

5th International Conference on Leadership, Technology, Innovation and Business Management

Understanding university brand loyalty: the mediating role of attitudes towards the department and university

İrem Erdoğmuş^a, Sinem Ergun^b, a^{*}

^{a,b} *Marmara University, Business School, 34180, İstanbul, Turkey*

Abstract

For today's competitive academic environment, brand management in higher education is becoming highly important. As students have many options available to them, there is a growing need to study factors that enable higher education institutions to attract and retain students. In literature, there are many factors that foster or challenge branding activities of universities. In this study, the mediating role of attitude on university performance variables and university brand loyalty relationship is investigated. A survey is used as a research instrument and applied to university students. Data is collected from 321 university students studying at business administration department of a public university. Hierarchical multiple regression is used to test the hypotheses which revealed partial mediation of attitude between the relationship of university performance and university brand loyalty.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the International Conference on Leadership, Technology, Innovation and Business Management

Keywords: University brand, Brand loyalty, Brand attitude, University performance

1. Introduction

Universities went through a thorough change since late 20th Century based on the changes in the society's needs and demands. The recent increase in the demand for higher education across the world, the globalization of the job market, and ease of international movement brought about a higher education market based on rivalry and the need for managing universities as brands. Universities had to position themselves as different and desirable brands and increase their image in the eyes of their stakeholders because of this rivalry (Chapleo, 2010; Schee, 2011; Bunzel, 2007). As such, Cornell University developed a new brand programme with students and the management when they weren't placed in the top ten lists of US News and World Report. Beaver University near Philadelphia conducted a questionnaire to students and found out that 30% of the students hadn't preferred it because of its name. Then the university changed its brand name to Arcadia University in 2001 (Bunzel, 2007).

Branding has become an important tool to leverage a university's position in the market, increase number of student applications, step up its position in rankings, improve graduate career prospects, or gain institutional support

^{*} Corresponding author. Tel. + 90-212-677-7400 fax. +90-212-677-7401

E-mail address: ireme@marmara.edu.tr

of the authorities. Universities now maintain various products and services with their brand and they serve various stakeholder categories to which these brands mean something (Mainardes, Alves, and Raposo, 2013a). Yet, the most important stakeholders of a university are its students (McAlexander, Koenig and Schouten, 2004). Universities, which want to gain competitive edge in the future, should begin searching for effective and creative ways to attract, retain and foster stronger relationships with students. Therefore, it is essential to understand how a strong university brand is created in the minds of the students (Bunzel, 2007; Schee, 2011). For this end, based on theory of reasoned action, a model is proposed and tested to understand the factors that lead to positive brand attitude and then to brand loyalty towards universities. The study is novel in the sense that it is one of few studies in the Turkish context to test the university students' perspectives on what creates loyalty to their universities. The outcomes are believed to shed light on future university brand management practices.

2. Literature Review And Hypotheses

2.1. Branding Universities

Brand management in higher education is an area that has been on the agenda of practitioners for some time (Llanes, Gray, and Fam 2003), but has received comparably limited academic attention (Chapleo, 2007; Balmer et al, 2010; Heaney and Heaney, 2008). Kotler and Fox (1995) claimed in 1990s that universities were faced with the challenge of acting like businesses, managing themselves as brands, and that their image and reputation influenced choices made by prospective students. Since then, many universities started to apply brand management strategies in their institutions. The main impetus behind branding universities is to attract attention and retain loyalty of the students, business world, and society in general. Then the question is which particular issues foster or challenge branding activities of universities. In today's competitive academic environment where students have many options available to them, factors that enable educational institutions to attract and retain students should be seriously studied (Schee, 2011; Tanyeri and Nardalli, 2015).

Studies on university branding have identified many different factors that drive positive brand image, student satisfaction, and success for universities. Some of these studies and their results are as follows. LeBlanc and Nguyen (1999) conducted a study on university students and identified six different values that students obtained from universities. These were functional values related to future career development and good value obtained compared to tuition fees, reputation-related symbolic values, social values associated with fellow students, epistemic values related to gaining knowledge and education, and finally emotional values related to self-fulfillment. Of all these values, functional values and epistemic values had a higher influence on overall evaluation of students. Studies by Cuthbert (1996) and O'Neill and Palmer (2004) showed that the driver of student satisfaction of a university was the process of education (course delivery mechanisms, quality of courses and teaching, interpersonal relationships etc.), and the students mostly cared about knowledge and assurance of the educators as well as the warm relationship and empathy provided by them. The physical appearance of the university (architecture, campus) was also one of the factors that students considered, but comparably it was less important for satisfaction. On the other hand, study by Smith and Ennew (2001) put forward that there were peripheral aspects and the university facilities, which students consumed such as cafeterias and residential areas which had a significant impact on the evaluation of universities. Similarly, in their study, Duarte, Alves and Raposo (2010) found out that university social life atmosphere was an important predictor of positive image towards a university along with employment opportunities. Ali-Choudhury, Bennett and Savani (2009) established a 10-component list of a university brand as: educational identity, institution's location, graduate employment opportunities, visual imagery, general ambience, reputation, sport and social facilities, learning environment, course choices availability and community links. Finally, Mainardes, Alves and Raposo's study (2013b) concluded that the university's environment, motivating lessons and easy university bureaucracy were the key expectations of university students.

Based on these studies, it can be concluded that both performance-related factors (including service given, the process, and physical evidence) of a university and its imagery have an effect on the perception of the students. The performance related factors can be listed as (a) education, (b) teaching staff, (c) course variety, (d) graduate employment opportunities, (e) general social environment, (f) fellow student compatibility, (g) general physical environment. The imagery factors, on the other hand, include general image and reputation of the universities. In order to be successful, universities should outperform others on all or some of these dimensions.

Turkey is a potential promising market for higher education. Each year, the number of new universities is increasing to meet the demand of the young population of the country. However, one cannot say that all of these

universities match with each other in terms of academic staff, number of students, number of faculties, or facilities. Additionally, with the rising tuition fees and choice availability, students and parents also started to question the quality and value they are going to gain from different university alternatives (Tanyeri and Nardallı, 2015). The decision making process became more sophisticated and complex. Thus, it is timely and important to elaborate the attitude and loyalty of the current university students to understand what drives a successful university brand. Based on the results, it would be possible to propose strategies for the new coming universities and existing ones to help them attract prospects and retain the loyalty of the current students for graduate education possibilities.

2.2. Proposed Model

Oliver (1999, p. 34) defines brand loyalty as ‘a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior’. Brand loyalty is the final dimension of consumer brand resonance symbolizing the consumer’s ultimate relationship and level of identification with a brand (Keller, 1993; Aaker, 1991). Brand loyalty is important in the sense that it assures continuity of the consumer lifecycle, positive word-of-mouth activities, and consumer advocacy. Organizations need to maintain the loyalty of consumers for success and sustainability of their organization (Oliver, 1999; Keller, 2008). Students’ loyalty to the university involves both a sense of community and also a desire to continue relationship with the university (Sung and Yang, 2008). In their study, Hennig-Thurau et al., (2001) found that a loyal student might continue to support his or her academic institution even after graduating (a) by providing financial support, such as donations or research projects; (b) through word-of-mouth promotion to other prospective students, and (c) by offering cooperation such as student placements or visiting lectures.

The extant literature shows that both performance-related and also imagery related factors influence consumer loyalty towards the brand (Keller, 1993; 2008). However, performance-related factors are more controllable by the firm whereas imagery-related factors are based on the perceptions of the stakeholders. Therefore, the management cannot truly exert an influence on them. Since the aim of this paper is to propose strategies to university top management on how to craft their academic supply on the market, only the performance-related factors were included in the proposed model based on the fact that they can be acted upon. The aim is to understand the influence of university performance ((a) education, (b) teaching staff, (c) course variety, (d) graduate career prospects, (e) general environment, (f) fellow student compatibility, (g) physical environment) on brand loyalty of university students.

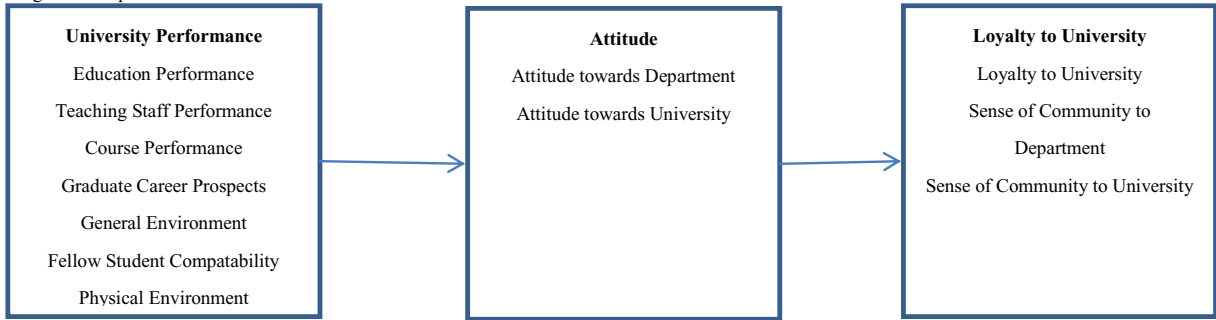
The model also proposes the mediation of brand attitude on the relationship between university performance and brand loyalty. Brand attitude is defined as the consumers’ overall evaluations of a brand; being either positive or negative (Keller, 1993). Attitude as an affective component is an evaluative process and is dependent upon the one’s knowledge or experience of the objects (Holbrook, 1978; Anand et al., 1987). The emotional component stems from the experience of the organization, and processing of the information related to the attributes, functions or performance of the organization (Kennedy, 1977). In the university context, then, the perceived performance of the university will have an effect on the affective evaluation (attitude) of the students about the university. On the other hand, the relationship between attitude and loyalty (as intention and behavior) is well explained under the theory of reasoned action (Ajzen and Fishbein, 1977; Fishbein and Ajzen, 1975), which posits that attitudes precede loyalty intentions and behavior. The extant literature also supports existence of strong links among brand loyalty and brand attitude (e.g.; Baldinger and Robinson, 1996; Chaudhuri, 1999; and Taylor and Hunter, 2003). It was empirically proved that brand attitude has a positive influence on brand loyalty.

Therefore;

H1: Attitude towards the department mediates the relationship between university performance: (1) education performance, (2) teaching staff performance, (3) course performance, (4) graduate career prospects, (5) general environment, (6) fellow student compatibility, (7) physical environment and loyalty towards the university: (a)loyalty to university, (b)sense of community to department, (c) sense of community to university.

H2: Attitude towards the university mediates the relationship between university performance: (1) education performance, (2) teaching staff performance, (3) course performance, (4) graduate career prospects, (5) general environment, (6) fellow student compatibility, (7) physical environment and loyalty towards the university: (a)loyalty to university, (b)sense of community to department, (c) sense of community to university.

Figure 1: Proposed Research Model



3. Methodology

3.1. Research Goal

The aim of the study is to identify the mediating effect of attitude on the relationship between university performance and brand loyalty. A mediator variable mediates the relationship between the independent variable and dependent variable. The independent variable affects the mediator variable which sequentially affects the dependent variable. According to Baron and Kenny's (1986) steps for mediation, a researcher has to test that independent variable is a significant predictor of dependent variable. Then, it has to be proven that mediating variable is significantly associated with the independent variable. After that, the researcher has to analyze that the mediator is a significant predictor of the dependent variable, at the same time control for the independent variable. When the mediator variable is removed in the model, the relationship between independent and dependent variable has to become insignificant or at least the effect has to be reduced.

To test the propositions, a structured survey was used as a research instrument. A structured survey is employed because it enables the researcher to reach a larger sample and measure variety of factors.

3.2. Sample and Data Collection

Data were collected from 321 university students, studying business administration at a public university. The collected data initially processed by factor and reliability analysis. The mediating effect of attitude between the relationship of performance and brand loyalty was tested by hierarchical regression analyses. All these statistical analysis were conducted through SPSS statistical package program.

3.3. Analyses and Results

Attitude was measured from two different perspectives, attitude towards the department and attitude towards the university. To measure attitude, 3 items were developed from Keller's (2008) work and adapted for the department and university separately. Loyalty construct was measured under two dimensions; sense of community with the university and customer loyalty. Three sense of community items were taken from Sung and Yang's (2008) study and three customer loyalty items were taken from Nguyen and LeBlanc (2001). Performance construct was developed with the help of several dimensions. The teaching staff performance dimension was adapted from Zeithaml, Gremler, Bitner's (2008) Servqual scale, and LeBlanc and Nguyen's (1999) study; fellow student compatibility dimension was also taken from LeBlanc and Nguyen's (1999) study. Graduate career prospects was developed from Gray, Fam and Llanes' (2003) study; education performance and general image dimensions were based on Palacio, Meneses, and Perez's (2002) work and physical environment dimension of performance was adopted from Kazoleas, Kim and Moffitt (2001). In total, performance was measured with the help of 38 items developed from the aforementioned studies. The respondents were asked to indicate their degree of agreement with these statements on a six-point one-sided scale ranging from "strongly disagree" = 1 to "strongly agree" = 6.

3.3.1. Reliability and Factor Analysis of Attitude Index

The attitude index resulted in two factors after the first factor analysis. No item was eliminated As seen in Table1 , they were labeled as “attitude to department” and “attitude to university”.

Table 1. Reliability and Factor Analysis of Attitude Index

	Factor loadings	Variance Explained	Cronbach alpha	Number of items
Attitude towards University		38.636	0.819	3
I like my university.	0.899			
I respect my university.	0.852			
I love my university.	0.822			
Attitude towards Department		37.127	0.847	3
I love my department.	0.874			
I like my department.	0.860			
I respect my department.	0.780			
Total Variance Explained		75.762	0.823	6
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.745			
Bartlett's Test of Sphericity				
App. Chi-Square	840.44			
df	15			
Sig.	0.000			

3.3.2. Reliability and Factor Analysis of Customer Loyalty Index

The customer loyalty index resulted in one factors after the first factor analysis. No item was eliminated As seen in Table 2., the only factor was labeled as “customer loyalty”.

Table 2. Reliability and Factor Analysis of Customer Loyalty Index

	Factor loadings	Variance Explained	Cronbach alpha	Number of items
University Loyalty				
If I were to take the university entrance exam once again, I would like to enter this department in this university.	0.854			
I would recommend this university to my friends taking the university entrance exam.	0.844			
If I were to take the university entrance exam once again, I would like to enter this university.	0.840			
If I were to do a master's degree, this department in this university would be my first choice.	0.793			
If I were to do a master's degree, this university would be my first choice.	0.695			
I would recommend this department in this university to my friends taking the university entrance exam.	0.676			
Total Variance Explained		61.908	0.874	6
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.825			
Bartlett's Test of Sphericity				
App. Chi-Square	822,331			
df	15			
Sig.	0.000			

3.3.3. Reliability and Factor Analysis of Sense of Community Index

The sense of community index resulted in two factors after the first factor analysis. No item was eliminated as seen in Table 3, they were labeled as “loyalty to department” and “loyalty to university”.

Table 3. Reliability and Factor Analysis of Sense of Community Index

	Factor loadings	Variance Explained	Cronbach alpha	Number of items
Sense of Community to Department		35.004	0.781	3
I am proud to be a student at this department.	0.824			
I feel like I belong to my department.	0.810			
I am highly concerned about my department.	0.791			
Sense of Community to University		34.545	0.771	3
I am proud to be a student at this university.	0.848			
I feel like I belong to my university.	0.837			
I am highly concerned about my university.	0.713			
Total Variance Explained		75.762	0.815	6
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.738			
Bartlett's Test of Sphericity				
App. Chi-Square	842.895			
df	15			
Sig.	0.000			

3.3.4. Reliability and Factor Analysis of Performance Index

The performance index resulted in nine factors after the first factor analysis. 3 items were eliminated due to low factor loadings which resulted in 7 factors. 4 items were also eliminated due to low reliability levels. When the factor analysis was conducted again 7 factors emerged and As seen in Table 4, they were labeled as “teaching staff performance”, “physical environment”, “fellow students compatibility”, “education performance”, “graduate career prospects”, “course performance” and “general atmosphere”.

Table 4. Reliability and Factor Analysis of Performance Index

	Factor loadings	Variance Explained	Cronbach alpha	Number of items
Teaching Staff Performance		16.007	0.893	8
Academic staff at my department tries to walk in my shoes and understand my feelings.	0.810			
Academic staff at my department tries to empathize with me.	0.788			
Academic staff at my department creates a sense trust in me.	0.766			
The education I receive from the academic staff at my department is valuable and qualified.	0.742			
Academic staff at my department is close to students.	0.703			
Academic staff at my department gives me a good education.	0.702			
Academic staff at my department listens to me and helps me when I am in need.	0.671			
Academic staff at my department is well educated and competent.	0.618			
Physical Environment		13.175	0.844	7
Art activities at my university are satisfactory in terms of quality and quantity.	0.806			
Library services at my university are satisfactory.	0.798			
My university is well equipped technically (number of computers, internet facilities etc).	0.788			
Student clubs at my university are satisfactory in terms of quality and quantity.	0.687			
Campus landscaping at my university is good.	0.656			
Sports facilities at my university are satisfactory in terms of quality and quantity.	0.654			
The architecture of my university is nice.	0.611			
Fellow Student Compatibility		9.231	0.820	4
I find lectures more interesting when I am with my friends.	0.830			
I enjoy lectures more when I am with my friends.	0.792			
I feel happy when I take courses with my friends.	0.790			
Teamwork in courses positively contributes to university education.	0.545			
Education Performance		8.578	0.836	4
The education is practical at my department.	0.686			
The quality of education is good at my department.	0.685			
I am satisfied with the courses I take at my department.	0.673			
The students get a good education at my department.	0.652			
Graduate Career Prospects		7.468	0.736	3
The graduates of my department start professional life with a satisfactory salary.	0.744			
There are a lot of graduates of my department who are well known in their area of expertise.	0.709			

When compared to other university graduates, the graduates of my department are more preferred and can find jobs more easily.	0.695			
Course Performance		7.000	0.763	3
I gain a lot of information from variety of topics in the courses.	0.768			
I can apply the information I receive in class to my professional life.	0.687			
The department I attend offers a variety of course alternatives.	0.625			
General Atmosphere		5.636	0.691	2
The social facilities at my university are good.	0.785			
The general atmosphere at my university is positive.	0.722			
Total Variance Explained		67.095	0.912	31
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.871			
Bartlett's Test of Sphericity				
App. Chi-Square	4055.661			
df	465			
Sig.	0.000			

3.3.5. Results of Hierarchical Multiple Regression Analysis

The mediating effect of attitude between the relationship of performance and brand loyalty was tested by hierarchical regression analyses. In Table 5,6 and 7 the results of the hierarchical multiple regression results can be found. Before searching for the mediating effect, the direct effect of performance indicators on attitude was tested using multiple regression analysis. Teaching staff ($\beta=0.367$), Graduate career prospects ($\beta=0.178$), Course ($\beta=0.178$) and physical evidence ($\beta= -0.123$) have significant effects on attitude towards department with R square of 0.302. Teaching staff ($\beta=0.441$), general atmosphere ($\beta= 0.228$) and physical evidence ($\beta= 0.186$) have significant effects on attitude towards university with R square of 0.431.

Hierarchical regression analysis for university brand loyalty revealed significant F changes between the 2 models. The R square of the models increased with additional list of variables. The first model includes performance dimensions. In model one, teaching staff ($\beta= 0.259$), education ($\beta= 0.168$) and general atmosphere performance ($\beta= 0.412$) have significant and positive contributions to university brand loyalty. When attitude dimensions are included in the second model, the model is still significant and R square increases to 0.457 from 0.417. However, teaching staff and education performance loses its significance in this new model. On the other hand general atmosphere performance reveals significant contributions to university brand loyalty with $\beta= 0.355$. In addition to it, attitude towards university also has a significant ant positive contribution to university brand loyalty with $\beta= 0.254$.

Table 5. Hierarchical Regression Results for University Brand Loyalty

Independent Variables Entered	Model 1			Model 2		
	B	SE B	β	B	SE B	β
Performance						
Teaching Staff Performance	0.300	0.081	0.259*	,151	,088	,130
Physical Environment	,057	,069	,051	-,001	,070	-,001
Fellow Student Compatibility	-,141	,077	-,116	-,143	,075	-,118
Education Performance	,184	,084	,168*	,189	,082	,173
Graduate Career Prospects	,062	,074	,052	,045	,073	,038
Course Performance	-,115	,073	-,110	-,117	,071	-,111
General Atmosphere	0.389	0.061	0.412*	,335	,061	,355*
Attitude						
Towards university				,229	,062	,254*
Towards department				,049	,063	,047
Adjusted R Square	0.398			0.434		
R Square	0.417			0.457		
Δ in R Square	0.417			0.040		
Sig. F Change	0.000			0.001		
F for Δ in R Square	21.755			7.727		
F for ANOVA	21.755			19.706		
N=321/*p< 0.05						

Hierarchical regression analysis for sense of community to department revealed significant F changes between the 2 models. The R square of the models increased to 0.455 from 0.381 with additional list of variables. The first model includes teaching staff, education and graduate career prospects which have significant and positive relations with sense of community to department with $\beta=0.284$, $\beta=0.174$ and $\beta= 0.253$ respectively. When attitude is included in the

second model, the investigation of the individual variables' regression coefficients and standardized regression coefficients tell that education performance, graduate career prospects and attitude towards department have significant relationships with sense of community to department with $\beta=0.168$, $\beta=0.199$ and $\beta=0.296$.

Table 6. Hierarchical Regression Results for Sense of Community to Department

Independent Variables Entered	Model 1			Model 2		
	B	SE B	β	B	SE B	β
Performance						
Teaching Staff Performance	,310	,076	,284*	,142	,081	,130
Physical Environment	-,114	,065	-,107	-,094	,064	-,088
Fellow Student Compatibility	,024	,070	,021	,015	,066	,013
Education	,182	,081	,174*	,175	,077	,168*
Graduate Career Prospects	,287	,072	,253*	,226	,068	,199*
Course	,134	,070	,134	,092	,067	,092
General Atmosphere	-,034	,059	-,037	-,059	,057	-,066
Attitude						
Towards university				,088	,058	,103
Towards department				,289	,059	,296*
Adjusted R Square	0.361			0.433		
R Square	0.381			0.455		
Δ in R Square	0.381			0.074		
Sig. F Change	0.000			0.000		
F for Δ in R Square	19.427			14.864		
F for ANOVA	19.427			20.309		
N=321/*p< 0.05						

Hierarchical regression analysis for sense of community to university revealed significant F changes between the 2 models. The R square of the models increased with each additional list of variables. In model one, teaching, physical environment, education, graduate career prospects and general atmosphere performance dimensions have significant and positive relations with sense of community to university with $\beta=0.173$, $\beta=0.155$, $\beta=0.210$, $\beta=0.151$ and $\beta=0.273$ respectively. When attitude dimensions are included in the second model, the model is still significant and R square increases to 0.557 from 0.397. The investigation of the individual variables' regression coefficients and standardized regression coefficients tell that education, graduate career prospects, general atmosphere performance dimensions and attitude towards university have significant and positive contributions to sense of community to university with $\beta=0.207$, $\beta=0.137$, $\beta=0.145$ and $\beta=0.535$ respectively.

As a result, H12b, H22a, H22c, H27c were fully supported.

Table 7 . Hierarchical Regression Results for Sense of Community to University

Independent Variables Entered	Model 1			Model 2		
	B	SE B	β	B	SE B	β
Performance						
Teaching Staff Performance	,204	,082	,173*	-,053	,079	-,045
Physical Environment	,177	,070	,155*	,056	,062	,049
Fellow Student Compatibility	-,052	,074	-,043	-,023	,064	-,019
Education Performance	,235	,087	,210*	,233	,075	,207*
Graduate Career Prospects	,187	,078	,151*	,170	,068	,137*
Course Performance	-,064	,074	-,060	-,061	,064	-,057
General Atmosphere	,265	,063	,273*	,141	,056	,145*
Attitude						
Towards university				,494	,056	,535*
Towards department				-,023	,058	-,022
Adjusted R Square	0.378			0.539		
R Square	0.397			0.557		
Δ in R Square	0.397			0.160		
Sig. F Change	0.000			0.000		
F for Δ in R Square	20.536			38.939		
F for ANOVA	20.536			30.185		
N=321/*p< 0.05						

4. Conclusion

The main objective of this research was to examine the determinants of university brand loyalty. Specifically based on theory of reasoned action, the mediating role of attitude towards university and attitude towards department were analyzed on the relationship between university performance dimensions and brand loyalty. The effects of university performance were investigated on attitude on two levels; university and the department. It was observed that teaching staff, graduate career prospects and course performance had a positive effect on students' attitude towards their department. The factors contributing to the students' attitude towards university, on the other hand, were teaching staff and general atmosphere. Physical evidence showed mixed results; as the physical environment of the university improved the attitude towards the university increased whereas the attitude towards the department decreased. This might be because as physical environment improves, students spend more time at the campus rather than their department. The reverse was true when the physical environment was not positive and the students tied themselves closely to their department.

When the mediation effects were observed, it was seen that attitude towards department fully mediated the relationship between teaching staff performance and sense of community to department. Attitude towards the university, on the other hand, fully mediated the relationship between teaching staff performance and brand loyalty to university. Finally, attitude towards university fully mediated the relationship between physical evidence, teaching staff performance and sense of community to university. Graduate career prospects and education performance also had an effect on sense of community to department, as well as on sense of community to university. General atmosphere of the university, on the other hand, had an effect on brand loyalty and sense of community to university. An interesting finding of the study was that the fellow students did not exert any influence on attitude or loyalty. Even though it was thought that the fellow students would be influential in either enhancing or disturbing the education experience of individual students, their effect did not find support in this study.

Overall one can say that university performance is important in explaining the variance of university brand attitude and brand loyalty. Teaching staff and their service was important in forming attitudes towards the department and university, what makes recruitment of quality staff a priority of universities. Graduate career prospects were also important for forming a sense of community to department and university. Therefore, relationships with the graduates should be developed and career paths and positive post experiences of the graduate students should be communicated to current students to enhance their loyalty. Education was also important in forming a sense of community to department and university. The implication is that the university should be careful about the quality and topicality of the course materials and methods. A control system could be put into place to watch over and update the education system. Additionally general atmosphere showed a positive effect on brand attitude and sense of community towards university. Thus, social facilities should be provided to the students in the campus.

This study is conducted on business administration students of a public university; further research can be done in other departments and comparative studies between departments, private and public universities can be conducted for the generalizability of the findings. Other variables such as imagery, university brand personality and feelings can also be included in the research model for elaborating the university brand loyalty.

References

- Aaker, David A. (1991), *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York: The Free Press.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888-918.
- Ali-Choudhury, R., Bennett, R., and Savani, S., 2009, University marketing directors' view on the components of a university brand, *Public Nonprofit Mark*, vol., 6, no. 11, pp. 11-33.
- Anand, P. Holbrook, M.B., and Stephens, D. (1988), The formation of affective judgments: the cognitive-affective model versus independence hypothesis, *Journal of Consumer Research*, 15, 386-391.
- Baldinger, A.L., and J. Robinson. (1996). Brand Loyalty: The Link between Attitude and Behavior. *Journal of Advertising Research*. 36.6: 22-34.
- Balmer, J.M.T., Liao, M. N. & Wang W. Y., 2010, "Corporate brand identification and corporate brand management: how top business schools do it", *Journal of General Management*, vol. 35, no. 4, pp. 77-102.
- Baron, R. M. and Kenny, D. A. (1986) "The Moderator-Mediator Variable Distinction in Social Psychological Research – Conceptual, Strategic, and Statistical Considerations", *Journal of Personality and Social Psychology*, Vol. 51(6), pp. 1173–1182
- Chaudhuri, A. (1999). Does Brand Loyalty Mediated Brand Equity Outcomes?. *Journal of Marketing Theory and Practice*. 7.2: 136-146.
- Chapleo, C. (2010), What defines 'successful' university brands?, *International Journal of Public Sector Management*, 23(2): 169-183.
- Chapleo, C., 2007, "Barriers to brand building in UK universities?", *International Journal of Nonprofit and Voluntary Sector Marketing*, vol. 12, no. 1, pp. 23-32.

- Cuthbert, P. F. (1996). Managing service quality in HE: is SERVQUAL the answer? Part 2. *Managing Service Quality*, 6(3), 31-35.
- David L. Bunzel, (2007) "Universities sell their brands", *Journal of Product & Brand Management*, Vol. 16 Iss: 2, pp.152 - 153
- Duarte, P. O., Alves, H. and Raposo, M. B. (2010), Understanding university image: a structural equation model approach, *International Review on Public and Nonprofit Marketing*, 7, 21-36.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Heaney, J.G., and Heaney, M., 2008, 'Services Branding Strategies: using corporate branding to market educational institutions, presented at the Academy of World Business, Marketing and Management Development Conference, Rio de Janeiro, Brazil, 14-17 July, 2008
- Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty: An approach based on the concept of relationship quality. *Journal of Service Research*, 3, 331-344.
- Holbrook, M.B. (1978), Beyond attitude structure: toward the informational determinants of attitude, *Journal of Marketing Research*, 15, 545-556.
- Keller, Kevin L. (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (1), 1-22.
- Kotler, P. and Fox, K. (1995), *Strategic Marketing for Educational Institutions*, 2nd ed., Prentice Hall, Englewood Cliffs, NJ.
- LeBlanc, G. and Nguyen, N. (1999) "Listening to the customer's voice: examining perceived service value among business college students", *International Journal of Educational Management*, Vol. 13 Iss: 4, pp.187 - 198
- Nha Nguyen Gaston LeBlanc. (2001), "Image and reputation of higher education institutions in students' retention decisions", *International Journal of Educational Management*, Vol. 15 Iss 6 pp. 303 - 311
- Llanes, V., Gray, B., & Fam, K. (2003). Branding universities in Asian markets. *Journal of Product and Brand Management* 12(2), 108-118.
- Mainardes, E., Alves, H. and Raposo, M. (2013a), 'Identifying Stakeholders in a Portuguese University: a Case Study,' *Revista de Educación*, DOI: 10-4438/1988-592X-RE-2012-362-167.
- Mainardes, E., Alves, H. and Raposo, M. (2013b), Portuguese Public University Student Satisfaction: A stakeholder theory-based approach, *Tertiary Education & Management*; Dec2013, Vol. 19 Issue 4, p353-372
- McAlexander J.H., Koenig H.F. ve Schouten J.W. (2004). Building a University Brand Community: The Long-Term Impact of Shared Experiences, *Journal of Marketing for Higher Education*, Vol. 14, No. 2, 61-79.
- Oliver, Richard L. (1999), "Whence Consumer Loyalty?" *Journal of Marketing*, 63 (Special Issue), 33-44.
- O'Neill, M. A., & Palmer, A. (2004). Importance-performance analysis: a useful tool for directing continuous quality improvement in higher education. *Quality Assurance in Education*, 12(1), 39-52.
- Palacio, A.B., Meneses, G.D., Pérez, P.J.P. (2002), "The configuration of the university image and its relationship with the satisfaction of students", *Journal of Educational Administration*, Vol. 40 Iss 5 pp. 486-505
- Schee, B.A.V. (2011), Students as Consumers: Programming for Brand Loyalty, *Services Marketing Quarterly*, 32 (1), 32-43.
- Smith, R. & Ennew, C. (2001, January). Service quality and its impact on word of mouth communication in higher education. Online: <http://www.unim.nottingham.ac.uk/dbm/papers/2001-01.pdf>.
- Sung, M.; Yang. (2008) Toward the Model of University Image: The Influence of Brand Personality, External Prestige, and Reputation. *Journal of Public Relations Research*. Vol. 20 Issue 4, p357-376. 20p.
- Tanyeri, M. and Nardalli, S. (2015), Yükseköğretimde Markalaşma, The Brand Age, 181, 54-63.
- Taylor, S. A. and G. Hunter. (2003). An Exploratory Investigation into the Antecedents of Satisfaction, Brand Attitude and Loyalty Within the (B2B) eCRM Industry. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*. 16: 19-35.