Student Residential Satisfaction of On-Campus Hostels: Case of ITU

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Abstract:
Accomodation is the most pressing problem among all the other issues that the students starting higher education in another city have to face. The ways that students find to solve this problem of accomodation are staying in privately or state-owned dormitories, renting flats or living with a relative.

Residence halls (dorms) are one of the leading facilities universities offer. Today, students and their parents opt for these on-campus halls as they provide a safer solution for access to faculty buildings, libraries, labs and sports and other social activities; the halls, needless to say, serve as the option nearest to these buildings and facilities, as well.

This study aims at identifying the on-campus residential satisfaction level of university students. The study comprises a part of the research that aims at identifying the satisfaction and expectation level of university students with the physical and social environment on campus depending on the service spaces.

Key words: University students, residential satisfaction, student housing, on-campus, Istanbul
1. INTRODUCTION AND LITERATURE REVIEW

The idea that campus life environment contributes to students' life and educational experience encourages university administrations to work on a continuous improvement of the quality of on-campus services and facilities.

The most important of all the services and facilities is on-campus halls that solve the problem of accommodation. Not only do these residence halls provide the students that have to live away from their parents with plausible accommodation, but they also play an important role as a place where students gather new life experience.

Accommodation is certainly one of the most eminent problems that the students leaving home for educational purposes have to face (Filiz & Çemrek, 2007). In our country, the number and capacity of the universities have considerably increased in the last few years; however, the issue of student accommodation presses itself as a problem of utmost importance since the capacity of on-campus dorms does not show an equal rate of increase.

Students solve this residential problem either by living with their relatives or staying in privately or state-owned dorms or sometimes by renting a flat. What affects the choice for the type of accommodation is the socio-economic status of the student and the housing capacity, quality and rates as well as its distance from the faculty buildings. (Filiz & Çemrek, 2007).

The studies (Met ve Özdemir, 2016; Astin, 1993; Blimling, 1993; Pascarella ve Tenzini, 1991; Tinto, 1993; Ballou vd., 1995) show that on-campus student hostels are more convenient and useful for students' own development.

Accommodation is one of the basic necessities of human beings. Satisfaction with dwelling and environmental quality increases the quality of life. Satisfaction with the residential environment reflects people’s responses to the area they live in.
Most studies indicate that there is a direct correlation between the satisfaction level and the hostel environment.

Despite plenty of studies on residential satisfaction, the studies on satisfaction with residence halls are quite insufficient in number (Fourbert et al. 1998; Kaya & Erkip, 2001; Khozaei et al. 2010; Amole, 2009a).

Existing studies on residence halls handle different aspects of the issue. Those that identify the effects of hostel features (kitchens, private bathroom, study lounges, TV rooms, laundry rooms, etc.) on student satisfaction focus on architectural features (low-rise, high-rise), physical features of places (air-conditioning) and the services and facilities offered (Internet access, wi-fi connection).

Physical facilities and comfort as well as security and privacy were some of the attributes that made the residence hall more similar to their homes from female students’ perspective Khozaei et al. (2010 a, b, c).

Kaya & Erkip (2001) investigated student satisfaction, focusing on perceptions of room size and crowding in Turkey. Similarly, Karlin, et al. (1979) confirmed that hostel room size can indeed influence students’ level of satisfaction.

Studies have revealed that controlled physical environment (heating, ventilation, and natural lighting) in dorms is effective on overall life satisfaction of students. (Koçbeker, 2007; Arlı, 2013).

Demographic characteristics of students, which include gender, age, socio-economic status, race and religion (Amole, 2005; Amole, 207; Amole, 2009 a, b; Wang & Li, 2006; Jabaren, 2005) are believed to influence satisfaction.

A number of studies on the effect of on-campus life satisfaction on student development have revealed that if students live inside the campus, their chances of stepping towards graduation and enjoying a positive life and education increase. Students with a positive experience show higher rates in completion of their coursework; besides, it is observed that
these students are highly satisfied with their university experience in general.

Since the studies related to student satisfaction with the residence halls have been conducted in countries with diverse conditions, they appear to focus on different levels and topics of student satisfaction.

Most of the studies indicate that there is a direct correlation between the satisfaction levels and the hostel environment. Among the limited studies on students’ life satisfaction are studies that some researchers (Amole, 2009 a; Hassan, 2011; Nurul ‘Ulyani et al., 2011). Amole (2009 a) investigate life satisfaction among students in Nigeria and the findings have shown that students were generally dissatisfied with the housing provided for them. Radder and Han (2009) researched student satisfaction levels in South Africa and the findings indicated again a level of dissatisfaction with campus residences. The studies were conducted in countries where the culture and climate are different from that experienced in the Southeast Asia region, which is likely to affect the perceived environment of the residence hall environment. Hassan (2011) studied student satisfaction levels in Middle-East and the findings indicated a level of satisfaction with on-campus residences.

Location of students’ housing is one of many research topics. Student housing should be located in proximity to teaching, food-consuming, sporting areas as well as recreational and cultural facilities within short walking distance (Hassanain; 2008).

In several studies, it has been observed that satisfaction with the halls creates a positive effect on students’ success levels.

Ware and Miller scrutinized the studies on student life and reached the following conclusions: student housing plays an important role in the success of university students. Student housing affects student enrollment and the adequacy of
facilities is a factor that increases the willingness of students to stay on campus (Frazier, 2009).

The researchers mentioned above came up with the following conclusions: Bowman & Partin have conducted a survey to see if there is a remarkable difference between the students living inside and outside the campus in terms of academic success measured by grade point average (GPA). Bowman & Partin have stated that the GPA values of these two groups do not reveal a significant difference statistically (Frazier, 2009).

The life quality of a student during his stay in on-campus residence halls determines that student’s willingness to elongate his stay in that environment. If the quality of this experience is high, this student will certainly share it with his peers and encourage them to benefit from these opportunities (Nurul ‘Ulyani, Nor’ Aini & Nazira 2011).

Studies on how satisfaction with the life environment on campus affects student development have consistently shown that students’ choice to live on campus increases their chances of enjoying the level of graduation as well as having a positive life experience and education. Those who have a positive experience are more likely to complete their programs; in addition to this, these students are observed to show higher satisfaction with the overall university experience. According to Popovics, comfort, freedom, protection and private life are perceived as the benefits of life on campus; whereas restrictions on visits, rules and noise are the perceived drawbacks. (Thomsen, 2008).

Li et. al. (2007) conducted a survey in order to understand the level of student satisfaction with their life environment. In this survey, the students were asked if they would stay on campus or consider moving to another place outside campus in the following year. Li et. al. have found that taking part in meal planning, leadership opportunities, being closer to campus, being able to decide where to live, academic
support opportunities and high-speed internet connection are important in predicting the decision to continue life on campus in the following year. The researchers also found that the strong positive indicators of deciding to live on campus are mostly the significant negative indicators of living outside the campus (Thomsen, 2008).

University residence halls offer housing to students who come to study at university from other cities. The studies have proven that providing young people who have to live away from their families with residences closer to the comfort of their own homes will be effective on their academic success. Therefore, this study aims at identifying the satisfaction level of ITU students with on-campus residence halls.

2. RESEARCH AREA AND METHODOLOGY

The aim of this study is to identify the satisfaction of university students with various features of on-campus halls. The study constitutes one part of another study that aims at identifying the satisfaction and expectation level of university students with physical and social environment on campus depending on service spaces.

This study defines the population as ITU undergraduate students. The target population consists of the students studied in Istanbul Technical University in 2014-2015 academic year. The chosen study field is ITU Ayazağa Main Campus and Gümüşsuyu campus as the downtown campus. ITU Ayazağa campus is the main campus which is inside the developing part of the city center; whereas downtown campuses are inside Istanbul’s Central Business District.

The sample is determined according to the 3000 questionnaires in proportion with the number of ITU students and their distribution to the faculties and classes (Stratified sampling method). However, 1747 questionnaires are found
applicable. The questions measuring dormitory satisfaction are answered by 415 students staying in ITU halls.

ITU on-campus halls have the capacity to accommodate 4026 students in 14 buildings. 44% of this capacity is used by female students; whereas 56% by male students. 7.1% of overall dorm capacity is located in Gümüşsuyu, 92.9% is on the main campus in Ayazağa.

Most of the rooms in ITU hall buildings are single; there are only a small number of double and triple rooms. Dorm rooms and common spaces are designed in such comfort that they can respond to every possible need of students.

ITU Ayazağa Main Campus main pedestrian entrance has a connection with the underground railway system.

The dorm buildings are located within a walking distance to the faculties, main library, gym and pool, cultural centre, canteen and the supermarket that meets students’ daily needs. Nevertheless, a regular bus service is operated from dorm buildings to ITU main entrance.

Evaluation of the questionnaire outcomes university student profile:

42.8% of the students surveyed live with their family, and 23.6% live with their friends. This percentage shows that 66.4% of the students surveyed live at home and 33.6% live in a residence hall.

The percentage of students staying in ITU halls comprise the majority with 70%; 16% stay in private dorms and 14% stay in KYK dorms (Credit and Hostels Institution).

46% of the students that filled the questionnaire were female students and 53.7% were males. 81.4% of those who stay in ITU halls are in the age range of 18-21; 18.6% are in the age of 22 and older.

Factors Influencing Students’ Satisfaction With On-Campus Hostels
The questionnaire form consists of 40 questions that will identify the satisfaction level of students with the residence halls on ITU campuses. Students are requested to evaluate each statement over a five-degree scale that shows “Completely dissatisfied” (1)(2)(3)(4)(5) “Completely satisfied”.

In terms of the variables identifying the student satisfaction with on-campus hostels, the factor analysis techniques that are applied are “Principal Component Analysis” as “Factor Extraction Technique”, and “Varimax” rotation as “Factor Rotation”. The significant factors are determined through “Eigen” values and “scree” test. When Principal Component analysis is applied to the data set, it has been observed that 6 eigenvalues are greater than the limit value 1.

Exploratory Factor Analysis is applied to the variables identifying student satisfaction with on-campus hostels, and “Principal Component Analysis” is used as factor extraction technique. The factors obtained are evaluated by “Varimax” axis rotation. The number of factors are determined by “Eigenvalue” values and “scree plot”. The application of Principal Component analysis to the data set has shown that the eigenvalues of 6 variables are greater than the limit value 1.

The variables with missing data are not included in this analysis. The matches excluded due to missing value have revealed random results without sampling bias.

“Kaiser-Meyer-Olkin” (KMO) measure is an index value that tests the sampling adequacy for factor analysis by comparing the magnitudes of observed correlation coefficients with the magnitudes of partial correlation coefficients. The KMO value of 0.90 shows that the adequacy of the sample is “exceptional”, 0.80 is “commendable”, 0.70 is “good” and 0,50 and below is “unacceptable” (Norusis, 1992). The sample chosen to measure the campus satisfaction of university students presents a KMO value of 0,88, which means the samples are “excellent” in terms of adequacy for factor analysis.
Bartlett’s test is a measure that shows homogeneity of variances. When Bartlett’s test is statistically significant, Bartlett’s test value for correlation matrix of variances to which factor analysis is applied will be 5321. This value is quite higher than Chi-Square table and it is also reliable. It shows a dense and strong homogeneity of variances on correlation matrix.

Communality is the variance amount that one variable shares with the other variables in the analysis. The variables with low communality (less than 0,50) are excluded and the analysis is repeated (Kalaycı, 2010). In this analysis, analysis is repeated after excluding the variables, namely, “heating in the dorm spaces”, “sound insulation”, “privacy in the rooms” as they show low communality.

Factor analysis provided us with significant variable groups. Correlated variables are gathered in sets. Table 4 shows that the satisfaction of students as university campus users with various features of ITU on-campus hostels reveals a 6-factor structure. According to the results statistics on the table, the first factor explains 33,60% of the total variance of 26 variables. The second factor explains 11,71%, the third factor 7,13%, the fourth factor 5,61%, the fifth factor 4,96%, and the sixth factor explains 4,06%. These six factor sets explain 67,08% of the total variance (Table 1).

The first factor is “satisfaction with shared spaces”. This factor explains 33.60% of the total variance. We may say that satisfaction with shared spaces is the most important factor of satisfaction with various features of dorms scale. All three variables on this factor has a greater weight than 0,7. These variables are “Noise level of shared spaces”, “Comfort in shared spaces”, Natural lighting of shared spaces”.

Students’ satisfaction with acoustics, natural lighting and thermal comfort appears to be high. It is obvious that variables related to physical environment control such as
lighting, heating and ventilation are of top priority in determining the physical quality of the place.

The second factor is “satisfaction with accessibility”. Five of the variables on this factor have a factor weight of greater than 0.7. These variables are “proximity of dorm buildings to recreational/sports facilities”, “proximity of dorm buildings to other university spaces”, “proximity to urban infrastructure and services”, “proximity to medical service”, “shuttle service from campus entrance to dorm buildings”. Another variable in this group is “access to cultural activities in the city”. It is observed that satisfaction with access to educational, social, cultural and recreational needs is important for students in this second aspect called accessibility.

The third factor that affects satisfaction with on-campus dorms is the “satisfaction with dorm rooms”. This factor explains 7.13% of the total variance. The factor weights of the variables “Interior Design of the rooms and the furniture”, “room ventilation”, “room size”, “level of natural lighting in the rooms” are greater than 0.7.

Table 1. The scale of satisfaction of students with various features of on-campus hostels

<table>
<thead>
<tr>
<th>Factors</th>
<th>Faktör Weight</th>
<th>Eigen Value</th>
<th>Explained Variance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Satisfaction with the Shared Dorm Spaces</td>
<td>8,736</td>
<td>33,600</td>
<td></td>
</tr>
<tr>
<td>Noise level of shared spaces</td>
<td>.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfort of shared spaces</td>
<td>.744</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural lighting of shared spaces</td>
<td>.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studying comfortably in spaces for study</td>
<td>.680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artificial lighting of the dormitory area</td>
<td>.595</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2: Satisfaction with accessibility</td>
<td>3,046</td>
<td>11,714</td>
<td></td>
</tr>
<tr>
<td>Proximity of dorm buildings to recreational/sports facilities</td>
<td>.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity of dorm buildings to other university spaces</td>
<td>.753</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to urban infrastructure and services</td>
<td>.738</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity to medical service</td>
<td>.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shuttle service from campus entrance to dorm buildings</td>
<td>.703</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to cultural activities in the city</td>
<td>.668</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,854</td>
<td>7,131</td>
<td></td>
</tr>
</tbody>
</table>
The fourth factor that is effective on the satisfaction of university students with hostels is the “satisfaction with cleaning and maintenance”. This factor explains 5.61% of the total variance. Three variables on this factor are with a factor weight greater than 0.7. These variables are “room cleaning and maintenance”, “cleaning inside the dorm building”, and “WC/Bath adequacy”. The other variables in this group are “cleaning in shared spaces” and “cleaning in the immediate surrounding of dorm buildings”.

The fifth group of factors is the “satisfaction with dorm management”. This factor is explained by 4.96% of the total variance. On this factor, the factor weights of “price/performance balance” and “rules and regulations in the dorm” variables are greater than 0.7.

The sixth factor obtained from the factor analysis is the “satisfaction with telecommunications infrastructure”. This factor explains 4.06% of total variance. The factor weight of one
variable on this factor is greater than 0.7. This variable is “internet connection in the rooms”. This variable on this factor group is either the least important or the least problematic variable. The high factor weight shows that students are satisfied with the internet connection in their rooms.

As the most important aspect on the scale of student satisfaction with various features of on-campus dorms is the “satisfaction with shared dorm spaces”, Factor 1 is composed of these variables. The “noise level of shared spaces” variable takes the first place in this group. The second important factor is named as “accessibility” and the third one is the “satisfaction with the dorm rooms”. The fourth of these factor groups is the “satisfaction with cleaning and maintenance”. The fifth factor group is the satisfaction with dorm management”. The sixth factor is represented by only one variable and this factor is named as “the satisfaction with telecommunications infrastructure”.

**Regression Analysis and Model Building between ITU Campus Satisfaction and Factor Groups**

Regression analysis is used to investigate the relationship between overall satisfaction with ITU hostels and the factors that constitute the subdimensions of student satisfaction with the various features of ITU hostels. Overall satisfaction variable as the dependent variable is measured by 1-5 scale. This analysis has included 375 observations.

R² value is determined as 0.422. This coefficient of determination might seem low, however, according to the literature, a high R² value has rarely been reached in social sciences. The reason is that there might be a number of different variables inside and outside the scope of this research which might affect the dependent variable. In addition to that, the dependent variable is the discrete variable. In this case, R² corresponds to an approximate value rather than a precise statistical value. Satisfaction with the dorm rooms, satisfaction
with the shared spaces, satisfaction with accessibility, satisfaction with cleaning and maintenance, satisfaction with dorm management and satisfaction with telecommunications infrastructure variables together explain 42.2% of the total variance in the overall satisfaction of students with on-campus hostels. The 6 variables in the equation positively affect “Overall satisfaction with hostels” as expected (Table 2). All t-values belonging to these exploratory variables are not only above critical values on table, but they are also statistically significant.

The significance level of F value is smaller than 0.05 in the variance analysis that measures the significance of the equation as a whole, therefore, this shows that linear regression model is significant as a whole.

The variables used as exploratory variables in the regression analysis are factor score values that the factor analysis produced. Even if the exclusion of some observations from the analysis due to missing value is taken into consideration, the mean of the factors are very close to zero and their variance is close to one. As a result, regression analysis will show minor differences between standardized and non-standardized regression coefficients.

When we examine according to the effect size of the factors, the first factor is “Satisfaction with the dorm rooms”. The effect of satisfaction with the dorm rooms on overall satisfaction is 0.408.

The second factor with an effect size of 0.318 is the “Satisfaction with the shared spaces”. The third one is the “Satisfaction with Accessibility”.

Overall dorm satisfaction of the respondent might be developed by adding other respondent-specific features to the model that explains satisfaction with sub-dimensions. Neither gender nor close age gap of the respondents appears to present an effective variable.
Therefore spending time on campus, their bonds with the university and a new life experience as additional independent variables have taken place among both subdimensions of satisfaction with hostels and exploratory variables (Table 6). Spending spare time on campus is considered to be effective on satisfaction. That is why this variable is added to the model. Respondents having a strong bond with university are believed to feel commitment to university and accordingly this will have an effect on dorm satisfaction; as a result, this variable is also added to the equation. Students living in dorms away from their parents are asked if they have a new life experience and this is added as an independent variable as we have needed to test its effect on satisfaction.

In the analysis including 9 independent variables and 367 observations, R2 value is calculated as 0.487. The top three subdimensions that have the highest effect on overall satisfaction are “satisfaction with dorm rooms”, satisfaction with the shared dorm spaces” and “satisfaction with accessibility”, respectively. (Tablo 3).

All three newly added variables are statistically significant and their increase positively affects overall satisfaction. “Having a new life experience” variable is the one with the highest effect of the three. The other two show approximately the same level of effect.

On-campus hostel life offers certain advantages in terms of social interaction as well as a positive relationship with peers, faculty and communities compared to life outside campus (Ballou vd., 1995). Blimling (1993), found that students living on-campus hostels are more satisfied with university experience than those living outside the campus. In parallel with the studies of Ballou vd. and Blimling, this study also reveals that the variable of having a new life experience due to living on campus have a positive effect on satisfaction with dorms.
Table 2. Regression Analysis For the Sub-Factors of Student Satisfaction with Various Features of On-Campus Hostels

<table>
<thead>
<tr>
<th>Regression Analysis</th>
<th>Non-Standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent Variable: ITU Overall Campus Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2,901</td>
<td>.041</td>
<td>70,943</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with the shared dorm spaces</td>
<td>.318</td>
<td>.041</td>
<td>7,757</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with accessibility</td>
<td>.305</td>
<td>.041</td>
<td>7,453</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with dorm rooms.</td>
<td>.408</td>
<td>.041</td>
<td>9,955</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with Cleaning</td>
<td>.221</td>
<td>.041</td>
<td>5,406</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with dorm management</td>
<td>.161</td>
<td>.041</td>
<td>3,943</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with telecommunications infrastructure</td>
<td>.124</td>
<td>.041</td>
<td>3,022</td>
<td>.003</td>
</tr>
</tbody>
</table>

R= 0,650, \( R^2=0,422, \) F= 44,787, p=0,000

Table 3. Regression Analysis between Sub-Factors of Satisfaction with Various Features of On-Campus Hostels and Variables of Spending Time on Campus, Bonds with University and Having a New Life Experience

<table>
<thead>
<tr>
<th>Regression Analysis</th>
<th>Non-Standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent Variable: ITU Overall Campus Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1,583</td>
<td>.219</td>
<td>7,244</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with the shared dorm spaces</td>
<td>283</td>
<td>.041</td>
<td>6,960</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with accessibility</td>
<td>231</td>
<td>.041</td>
<td>5,680</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with dorm rooms.</td>
<td>411</td>
<td>.040</td>
<td>10,398</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with Cleaning</td>
<td>204</td>
<td>.040</td>
<td>5,076</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with dorm management</td>
<td>129</td>
<td>.041</td>
<td>3,143</td>
<td>.002</td>
</tr>
<tr>
<td>Satisfaction with telecommunications infrastructure</td>
<td>100</td>
<td>.039</td>
<td>2,529</td>
<td>.012</td>
</tr>
<tr>
<td>Spending time at university</td>
<td>.208</td>
<td>.067</td>
<td>3,100</td>
<td>.002</td>
</tr>
<tr>
<td>Bonds with university</td>
<td>304</td>
<td>.105</td>
<td>2,898</td>
<td>.004</td>
</tr>
<tr>
<td>Having a new life experience</td>
<td>149</td>
<td>.034</td>
<td>4,323</td>
<td>.000</td>
</tr>
</tbody>
</table>

R= 0,698, \( R^2=0,487, \) F= 37,668, p=0,000
There is a relationship between the effects of places on users and the productivity level there. Therefore, while planning these places, its effect on the individuals that will live inside should be taken into account and these plans should give priority to physical arrangements that will create favorable contributions to the intended use of the place. At that point, not only needs but also demands of the user should be learned.

Students do not only care about the variables related to educational quality; they also find physical and social quality of life environment on campus highly important among the various features of university. In the competitive educational atmosphere of the world today, if university managements organise the campus life environment in accordance with the needs and demands of students, students will certainly feel its effects on their educational experience; as a result, this will maximize student satisfaction and enable universities to
become more appealing to students with a number of opportunities they offer.

The questionnaire that identifies the student satisfaction with on-campus hostels requested the respondents to answer 40 questions and Principal Component Analysis and Varimax are applied to the variables as factor analysis techniques. The satisfaction of students as the users of university campuses with various features of ITU on-campus hostels reveal a six-factor structure. The six-factor group explains 68.08% of total variance. The variable groups determined by factor analysis are significant. The variables in relation are gathered together.

The sub-factor “Satisfaction with the shared dorm spaces” explains the greatest part of the total variance in factor analysis. The first factor in this group is “the noise level of shared spaces”. This is followed by satisfaction with natural lighting of shared spaces and thermal comfort level. In this factor group, the other physical environment control variables that affect student satisfaction are lighting, heating, and ventilation. The variables of satisfaction with acoustics, ventilation, heating, natural lighting level of shared spaces are observed to be at the top; this finding is in parallel with those in the studies of Koçbeker (2007), Arlı (2013) and Khozaei et al. (2010 a, b, c).

“Accessibility” takes the second place on the scale of student satisfaction with various functions of on-campus hostels. This factor group consists of proximity of dorm buildings to recreational/sports facilities, to other university spaces, to urban infrastructure and services, to medical service, to campus entrance and access to cultural activities in the city. Hassanain’s (2008) survey also reveals that dorms should be close to learning spaces, recreational activities, catering services and cultural facilities. That is why the findings of this study and those of Hassanian’s study are similar.
The third factor is called the “satisfaction with dorm rooms”. This factor group comprises the variables of interior design and furnitures of dorm rooms, ventilation of rooms and level of natural lighting in rooms.

“Satisfaction with cleaning and maintenance” is the fourth factor. The fifth factor is the satisfaction with dorm management. The sixth factor is represented by only one variable which is called the “satisfaction with telecommunications infrastructure”. The variables under the fifth and sixth factor groups are observed to be those students cared about the least.

In conclusion, the six factor groups obtained in this study are satisfaction with shared dorm spaces, accessibility, dorm rooms, cleaning and maintenance, dorm management and the satisfaction with telecommunications infrastructure.

The regression analysis between the dependent variable of overall satisfaction with on-campus hostels and sub-factors of satisfaction with dorms and independent variables of spending time on campus, bonds with university, having a new life experience has revealed that the satisfaction with the dorm rooms takes the first place and it is followed by bonds with university variable. Accessibility and spending time on campus are the third and fourth variables. It is obvious that having a new life experience, bonds with university and spending time on campus as well as the sub-factor groups determined by factor analysis of satisfaction with dorms have a favorable effect on the satisfaction with on-campus hostels.

The findings of this study are considered to contribute to the body of literature on variables that are effective on the satisfaction with on-campus hostels.

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