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Research Article

A Survey Study on Freetime Behaviour of Undergraduate Students in Mechanical Engineering Program

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Abstract: This research purposed to study on freetime behaviours of undergraduate students in Mechanical Engineering program at Silpakorn University during their freetime and the correlation between their behaviours and their learning achievements via using the mixed methods research. The sample were 347 students in semester year 2/2016. The research instruments included questionnaire and structured interview. The data were statistically analyzed by using frequency, percentage, mean, S.D. and One-way ANOVA. The research findings were as follows: The students spent the average of 75.54 hours per week or 35.26 hours per week (46.68%) on resting, 21.42 hours per week (28.36%) on their study, 16.79 hours per week (22.23%) on others, and 2.07 hours per week (2.74%) on doing exercises, respectively. The correlation between behaviours and learning achievements of students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University shows that spending time on studying, resting, doing exercises, and other activities, and the learning achievements of the three groups were different and statistically significant at the 0.05 level.

Keywords: Freetime Behaviours, Achievement of Students

1. Introduction

Freetime activities can be done freely or without any social and environmental pressures. However, people should spend it according to their inner drive, personal satisfaction, and instinct. (Kraus, 2000 ; Bergero, 2008 ; Stebbins, 2012) Freetime can be spent by being idle, which means doing nothing. Spending freetime does not necessarily have to involve any activities. To decide whether that moment is actually free time depends on an individual's attitude and character. There are no measures or criteria to identify this. (Russell, 2005 ; , Bammel, and Bammel, 1996) Activities that students do when they are free can be considered as their learning process. This is because they recognize the importance and benefits of spending free time on activities that reflect their needs. (Pesavento et al., 2008) The study shows that spending free time is a process that an individual is satisfied with how their time is spent and how it contributes to their learning and quality of life. Example of skills gained from recreations during freetime may include problem solving skills and learning recognitions. Those who have freetime to spend will be healthy, happy, and enjoy the activities they do. (Mundy, 1998) Moreover, the study on spending freetime is an element that will cover services which focus on learning and development, and social interaction in the environment that plays role in an improvement of an individual, family, school, and society. Therefore, doing leisure activities is a way to increase learning experience as well as quality of life (Aslan, 2009 ; Aslan et al., 2012) This correlates with the study on how motives behind spending freetime significantly influence the benefits of leisure activities and how it shows that the motives directly influence satisfaction, according to the overall direct and indirect motives behind the activities. This means those who feel content in life tend to have better quality of life. (Stumbo and Peterson, 2004) ; Sivan and Ruskin, 2000). Factors and limitations of an individual may include the frequency, difficulty, continuity, and quality of leisure activities. Those factors may obstruct them from doing leisure activities and decrease the pleasure of spending their freetime (Cho et al., 2010)

Nowadays, students spend most of the time on their study and behaving in a way that can help develop their quality of life. Their actions at different times are expressed according to their capability. Leisure activities of an individual may include socializing, visiting cultural places,

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playing sports, watching television, using the internet, reading, and doing other hobbies. (Electronic Transactions Development Agency, 2016) However, some students have difficulties spending their freetime because they lack knowledge and skills to do so. (Chalermputipong, 2011) This can be a big issue for them and it can be significant because there will be less time to do daily tasks. Their time will decrease from 72 hours per week to around 40 hours per week. This issue obviously shows how it is important to spend freetime wisely in order to achieve goals. Spending freetime on academic activities are promoted so students can learn and develop themselves according to their ability and proficiency within their interest, capability, and differences. (Office of the Council of State, 2018) One factor that identifies differences between individuals is their overall learning achievements throughout the course. It is one of the most reliable tool to tell the differences.

Objectives of this research is to study behaviours of students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University during their freetime and the correlation between their behaviours and their learning achievements. Outcomes of this study can be used as guidelines and suggestions to improve curriculum and activities of the university. Relevant departments can also use the results to explore suitable activities for students so they can find strategy to improve their quality of life as well as encourage them to spend their time wisely for their own benefits.

2. Methodology

2.1 The population and sample

The population was 599 students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University in semester 2/2016. The sample was 347 students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University in semester 2/2016. The method of determining the sample size of this research was derived from the determination of the percentage of the population. If the population size is hundreds, the sample should be used at least 25%. Therefore, the sample of this research is 57.92% of the population. Then, there were 3 cluster random sampling groups according to GPA level in semester 1/2016 as follows: 31 students, GPA 0-1.99, 262 students, GPA 2.00-2.99, and 54 students, GPA 3.00-4.00.

2.2 The instrument used to collect data

The instrument used to collect data was 1) the structured interviews topics on the personal data of students were close ended question, consisting of gender, year level studying, hours each day on sleeping, enrolled, and GPA in semester 1/2559, and 2) the self-administered questionnaires topics on the students' behaviours during freetime. The questionnaires were in checklist format and considering from the score level according to the interpretation criteria to classify the average score with 5 levels of dividing, use the highest score, minus the lowest score, and divide via the desired level (5-1)/5 = 0.80. (Allyn and Bacon, 1998 ; Pearson Education Inc. , 2006)

2.3 Data analysis

Data analysis was 1) the structured interviews analysis by using content analysis, frequency, and percentage, and 2) the self-administered questionnaires analysis by using mean, standard deviation, percentage, and One-way ANOVA.

3. Finding

1) The number of students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University participated as a sample group of this research was 347. According to the research results, there were 234 male students, 67.44%, and 113 female students, 32.56%. The majority of them, 110 students or 31.70%, were in their first year. 305 students, 87.90%, spent 6-8 hours each day on sleeping and resting. 278 students, 80.12%, enrolled in semester 1/2016 for 18-22 credits. 262 students or 75.51% had their GPA ranging from 2.00-2.99 in the semester. See table 1.

Table. 1 The data of students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University.

The data of students		Number of person	Percentage (%)
Gender	Male	234	67.44
	Female	113	32.56
Year level studying	1st year	110	31.70
	2nd year	94	27.09
	3rd year	47	13.55
	4th year	76	21.90
	5th to 8th year	20	5.76
Hours each day on sleeping	Less than 6 hours	28	8.07
	6-8 hours	305	87.90
	More than 8 hours	14	4.03
Enrolled in semester 1/2016	Less than 18 credits	60	17.29
	18-22 credits	278	80.12
	More than 22 credits	9	2.59
GPA in semester 1/2016	0-1.99	31	8.93
	2.00-2.99	262	75.51
	3.00-4.00	54	15.56

2) The correlation between students' behaviours during free time and their learning achievements can be seen in table 2.

From table 2, students spent the average of 75.54 hours per week or 46.68% on resting, 28.36% on their study, 22.23% on others, and 2.74% on doing exercises, respectively. Their learning achievements are as follows:

Table. 2 The correlation between students' behaviours during free time and their learning achievements.

The students' behaviours during free time	Number of person	Hours of during free time per week		S.D.	F	p
		$\bar{x}$	%			
1. Studying, such as access to libraries, special classes, homework/reports						
0.00-1.99	31	21.29	29.02	2.02	201.02	0.000*
2.00-2.99	262	20.60	27.59	1.45		
3.00-4.00	54	25.52	31.48	2.21		
Total	347	21.42	*28.36*	2.41		
2. Resting, such as surf the Internet, watch movies, listen to music, travel						
0.00-1.99	31	33.74	45.99	7.55	6.82	0.001*
2.00-2.99	262	35.33	47.31	0.74		
3.00-4.00	54	35.78	44.13	2.57		
Total	347	35.26	46.68	2.57		
3. Doing exercises, such as fitness, running, football						
0.00-1.99	31	1.94	2.64	1.41	4.97	0.007*
2.00-2.99	262	2.00	2.68	0.98		
3.00-4.00	54	2.52	3.11	1.56		
Total	347	2.07	2.74	1.14		
4. Others, such as special work, daily activities						
0.00-1.99	31	16.39	22.34	2.42	4.21	0.016*
2.00-2.99	262	16.74	22.42	1.25		
3.00-4.00	54	17.26	21.29	1.59		
Total	347	16.79	22.23	1.46		
Total mean of students' behaviours during free time						
0.00-1.99	31	73.36	100	8.24	72.51	0.000*
2.00-2.99	262	74.67	100	8.24		
3.00-4.00	54	81.08	100	5.80		
Total	347	75.54	100	4.42		

* The level of statistical significance at 0.05

Students whose GPA ranged from 0.00-1.99 spent 73.36 hours per week, 45.99 %, on resting, 29.02% on their study, 22.34 on others, and 2.64 on doing exercises, respectively.

Students whose GPA ranged 2.00-2.99 spent 74.67 hours per week, 47.31 %, on resting, 27.59 % on their study, 22.42 on others, and 2.68 on doing exercises, respectively. Students whose GPA ranged 3.00-4.00 spent 81.08 hours per week, 44.13 %, on resting, 31.48 % on their study, 21.29 on others, and 3.11 on doing exercises, respectively. The correlation between behaviors and learning achievements of students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University shows that spending time on studying, resting, doing exercises, and other activities, and the learning achievements of the three groups were different and statistically significant at the 0.05 level.

4. Discussion and Conclusion

The students studying the Bachelor of Engineering Program in Mechanical Engineering at Silpakorn University spent the average of 75.54 hours per week or 46.68% on resting, 28.36% on their study, 22.23% on others, and 2.74% on doing exercises, respectively. The correlation between behaviours and learning achievements of students were diff Sirirattanajitt,erent and statistically significant at the 0.05 level.

According to the study, the analysis of the behaviours during freetime found that students spent most of their time on resting, which included using the internet, watching movies, listening to music, and travelling, while they spent the least of their time on going to a gym, jogging, and playing football. Since everything seems to be available online nowadays, students tend to spend their freetime online and that means they do less exercises. The outcomes of the study on spending free time on academic activities such as going to a library, taking extra courses, and doing homework or assignments, showed that students who had higher learning achievement spent more time on academic activities than those who had lower learning achievement. The reason for this can be because students with higher GPA are more enthusiastic in learning. However, in general, it is found that spending freetime on academic activities is more common than other activities such working or doing daily chores. This is not consistent with the study to the leisure time behavior of the students in Dhurakij Pundit University. The results revealed that the personal behavior was the highest time using behaviors among students, followed by part-time work, learning and social behaviors respectively. (Thongboonta, , 2012) Moreover, the study to the relationship between leisure behaviors and learning styles of the first-year undergraduate students in Hatyai University. The research results revealed that the leisure behaviors significantly related to learning styles at 0.05 and 0.01 levels. Learning, recreation and interactive activities of the leisure behaviors significantly related to the learning styles such as independence, collaboration, dependence, competition and participation except health activity of the leisure behavior significantly related to the avoidance learning style (Sirirattanajitt, 2015)

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