School Culture as a Predictor of Student Loyalty in a Turkish University

Bir Türk Üniversitesinde Öğrenci Sadakati Yordayıcısı Olarak Okul Kültürü

Esra TEKEL, Mithat KORUMAZ

ABSTRACT

The aim of this study is to determine the regression levels of perceived school culture to university students' loyalty levels. This research is designed in correlational design. School culture is an independent variable, and student loyalty is a dependent variable. The sample of the study consists of 382 university students determined by a stratified sampling method. School Culture Scale and Student Loyalty Scale were used to collect data. According to the findings of the study, the level of student loyalty varies according to faculty type, class level, and taking the course at a regular time. Multiple regression analysis was conducted to determine whether school culture factors predict student loyalty. It was concluded that instructor-student relationship, commitment, structure/process, and support factors predicted 38% of student loyalty, respectively.

Keywords: Student loyalty, Organizational culture, University

ÖZ

Bu çalışmanın amacı, üniversite öğrencilerinin algılanan okul kültürü düzeylerinin öğrenci sadakati seviyelerini yordama düzeylerini belirlemektir. Bu araştırma ilişkisel desende tasarlanmıştır. Okul kültürü bağımsız değişken, öğrenci sadakati bağımlı değişkendir. Çalışmanın örneklemini, tabakalı örnekleme yöntemi ile belirlenmiş 382 üniversite öğrencisi oluşturmaktadır. Veri toplamak için Okul Kültür Ölçeği ve Öğrenci Sadakat Ölçeği kullanılmıştır. Araştırmanın bulgularına göre öğrenci sadakati düzeyi fakülte tipi, sınıf düzeyi ve dersi alttan/üstten/düzenli almaya göre farklılaşmaktadır. Okul kültürü faktörlerinin öğrenci sadakatini yordayıp yordamadığını belirlemek için çoklu regresyon analizi yapılmış ve sırasıyla öğretim elemanı-öğrenci ilişkisi, bağlılık, yapı/işleyiş ve destek faktörlerinin öğrenci sadakatinin %38'ini yordadığı sonucuna ulaşılmıştır.

Anahtar Sözcükler: Öğrenci sadakati, Örgütsel kültür, Üniversite

INTRODUCTION

Universities have played a crucial role in the development of society in Turkey with their teaching and research missions for several years. When considered from the perspective in the field of education, Darülfünûn what we call university today is one of the most important institutions inherited from the Ottoman Empire in modern Turkey. It is possible to say that Darülfünûn to start with state's modernization process as

Esra TEKEL (✉)
ORCID ID: 0000-0003-4600-9900

Afyon Kocatepe University, Sandikli School of Applied Sciences, Department of Social Service, Afyonkarahisar, Turkey
Afyon Kocatepe Üniversitesi, Sandıklı Uygulamalı Bilimler Yüksekokulu, Sosyal Hizmet Bölümü, Afyonkarahisar, Türkiye
esracakmak88@hotmail.com

Mithat KORUMAZ
ORCID ID: 0000-0003-1800-7633

Yildiz Teknik University, Faculty of Education, Department of Educational Sciences, Istanbul, Turkey
Yıldız Teknik Üniversitesi, Eğitim Fakültesi, Eğitim Bilimleri Bölümü, İstanbul, Türkiye

Received/*Geliş Tarihi* : 11.11.2019
Accepted/*Kabul Tarihi* : 06.04.2020

planned in 1845 as the first university in Turkey similar to Western examples in the modern sense and as a result can be opened in 1863 (Gündüz, 2013). The first university in Turkey as part of the establishment of the Republic as a new (modern) state regime is Darülfünûn, which was transformed to the university by the 1933 reform. Since this university reform, the area of higher education has changed rapidly, and there has been a rapid increase in both the number of universities and the students in higher education. In recent years, the Turkish economy in the category of developing countries has been one of the fastest countries to increase investment in universities (OECD, 2018). In 2019, the total number of universities in Turkey had risen to 206. While 129 of these universities are public universities, 77 are foundation universities (Turkish Higher Education Council (YÖK), 2019). This increase in the number of universities also has brought high competition in terms of which institutions the most successful students would prefer as a result of a central assessment. When considered in this context, although universities promise academic authenticity and uniqueness to their students, Aypay (2001) argues that the attempt to construct universities to a high degree leads to inevitable homogeneity in structure, culture, and outcomes. Powell and DiMaggio (1991) conceptualized this situation as isomorphism, which leads to the emergence of mirror image universities, both structurally and in terms of the content of the service provided. On the other hand, the most important feature of the post-modern era is that it is unique and revealing innovations. This homogeneity of the universities also seems to contradict that promises to be the unique status of universities in Turkey. According to Fornell, Johnson, Anderson, Cha and Bryant (1996), the most important reasons for choosing something are satisfaction, commitment, and loyalty. Loyalty to service is basically one of the most important final objectives for the service providers (Kiran & Diljit, 2011). In fact, this term, conceptualized as customer loyalty expresses all of the related behavioral tendencies referring to the re-use of the service offered (Oliver, 1997), the tendency to prefer it again (Cronin, Brady & Hult, 2000), and the service recommendation to others (Zeithaml, Berry & Parasuraman, 1996). Customer loyalty, defined as repeated purchasing of the same-brand (Tellis, 1988), might be explained as the relationship between a relative attitude and repeat patronage (Annamdevula & Bellamkonda, 2016). As a marketing activity, customer loyalty has been defined differently. One of the most known definitions by Oliver (1997) viewed customer loyalty as "a deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior" (p.392). The common aspect of these definitions is that customer loyalty includes attitudinal and behavioral components (Hennig-Thurau, Langer & Hansen, 2001; Marzo-Navarro, Pedraja Iglesias & Rivera Torres, 2005). In an educational context, student loyalty needs to develop a solid relationship with students for future university attendance. A university needs to have loyal students not only when they are formal attendees, the gaining of a university also depends on the loyalty of former students (Annamdevula & Bellamkonda, 2016).

The most basic measure of loyalty for the profit-oriented organizations is profitability ratio while as a non-profit organization in universities (in the context of Turkey, universities are either public schools or foundation schools free of charge) the most basic criterion is the level of student loyalty (Korumaz & Tekel, 2017). It is possible to say that the quality of the education service provided in higher education institutions, the image of the institution and the program, and the commitment of the students are the main variables of student loyalty in higher education (Helgesen & Nesset, 2007). Service quality in the university is defined and discussed by many of the researchers because of its importance and outcomes for sustaining student's loyalty. Service quality in university seems like a multi-faceted concept (Harvey & Green, 1993). Students receive teaching and learning experiences offered by the university or their departments. Hence it is possible to state that students are the preeminent customers of educational activities among other stakeholders in higher education (e.g., students, parents, government, other institutions, and employers) (Marzo-Navarro et al., 2005). O'Neill and Palmer (2004) defined the service quality in university as "the difference between what a student expects to receive and his/her perceptions of actual delivery". On the other side, the concept of satisfaction of students which is defined as "… the favorability of a student's subjective evaluation of the various outcomes and experiences associated with education. Student satisfaction is being shaped continually by repeated experiences in campus life" (Elliott & Shin, 2002), which has also been discussed recently to the context of higher education. Another variable which changes students' loyalty is the image of the university. The term image can be defined as one's general impression of a certain object (Kotler & Karen, 1995). So, the image of the university contains every one of the students' insights for their university (Chandra, Hafni, Chandra, Purwati & Chandra, 2019). Another important factor determining student loyalty in higher education is the quality of the education service provided. It is possible to talk about many preferences, such as preferred teaching principles and methods, educational technologies, and the suitability of educational environments (Rashid & Raj, 2006). The last factor affecting student loyalty in higher education is the commitment of the student to his/her institution (Helgesen & Nesset, 2007; Strauss & Volkwein, 2004).

When the image of the institution affecting the loyalty levels of students in higher education, the quality of the education service provided, and the commitment of the student to the institution, the relationship between the school culture and student's loyalty seems to be worth examining. The reason for this is that, in recent years, school culture has been handled in a multidimensional way as opposed to usual, and universities have promised a unique cultural pattern to their students. Organizational culture is concerned with the underlying assumptions, values , and practices shared by individuals (all formal and informal rules, norms, values , and traditions) (Hofstede, 2001; Schein, 1985). According to Schein (1984), these values include organizational culture, the stories of the organization, myths, symbols, and the dominant

discourse of the organization. When the organizational culture of higher education is taken into consideration, it is possible to say that not only the academics and managers working in that organization but also the students, internal and external stakeholders, business world and a significant part of the society on a larger scale affect the culture of the universities in a complex relationship network (Alemen, Freire, McKinney & Bernal, 2017). In this context, higher education institutions are expected to create a unique cultural pattern by combining social values and norms and the culture that they form within their own organizational structure (Demirtaş & Ekmekyapar, 2012). Modern point of views on university culture was characterized as the accumulation of bits of knowledge and as conceptual structures that were meaning the practices and behaviors in the schools (McLaren, 1991). On the other hand, postmodernist views have explained culture in plural form. That means there is no one exact definition of school culture; rather, 'cultures' are tried to be defined. This new form of defining the culture of the university is given great importance in terms of creating a school desired by each of the stakeholders (Deal & Peterson, 2016). The current studies have shown that University culture positively strengthens service quality to achieve and sustain student satisfaction and affects students' loyalty to university (Saleem, Moosa, Imam & Ahmed Khan, 2017). The results of this study, in which the effects of university culture, which is assumed to be an important variable affecting students' loyalty, are expected to be useful for university administrators, university policymakers, families, and students who would prefer university. The aim of this study is to determine the level of school culture to predict students' university loyalty levels.

METHOD

Research Design

This research is designed as a *correlational design* which investigates whether school culture is a predictor of student loyalty. The purpose of the correlational design is to determine whether and to what degree a relationship exists between two or more variables or to use these relations to make predictions (Gay, Mills & Airasian, 2009; McMillan & Schumacher, 2006). In this study, a multiple regression model was used to discover whether and to what degree the sub-dimensions of the school culture predict student loyalty. Therefore school culture is an independent variable, and student loyalty is a dependent variable.

Population and Sample

The population of the study is 22.201 students (presented in Figure 1) who continue to study in an undergraduate program in a University in the Western part of Turkey. The sample of the study is 382, which is enough for Krejcie and Morgan (1970). Participants were defined by a *stratified random sampling* method. In stratified random sampling, the population is divided into subgroups on the basis of a variable chosen by the researcher. After the population has been divided into subgroups, samples are drawn randomly from each subgroup (McMillan & Schumacher, 2010). Researchers use this sampling method when the percentage of some subgroups of the population is low, and this may cause these subgroups may not be in the sample (Neuman, 2006). In this study, faculties were defined as a subgroup. Because some faculties such as Faculty of Arts and Science and Faculty of Naval Architecture and Maritime have few students relatively (Figure 1). Demographic information of the sample was presented in Table 1.

According to Table 1, at least 2% of each faculty participate to the study. While 36.1% of the participants is in the senior class, 35.6% is in junior class, 23.3% is sophomore class and 5% is in freshman. The percentage of the female is 34.87 while male's is 65.2. Also 78.4% of the participants did not attend any project, and 53.7% of them do not have a membership of any student communities. Finally, 70.4% of the participants do not find the university's social and cultural facilities enough, and 47.8% of the participants take courses at a regular time while 45% of them retake failed courses, and 6.3% of them take courses from the upper classes.
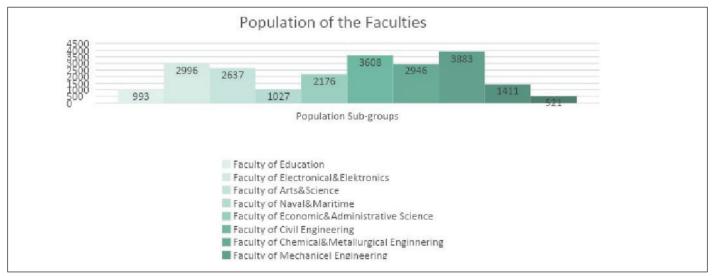

Figure 1: Population of the study.

Data Collection Tools

Two scales were used for the data collection process. School Culture Scale (Kantek, Baykal & Altuntaş, 2010) was used to measure students' perception of school culture. To measure participants' loyalty perception Student Loyalty Scale (Helgesen & Nesset, 2007) which was adapted to the Turkish language by Korumaz and Tekel (2017) was used.

School Culture Scale

It was developed by Kantek, Baykal, and Altuntaş (2010) to define students' perception of school culture. The scale has 50 items and 8 factors such as (*i*) relationship between administrator-students, (*ii*) commitment, (*iii*) relationship between instructor-students, (*iv*) present/change, (*v*) structure/ process, (*vi*) relationship intra instructors, (*vii*) relationships intra students and (*viii*) support. The highest point is 150, while the lowest point is 0 that the participant can get from the scale. The reliability values were presented in Table 2.

Student Loyalty Scale

It was developed by Helgesen and Nesset (2007) and was adopted into the Turkish language by Korumaz and Tekel (2017) to discover to what degree students are loyal to their schools. The scale has 25 items and 6 factors such as (*i*) facilities, (*ii*) service quality, (*iii*) satisfaction, (*iv*) image of the university,

Table 1: Demographic Information of the Sample

Variables	ƒ	%	Variables	ƒ	%
Faculty			**Gender**		
Education	20	5.2	Female	133	34.8
Electronical & Electronics	63	16.5	Male	249	65.2
Literature & Science	41	10.7	Total	382	100
Naval & Maritime	22	5.8	**Class**		
Economic & Administrative Science	45	11.8	Freshman	19	5.0
Civil Engineering	76	19.9	Sophomore	89	23.3
Chemical & Metallurgical Engineering	60	15.7	Junior	136	35.6
Mechanical Engineering	15	3.9	Senior	138	36.1
Art & Design	11	2.9	Total	382	100
Architecture	29	7.6	**Finding social and cultural**		
Total	382	100	**facilites sufficient**		
Attending to a Project			Yes	110	29.6
Yes	80	21.6	No	261	70.4
No	291	78.4	Total	371	100
Total	371	100	**Membership to the student**		
Taking courses in a regular time			**communities**		
Retaking failed courses	174	45.9	Yes	174	46.3
Taking courses in a regular time	181	47.8	No	202	53.7
Taking courses from the upper classes	24	6.3	Total	376	100
Total	379	100			

Table 2: Reliability Values of School Culture Scale

Factors	Item	Cronbach's Alpha
Relationship between administrator-students	7	.89
Commitment	7	.86
Relationship between instructor-students	8	.83
Present/change	5	.69
Structure/ process	10	.76
Relationship intra instructors	5	.78
Relationships intra students	4	.73
Support	4	.70
Total	50	.93

(*v*) image of the study program, and (*vi*) loyalty. The highest point is 175, while the lowest point is 25 that participants can get from the scale. Cronbach's Alpha reliability values were presented in Table 3.

RESULTS

Independent group t-test and one way ANOVA tests were conducted to discover whether students' loyalty point differentiate according to gender, faculty, class, attending to a project, finding social and cultural facilities sufficient, being a member to student communities and getting courses in a regular time variables. In addition, regression analysis was conducted to understand whether school culture is a predictor of student loyalty. Before these analyses, to understand the level of students' loyalty and school culture perceptions, descriptive statistics were conducted and presented in table 4.

According to Table 4 it can be said that students' loyalty perceptions (25-75= low, 76-125=medium, 126-175=high) and their school culture perceptions (0-50=low, 51-100=medium, 101-150=high) are medium level.

T-test analysis was conducted to understand whether students' loyalty differentiates according to gender, attending to the project, finding social and cultural facilities sufficient and being a member to the student communities and there are not any significant differences on students' points according to these variables.

To determine whether students' loyalty points differentiate according to faculty, class and taking a course in regular time variables, One Way ANOVA tests were conducted and results were presented on table 5. According to results, there are significant differences in students' loyalty points according to these three variables.

According to Table 5 students' loyalty points differentiate significantly according to faculty variable (p<.05). To discover in which groups there are differences, Bonferroni test was conducted. According to Bonferroni test results, students

in the Faculty of Mechanical Engineering has significantly more loyalty than students in the Faculty of Chemical and Metallurgical Engineering. Students in the Faculty of Art and Design have significantly more loyalty than students in the Faculty of Chemical and Metallurgical Engineering. And finally students in the Faculty of Art and Design have significantly more loyalty than the students in the Faculty of Civil Engineering.

On Table 6, it is presented the one way ANOVA test results that were conducted to determine whether student loyalty differentiates according to the class variable. According to Table 6 students' loyalty points differentiate significantly according to a class variable (p<.05). According to Bonferroni test results, the freshmen have significantly more loyalty than the juniors.

On Table 7, it is presented the one way ANOVA test results that were conducted to determine whether student loyalty differentiates according to taking courses in a regular time variable. According to Table 7 students' loyalty points differentiate significantly according to taking courses in a regular time variable (p<.05). According to Bonferroni test results, students who take courses from the upper class have significantly more loyalty than the students who retake failed courses.

Before conducting the regression model, correlation analysis was conducted to discover whether there is any relationship between the factors of School Culture Scale and Student Loyalty Scale total score, and results were presented in table 8. According to Table 8, there is a significant relationship between the two scales (p<.01). The relationships between the two scales are between .715 and .258. The relationship between *commitment* and *present/change,* which are factors of school culture scales, is the highest one (r= .715, p<.01). The relationship between *relationship between instructor-students* and *relationship of intra students* which are the factors of school culture, is the weakest one (r=.258, p<.01).

Multiple regression analysis was conducted to discover whether school culture factors as (*i*) relationship between instruc-

Table 3: Reliability Values of Student Loyalty Scale

Factors	Item	Cronbach's Alpha
Facilities	3	.750
Service quality	3	.463
Satisfaction	6	.857
Image of the university	3	.866
Image of the study program	3	.881
Loyalty	7	.914
Total	25	.715

Table 4: Descriptive Statistics Results of Student Loyalty and School Culture

Scales	n	$\overline{X}$	Minimum	Maximum	Std. Deviation
Student Loyalty	382	101.57	39.00	172.00	22.51
School Culture	382	87.13	23.00	147.00	22.66

Table 5: One Way ANOVA Results to Determine Whether Student Loyalty Points Differentiate according to Faculty Variable

Scale	Groups	n	$\overline{X}$	sd	Var.	Sum of Square	df	Mean Square	F	p	Differences between groups
Student Loyalty	1. Naval & Maritime	22	104.72	18.62	**Between Groups**	15230.98	9	1692.33	3.63	.000*	2-9 2-10 8-10
	2. Chemical & Metallurgical Engineering	60	92.41	20.52	**Within Groups**	173419.004	372	466.18			
	3. Arts & Science	41	101.26	21.22	**Total**	188649.98	381				
	4. Architecture	29	102.66	21.37							
	5. Economic & Administrative Science	45	103.24	20.23							
	6. Education	20	106.32	23.88							
	7. Electronical & Electronics	63	104.00	23.18							
	8. Civil Engineering	76	97.54	23.26							
	9. Mechanical Engineering	15	116.80	17.89							
	10. Art & Design	11	121.29	17.92							

Table 6: One Way ANOVA Results to Determine Whether Student Loyalty Points Differentiate according to Class Variable

Scale	Groups	n	$\overline{X}$	sd	Var.	Sum of Square	df	Mean Square	F	p	Differences between groups
Student Loyalty	1. Freshman	19	115.48	14.32	**Between Groups**	4945.47	3	1648.49	3.39	.018*	1-3
	2. Sophomore	89	102.56	23.14	**Within Groups**	183704.51	378	485.99			
	3. Junior	136	98.64	22.96	**Total**	188649.98	381				
	4. Senior	138	101.91	21.21							

Table 7: One Way ANOVA Results to Determine Whether Student Loyalty Points Differentiate according to Taking Course in a Regular Time Variable

Scale	Groups	n	$\overline{X}$	sd	Var.	Sum of Square	df	Mean Square	F	p
Student Loyalty	1. Retake failed courses	174	99.57	23.03	**Between Groups**	8305.23	2	4152.61	8.66	.000* 1-3
	2. Take courses in a regular time	181	101.28	20.17	**Within Groups**	180107.28	376	479.00		
	3. Take courses from upper class	24	119.36	25.58	**Total**	188412.52	378			

tor-students, (*ii*) relationship intra instructors, (*iii*) relationship between administrator-students, (*iv*) support, (*v*) relationships intra students, (*vi*) structure/ process, (*vii*) commitment, (*viii*) present/change predict student loyalty. Multiple regression analysis results were presented on Table 9. According to Table 9, factors of school culture contributed 38% of student loyalty (R=.624, R^2=.377, $F_{(8-373)}$=29.61, p<.05) which means that the remaining 62% variations in student loyalty are due to other variables outside the regression model. According to results commitment, relationship between instructor-students, support, structure/ process and commitment variables predict 38% of student loyalty. According to standardized coefficient beta, the best predictor of student loyalty is relationship between instructor-students with a beta weight of .309. Then commitment, structure/ process and support predict student loyalty with beta weight .224, .188 and .160 respectively.

Table 8: Correlations Between the Factors of School Culture and Student Loyalty Scales

Factors	X̄	SS	1	2	3	4	5	6	7	8	9
School Culture Scale											
1. Relationship between instructor-students	15.62	4.31	1	.548**	.500**	.311**	.258**	.440**	.438**	.344**	.503**
2. Relationship intra instructors	9.05	3.64		1	.479**	.312**	.300**	.500**	.365**	.505**	.319**
3. Relationship between administrator-students	10.78	4.32			1	.507**	.337**	.546**	.515**	.572**	.425**
4. Support	6.62	2.96				1	.388**	.428**	.417**	.471**	.393**
5. Relationships intra students	7.19	2.29					1	.428**	.346**	.350**	.269**
6. Structure/ process	17.25	5.45						1	.587**	.715**	.453**
7. Commitment	12.61	4.52							1	.439**	.501**
8. Present/change	7.31	3.54								1	.315**
9. Student Loyalty Scale	101.57	22.25									1

n=382 , **p<.01.

Table 9: Regression Analysis Results to Determine Whether School Culture Predict Student Loyalty

Variables	B	*Std Error*	β	*t*	*p*	Zero order r	Partial r
Constant	45.96	4.11	-	11.16	.000	-	-
Relationship between instructor-students	1.59	.273	.309	5.84	.000	.503	.290
Relationship intra instructors	-.306	.329	-.050	-.929	.353	.317	-.048
Relationship between administrator-students	.273	.297	.053	.917	.360	.424	.048
Support	1.209	.383	.160	3.15	.002	.393	.162
Relationships intra students	.030	.454	.003	.066	.947	.270	.003
Structure/ process	.767	.274	.188	2.80	.005	.454	.144
Commitment	1.103	.265	.224	4.16	.000	.500	.212
Present/change	-.662	.401	-.106	-1.65	.100	.317	-.085

DISCUSSION

The aim of this study is to investigate whether school culture predicts student loyalty. Before that, it was examined whether students' loyalty points differentiate according to gender, attending to a project, finding social and cultural facilities sufficient, being a member to the student communities, faculty, class and taking course in regular time. According to results students' loyalty points don't differentiate according to gender, attending to a project, finding social and cultural facilities sufficient and being a member to the student communities. Nevertheless, their loyalty points differentiate according to faculty. Students in the Faculty of Mechanical Engineering has significantly more loyalty than students in the Faculty of Chemical and Metallurgical Engineering. Students in Faculty of Art and Design has significantly more loyalty than students in the Faculty of Chemical and Metallurgical Engineering. And finally, students in Faculty of Art and Design has significantly more loyalty than the students in the Faculty of Civil Engineering. In previous research antecedents of student loyalty have

been identified as service quality and long-term relationships (Rojas-Méndez, Vasquez-Parraga, Kara & Cerda-Urrutia, 2009). In educational setting, service quality is referred as "people-based" rather than "equipment-based" (Thomas, 1978). Therefore, it can be said that interaction between members in school context have a key role in defining and evaluating service quality. Since university staff are more empowered than employees in other organizations because of the fact that they have much more autonomy in communicating with students (Tang & Zairi, 1998). In the light of these information, it can be said that the reason of differences in students' loyalty levels according to faculties may stem from their faculty staff's communication cultures with students.

According to another result of the study, freshmen have significantly more loyalty than the juniors. There can be two reasons of this finding. First one is that students' loyalty points can be higher when they start the university that they have wanted to study in. Second one is that as they spend enough time in school, they can decide whether this school is sufficient

for them or not. Because students are consumer who consumes educational services (Rojas-Méndez et.al, 2009). If they are not satisfied with the educational services, they can drop out of the school. According to Tinto (1993) 75% of the students who leave from the university drop out in the first two years of the university in the USA. Therefore, many educational institutions consider supporting and monitoring the freshmen to predict rate of dropout rate and to prevent it (Dekker, Pechenizkiy & Vleeshouwers, 2009). In this context it can be thought that dropping out from the school much easier for freshmen to start a new school than juniors or seniors who are still in the school although they are not satisfied with the educational services. It can be said that freshmen in the school can be considered that they are more satisfied with the educational services and much more loyalty to the school than juniors or seniors.

According to one other finding, there are significant relationships between all factors of school culture and student loyalty. Student loyalty total score are correlated with instructor-student relationship which is the factor of school culture at the highest level. In addition, instructor-student relationship predicts student loyalty at the highest level, as well. Instructor-student relationship has been studied in different contexts such as teaching service quality (Hagenauer, Hascher, & Volet, 2015), cross-cultural comparison (Roach & Byrne, 2001; Roach, Cornett-Devito & Devito, 2005) or as a central role for motivating students and rising students' satisfaction (Wentzel, 2016). These studies showed that students' satisfaction and their perceptions on service quality may be correlated with the instructor-student relationship as a part of school culture. According to Jo Hatch and Schultz (1997), identity and image in an organization increase the levels of communication and interaction among members and the multiple roles of organizational members who often act both as "insiders" and as "outsiders". As a result, instructor- student relationship as a part of university culture has correlation with student loyalty.

After the best predictor instructor-students relationship, commitment, structure/ process and support predict student loyalty respectively. Since commitment and the loyalty complete each other, commitment predicts student loyalty. Even though there is not accessed any study that examines the relationship between college's organizational structure or process, there are limited studies that examine the relationship between school structure and teachers' loyalty. According to Hoy, Newland and Blazovsky (1978) teachers are less loyalty to their institutions which are more centralized and formalized. Miskel, Fevurly and Stewart (1979) found that when school structure (decision making and supervision) is centralized, teachers' loyalty is getting less. In the same study, it is found that teachers' loyalty is positively correlated with staff and student climate. These results are meaningful when the items in structure/process factors in school culture scale which is used in present study are considered. Since the items in structure/ process factors consisted of both about formalization such as "Business in our school are carried out according to certain standards" and climate such as "Memories, stories, etc. about the history of our school transferred to new arrivals by old students".

In the support factor of school culture, it is mentioned about supporting students' social and academic developments. According to Subrahmanyam (2017) students try to fulfill basic requirements which in turn motivates and helps them to continue their academic careers and this process affect their loyalty to their schools. Therefore, it can be said that as students are supported by the institution especially for their academic development, their loyalty levels are getting higher. This result was supported by Frankola (2001) and Tinto (1987) who think that educational outcome is influenced by emotional and motivational factors which enhance academic achievement and prevent students from dropping out of colleges. In sum, there are relationship between student motivation, satisfaction and loyalty (Annamdevula & Bellamkonda, 2016). As a result, it can be said that students' loyalty are predicted by instructor-students relationship, commitment, structure/ process and support which are factors of school culture.

Limitations and Future Directions

The study has some limitations as the other studies. The first limitation is that the sample was drawn from a single university. Due to the fact that this university is very popular among nominees of university students and the university accepts students from all over the Turkey, it can be said that the university represents the population. Nevertheless, future research should aim to replicate the same study with other student populations in different geographic locations of Turkey.

Another limitation of the study is that there are differences in students' loyalty points according to faculty variable. It is thought that the reason of this finding is due to the faculty staff- student communication culture. Nonetheless, this culture couldn't be investigated through qualitative approach. Future studies should conduct a study which is designed with mixed approach. By this way, the results can be much more explanatory and meaningful.

REFERENCES

Alemán, E., Freire, J. A., McKinney, A., & Bernal, D. D. (2017). School –university–community pathways to higher education: Teacher perceptions, school culture and partnership building. *The Urban Review, 49*(5), 852-873.

Annamdevula, S., & Bellamkonda, R. S. (2016). The effects of service quality on student loyalty: The mediating role of student satisfaction. *Journal of Modelling in Management, 11*(2), 446-462.

Annamdevula, S., & Bellamkonda, R. S. (2016). Effect of student perceived service quality on student satisfaction, loyalty and motivation in Indian universities: development of HiEduQual. *Journal of Modelling in Management, 11*(2), 488-517.

Aypay, A. (2001). Örgütsel analizde teorik gelişmeler: Yeni kurumsalcılık. *Kuram ve Uygulamada Eğitim Yönetimi, 28*, 501-511.

Chandra, T., Hafni, L., Chandra, S., Purwati, A. A., & Chandra, J. (2019). The influence of service quality, university image on student satisfaction and student loyalty. *Benchmarking: An International Journal, 26*(5), 1533-1549.

Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, *76*(2), 193-218.

Deal, T. E., & Peterson, K. D. (2016). *Shaping school culture.* John Wiley & Sons.

Dekker, G. W., Pechenizkiy, M., & Vleeshouwers, J. M. (2009). Predicting students drop out: A case study. In T. Barnes, M. Desmarais, C. Romero, & S. Ventura. (Eds), Proceedings of the 2nd International Conference on Educational Data Mining (pp. 41–50). Retrieved from http://www.educationaldatamining.org/EDM2009/uploads/proceedings/dekker.pdf

Demirtaş, Z., & Ekmekyapar, M. (2012). İlköğretim okulu yöneticilerinin değerlere dayalı yönetim uygulamalarının okul kültürüne etkisi. *Kuram ve Uygulamada Eğitim Yönetimi, 18*(4), 523-544.

Elliott, K. M., & Shin, D. (2002). Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, *24*(2), 197-209.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: Nature, purpose, and findings. *Journal of Marketing*, *60*(4), 7-18.

Frankola, K. (2001). Why online learners drop out. *Workforce, 80*(10), 52-61.

Gay, L. R., Mills, G. E. & Airasian, P. (2009). *Educational research: Competencies for analysis and applications.* Pearson: New Jersey.

Gündüz, M. (2013). Recalling academy: University problems and critics in memories. *Journal of Higher Education and Science, 3*(1), 16-26. doi: 10.5961/jhes.2013.055

Harvey, L., & Green, D. (1993). Defining quality. *Assessment & evaluation in higher education*, *18*(1), 9-34.

Hagenauer, G., Hascher, T., & Volet, S. E. (2015). Teacher emotions in the classroom: associations with students' engagement, classroom discipline and the interpersonal teacher-student relationship. *European Journal of Psychology of Education*, *30*(4), 385-403.

Helgesen, Ø., & Nesset, W. (2007). Images, satisfaction and antecedents: Drivers of student loyalty? A case study of a Norwegian university collage. *Corporate Reputation Review, 10*(1), 38-59.

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*(4), 331-344.

Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across the nations*. Thousand Oak: California.

Hoy, W. K., Tarter, C. J., & Forsyth, P. (1978). Administrative behavior and subordinate loyalty: an empirical assessment. *Journal of Educational Administration, 16*(1), 29-38.

Jo Hatch, M., & Schultz, M. (1997). Relations between organizational culture, identity and image. *European Journal of Marketing*, *31*(5-6), 356-365.

Kantek, F., Baykal, Ü. & Altuntaş, S. (2010). Okul kültürü ölçeğinin geliştirilmesi. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi, 13*(3), 36-43.

Kiran, K., & Diljit, S. (2011). Antecedents of customer loyalty: Does service quality suffice *Malaysian Journal of Library & Information Science, 16*(2), 95-113.

Korumaz, M., & Tekel, T. (2017). Yükseköğretimde öğrenci sadakâti ölçeği: Uyarlama, dil geçerliği ve faktör yapısının incelenmesi. *Kalem Eğitim ve İnsan Bilimleri Dergisi, 7*(1), 183-203.

Kotler, P., & Karen, F. A. (1995). Strategic marketing for educational institutions. New Jersey: Englewood Cliffs.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), 607-610.

Marzo Navarro, M., Pedraja Iglesias, M., & Rivera Torres, P. (2005). A new management element for universities: satisfaction with the offered courses. *International Journal of educational management*, *19*(6), 505-526.

McLaren, P. (1991). Decentering cultures: Postmodernism, resistance, and critical pedagogy. In N. B. Wyner (Ed.), *Current perspectives on the culture of schools* (pp. 231–258). Brookline, MA: Brookline Books

McMillan, J. H, Schumacher, S. (2010). *Research in Education: Evidence-based Inquiry.* Pearson: Boston.

Miskel, C. G., Fevurly, R., & Stewart, J. (1979). Organizational structures and processes, perceived school effectiveness, loyalty, and job satisfaction. *Educational Administration Quarterly, 15*(3), 97-118.

Neuman, W. L. (2006). *Toplumsal Araştırma Yöntemleri: Nitel ve nicel yaklaşımlar*. Yayın Odası: Ankara

OECD. (2018). *Education at a Glance 2018: OECD Indicators*. OECD Publishing, Paris. doi: 10.1787/eag-2018-en

Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. McGraw-Hill: New York.

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.

Powell, W. W., & DiMaggio, P. J. (Eds.) (1991). *The new institutionalism and organizational analysis.* Chicago: The University of Chicago Press.

Rashid, T., & Raj, R. (2006). Customer satisfaction: Relationship marketing in higher education E-learning. *Innovative Marketing, 2*(3), 24-34.

Roach, K. D., & Byrne, P. R. (2001). A cross-cultural comparison of instructor communication in American and German classrooms. *Communication Education*, *50*(1),1-14.

Roach, K. D., Cornett-Devito, M. M., & Devito, R. (2005). A cross-cultural comparison of instructor communication in American and French classrooms. *Communication Quarterly*, *53*(1), 87-107.

Rojas-Méndez, J. I., Vasquez-Parraga, A. Z., Kara, A. L. I., & Cerda-Urrutia, A. (2009). Determinants of student loyalty in higher education: A tested relationship approach in Latin America. *Latin American Business Review*, *10*(1), 21-39.

Saleem, S., Moosa, K., Imam, A., & Ahmed Khan, R. (2017). Service quality and student satisfaction: The moderating role of university culture, reputation and price in education sector of Pakistan. *Iranian Journal of Management Studies, 10*(1), 237-258.

213

Schein, E. H. (1984). Coming to a new awareness of organizational culture. *Sloan Management Review, 25*(2), 3-16.

Schein, E. H. (1985). *Career anchors.* San Diego: University Associates.

Strauss, L. C., & Volkwein, J. F. (2004). Predictors of student commitment at two-year and four-year institutions. *The Journal of Higher Education*, *75*(2), 203-227.

Subrahmanyam, A. (2017). Relationship between service quality, satisfaction, motivation and loyalty: A multi-dimensional perspective. *Quality Assurance in Education, 25*(2), 171-188.

Tang, K. H., & Zairi, M. (1998). Benchmarking quality implementation in a service context: A comparative analysis of financial services and institutions of higher education: Part II. *Total Quality Management*, *9*(7), 539-552.

Tellis, G. J. (1988). The price elasticity of selective demand: A meta-analysis of econometric models of sales. *Journal of Marketing Research*, *25*(4), 331-341.

Thomas, D. R. (1978). Strategy is different in service businesses. *Harvard Business Review*, *56*(4), 158-165.

Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. University of Chicago Press: Chicago.

Wentzel, K. (2016). Teacher-student relationship. In Kathryn R. Wentzel and David M. Biele (Eds.) *Hand Book of Motivation at School*. Routledge: New York.

Turkish Higher Education Council (YÖK). (2019). Türkiye'de üniversite sayıları. Retrieved from https://istatistik.yok.gov.tr

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, *60*(2), 31-46.