

# Sport and Exercise Behavior of Students in Suan Sunandha Rajabhat University

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**Abstract**—The purpose of this research is to study sport and exercise behavior of students in Suan Sunandha Rajabhat University in September of 2012. The sample group used in this research was a group of regular students in undergraduate school enrolled in faculty of science and technology. This sample group consisted of 1,858 students. The research tool used to collect result was the checklist. The data was calculated by statistical percentage. From the research, it was discovered that most students did exercise in previous month. 71.6% of students exercised by running. 61.1% of students exercised in their neighborhood. 60.4% of students exercised in order to keep fit. 60.2% of students agreed that the result from this research can be educational and inspirational for students in campus in terms of living healthily by exercise.

**Keywords**—Exercise behavior, sport behavior, students.

## I. INTRODUCTION

ACCORDING to the 11<sup>th</sup> National Economic and Development Plan of 2012-2016, it stated the purpose of decreasing volume of health risk factors among Thai people as a whole by creating physical and emotional happiness [1]. It can be created by developing knowledge of health and skills to look after one's self, family, community and the nation. It also focuses on decreasing all risk factors from workplaces and household, developing the system of health awareness and capturing the hidden risks in development process. More importantly, the public health care support is very essential and should not be missed. This statement is coherent with the national health development plan which specifies the proactive strategy of health support, disease prevention and control. We should encourage the reduction of risk factors in health. Citizens should have physical and mental well-being. They should also possess knowledge and skills in health care at the individual, family and community levels. They should participate in formulating public policies regarding health care. Public health services should be improved through better quality and coverage, and promote the use of alternative medicines. The supply of health personnel should be redistributed more equitably and a national health database should be created. Monetary and fiscal measures for health care should be managed in an efficient and sustainable manner. It's also essential to have strategy in children development in physical, emotional and intelligent terms. Drugs awareness should also be part of the plan, as well as the measure of controlling the risk factors among people in the

society. More importantly, exercising should be promoted as a way to be healthy [2].

The 5th National sport development plan of 2012-2016 by ministry of tourism and sport also has the framework which claims sport development as "part of the national development". According to the plan, national growth depends on the development of people and society. Healthy citizen are the most important source to drive the country to prosperity. Therefore, the complete and standardized health support strategy is needed. This strategy should involve sport supporting among youth, to create sport behavior among young people and use sport as the tool to good quality of life. The idea of sport development is very essential for the nation. Not only making people healthy and happy, sport also represents national's prosperity. As sport is a factor of country wellness, it should be supported by all bureaus and promoted to be active in every part of the country [3]. Exercise means any movement of the body which has the purpose of creating good health, enjoyment and socialization by using simple activity or uncomplicated rules, such as walking, jogging, rope skipping, weight lifting (daily or professional movements are not included.) There are 4 categories of exercise divided by purpose: endurance, strength, balance, and flexibility [4].

From the 2007's survey of National Statistics Office [5] about exercise behavior of people above 11 years old in 2003, 2004 and 2007, it stated that the tendency to exercise was risen up slightly from 29% to 29.1% and 29.6% respectively. Men tended to exercise more often than women. For frequency volume, people exercised quite regularly. 38.2% said they exercised for 3-5 days a week. 28.2% exercised 6-7 days. 21.6% did some exercise for less than 3 days a week and 12% did not have the behavior of exercise. For duration of exercise time, 31% exercised for 21-30 minutes and 29% exercised for 31-60%, respectively. 14.2% did it more than 60 minutes and 3.9% worked out less than 10 minutes per time. However, it is noticeable that the percentage of work out time was very high in 2004 (33% in 31-60 minutes and 23.3 in more than 60 minutes), which can be assumed that there was a serious health campaign promoted that year. For reason of exercise, 76.9% said they wanted to be healthy. 8.5% said they exercised because of friends' invitation. When taking a look at the relationship between hospital patients and exercise, it was stated that 68.5% of the new patients within the previous month did not exercise in their everyday life.

National statistic office also runs the same survey in 2011. There were 57.7 million people in this survey. The survey found out that only 26.1% of people exercised in the previous month. Men also performed exercise more than women

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(27.4% and 25.0% respectively. Comparing to the last survey, the volume of national exercise percentage has dropped down for 3%. When looking at 17.1 million patients admitted in hospitals last month, 73.1% of the patients didn't do any exercise for at least a month. Also, 76% of 3.1 millions of patients admitted within last year didn't do much exercise either [5]. Suan Sunandha Rajabhat University has founded the College of Allied Health which has major subjects in health science and aesthetic health science. College of nursing and health is also founded as a support to domestic healthiness. As healthiness is a key strategy to national growth, this research is aimed to support that strategy. The result from this research is expected to be useful for university and ministry of health in promoting exercise among Thai people. As a role model, Suan Sunandha appoints students to take the course of science and technology for quality of life, as a hope for students to have health awareness and know how to take care of themselves. This course is conducted by me. Thus, running a survey of students' sport and exercise behavior is very important in order to collect the factual data as a tool for lesson planning. This research will not only benefit the students academically, but also will encourage them to realize how important exercise is.

It is hoped that this research will help the students, young generation of Thailand, having a healthy life by adapting a healthy lifestyle that includes exercise and sport into their daily routine, so they will be physically and emotionally ready to lead Thailand to everlasting growth.

## II. LITERATURE REVIEW

This research uses the related research paper about sports and exercise behavior of Khanitta Imsuwan, Chop Nuklam and Somnuek Aimprom, who conducted a similar research in 2009 [6]. Their research took place in Piboonsongkram Rajabhat University with the sample group of 1,422 students in the first year of 2008. From their research, 91.1% of the sample group exercised. 75.2% of them exercised 3-5 days a week, 16.1% exercised 1-2 days a week, and 8.7% exercised 6-7 days a week. For duration of exercise time, 45.1% worked out 31-45 minutes per time and 41.5% exercised longer than 46 minutes. For style of exercise, most students did jogging (83.5%) and 48.6% joined aerobic dance group. Students exercised mostly with group of friends (94.8%), with friends in same gender (90.3%), with boyfriends/girlfriends (33.5%), with friends in the opposite gender (31.1%) and alone (8.7%). The purposes for exercising were to socialize (77.8%), to have better shape (74.4%), to have better personality (73.7%), to build up physical competency (72.2%) to bond among group of friends (71.7%), to spend time doing something good (64.5%) and to put sport in terms of hobby (33%). Places to exercise were campus gymnasium (32.2%) and the park (29.5%). Most students exercised after school (99.4%) and 0.6% worked out in the morning [6].

Chalong Apiwongse did the research about exercise behavior of students in Thai Commerce University in 2011 [7]. 400 students were in the sample group of this research chosen by accidental sampling. The finding was released that

this group of students had average level of exercise and health awareness. Male students had different level of knowledge with female students in the statistical significance of 0.05. In terms of exercise behavior, both male and female students didn't have different level of satisfaction. It was implied that the campus lacks of sport-like areas to encourage students to exercise because the campus is located downtown and has limited space, which can't be expanded to have supportive sport area.

From the studies above, students showed uniqueness in exercise in terms of frequency, duration, consistency, types of exercise, places to exercise and reasons to exercise. The studies also pointed out the importance of exercise "behavior"; to make it become part of students' lives. With the same purpose, this research aims to study exercise behavior of 1,858 freshmen in Suan Sunandha Rajabhat University taking the course "Science and technology for quality of life" in the first semester of 2012. The study took place from 1-30 of September, 2012. The study is targeted to find out the exercise behavior of students in order to give the right knowledge of being healthy to students. It can help students who have been exercising in the wrong way, and those who have no health awareness can adapt exercise to be part of their lifestyle and have better quality of life. Besides, students can use the knowledge from this research to share healthiness in family, community and nationwide.

## III. METHODOLOGY

In this research, the sample group was 1,858 students. The data was collected in Sunandhanusorn Auditorium and Chokaew Auditorium in Suan Sunandha Rajabhat University. These auditoriums were used as the lecture room for the course. Staff handed out the questionnaires to students. It took around 20 minutes to complete the questionnaires. Staff would collect the questionnaires and check the data at the end of the day.

## IV. FINDINGS

The students who completed the questionnaires were mostly female (1,163 students) and 695 males. The percentage was 62.6% and 34.4% respectively. 94.7% of students were in the age between 18-20 years old (94%), following by 20-22 years old (2.7%), below 18 years old (2.2%) and above 22 years old. (0.4%) The average weight was 56.1 kg and average height was 1.6 m.

Numbers of students from each faculty in the sample group might not be in the same portion. It was because this course (Science and technology to quality of life) wasn't the required subject. Therefore, numbers of students enrolling for this course varies every semester. From this research, most students are studying in management science (872 students), following by the innovation and management (483 students), industrial technology (282 students) and fine and applied arts (221 students). The percentage was 46.9%, 26.0%, 15.2% and 11.9% respectively. In terms of income, 1,282 students (69.0%) earn below 5,000 baht per month. 519 students

(29.7%) earn 5,001 -10,000 baht per month, and 57 students (3.1%) earn more than 10,001 baht per month.

TABLE I  
PERSONAL INFORMATION OF SAMPLE GROUP

	Frequency	Percent
1. Gender		1,858
Male	695	34.4
Female	1,163	62.6
2. Age		1,858
Below 18 years old	41	2.2
18 – 20 years old	1,759	94.7
21 – 22 years old	50	2.7
Above 22 years old	8	0.4
3. Salary per month		1,858
Below 5,000 - 5,000 Baht	471	62.2
5,001 - 10,000 Baht	256	33.8
Above 10,000 Baht	30	4.0
4. Faculty		1,858
Industrial Technology	282	15.22
Fine and Applied Arts	221	11.9
Innovation and Management	483	26.0
Management Science	872	46.9
5. Monthly Income		1,858
Below or equal 5,000 Baht	1,282	69.0
5,001 – 10,000 Baht	519	27.9
Above 10,000 Baht	57	3.1

TABLE II  
LINKING IN EXERCISE AND OPINIONS ON CAMPUS' SPACE AND EQUIPMENT FOR EXERCISE

Exercise	Frequency	Percent
1. Has done some exercises within last month	1,311	71.6
2. Enjoy exercise	1,206	64.9
3. There is enough space to exercise in the campus	1,157	62.3
4. Campus provides enough equipments for exercise	1,076	57.9

TABLE III  
FREQUENCY IN EXERCISING

Frequency (Per Month)	Frequency	Percent
1. Less than 3 days	645	37.4
2. 3- 10 days	850	45.7
3. 11- 20 days	273	14.7
4. 21- 30 days	90	4.8

When studying the exercise history within one month of the sample group (shown in Table II), we found out that 1,311 students (71.6%) performed some exercises. Also, 1,206 students (64.9%) shared that they really love exercising.

When asking about the opinion on the availability and convenience of campus area to exercise, 1,157 students (62.3%) said there was enough space to exercise in the campus.

When discussing the point of availability in sport equipment and space, the research showed that most of students from sample group (1,076 students, 57.9%) thought that there were enough space and equipment to exercise in the campus.

Table III displays frequency of exercise within last month of sample group. We found out that the majority of students exercised only 3-10 days last month (850 students, 45.7%), following by less than 3 days last month (645 students,

37.4%), 11-20 days last month, (273 students, 14.7%) and 21-30 days last month (90 students, 4.8%).

TABLE IV  
DURATION OF TIME SPENT PER ONE EXERCISE

Duration per One Exercise	Frequency	Percent
1. Spent 10- 20 minutes	568	30.6
2. Spent 21- 30 minutes'	753	40.5
3. Spent 31- 60 minutes	356	19.2
4. Spent more than 60 minutes	181	9.7

According to the right frequency of exercise to get fit and healthy, people should exercise 3-5 days a week or 11-20 days a month. However, when considering from the research finding, only 14.7% of sample group performed such exercise, which indicates that sport and exercise should be promoted more among this group of students.

Next is the discussion of duration of exercise each time. From Table IV, most of the sample group spent 21-30 minutes per one exercise (753 students, 40.5%), following by 10-20 minutes (568 students, 30.6%), 31-60 minutes (356 students, 19.2%) and more than 60 minutes (181 students, 9.7%).

It is a satisfying finding to see that most students have the right sport behavior in terms of time spending per each session of exercise. According to the standard, the effective time duration per each exercise should be 25-30 minutes. 753 students from the sample group were in this standard, however; it is still in low number (40.5%). So there should be a way to encourage students to spend more time in each session of exercise.

TABLE V  
CONSISTENCY IN EXERCISE

Consistency un Exercise	Frequency	Percent
1. Less than 1 month	754	40.6
2. 1- 3 months	734	39.5
3. 4- 6 months	187	10.1
4. More than 6 months	183	9.8

Considering the overall consistency of exercise, 754 students (40.6%) exercised less than a month, respectively following by 1-3 months (734 students, 39.5%), 4-6 months (187 students, 10.1%) and longer than 6 months (183 students, 9.8%).

The result from Table V showed that only few students performed the healthy style of exercise consistency (more than 6 months). Only 183 students (9.8%) have been exercising for longer than 6 months. It is the urgent concern for us and there should be a way to improve.

TABLE VI  
TYPES OF SPORT OR EXERCISES AMONG SAMPLE GROUP

Types of Sport or Exercises	Frequency	Percent
1. Jogging	1,135	61.1
2. Badminton	1,016	54.7
3. Walking	656	35.3
4. Swimming	596	32.1
5. Aerobic Dance	466	25.1
6. Playing Football	426	22.9
7. Playing volleyball	329	17.7
8. Using treadmills	316	17.0

Table VI displays types of sport or exercise that students did. The most popular workout is jogging, following by playing badminton, walking, swimming, aerobic dancing, playing football, volleyball and using treadmills.

In Table VII, we can see the percentages of locations where students exercised. Most students exercised at home (1,122 students, 60.4%), following by in the park (1606 students, 32.6%), campus football pitch (458 students, 24.7%), multipurpose field (336 students, 18.1%), private gymnasium (283 students, 15.2%) public gymnasium (153 students, 8.2%) and monastery areas (31 students, 1.7%).

TABLE VII  
LOCATION OF EXERCISE

Location	Frequency	Percent
1. Home	1,122	60.4
2. Campus football pitch	458	24.7
3. Park	606	32.6
4. Campus area	336	18.1
5. Multipurpose field	367	19.8
6. Public gymnasium	153	8.2
7. Private gymnasium	283	15.2
8. Monastery area	31	1.7

Table VIII displays students' motivation to exercise. We found out that keeping fit and healthy ranked number 1 on table VIII (1,152 students, 62.0%). Then follows by losing weight (647 students, 34.8%), decreasing stress (517 students, 27.8%), toning body (473 students, 25.5%), accompanying friends (336 students, 18.1%) and to stabilize personal health condition (115 students, 6.2%).

TABLE VIII  
MOTIVATION TO EXERCISE

Motivation to Exercise	Frequency	Percent
1. Keeping fit and healthy	1,152	62.0
2. Accompanying friends	336	18.1
3. Stabilizing personal health condition	115	6.2
4. Losing weight	647	34.8
5. Decreasing stress	517	27.8
6. Toning body	473	25.5

When asking students to rank 8 activities that they want the university to support and provide more, they voted badminton to be the first priority. Table IX shows percentage of activities that need to be supported in campus. The descending order will be badminton, swimming, football, aerobic dance, jogging, volley ball, yoga and basketball, respectively.

TABLE IX  
ACTIVITIES THAT NEED MORE SUPPORT FROM UNIVERSITY

Activities	Frequency	Percent
1. Badminton	762	59.0
2. Swimming	658	35.4
3. Football	449	24.2
4. Aerobic Dance	439	23.6
5. Jogging	431	23.2
6. Volleyball	427	23.0
7. Yoga	367	19.8
8. Basketball	342	18.4

## V. DISCUSSION

After studying the research findings in locations of exercise, We found out that the majority of the sample group loved to exercise at home (60.4%), following by at campus gymnasium (24.7%). It is relevant to the survey from National statistic office in 2007 that mostly people exercise at home (32.9%) following by campus gymnasiums (25.7%) (National statistic office, 2008: Executive summary). In duration of exercise session, the smallest percentage is in the group that exercised longer than 60 minutes per one time (9.8%), which is, as well, similar to the survey of National statistic office stated that only 8.5% of people worked out longer than 60 minutes. Another similarity is in the exercise motivations. Most students in this research exercised to keep fit and healthy (62.0%) and most people in National statistic office's survey also exercised to keep fit (76.4%) (National statistic office, 2011: 3). However, the secondary motivations of both researches are different. In this research, the second motivation is to lose weight, while the research from national statistic office said the 2nd motivation was to accompany friends.

In types of sport and exercise, the most popular activity in this research is jogging (61.1%). It agrees with the research of Khanitta Imsuwan, Chop Nuklam and Somnuek Aimprom in 2009 which stated that most students in Piboonsongkram Rajabhat University exercised by jogging (83.5%) [6].

Overall, most students in Suan Sunandha Rajabhat University enjoy exercising and realize how important exercise is to their health. However, only a few numbers of students do not like to exercise. As a result, university should provide some support and encouragement by providing equipment and space to exercise as well as running various activities to serve different interests. Because exercising activities not only help our students stay fit and healthy, they also can create fun, enjoyment, happiness and bond among students, university staff and teachers.

## VI. LIMITATION AND FUTURE RESEARCH

This research should not be done only in university level. It should be introduced to secondary schools, demonstration schools and other offices under Suan Sunandha. The future research should include the factors that affect exercise behavior, such as personal issue, family support, etc. Lastly, the extended research about students who don't like to exercise should be initiated in order to get more ideas of limitation to exercise.

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