

Study on Student Health and their Lifestyle

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Abstract:

Objective:The main purpose of the study is to investigate the health and lifestyle of hosteller's and day scholar students at the Lovely Professional University (LPU).

Study design:

Methods:To analyze the health status of student health in LPU, information was collected via a lifestyle questionnaire, a standard survey tool by Student health and lifestyle survey Edinburgh healthy university research project) [2]. By making use of SPSS/PC (statistical package for the social sciences) computer data entry and analysis was undertaken. Data analysis includes mean, standard deviation, frequency distributions, percentages, means, and crosstab followed by Chi-square test. There are two questionnaires in which the first part consists of demographic data including the student's gender, nationality, age and weight while the second section consists of various aspects including stress, depression, descriptive weight, diet, exercise and health [1]. The data is analyzed between the hostellers and day scholar's student with the given six factors.

Results:According to the data there are 62.6% male and 37.4% female, out of total there are 55.7% hostellers and 44.3% day-scholar's students and there are 90.1% national and 9.9% international students. The mean age of the student is 21.37 and the mean weight of the student is 62. The parameter of the stress of the hostellers via day scholar student is calculated via the Chi-square test and the p-value is calculated for different factors. The p-value of the stress obtained is 0.000896(>0.05). The p-value of depression calculated is 0.472(>0.05). The p-value of exercise calculated is 0.091(>0.05). For the diet habit according to the data, the p-value of serving fruits and vegetables per day calculated by crosstab is 0.6168(>0.05). The parameter of the descriptive weight of the students resulted in the p-value calculated is 0.981(>0.05). According to the results, the overall health of the hosteller via day scholar's student resulted in the p-value of overall health calculated as 0.48388(>0.05).

Conclusion:After the analysis of the results, the null hypotheses between day scholars/ hostlers with all these parameters are accepted except the factor of stress. The result shows that whether a student is a day scholar or a hostler they are having good health with respect to the observed factors. Only stress is a major factor which is analyzed more in hostellers as compared to a day scholar. The reason for this could be family support which plays an important aspect in everybody life.

Keywords: Student health, Stress management, Nutrition, Exercise, Weight gain.

Introduction

The main purpose of the study is to investigate the health and lifestyle of hosteller's and day scholar students at the Lovely Professional University. When the students enter in the university life, it is a critical time of their transition to develop and integrate health-related behaviour into their lives. Students not only face academic challenges in their academic years but also face challenges on how to maintain their health behaviour and lifestyle. A number of studies have been done to study the impact of transition on student lifestyle during their higher studies [4]. To overcome these sudden changes in their life, it is observed that they usually use alcohol, suffer from insomnia, and get stressed and even sometimes result in weight gain. Hence there is a need to find out what are the important health issues in student life. This could lead to find out the way to improve student health and lifestyle by using the required facilities. The aim of this research is to find out the factors that are responsible for the good health of students. These factors include living-status, diet, exercise and many others.

Health plays the most important role in our lives. If a person is not healthy, he won't be happy, even if he is wealthy. Health is not just about physical or medical fitness, it is also about how people deal with their emotional, mental and relationship behaviour. There are various important factors that affect the health of students. Some of them include nutrition, exercise, stress management and eating habits. It is well known that nowadays students have too much stress in their college life. They all have sufficient time to do everything which is felt important, even they give extra efforts and concentrate on their work without giving proper attention to their diet and sleeping needs [1]. The simple way to stay healthy and fit with a stress-free life is to follow a regular schedule of exercise and taking healthy diet. One of the measure issues regarding the health of students is weight gain. Students who maintain their ideal weight faceless health problems and also being physically active they maintain a relaxed state of mind, which is essential for their overall health. On the daily basis our body needs a sufficient amount of protein, minerals and vitamin to be fit and healthy, so we should consume fresh and green vegetables, fruits, milk etc. Along with the healthy food and physical activities, students are advised to maintain cleanliness in their residence and surrounding areas. Many studies have proved that if people are fit and healthy they achieve greater success in their life.

In November 1986, the first international conference on health promotion [3] held in Ottawa Canada. The concept of health promotion was to promote the public health care system in a variety of nations. In the conference, it was decided that health awareness among youth can be promoted by offering degrees by universities under the theme of health promotion. Thus the concept of health promotion can be an underlying theme to nursing, medical and another health curriculum. Till then, a lot of health care conferences and workshops are being organized by the WHO (World Health Organization) and efforts have been done to promote health care awareness among the public.

Programs that are supported by health care promotion can also be seen at the national and international level. In America, USDHHS (The United state department of health and human services) [3] propose to lead the better health, safety and well-being human life. The USDHHS is a principal agency for protecting the health of Americans by providing essential human services. There are more than 300 health-related programs represented by USDHHS that includes food, safety, and diseases safety, program for children, families and ageing as well as research branch related to diseases states, safety and wellness.

In India, there is no such nodal agency that takes care of public health but there are various NGO's and national insurance schemes that are popular for supporting the health care of individuals and their families but they are not providing any information related to health and public safety.

In India, the WHO is also playing an important role in promoting health-related activities among youth. Recently in 2018, Prime Minister Narendra Modi signed an agreement between India and WHO to improve the health status of Indians and to facilitate them in the uplifting status of public health.

A study was conducted with the main purpose of Health promoting lifestyle (HPL) by Tol [8], which focus on the life promotion via lifestyle process consisting of six main factors like physical activities, nutrition, interpersonal relation, stress management and spiritual growth. This study actually aims to determine the relation between the health promoting lifestyle and its factors. The cross sectional study was analyzed on undergraduate students at school of health Isfahan University of Medical Sciences, using a census method. The mean age of the students 21.12 years old. Among the six factors, the mean of spiritual growth and responsibilities 22.01 ± 2.224 . 40.7% student had the good general life quality and 19.8% student had the average global life quality. The lowest and highest frequencies of health related life quality, the student having 58.6% good and 9% excellent health. Except the two things like stress management ($p = 0.05$) and student gender, there were no substantial relationships amongst other HPL traits and gender. Health-related life quality and stress management were expressively related to each other; conversely, no statistically significant link was observed between health-related life quality and nutrition, physical activity, interpersonal relations and spiritual growth. The whole study concluded on the facts that there is a promising relationship between accepting and adopting the health promoting lifestyle with the aspects of its spiritual growth and stress management as compared to adopting general lifestyle.

Health-promoting lifestyle (HPL) is one of the main principles, which govern health, and includes six dimensions those are spiritual growth, health responsibility, nutrition, stress management, interpersonal relations, and physical activity. This study was conducted by Zohreh [5] that evaluates HPL among students (mainly females) of School of Health, affiliated to Mashhad University of Medical Sciences in 2014. In this cross-sectional study, 107 students of Mashhad School of Health using stratified random sampling were incorporated. The lifestyle of the student was 9.3%, 84.1%, and 6.5% poor, moderate and good, respectively. The mean scores of HPL factors were as follows: spiritual growth: 30.27 ± 5.4 , health responsibility:

32.15±6.5, nutrition: 15.65±4.06, stress management: 12.76±2.9, interpersonal relations: 21.34±4.35, and physical activity: 13.69±5.1. A significant relationship was seen between gender and physical activity ($p < 0.05$). This study concluded that the majority of students had a moderate score of HPL. Since the lowest scores were correlated to physical activity and stress management, more facilities and training programs are required to improve these issues.

Another study that inspects the health-promoting behaviors and psychosocial well-being of university students in Hong Kong was conducted by (Regina) [7]. This was a cross-sectional study conducted with the sample ($n = 247$) of students entered at various locations on campus. The questionnaire was given by the Chinese version of the Health Promotion Lifestyle Profile II to the students. By the statistics, the result analyzed that the few universities students had a sense of “health responsibility” (6.5–27.1%), participate in the physical activity (31.2%), or exercised regularly (13.8%). Less than half ate fruits (35.2%) and vegetables (48.9%) every day. Positive personal growth was reported by 50.6% of the students; 42.5% used stress-management skills and 74.1% rated their interpersonal relationships. There is no significant difference between the students' scores on the health accountability, nutritional habits, spiritual growth, interpersonal relations, or stress-management subscales of HPL II by gender, but males scored better than females ($p = 0.001$) on the physical exercise subscale.

In research study conducted to examine the perception of college students from Kuwait University about a healthy lifestyle and its consequence on their health was conducted by Hanaa in 2015 to study the healthy lifestyle of students examined on the parameters of diet, exercise and sleep [4]. For the purpose of this study, a questionnaire was circulated to the participants, which included 150 undergraduate college students from Kuwait University. The results of the study reveal that the majority of the students showed the healthy lifestyle (50.0%) eat a healthy diet, and (48.7%) suffer from iron deficiency anaemia (IDA), while (46.3%) get at least seven to nine. The research suggests that its findings are not enough to get to a stint conclusion and suggests some more studies to be incorporated for studying the effects of a healthy lifestyle on the health.

The aim of this research is to find out the factors that are responsible for the good health of students. These factors include living-status, diet, exercise and many others.

Methods

Study design:

The study has been conducted to determine the student health and lifestyle at Lovely Professional University for three purposes. The first purpose of this study is to determine the frequency distribution of categories like nationality, gender, age, weight, and residential status [6]. The second purpose is to identify

the difference in health-promoting lifestyle between hostellers and day scholars. And the third purpose is to determine the demographic finding of physical activity, stress, nutrition, health and weight gain.

The Data was collected via a lifestyle questionnaire, a standard survey tool, by Student health and lifestyle survey, Edinburgh healthy university research project [2]. The analysis and the interpretation of the data were done by using SPSS/PC (statistical package for the social sciences). Data analysis combine of mean, standard deviation, frequency distributions, percentages, means, and crosstab followed by chi-square test. There are two questionnaires in which first part consists of demographic data including the student's nationality gender, age and weight while the second section consists of various aspects including stress, depression, weight, diet, exercise.

Selection of participants:

The study was designed to examine the health-promoting factors that affect the lifestyle of college students. To analyze the health and lifestyle of a college student, assessment data about college students is needed. For these requirements, participants were selected for the survey by using random sampling with the total number of 300 students of Lovely Professional University (LPU).

Statistical analysis:

The data is analyzed by SPSS. The percentage, mean, and standard deviation are used to examine the background information on the demographic data on the sample. Chi-square test is used to analyze whether a statistical association exists between non-metric dependent or independent variables. The dependent variables are stress, depression, exercise, diet, descriptive weight and health. These factors are depending on two variables that are residential status whether the student lives in hostel or day scholar.

Results: Following are the results initially calculated for the frequency distribution of different variables such as gender, residential status, nationality, weight and age. Then the data is analysed between the hostellers and day scholar with the given six factors i.e. stress, depression, exercise, vegetables and fruits serving per day, descriptive weight and health. The obtained results are summarized as follows:

Frequency distribution of variables

One hundred thirty-one college students completed the questioner, a 100 percent response rate of which 62.6 percent were male and 37.4 percent were female. Out of 131 students, 73 (55.7%) are hostellers and 58 (44.3%) are day scholars. According to the data there are 118(90.1%) are national and 13(9.9%) are the international students as shown in Table 1.

Table 1 frequency distribution of variables

Characteristics	Frequency	Percentage
Gender		
Male	82	62.6
Female	49	37.4
Residential status		
Hosteller	73	55.7
Day scholar	58	44.3
Nationality		
National	118	90.1
International	13	9.9

The mean age score of students is 21.37 ± 2.202 with minimum age as 17 and the maximum age 28. The mean score of the weight of student is 62 ± 11.185 with minimum weight 35 and maximum weight 95 which are presented in Table 2.

Table 2 Frequency distribution of variables

Characteristics	Mean	Standard deviation	Minimum	Maximum
Age	21.37	2.202	17	28
Weight	62	11.185	35	95

Stress:

In college life, we all are well aware of the fact that stress is a major issue because of academic, personal and social pressure. So the results of the study regarding the stress of college students illustrate that out of 73 hosteller students 12(9.16%) students and out of 58-day scholar students, 3(2.29%) students suffer the tremendous stress. 14(10.69%) hosteller students and 4(3.05%) day scholar students suffer more than average stress. 30(22.90%) hostellers and 19(14.50%) day scholar students go through average stress. 8(6.11%) hostellers and 15(11.45%) day scholar students feel less than the average stress. 9(6.87%) hostellers and 17(12.98%) day scholar students feel no stress as shown in Table 3 and Figure 1. To calculate the chi-square statistics, the first two rows of Table 3 has been merged to satisfy the minimum cell value criteria as 5 as shown in Table 4. The calculate chi-square value is 16.4995 with the p-value of the stress calculated by crosstab is $0.000896 (< 0.05)$. The null hypothesis is rejected in the case of stress. Therefore, from the obtained results it can be calculated that hosteller's students are more stressed as compare to day scholar.

Table 3 : Stress * Hosteller/ Day scholar Cross tabulation

Count		Hosteller/ Day scholar		Total
		HOSTELLER	DAY SCHOLAR	
Stress	TREMENDOUS STRESS	12	3	15
	MORE THAN AVERAGE STRESS	14	4	18
	AVERAGE STRESS	30	19	49
	LESS THAN AVERAGE STRESS	8	15	23
	NO STRESS	9	17	26
Total		73	58	131

Table 4 : Stress * Hosteller/ Day scholar Cross tabulation

Count		Hosteller/ Day scholar		Total
		HOSTELLER	DAY SCHOLAR	
Stress	MORE THAN AVERAGE STRESS	26	7	33
	AVERAGE STRESS	30	19	49
	LESS THAN AVERAGE STRESS	8	15	23
	NO STRESS	9	17	26
Total		73	58	131

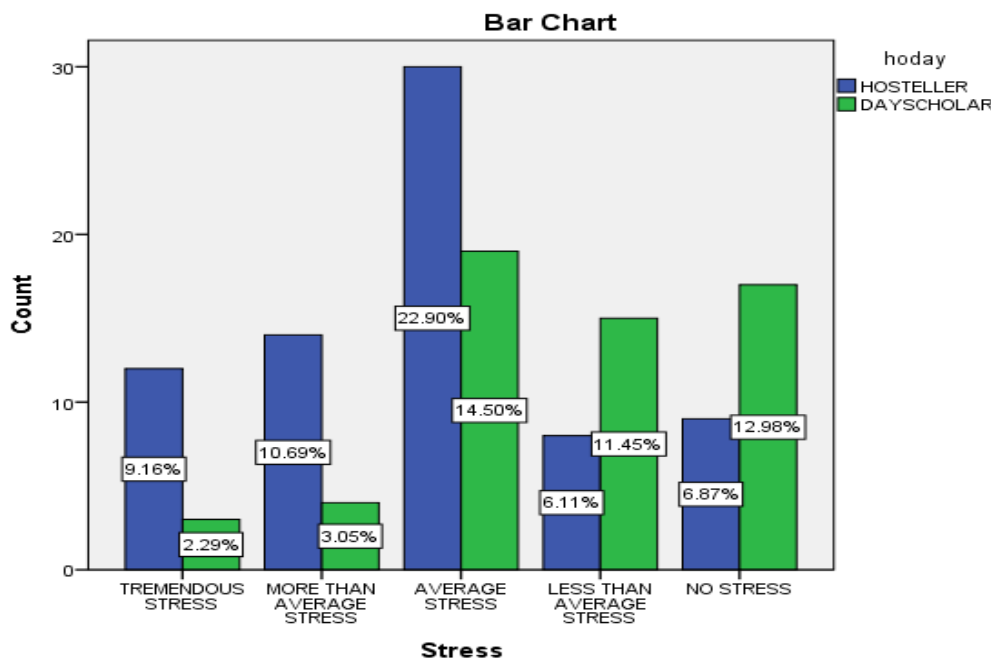


Figure 1 Stress * Hosteller/ Day scholar

Depression

From the obtained result it can be stated that 15(11.15%) students of both hosteller and day scholars are diagnosed for depression while 58(44.27%) hosteller and 43(32.82%) day scholar students are not diagnosed for depression as shown in Table 5 and Figure 2. The value of chi-square is 0.5169 with the p-value of depression calculated by crosstab is 0.472(>0.05). Therefore, the null hypothesis is accepted. Hence there is no any significant difference between residential statuses.

Table 5: Depression * Hosteller/ Day scholar Cross tabulation

Count

	Hosteller/ Day scholar			
	HOSTELLER	DAYSCHOLAR	Total	
Depression	YES	15	15	30
	NO	58	43	101
Total	73	58	131	

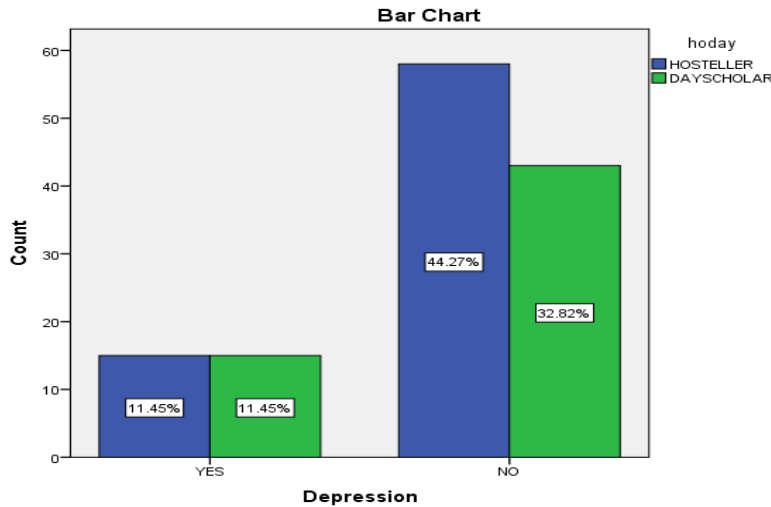


Figure 2: Depression * Hosteller/ Day scholar

Exercise

Analyzing the data regarding physical health, it can be stated that there are 31 (23.66%) hostellers and 20 (15.27%) day scholar students who never to do exercise. 38(29.01%) hosteller and 28 (21.37%) day scholar students have reported doing exercise often. 4(3.05%) hosteller and 10(7.63%) day scholar students to do exercise regularly as shown in Table 6 and Figure 3. The chi-square value is 4.8046 with the p-value of exercise calculated by crosstab is 0.091(>0.05) and hence the null hypothesis is accepted.

Table 6: Exercise * Hosteller/ Day scholar Cross tabulation

Count		Hosteller/ Day scholar		Total
		HOPELLER	DAYSCHOLAR	
Exercise	Never	31	20	51
	Often	38	28	66
	Regularly	4	10	14
Total		73	58	131

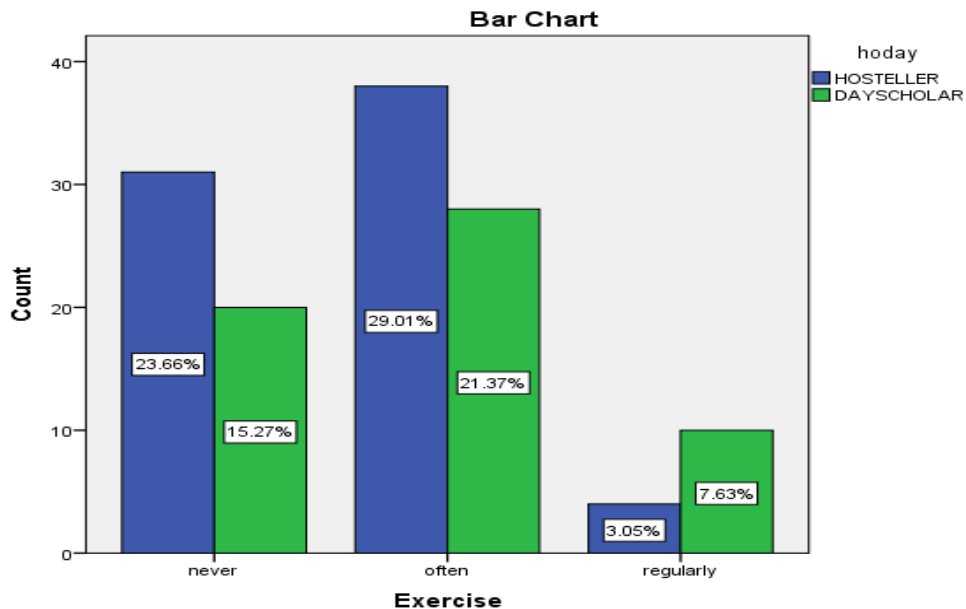


Figure 3: Exercise * Hosteller/ Day scholar

Vegetables and fruits serving per day

As per the given information, for the consumption of fruits and vegetables that a student consumes per day out of 73 hostellers 24(18.32%) and out of 58-day scholar 12(9.16%) do not consume any fruits and vegetables once in a day. There are equal numbers of majority (5.34%) of hosteller and day scholar students who consume fruits and vegetables once in a day. 23(17.56%) hosteller and 21(16.03%) day scholar students consume fruits and vegetables one or two times in a day. 12(9.16%) hosteller and 10(7.63%) day scholar eats fruits and vegetables two or three times in a day. The students who eat fruits and vegetables three or four times per day are 6(0.76%) hostellers and 4(3.05%) day scholars as shown in Table 7 and Figure 4.

To calculate the chi-square statistics, the last two rows of Table 7 has been merged to satisfy the minimum cell value criteria as 5 as shown in Table 8. The calculate chi-square is 2.6567 with the p-value of the serving fruits and vegetables per day calculated by crosstab is 0.6168(<0.05) in Table 8. The null hypothesis is accepted.

Table 7: Fruit and vegetables serving per day * Hosteller/ Day scholar Cross tabulation

Count	<u>Hosteller/Day scholar</u>		
	HOSTELLER	DAYSCHOLAR	Total
Fruit_and_vegetables_serving_per_day			
0 servings per day	24	12	36
0-1 servings per day	7	7	14
1-2 servings per day	23	21	44
2-3 servings per day	12	10	22
3-4 servings per day	6	4	10
4 or more servings per day	1	4	5
Total	73	58	131

Table 8: Fruit and vegetables serving per day * Hosteller/ Day scholar Cross tabulation

Count	<u>Hosteller/ Day scholar</u>		
	HOSTELLER	DAYSCHOLAR	Total
Fruit and vegetables serving per day			
0 servings per day	24	12	36
0-1 servings per day	7	7	14
1-2 servings per day	23	21	44
2-3 servings per day	12	10	22
3-4 or more serving per day	7	8	15
Total	73	58	131

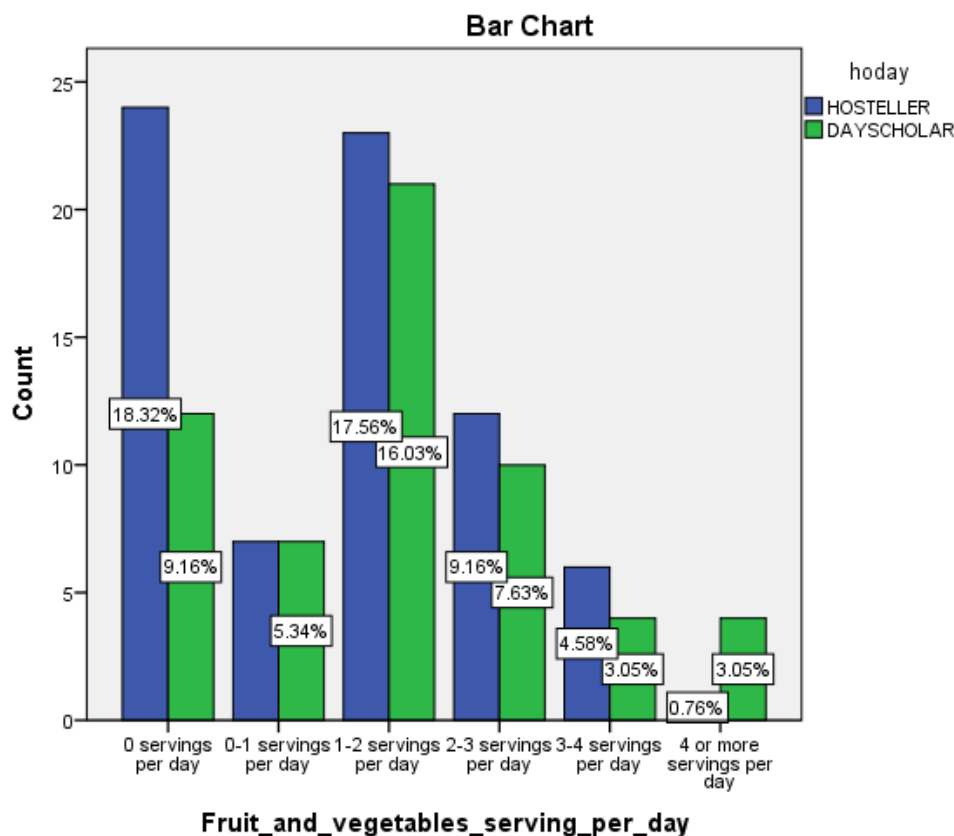


Figure 4: Fruit and vegetables serving per day * Hosteller/ Day scholar

Descriptive weight

From the collected data on analyzing the weight of the students, it was found that out of total 20(15.27%) hosteller and 16(12.21%) day scholar students are having the abnormal/overweight. 53(40.46%) hostellers and 42(32.06%) day scholar students have a normal weight as shown in Table 9 and Figure 5. The calculated chi-square value is 0.0006 with the p-value of the descriptive weight calculated by crosstab is 0.981(>0.05). The null hypothesis is accepted.

Table 9: Descriptive weight * Hosteller/ Day scholar Cross tabulation

Count	Hosteller/ Day scholar		Total
	HOSTELLER	DAYSCHOLAR	
ABNORMAL/UNDERWEIGHT/ OVERWEIGHT	20	16	36
NORMAL	53	42	95
Total	73	58	131

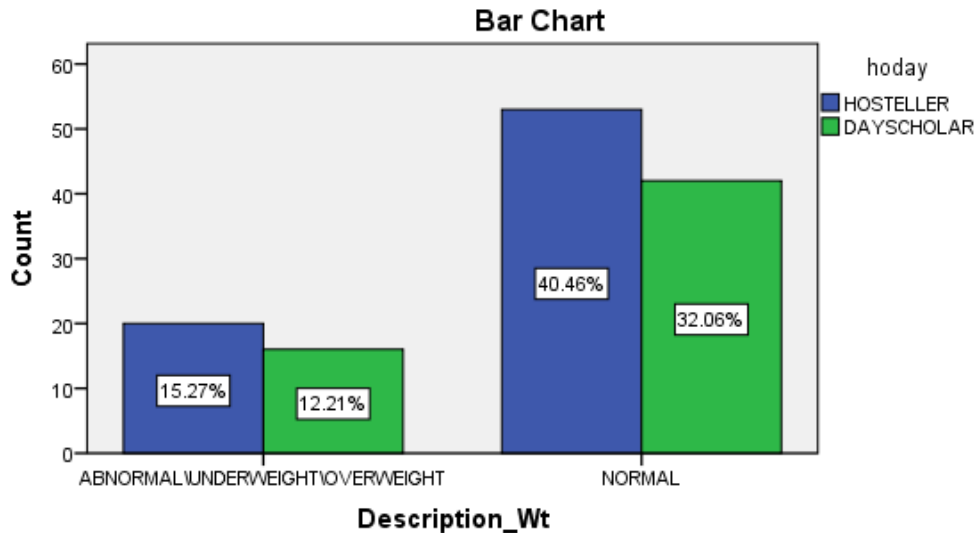


Figure 5: Descriptive weight* Hosteller/ Day scholar

Health

According to the analyzed data for the overall health of the students, it is observed that 2 (0.76%) hostellers and 1(0%) day scholar feels very bad health, 3(2.29%) hostellers and 1(0.76%) day scholar students having bad health. 18(13.74%) hostellers, as well as 9(6.87%) day scholar students, are having the average health. The majority of the students with good health is 30(22.90%) hostellers and 20(15.27%) day scholar students. There is an equal majority of 16(12.21%) of students who feel very good health whether they live in a hostel or their home. The students having excellent health are 4(3.05%) hostellers and 11(8.40%) day scholars as shown in Table 10 and Figure 6.

To calculate the chi-square statistics, the first three rows of Table 10 has been merged to satisfy the minimum cell value criteria as shown in Table 11. The calculate chi-square is 7.8878 with the p-value of the overall health of student calculated by crosstab is 0.48388(<0.05) as shown in Table 11. The null hypothesis is accepted. Hence there is no any significant difference between the residential statuses. Both hosteller and day scholar student are healthy.

Table 10: Health * Hosteller/ Day scholar Cross tabulation

Count		Hosteller/ Day Scholar		
		HOSTELLER	DAYSCHOLAR	Total
Health	Average	23	11	34
	Good	30	20	50
	Very good	16	16	32
	Excellent	4	11	15
Total		73	58	131

Table 11: Health * Hosteller/ Day scholar Cross tabulation

Count		Hosteller/ Day Scholar		
		HOSTELLER	DAYSCHOLAR	Total
Health	very bad	2	1	3
	Bad	3	1	4
	Average	18	9	27
	Good	30	20	50
	very good	16	16	32
	Excellent	4	11	15
Total		73	58	131

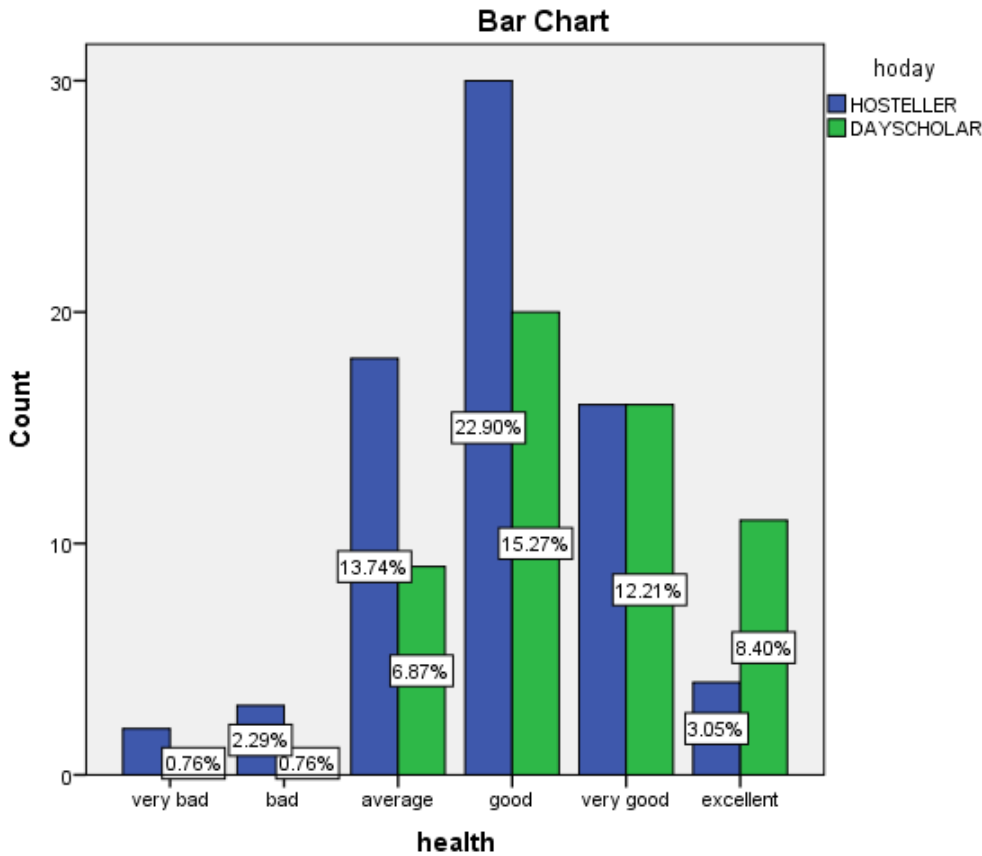


Figure 6: Health * Hosteller/ Day scholar

Conclusion:

To validate the health issues of hostler via day scholar student’s cross tabulation is performed to analyze the null hypothesis that the health of student has no significant relation with the living place (hostler’s/ day scholars). By using chi-square test, we observed the results between day scholars/ hostellers with six different parameters. The different parameters involved are stress, depression, exercise, diet, descriptive weight and health. After the analysis of the results, the null hypothesis between day scholars/ hostlers with all these parameters is accepted except the factor of stress. The p-value of day scholars/ hostlers via depression is 0.472 (>0.05), descriptive weight is 0.981(>0.05), exercise is 0.091(>0.05), serving the fruits per day is 0.438(>0.005), overall health is 0.157(>0.05) and the stress is 0.000896(>0.05). The result shows that whether a student is a day scholar or a hostler they are having good health with respect to the observed factors. Only stress is a major factor which is analyzed more in hostellers as compared to a day scholar. The reason for this could be family support which plays an important aspect in everybody life.

Acknowledgment:

To be inserted...

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