' socio-economic and educational level are the main factors. However, Ensign and Woods (2014) point out that external factors related to the quality of the education should also be taken into consideration in the overall student achievement as well as psychological factors (self-efficacy, engagement and effort). These factors are listed as the type, capacity and general quality of educational institution, interaction between student and academics and tolerance to different voices. In addition, Kanakana et al. (2012) assert that the physical conditions of the learning environment are as important as faculty staff, teaching processes and consulting on student achievement in South Africa. Indiana University National Survey of Student Engagement (NSSE, 2012) research indicates that there are five main elements of effective educational practices in higher education. They are active and collaborative learning strategies, optimal academic difficulty level of courses, enriching students' educational experience, student-faculty interaction and creating supportive campus environment respectively. It can be inferred that there are variety of external factors affecting student achievement besides individual learning capacity and family background.

Various studies are available which examine the notion of quality in higher education from different aspects. It has been observed that the current research is about specifying certain standards (Harvey & Green, 1993); describing higher education quality concept (Meraler, 2011; Yüksel, 2011); determination of current situation in certain contexts (Arslan, 2000; Bayrak, 2007; Deveci, 2012; Hacıfazlıoğlu, 2006; Lagrosen et al., 2004; Saad, 2013; Sandmaung & Khang 2013) or determining its relationship with some other variables (Zineldin et al., 2011). However, it is interesting that higher education quality has not been associated with student achievement, yet. It has been known that formal education is based on alterations in human behavior (Demirel & Kaya, 2013) and the changes in human behavior are regarded as sign of achievement. In this respect, grade point averages are the main quantitative indicators of student achievement.

Aim of the Study

The aim of present study is to determine the relationship between the quality of teaching processes and learning resources of a higher education institution and academic achievement of junior and senior B. A. students in Gaziantep University. It is also within the scope of the research to test whether the participants' opinions differ significantly according to their gender. Research questions of the study are as follows:

- Does the quality of teaching processes and learning resources of Gaziantep University is a meaningful predictor of academic achievement of junior and senior B. A. students?
- Do the participants' opinions differ significantly according to their gender?

The Importance of the Study

Recent developments in the 21st century have ascertained that higher education institutions ought to meet certain standards and expectations in a globalized world. In this period, the universities have to determine the quality of teaching processes and learning resources and make them compatible with the national and international standards (Mızıkacı, 2003). Therefore, this study is significant as it depicts the very situation specific to a certain higher education institution. The quality of teaching processes and learning resources may also be associated with student achievement as the literature indicates that characteristics of schools, teachers and curriculum are vital as well as students and their families. Hence, the determination of significance, direction and degree of impact of the relationship between higher education quality and student achievement will lead us to identify what to do to increase student achievement in undergraduate education.

Research Methodology

Research Design

This study is designed with the correlational survey model. Survey research usually with larger samples is used to determine participants' views on a topic/event or their characteristics such as interests, skills, abilities and attitudes and etc. are depicted (Büyüköztürk, et al., 2013). This method also necessitates describing the events, individuals or objects on their own terms and as they are. No effort is welcomed to change or affect the present circumstances. Among survey research, correlational survey model aims at determining the presence and level of variation between two or more variables (Karasar, 2009).

Participants of the Study

A number of researchers indicate that students are the main stakeholders of higher education and their judgements are valuable (Owlia & Aspinwall, 1996; Sarrico et al., 2010; Srikanthan & Dalrymple, 2003; Rehber, 2007; Zou et al., 2012). In a similar vein, according to Bandevica & Ligotne (2014) student evaluation is the most effective way in quality assessment of the implementation of a higher education program. The research universe consists of junior and senior undergraduate students of Gaziantep University in 2014-2015 academic year. A sample size representing the target population is ascertained because of difficulty in reaching all the population, time limitations and economic reasons. In line with the research design, simple random sampling method is used to provide equal opportunity to each sampling unit (Büyüköztürk, et al., 2013).

According to data of the Directorate of Student Affairs, there are 4181 junior and senior students in 17 faculties of Gaziantep University in 2014-2015 academic year. In order to avoid bias, some of the faculties are excluded in sampling phase. Three faculties on health sciences are eliminated because of the idea that the instrument may not produce appropriate results for these disciplines (Hacıfazlıoğlu, 2006); two faculties because of off-campus location; eight faculties because of having a limited number of junior and senior students or not having alumni yet. The faculties that constitute the research sample are Faculty of Education; Faculty of Arts and Sciences; Faculty of Engineering; Faculty of Economics and Administrative Sciences and there are 2137 junior and senior students which is about 51% of the universe. The randomly selected 796 students are 19% of the universe.

Table 1 shows the distribution of the participants in terms of gender and the faculty they are enrolled.

Table 1. Participant Profile of the Study

	Gender				Total	
	Female		Male			
	f	%	F	%	f	%
F. of Education	196	24.6%	107	13.4%	303	38.1%
F. of Arts & Sciences	94	11.8%	50	6.3%	144	18.1%
F. of Engineering	47	5.9%	136	17.1%	183	23.0%
F. of Econ. & Adminst. Sciences	103	12.9%	63	7.9%	166	20.9%
Total	440	55.3%	356	44.7%	796	100%

As shown in Table 1, the 55.3% of respondents is women and 44.7% of men. According to the distribution of participants in terms of the faculties they are enrolled, the largest proportion of the participants belongs to Faculty of Education with 38.1%. It is followed by Faculty of Engineering with 23%; Faculty of Economics and Administrative Sciences with 20.9% and Faculty of Arts and Sciences with 18.1% respectively.

Data Collection

In data collection period, “Inventory of Teaching Processes and Learning Resources in Higher Education” and Grade Point Averages are used. The instrument is administered to 929 students, but 796 questionnaires are accepted as valid. Survey return rate is approximately 85%.

The instrument of the study is “Inventory of Teaching Processes and Learning Resources in Higher Education” by Hacıfazlıoğlu (2006). The scale includes 77 Likert-type items and 13 sub-dimensions: Student integration (11 items), teaching processes (13 items), career guidance services (7 items), library facilities and services (6 items), communication with the faculty administration (6 items), communication with the academics (6 items), student affairs (4 items), physical learning conditions (6 items), campus life (5 items), research activities (4 items), assessment and evaluation (3 items), and course contents (3 items), classroom conditions (3 items).

Data Analysis

SPSS 20.0 software package is used to analyze data and parametric tests are applied to normally distributed data set (N=796, Statistic=.020=, p=.200>.05). The normality of research data is tested via Kolmogorov Smirnov Test as the sample size is over 50 (Büyüköztürk, 2011). Multiple linear regression analysis is applied to determine whether the quality of teaching processes and learning resources of a higher education institution is a meaningful predictor of academic achievement of B. A. students in Gaziantep University. In data analysis, students’ Grade Point Averages are converted to T-scores to prevent faculty bias. Independent samples T Test is conducted to determine whether there is a significant difference among participants’ views according to their gender. The significance level is accepted as .05 for statistical analyses. Cronbach's Alpha Coefficient is calculated as =.95.

Findings

The results of Multiple Linear Regression Analysis to determine whether the quality of teaching processes and learning resources of a higher education institution is a meaningful predictor of academic achievement of B. A. students in Gaziantep University are shown in Table 2.

Table 2. Multiple Linear Regression Analysis Results for Academic Achievement

Variable	B	Standart Error	β	T	P	Zero-Order	Partial
Constant	46.487	1.76		26.365	.000		
Career Guidance	-.457	.073	-.247	6.231	.000	-.215	-.219
Teaching Process	.243	.052	.212	4.681	.000	.129	.166
Campus Life	-.442	.091	-.182	4.827	.000	-.178	-.171
Assess. & Evalua	.660	.170	.159	3.885	.000	.213	.139
R=0.383.		R^2=0.147					
F (4. 769)=33.066.		P=.000					

The examination of zero-order and partial correlations between the predictor variables and the dependent one indicates that there is a weak negative relationship (r=.215) between career guidance services and students' Grade Point Averages while the correlation is (r=.219) when all the other variables are kept under control. There is a weak negative relationship (r=.178) between campus life and students' Grade Point Averages while the correlation is also in weak levels (r=.171) if the other variables are kept under control.

There is a weak positive relationship (r=.129) between teaching processes and students' Grade Point Averages while the correlation is in weak levels (r=.166) when other variables are kept under control. There is a weak positive relationship in (r=.213) between assessment and evaluation and students' Grade Point Averages while the correlation is also in weak levels (r=.139) if other variables are kept under control.

The sub-dimensions of career guidance services, teaching processes, campus life, assessment and evaluation moderately correlate with students' Grade Point Averages, R=0.383, R^2=0.147, F (4, 769)= 33.066, $p<.05$. These four variables together explain about 15% of the total variance.

According to the standardized regression coefficients (β), relative order of importance of the predictor variables on students' academic grade point averages is: Assessment and evaluation, career guidance services, campus life and teaching processes. The examination of T-test results for the significance of the regression coefficients indicates that four variables are statistically significant. The regression equation for the prediction of students' grade point averages is established as follows:

Student Achievement= 46.487 + Assessment & Evaluation x 0.660 + Teaching Processes x.0.243 – Campus Life x 0.442 – Career Guidance Services x 0.457

Independent Samples T Test results in order to find out whether there is a significant difference among the participants' views according to their gender are shown in Table 3.

Table 3. Independent Samples T Test Results for Gender

Dimension	Gender	N	$\overline{X}$	S	*df*	*t*	p
Total	Female	440	200.70	39,00	794	.993	.321
	Male	356	203.55	41,77			
Teaching Processes	Female	440	39.03	8,44	794	1.977	.048
	Male	356	37.79	9,13			
Career Guidance Services	Female	440	14.08	5,04	719.937	4.457	.000
	Male	356	15.79	5,63			
Campus Life	Female	440	12.28	3,97	794	3.911	.000
	Male	356	13.41	4,24			
Assessment & Evaluation	Female	440	10.22	2,38	794	2.111	.035
	Male	356	9.86	2,41			

There is a significant difference among the participants' views in the sub-dimension of teaching processes, t(794)=1.977, p<.05. The average scores of female participants ($\overline{X}$=39.03, Sd=8.44) is higher than that of male participants ($\overline{X}$=37.79, Sd=9.13). In other words, women have significantly more positive opinions about the teaching processes in comparison with men.

It is observed that there is significant difference among the participants' views in the sub-dimension of career guidance services, t(719.937)=4.457, p<.05. The average scores of female participants ($\overline{X}$=14.08, Sd=5.04) is lower than that of male participants ($\overline{X}$=15.79, Sd=5.63). Therefore, it is obvious that men have significantly more positive opinions about career guidance services when compared to women.

There is a significant difference among the participants' views in the sub-dimension of campus life, t(794)=3.911, p<.05. The average scores of female participants ($\overline{X}$=12.28, Sd=3.97) is lower than that of male participants ($\overline{X}$=13.41, Sd=4.24). Men have significantly more positive opinions about the campus life.

A significant difference is observed among the participants' views in the sub-dimension of assessment and evaluation, t(794)=2.111, p<.05. The average scores of female participants ($\overline{X}$=10.22, Sd=2.38) is higher than that of male participants ($\overline{X}$=9.86, Sd=2.41). That is to say, women have significantly more positive opinions about the assessment and evaluation.

Conclusion and Discussion

The research results indicate that the quality of education and services of a higher education institution is associated with student achievement. It has also been found that the participants' views differ significantly about some dimensions according to their gender. A remarkable finding of the research is that women have significantly more positive opinions in the sub-dimensions predicting student achievement positively whereas men have positive opinions in the sub-dimensions predicting student achievement negatively.

According to research results, career guidance services, teaching processes, campus life and assessment & evaluation are found to predict about 15% of student achievement. In addition to the sub-dimensions (teaching processes, assessment & evaluation) positively predicting student achievement, the sub-dimensions of career guidance services and campus life have been identified as negative predictors of student achievement. In his work aiming at the determination of the factors that affect student achievement via the synthesis of over 800 meta-analyses mostly from North America and Europe, Hattie (2009) reveals that the factors that most influence student achievement are teachers and the teaching process. In many research relevant to the effects of educational leadership on school processes, it has been concluded that the factor that most influence student achievement is the maintenance of the teaching process (Leithwood et al., 2004; Waters et al., 2003). In this regard, it is an expected result that some sub-dimensions' prediction of student achievement positively. These are the sub-dimension of teaching processes about teaching and learning strategies and the sub-dimension of assessment and evaluation about the link between assessment & evaluation and the course content.

The variables related to the supportive campus environment have also been found to be the predictors of student achievement. Hattie (2009) detects that the physical variables related to the educational institutions have the least impact on student achievement in the developed countries and he adds that this may differ in developing and under developed countries because of the differences in physical capabilities of diverse educational institutions. Indeed, in their research about South African higher education system as a developing country, Kanakana et al. (2012) have reached the conclusion that physical conditions of the learning environment are as important as faculty staff, teaching processes and consulting on student achievement. Similarly, Ensign and Woods (2014) point out that external factors related to the general quality of educational institution are important in the overall student achievement. Furthermore the results of Indiana University National Survey of Student Engagement (NSSE, 2012) shows that creating a supportive campus environment is among five main factors affecting student achievement in higher education. It can be inferred that creating a supportive campus environment together with the general quality of educational institution have an important role in student achievement in higher education. Findings of this research also reveal that the sub-dimensions of career guidance services and campus life are negative predictors of student achievement indicating the lack of a supportive campus environment for students in Gaziantep University. It is considered that various short-comings in current practices have caused the means of these dimensions to be lower than students' grade point averages and so they have emerged as negative indicators in predicting student achievement.

The finding related to the prediction of student achievement negatively can also be interpreted differently. In his study investigating the factors contributing the difference between failing and successful students in Thailand higher education system, Yamchuti (2002) puts forward that successful students participate in classroom activities and discussions more and they spend more time for studying individually while the failing ones spend more time in sports activities and attend more crowded higher education institutions. Therefore, it can be assumed that the increase in devoted time for extracurricular activities has a negative impact on student achievement. However, this interpretation leads us to the misconception that student achievement solely contains academic study and accordingly the participants of the study contemplate that sports facilities and professional development activities are factors that reduce student achievement. In this case, it will also be criticized to use grade point averages as the sole indicator of student achievement. However, it should not be ignored that students' grade point averages are considered to be one of the most widely used indicators of student achievement and they are essential components of the research conducted to determine the factors affecting student achievement.

Research on higher education quality assessment indicates that the following variables affect the quality perception of the students: gender (Hacıfazlıoğlu, 2006; Harris, 2002; Kelso, 2008; Palli & Mamilla, 2012), race (Harris, 2002); the program students attend

(Hacıfazlıoğlu, 2006; Harris, 2002; Saad, 2013); class (Bayrak, 2007; Hacıfazlıoğlu, 2006; Kelso, 2008); size of the university (Kelso, 2008); type of the university (Bayrak, 2007; Deveci, 2012); national culture (Lagrosen et al., 2004); service quality expectations and age (Bayrak, 2007). Although there are sampling and universe differences, all these studies reveal that participants' views on higher education quality are influenced by demographic variables. The findings of this research indicate that participants' opinions differ significantly in terms of their gender. It has also been determined that there is a differentiation in favor of women about educational procedures while there is a differentiation in favor of men about support services.

It is interesting to see that there is a remarkable overlap between the research findings related to gender and the one of Hacıfazlıoğlu (2006) who developed the instrument. In her study, participants were studying at Faculty of Education and Economy & Administrative Sciences from Dokuz Eylül and Marmara Universities. Tough these higher education institutions located on the western part of Turkey, they attract many students from every part of the country as they are among the top 25 universities of Turkey (URAP, 2016). In similar vein, Gaziantep University attracts lots of students especially from the southeastern and eastern part of Turkey as it is also among the top 25 universities of Turkey (URAP, 2016). Therefore, the overlap between this research and the one of Hacıfazlıoğlu (2006) is important in terms of generating implications about the characteristics of Turkish higher education students. According to research results, women have significantly more positive opinions in the sub-dimensions (teaching processes, assessment and evaluation) predicting student achievement positively while men have positive opinions in the sub-dimensions (career guidance services, campus life) predicting student achievement negatively. As a consequence, it can be inferred that the main focus of women is the training process while it is supportive campus life for men. It can also be claimed that this will lead women to be more successful when compared to men in terms of grade point averages.

Several other studies have also contributed to the general characteristics of the students in Turkish higher education. In her research, Bayrak (2007) have extrapolated that library and internet facilities are the factors that first come to Turkish students' minds in terms of higher education service quality. In addition, it is a quite remarkable finding of Zineldin et al. (2011) that according to Turkish students, the most important factors that determine the quality of higher education are the cleanliness of the classrooms and toilets and it is followed by the quality, courtesy and physical appearance of academic staff and their responsiveness to students' needs. These results are obviously inconsistent with the relevant literature (Hattie 2009; Zineldin et al., 2011) in which the factors related to the quality of teaching staff are accepted as the most important elements and physical environment variables are the least effective ones.

In his study examining the students' perceptions on higher education quality, Kelso (2008) reported that females have more positive opinions about student health and nutrition services, while males think more positively about having courses whenever they want though there are slight statistical differences. The participants were studying at various departments of a large southeastern university in the U.S.A. Furthermore, Harris (2002) also reported small differences in terms of reliability, assurance, tangibility, empathy and responsiveness in favor of women in her study with the students of Faculty of Education in southeastern part of the U.S.A. and in Palli & Mamilla (2012)' study in India and Saad (2013)'s study in Lebanon.

Deveci (2012) surveyed 1714 higher education students from 83 universities in Turkey and extrapolated that students' perceptions about higher education quality do not differ according to their gender. In her study with the students from Economy & Administrative

Sciences in 14 universities located in İstanbul, Bayrak (2007) points out that although there is no significant difference between students' perceptions about higher education quality according to gender; quality expectations of female students are relatively high. Accordingly, Meraler's (2011) study with the students at several Faculties of Education in southeastern part of Turkey concludes that females do have higher quality expectations about higher education institutions. As the research results indicate gender is not a decisive factor on the perception of higher education quality whereas there might be intercultural differences. Furthermore, the research findings point out that perception of higher education quality is something different from expectations of higher education quality.

Suggestions

As a result of this research, it is suggested that questionnaires delivered to students to evaluate the academic staff at the end of semesters should be generated for all teaching processes and learning resources by Gaziantep University. Student council and student clubs might also be actively benefited by higher education institution to get student opinions on higher education quality indicators systematically. The establishment of a Career Guidance Office will systematize career guidance services in terms of vocational guidance and communication with alumni. Another implication of the research is that higher education institution should improve its capacity in terms of indoor and outdoor sports facilities, college dorms and medico-social services.

The finding related to the quality of education and services of a higher education institution is associated with student achievement should be justified in different samples. Therefore, it is advisable to verify the research results in various settings. The researchers might also investigate direct and indirect relationships between higher education quality indicators and student achievement. The prediction of student achievement can also be examined in terms of specific variables such as faculty, program or university campus the students attend instead of a general evaluation. All these will contribute to the understanding of the variables that influence student achievement.

For similar research, it might be useful to construct a profile for higher education institutions by means of province or region wide studies instead of a certain university. In this case, the universe can be determined according to the university rankings or the type of university (public/private). In addition, the results obtained in a quantitative research can be enriched by means of variety of tools in qualitative research methodology (observation, interview, focus group interview, document analysis and etc.) or by collecting data from different stakeholders.

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