

## **Analyzed Physical Fitness and Exercise Behavior to Effectiveness of Students in Rajabath Mahasarakham University, Thailand**

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### **ABSTRACT**

An exercise is very important and useful in promoting healthy physical and mental health of everyone. Specific purpose to analyzed physical fitness and exercise behavior to effectiveness of students in RajabathMahasarakham University, Thailand. The collections came from documentary study, participatory action learning, and to survey by questionnaire with 417 students to data. Physical fitness to effectiveness of 2 factors, 11 sub- factors and 21 indicators. The knowledge, attitude, and behavior to exercise at level of high levels. Relationship between knowledge about to exercise and attitude to exercise with behavior to exercise have to positive as correlation in the same direction at statistically significant level of .01. Guidelines for encourage and promote exercise, should be set up strategic plan that is practical for all the students.

### **Keywords**

Physical fitness, effectiveness, knowledge and attitude, exercisebehavior.

### **INTRODUCTION**

A promoting an exercise and the sports in cultivating of young people to know how to exercise and play sports in the right way, understanding the benefits of exercise in developing as healthy body, able to develop such as emotionally, socially and intellectually, effectively building unity among faculties. In this regard, the development of good health and body are to an exercising and playing all kinds of sports that to essential factors for having a healthy physical fitness. Physical fitness is divided into 2 types such as health- physical fitness and sport- related physical fitness readiness. (Office of Sport Science, Ministry of Tourism and Sports, 2016) People with good physical fitness must have the qualifications, namely the body have to aerobic power such as local muscle endurance, muscle strength, agility, flexibility, and body composition, to be able to recover to normal in no time, can to generate of enough strength in an emergency. (Miller and Allen, 1999) Physical fitness can to occur as only when the body is physically active through proper and appropriate exercise, as well as having good exercise behaviors and attitudes to keep the body healthy. Douglas, D. F & Shingairai, A. F (2013) said to the occurrence of certain behaviors will help them use to their judgment in looking at the relationship between behavior and health better. Nowadays, economic, social and political changes, as well as technological advancements have to increasingly to played a role in human life, economic conditions must be competitive all the time, leading to a fast-paced lifestyle, And while modern technology makes it easier for people to exercise less time to exercise, and less attention to exercise, they to create as problems physical fitness. Nipa Manonpig (2013) to mentions that each day we have to hurry and work against time to earn money for various expenses, but will anyone think that if they do only work without a taking an account to your own of physical and mental health. When a lot of work to leads to physical health, illness and mental health are also ill, so regular exercise should be exercised to stay healthy. Exercise is recognized both academically and individually as beneficial, but most people neglect it is shows that to most people as only to see benefits, but not the need for exercise, and a seeing that not exercising to only makes of the body to less healthy. In fact, exercise is an activity of balancing the life of a truly happy life, having physical activity is

a fundamental factor in promoting health. ManeepatCaimak and AumpaiMounsit (2017) to summarized as the effect of alcohol consumption behavior among students to physical activity practice on health (e.g.,reducing premature mortality, coronary heart disease mortality, the incidence of diabetics, the incidence of hypertension, build and maintain bone, muscle and Joints, improves the mental state, etc.)The university is one of the departmentsto responsible for promoting physical fitness and health as well as being for the students and general public. In particular, students have a great need to maintain their health, both physically and mentally, to maintain their daily practice, exercise, and improve their quality of life and health to be effectiveness. This study have fourth main objectives:

- a) Analyzed the physical fitness to effectiveness of the students in RajabhatMahasarakham University, Thailand.
- b) Study the knowledge, attitude, behavior exercise of students in RajabhatMahasarakham University, Thailand.
- c) Study the relationship between knowledge about to exercise and attitude to exercise with behavior to exercise of students in RajabhatMahasarakham University, Thailand.
- d) Study the guidelines for encourage and promote exercise of the students in RajabhatMahasarakham University, Thailand.

## **REVIEW OF THE LITERATURE**

### ***Physical Fitness and Exercise Behavior.***

Physical fitness is the condition of the physical condition that is healthy and complete as well as the physical and mental readiness of the person to be able to perform activities patiently and continuously for a long time without burnout, fatigue, exhaustion,can be done effectively. The level of fitness can be determined by the availability of muscles and organs in a person's body, however this does not mean that the body is strong, durable. (TermpetchSuknaphiban, 2014) Not only does to the muscles and body systems work in harmony, but also the body must be in good health in order to perform as the task to well. But also the body must be in good health in order to be able to perform a task well. Physical fitness is an important factor that determines a healthy and complete body, because physical fitness is the performance of the heart, both the respiratory and circulatory systems. (OrnjiraThalithong, 2018) As well as the physical ability of the person to control and direct the body to perform various tasks. Both work, exercise, play sports well with agility,Effective for workload, time.AmmandaChaiyakan and Amara Chai Kan (2017) alcohol drinking behavior among students a causing slow fatigue, and no health-related problems due to lack of exercise. Physical fitness is generally divided into two categories: health- physical fitness and sport- related physical fitness readiness. (Knechtle, B, Dalamitros, A, A, Babosa, M, T, Sousa, C, V, Rosemann, T &Nikolaidis, P, Th, 2020) In addition, those who have good physical fitness or are truly physically fit, known as "fitness", must have the following qualifications of aerobic power, local muscle endurance, muscle strength, agility, flexibility, body composition as able to recover to normal in a short time, able to reserve sufficient strength or vitality for emergency use. (AmnatSoithong, ChumponPumphet, and ChanyutSudthongkong, 2015; NopadonNimsuwan, 2016; Miller and Allen, 1999) Behavioral is the actions and symptoms to expressed through the muscles, feeling, in response to a stimulus. Behavior is activities a occurring which to actions that the person expresses, including the activities that take to place within the person and activities, observed either sensory or unobservable are of two types as overt behavior and covert behavior.NiwatBoonsom (2017) describes to behavior as all types of activities it is divided into 3 sections of cognitive domain, affective domain, and psychomotor

domain. Sophon Akornsirirot (2019) talks about knowledge as remembering details and facts. The attitudes are the feelings, opinions of a person about something that arises from learning, the experience that is expressed as a behavior. Exercise behavior is part of the health behavior of maintaining a healthy self, being able to live a normal life, and avoiding the dangers that affect health from exercising in physical activity effectively of systematic system. The results of this study looking the physical fitness to effectiveness of factors, sub-factor and indicators, the knowledge, attitude, and behavior exercise of students, the relationship between knowledge about to exercise, attitude to exercise with behavior to exercise of students, and the guidelines for encourage and promote exercise of the students.

## METHODOLOGY

The methodology were to mixed method research, it is a qualitative study employed a review of documentary and participatory action learning, quantitative research to survey by questionnaire.

### Population and Sample.

The population used to the research was 5,783 students in Rajabhat Mahasarakham University, Thailand. Key informant of 30 students, they all were by purposive sampling. The sample of 437 students, they all were by stratified random sampling.

### Research Instrument

An instrument into collection of the research was the questionnaire to knowledge, attitudes, behavior to exercise, it is divided into 3 parts as general information, questions on each side of knowledge about to exercise, attitude to exercise behavior to exercise, and open-ended recommendations, with the consistency of the tool from the experts to assessment, and the confidence of the try-out questionnaire with 30 students in Rajabhat Mahasarakham University to context as similar to the research sample, the questionnaire had a total confidence value of 0.83.

### Data Collections.

In conducting data collection, the researcher took into account accuracy and precision with the following sequence of data collection procedures:

1. Study the documentary for analyzed the factors of physical fitness to exercise behavioral into health- physical fitness such as muscle strength, muscle endurance, flexibility, cardiovascular, body composition, sport- related physical fitness readiness such as agility, speeds, power, body balance, neuromuscular coordination, reaction time to diversity for the conceptual framework.
2. Synthesis of factors from study the documentary to analyzed the physical fitness to effectiveness of factors, sub- factors and indicators, this is qualitative research.
3. To survey by questionnaire with 473 students were asked to answer the questionnaire, all data obtained from the questionnaire were used to analyzed the knowledge, attitude, and behavior to exercise of students, relationship between knowledge about to exercise and attitude to exercise with behavior to exercise of students, this the quantitative research.
4. To participatory action learning with 30 students to all data obtained for analyzed the guidelines for encourage and promote exercise of University students' to effectiveness, this qualitative research.

## Data Analysis.

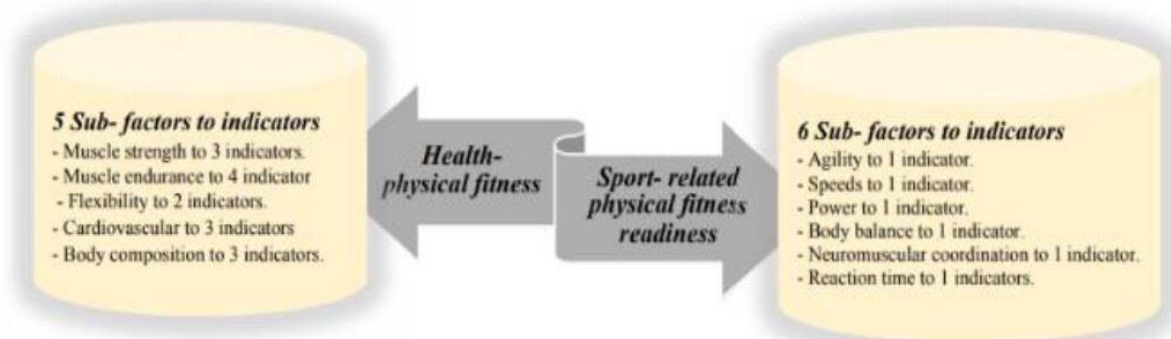
Into data analysis on qualitative data was analyzed by using three main stages, i.e., data reduction, data organization, data interpretation to conclusion. On quantitative data to analyzed by descriptive statistical analysis including percentage, mean, standard deviation, and correlation coefficient (r).

## STUDY REVEALED AND DISCUSSION

The study revealed that the physical fitness and exercise behavior to effectiveness of the students in RajabathMahasarakham University, Thailand as the results were followed:

### a) Factors, sub-factors and indicators of physical fitness to effectiveness.

Factors, sub-factors and indicators of physical fitness to effectiveness of the students in RajabathMahasarakham University, Thailand to shown as figure 1.



**Figure 1.2** Factors, 11 sub- factors and 21 indicators of physical fitness to effectiveness.

### 1. Health- physical fitness:

To 5 sub- factors to, 1) muscle strength to indicators as, (1) the ability of the muscles to work of against resistance, (2) the strength of the muscles in the performance of various activities, (3) the movement of exercise, 2) muscle endurance to indicators as, (1) ability of the muscles to perform repetitive work over a long period of time, (2) increased muscle endurance (3) age and gender factors, (4) physical fitness level and physical activity and types of exercise, 3) flexibility to indicators as, (1) the ability of the muscles and joints of the body to stretch and move in full range of motion, (2) the stretching of the muscles that are both stationary and in motion, 4) cardiovascular to indicators as, (1) ability of the heart and blood vessels to transport of oxygen and nutrients to the muscles to generate energy for sustained exertion, (2) prolonged muscle function, (3) physical movement for consecutive periods of time, 5) body composition to indicators as, (1) composition in various to parts of the body such as fat mass, bone, muscle, minerals, (2) body composition in relation to body weight.

### 2. Sport- related physical fitness readiness:

To 6 sub- factors to, 1) agility to indicators as, (1) ability to quickly change the direction and position of the body, 2) speeds to indicators as, (1) ability to change as the position of the body from one place to another within a short period of time according of the goals, 3) power to indicators as, (1) ability to exercise maximum strength for a short time, 4) body balance to indicators as, (1) ability to maintain a body position while still performing the activity effectively and without loss of balance, 5) neuromuscular coordination to indicators as, (1) ability to move

and practice complex skills and mechanics at the same time smoothly and precisely, 6) reaction time to indicators as, (1) ability of the nervous system to sense stimulation that can direct the movement-related organs to a rapid response.

#### b) The knowledge, attitude, and behavior to exercise of students.

The knowledge, attitude, behavior to exercise of students in RajabathMahasarakham University, Thailand of the levels to shown as table 1.

**Table 1.** Mean, standard deviation of knowledge, attitude, behavior exercise and levels.

Aspects	Average		Levels
	Mean	Std.	
Knowledge about to exercise.	4.42	0.58	High
Attitude to exercise	4.46	0.54	High
Behavior to exercise	4.44	0.56	High
<b>Totals</b>	<b>4.44</b>	<b>0.56</b>	<b>High</b>

The knowledge, attitude, and behavior to exercise of students at level of high levels (*Mean* of 4.44, *Std.* of 0.56), By the aspects to highest mean of attitude to exercise (*Mean* of 4.46, *Std.* of 0.54) inferior to behavior to exercise (*Mean* of 4.44, *Std.* of 0.56), Knowledge about to exercise (*Mean* of 4.42, *Std.* of 0.58), respectively.

#### c) Relationship between knowledge about to exercise and attitude to exercise with behavior to exercise of students.

The relationship between knowledge about to exercise and attitude to exercise with behavior to exercise of students in RajabathMahasarakham University, Thailand to shown as table 2.

**Table 2.** Correlation coefficient (r) knowledge about to exercise and attitude to exercise with behavior to exercise as sort descending.

Relationship	Behavior to exercise	Sig. (2-tailed)	Relationship Levels
Attitude to exercise	0.83**	0.00	High
Knowledge about to exercise	0.81**	0.00	High
<b>Totals</b>	<b>0.82**</b>	<b>0.00</b>	<b>High</b>

\*\* Statistically significant of .01.

Relationship between knowledge about to exercise and attitude to exercise with behavior to exercise of students have to positive as correlation in the same direction at statistically significant a level of .01.

#### d) The guidelines for encourage and promote exercise of the students.

Guidelines for encourage and promote exercise of the students were followed:

1. Should find to the ways, measures to promote physical health and support physical exercise, as well as solving problems in teaching and learning of all faculties in a timely manner in order to allow students to have time to exercise afterward as schooling.
2. Organizing the training, seminars and activities disseminating knowledge about exercise for correct health, and the benefits of exercise to students on a regular basis through a variety of

media to enhance students' behavior, knowledge, attitudes, and exercise practice for even more health.

3. Promote to health-saving of the projects for staff to have good health and be a good role model for students, by clearly setting strategies for promoting exercise.

4. Develops to systematic management of sports and exercise, with the participation of students including raising awareness on the promotion of health and exercise among personnel, as well as promoting and supporting them. Developing sports and exercise leaders to have higher capacities.

Playing sports and exercise that get people to move for preparing physical fitness to work as effectively. Physical fitness to effectiveness of 2 factors, 11 sub-factor and 21 indicators. The knowledge, attitude, and behavior to exercise at a level of high levels. Relationship between knowledge about to exercise and attitude to exercise with behavior to exercise have to positive as correlation in the same direction at statistically significant a level of .01. Guidelines for encourage and promote exercise, should be set up strategic plan that is practical for all the students. However, muscle strength to work of against resistance, the strength of the muscles in the performance of various activities, movement of exercise. Also, the sport-appropriate clothing keeps you safe and comfortable. Hosseinzadeh, K, and Others (2017) to said that knowledge, attitude and practice regarding physical activity are the use of abilities that express the body, which will require different levels of behavior both knowledge and attitudes are the components of behavior, which require multiple decision-making processes. Wear sports-appropriate shoes that help prevent ankle injuries, regular exercise helps keep your body healthy, exercise helps to burn excess fat, causing weight loss, exercise strengthens the heart muscle. Parker, R (2016) a relationship between physical fitness also had ineffective exercise behavior according to the exercise principles of warm-up period, perceived barriers to exercise, the body is low. Exercise helps the lungs to expand as well, exercise helps build immunity and prevent disease. Behavioral is the actions and symptoms to expressed through the muscles, feeling, in response to a stimulus. Behavior is activities a occurring which to actions that the person expresses, including the activities that take to place within the person and activities, observed either sensory or unobservable are of two types as overt behavior and covert behavior. NiwatBoonsom (2017) describes to behavior as all types of activities it is divided into 3 sections of cognitive domain, affective domain, and psychomotor domain. SophonAkornsirirot(2019) talks to about of knowledge as remembering details and facts. The attitudes are the feelings, opinions of a person about something that arises from learning, the experience that is expressed as a behavior. Exercise is the first choice for health care, regular exercise is not a problem with frequent illnesses. Finally, an exercise is very important and very useful in promoting healthy physical and mental health of everyone, and exercise also helps to build immunity, thus preventing the development of disease, fever and sore as well.

## CONCLUSION

Exercise is very important and useful in promoting healthy physical and mental health of everyone, and exercise also helps to build immunity, thus preventing the development of disease, fever and sore as well. Physical fitness to effectiveness of: Health- physical fitness such as muscle strength to the ability of the muscles to work of against resistance, strength of the muscles in the performance of various activities, the movement of exercise, muscle endurance to ability of the muscles to perform repetitive work over a long period of time, increased muscle endurance, flexibility to the ability of the muscles and joints of the body to stretch and move in full range of

motion, the stretching of the muscles that are both stationary and in motion, cardiovascular to ability of the heart and blood vessels to transport of oxygen and nutrients to the muscles to generate energy for sustained exertion, prolonged muscle function, physical movement for consecutive periods of time, body composition to composition in various to parts of the body. Sport- related physical fitness readiness ability to ability to quickly change the direction and position of the body, speeds to ability to change as the position of the body from one place to another within a short period of time according of the goals, power to ability to exercise maximum strength for a short time, body balance to ability to maintain a body position while still performing the activity effectively and without loss of balance, neuromuscular coordination to ability to move and practice complex skills and mechanics at the same time smoothly and precisely, reaction time to ability of the nervous system to sense stimulation that can direct the movement-related organs to a rapid response. Knowledge, attitude, and behavior to exercise at level of high levels. Relationship between knowledge about to exercise and attitude to exercise with behavior to exercise have to positive as correlation in the same direction at statistically significant. Guidelines for encourage and promote exercise, should be set up strategic plan that is practical for all the students.

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