Research Article

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Influence of residential setting on student outcome

Abstract

The research study was established using sample population of 278 students from the Near East University, Cyprus. The study seek to investigate if students that resides on campus residential halls have better academic performance in comparison to students leaving outside the campus environment as a result of the facilities provision available on the campus. Likewise, further examination was made if gender and age factors influence the choice of accommodation location.

However the result of the study using a chi-square statistic of test of independence suggested that there is no significance difference in the academic performance of the students residing on campus and those residing outside the school environment. But gender and age classifications were discovered to exert some influence on the choice of student accommodation preference.

Keywords: off-campus, on-campus, performance, facilities, structure

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Introduction

In higher institution of learning, dormitories otherwise known as hostels or hall of residences are built for students in order to cater for their accommodation need and they are often in great proximity to classroom blocks in order to make learning more suitable and reduce the stress of commuting. Students residing in the school dormitories are often expected to be more comfortable and thus translating into a better academic performances compared to their counterparts residing outside the school environment. In view of this, student affairs organization of higher institutions strive to ensure that their citadel of learning are not devoid of essential facilities especially housing for their students and lecturers in most cases.

This expectation of enhanced performance of students residing on the campus dormitories are attributable to factors such as closer proximities to classrooms of learning, easy accessibility to libraries, campus wide internet connectivity, quick laundry services, social interaction with fellow hall residents, greater bonding opportunities, participation in university social activities, sporting arenas for relaxation, and many more which off campus students might not be privilege to experience in a greater sense.[1,2] Likewise, it is considered very favourable for new entry students and those single students in terms of marital status to reside in the school premises for better academic performance.

In terms of previous researches made, demographic differences such as age and sex have not been critically examined in the context of preference for the selection of students' accommodation location which made it understudied.[3,4] Since research has shown that choices on difference subjects can greatly be influence along the gender line as a result of innate difference and traits constituents.[5,6] Therefore, this study will equally be helpful to fill this research gap by assisting to examine if gender and age difference have any impact on the choice of accommodation location of students.

Statement of problem

Despite the suppose advantages accruable in having a university hall of residence as a place of abode and huge investment made by university administrations to erect dormitories structures on their campuses, most students still express great preference in residing outside the campus environment. The choice for this type of accommodation (outside campus accommodation could be induced from factors such as quest for personal privacy, larger space of outside campus accommodation, availability of university shuttle buses that convey students in and out of the campus, cheaper accommodation fee and payment flexibility, closeness to arrays of shopping centers, groceries stores, restaurants, or form of status symbol among many other factors. Most students also could make the choice of an outside campus accommodation due to the rules and restrictions that are operational in halls of residences of university campuses. It is thus propounded if the choice of accommodation locations of students will reflect on their academic performance as a result of the aforementioned. Also, it will be quite enlightening to examine if gender or age difference of students have any relationship to do with the selection of residential abode.

Research questions

(a) What is the impact of students' accommodation location on their academic performances?

(b) Does the gender type of students influence the choice of residential location?

(C) What is the impact of age category in the selection of students residential location?

Research hypothesis

(a) H_o: There is no significant relationship between students' accommodation location on their academic performance.

H_1: There is a significant relationship between students' accommodation location on their academic performance.

(b) Ho_1: There is no significant relationship between students' accommodation location and their gender.

$H1_2$: There is a significant relationship between students' accommodation location and their gender.

(c) Ho_3: There is no significant relationship between students' accommodation location and their age.

H1$_3$: There is significant relationship between students' accommodation location and their age.

Various researchers have attempted to investigate the roles played by school residential housing system and those of outside campus on students' academic performance. Few of such are discussed in the literature review.

Literature review

In academic environment settings, one of the pivotal roles of a school management is to provide an enabling conducive environment and facilities for learning as inferred by Schroeder and Maple.

In a study conducted by De Araujo and Murray,[7] they concluded that the advantages of staying on campus tend to improve student performance. The result reveals that being on campus could have a positive impact on academic performance of students during their time of academic period. Thompson et al.,[8] in their study also revealed that residing on campus for a new student tend to make them more progressive in academics with educational higher performance.

By focusing on areas of reading comprehension, critical rational and mathematics, Pascarella et al.,[9] observed also that new students who lived on campus, experienced greater improvement more than student that stays off-campus. In an update study, Pascarella and Terenzini[10] conducted a study on the effects of campus residency on educational outcomes of students. In the study, they opined that campus residency has a positive correlational relationship with academic performance and other students outcomes the research seek to evaluate. Likewise, Allen et al.,[11] research concluded that the dormitories student's persistent interaction and connection with the institution's local community improve their tendency to have improved learning outcomes. However, other researchers have a deviation to some of these above assertions.

For instance, Delucchi[12] opined that only very few students living in the hostels have an improved academic performances. He found out also that students living outside the campus with close walking distance to the institution also perform better than those living on campus. Also, a study conducted by Bowman and Partin[13] on influence of student residency on academic performance concluded that there is no significant impact of residency location of students on their academic performance irrespective of where the students live either on campus or outside the campus.

Pascarella and Terenzini,[9] Astin,[14] and Kuh and Hu[15] all of them discovered that faculty student of interaction in academic nature improves student performance and student satisfaction. Kuh and Hu[15] further find that students' interaction with faculty outside of class positively influences effort put forth by students. Even non-academic university resources may help improve students' performance. Toutkoushian and Smart[16] find that increasing institutional spending leads to gains in students' learning, as well as their interpersonal skills. However, they find that allocating more money specifically to academic support does not necessarily improve learning. Non-academic resources that we consider include university-sponsored, clubs and organizations (admittedly, these do include some academic clubs, but there are also many that are social in nature and based on common interests and activities) and use of university provided fitness resources. Besides providing food and shelter, residence hall administrators provide a variety of activities and services to create an environment that cause students to develop close relationships with each other and which encourages students to study and socialize together. However dynamics of social interactions and the influence of associates are liable to be dissimilar with on-campus dormitories than off-campus apartments.

In terms of gender difference, Oppewal et al.,[17] in their research indicated that gender type also influence the choice of student selecting their housing location. This assertion was further corroborated by Jabareen;[18] Wang and Li.[19] When conducting her research on gender response to preference of accommodation selection, Amole,[20] found out that there was no significant difference in the response of male or female as regards their preference for on campus or off campus housing accommodation.

Age wise, Devlin,[21] found out that this play a key role in preference for the choice of residential accommodation for students. Relative to financial capability of students, The Millennial[22] in a study concluded that college students usually below 25 years are not often work engaged. Hence, their financial spending is limited. Therefore, they express strong preference for on campus student housing due to their pricing affordability (Gavin;[23] Mintel[24]). In addition, Mintel[24] also stated that this age category do have strong interest in social activities which university hostels readily, hence this becomes a strong attractiveness for them to prefer on campus hall of residence.[25-37]

Methodology

The descriptive survey research design was put to use in this study. The research intends to study if the housing locations of students have an impact on their academic performance. In a survey, a representative sample is chosen from a population and studied. Findings made from the representative sample are used to generalize for the whole population.

Hence, the survey made use of 278 student respondents which are samples from the student population of Near East University, Cyprus. The respondents are mixture of students residing in the school's hall of residences, near campus and those living in farther places away from the university environment. A set of structured questionnaire was designed and developed for the purpose of data collection. The questionnaire was meant to elicit responses from the students regarding the impact their accommodation locations have on their academic performance. The questionnaires were administered to the students and consequently retrieved upon providing answers to the questions asked.

After collection, descriptive statistics were used to describe the structure of the respondents and their different composition. In order to investigate if the choice of students' place of abode has any significant relationship on their academic performances, a test on measure of association was employed by using the Chi-Square Statistic of test of independence.

Specifically, the Chi-Square statistic test of independence which is an example of a non-parametric analytical tool used is in analyzing categorical data by examining if there is an existence of any form of dependence or relationship among categorical variables under examinations. The test was conducted at a 0.05 level of significance with the aid of SPSS (Statistical Package for the Social Sciences) computer software version 20.

Data presentation and analysis

This section discusses the demographic characteristics of the respondents and evaluates other findings which are relevant to the study.

Section (1) Descriptive statistics of the 278 surveyed students

Variable	Frequency	Percentage
Gender		
Male	146	52.5
Female	132	47.5
Total	278	100
Age		
19 years and below	152	54.7
20years-24 years	92	33.1
25 years and above	34	12.2
Total	278	100
Education level		
Undergraduate	211	76
Masters	50	18
PhD	17	6
Total	278	100
Housing location		
On campus	89	32
Near campus	93	33.5
Distant campus	96	34.5
Total	278	100
Performance response		
Good performance	91	32.7
Average performance	80	28.8
Low performance	107	38.5
Total	278	100

From the table above, the following conclusions can be deduced. In the gender category, the female with a percentage of 52.5% are the highest respondents in the survey. The students that are 19 years and below formed the major bulk of respondents in the age categorization by having a percentage of 54.7% followed by those between ages 20 years and 24 years old with 33.1% while those from 25 years and above has a record of 12.2%. With a percentage of 76%, the undergraduate students were the highest participants in the study while the PhD students are the lowest participants with a record of 6% of the total sample.

In respect to the place of student abode, there seems to be uniformity in the number of students that answer to the three categories of housing specified in the research. However, students that live farther from the school campus have a percentage of 34.5%, being the highest in the location category. The on - campus and near campus residents has a record percentage of 32% and 33.5% respectively. In terms of academic performance, 38.5% of the respondents replied to a low performance outcome academically.

Section (2): Cross Tabulation Table and Chi-Square Test Results (Table 1 & Figure 1)

This section examines the base line of the research study by checking the outcome of students' location of abode on academic performance.

Symmetric measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.109	.506
	Cramer's V	.077	.506
No of valid cases		278	

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

From the Chi –square test output, it was found that the p-value =0.506. Since the value of the p-value is greater than the level of significance α=0.05, we accept the Ho hypothesis that there is no significant relationship between the students' location of residence to academic performance. This result can further be buttressed by the Cramer V statistics output which seek to examine the strength of association. Since the value of Cramer V statistics =0.077 is far from the value of 1 which indicates perfect strong relationship, we therefore also state that there is a very a weak association between the students' location of residence relative to their academic performance.

Table 1 Cross Tabulation and Chi-Square Statistics of student place of abode and academic performance

| Crosstab of location with student performance					
Place of residence has effect on gender		**Performance**			**Total**
		Good performance	**Average performance**	**Low performance**	
Location	**Near campus**				
	Count	27	30	36	93
	% within location	29.0%	32.3%	38.7%	100%
	% within performance	29.7%	37.5%	33.6%	33.5%
	Distant campus				
	Count	29	26	41	96
	% within location	30.2%	27.1%	42.7%	100.0%
	% within performance	31.9%	32.5%	38.3%	34.5%
	On campus				
	Count	35	24	30	89
	% within location	39.3%	27.0%	33.7%	100%
	% within performance	38.5%	30%	28%	32%
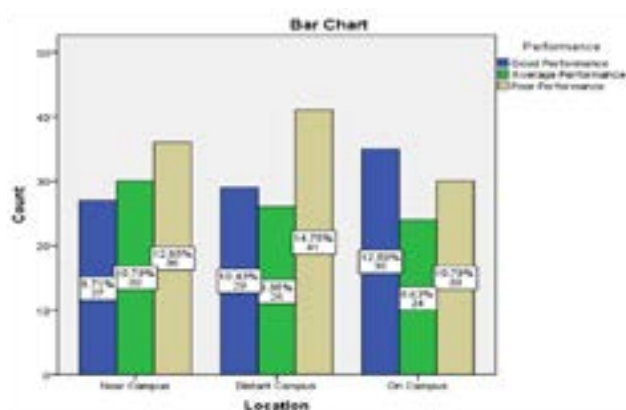
Figure 1 Showing the bar-chart of the location and the performance of students.

Furthermore, in order to examine if the gender of the respondents have relationship with preference of residential location, we again use the Chi- square statistic to investigate any relationship of dependence. The result is shown in the table 2 below (Figure 2).

Symmetric measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.320	.000
	Cramer's V	.320	.000
No of valid cases		278	

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

From the Chi –square test output, it is found that the p-value of the test = 0.00. Since the value of the p-value is lesser than the level of significance α=0.05, we reject the Ho hypothesis and that there is a significant relationship between the gender and the students accommodation location preference. The Cramer V statistics value of 0.320 shows a bit moderate association indeed exists between gender category and the choice of accommodation location. From the cross tabulation table, female students accounted for 67.7% of students who prefer to live in the campus hall of residence. Therefore, it can be stated that female students tend to live in the school hall of residence in contrast to their male counterparts with major proportion of them preferring an off campus accommodation (Table 3 & Figure 3).

Table 2 Cross tabulation and chi-square statistics of gender in relation to their accommodation location

Crosstab of gender with student location χ^2=28.418 , p=0.00

			Location			Total
			On campus	Near campus	Distant campus	
Gender	**Male**					
		Count	31	53	62	146
		% within gender	21.2%	36.3%	42.5%	100%
		% within location	32.3%	55.8%	71.3%	52.5%
	Female					
		Count	65	42	25	132
		% within gender	49.2%	31.8%	18.9%	100.0%
		% within location	67.7%	44.2%	28.7%	47.5%
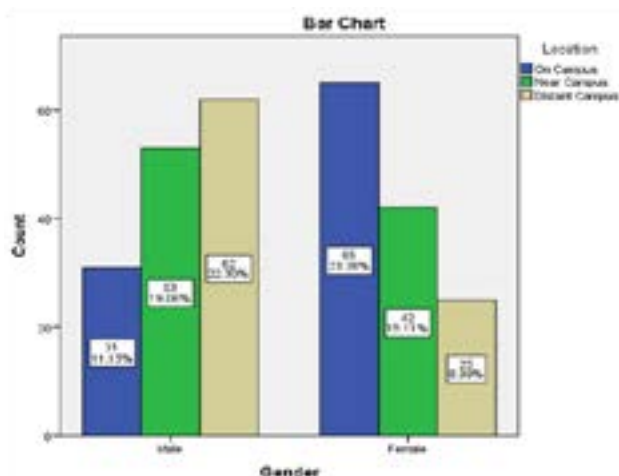
Figure 2 Showing the bar-chart of the gender and the location.

Symmetric measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.385	.000
	Cramer's V	.272	.000
No of valid cases		278	

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis

From the result table above, it could be seen that the p-value of the test = 0.00. Since the value of the p-value is lesser than the level of significance α=0.05, we reject the Ho hypothesis and conclude that there is a significant relationship between age categorization of students and their accommodation location preference. The Cramer V statistics value of 0.27 shows that a bit moderate association exists between the students' age groupings and their choice of accommodation location. Age exerts some influence in the choice

of accommodation location. Generally, students that can be termed younger tend to reside on campus while much older students would desire to live outside the school environment.

Findings and conclusion

Following the result outputs generated from the analysis of data collected, it can be deduced that the choice of accommodation locations does not have a significant relationship on the academic performance of students according to this study. It can hereby be concluded that irrespective of where students choose to reside whether on campus halls or outside of the school campus, their academic performances is not dependent on this according to this study. However, it can be deduced that female students express preference for on campus hall of residence and also, younger students usually below the age of 19 years prefer the choice of university hall of residence than older counterparts.

Table 3 Cross tabulation and chi-square statistics of age group in relation to their accommodation location

| **Crosstab of age with student location** χ^2=41.177, p=0.00		Location			Total
		On campus	**Near campus**	**Distant campus**	
Age	19 years and below				
	Count	94	31	27	152
	% within age	61.8%	20.4%	17.8%	100%
	% within location	74%	31.6%	50.9%	54.7%
	20 yrs-24 yrs				
	Count	25	47	20	92
	% within age	27.2%	51.1%	21.7%	100.0%
	% within location	19.7%	48.0%	37.7%	33.1%
	25 yrs and above				
	Count	8	20	6	34
	% within age	23.5%	58.8%	17.6%	100.0%
	% within location	6.3%	20.4%	11.3%	12.2%
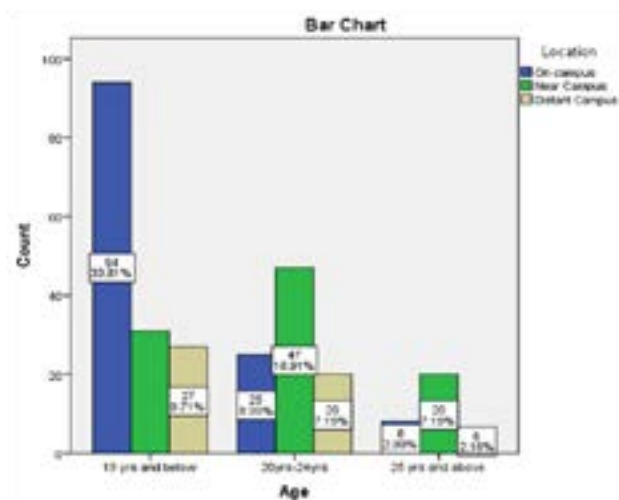
Figure 3 Showing the bar-chart of the age category and the location.

Suggestion for further studies

However as this study is limited by time and finance, future studies would provide a wider perspective especially if other students from other institutions can be included in the study and if metrics like grade points of students can be added as they are a good measure for accessing the academic performance of students in institutions of learning.

Acknowledgements

Conflicts of interest

None.

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