EXERCISE BEHAVIOR OF THE PEOPLE WHO EXERCISED AT PUBLIC PARKS IN BANGKOK, THAILAND

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ABSTRACT

The research objective is to study the exercise behavior and opinions of the people on exercise at public parks, Bangkok, Thailand. It is descriptive research. The samples consisted of 206 samples of the people who exercised at public parks, Bangkok. They were selected by convenient sampling. The sample size was calculated by Cohen Table (Cohen, 1992). The research tools were the questionnaires constructed by the researcher and consisted of 5 rating scales answers. The questionnaires were tested for quality with content validity and reliability by Alpha-Coefficient Cronbach which the reliability was 0.89. Data collection was conducted by self-directed questionnaires. The data were analyzed by descriptive statistics. The research results showed the samples had the 3 most popular exercises were walking, jogging and aerobic dance. The exercises that the samples do almost every day are jogging, walking, and aerobic dance. With regarding the opinion of exercise it was found that the samples had a moderate level of the opinions about the items of benefits, barriers and exercise ability ($\bar{X}$ = 3.42, $\bar{X}$ = 2.54 and $\bar{X}$ = 2.69 respectively).

This research pointing out that the exercise of people in the urban area has 3 types popular of exercise that were jogging, walking and aerobic dancing. Furthermore, the three exercising that people can continuously almost every day were, jogging and walking. These can be used as an activity to promote good physical and mental health for people in urban areas at public parks in Bangkok.

Key words: exercise behavior, benefits, barriers and personal ability of exercise

INTRODUCTION

At present, the number of deaths from non-communicable diseases (NCDs) is 71% or 41 million people from total deaths of 57 million people per year. WHO has classified NCDs as major health problems with increasing severity. In 2018, most of the deaths of world population were from NCDs (WHO, 2018)1 and more than 80% of them occurred in the developing countries. In Thailand, the number of deaths from NCDs was 75% or 320,000 people per year or 37 people per hour which was higher than the average of deaths globally and was likely to increase in the future. The leading disease of NCDs was cerebrovascular disease (4.59% or 28,000 people), followed by cardiovascular disease, chronic obstructive pulmonary disease, diabetes mellitus and hypertension respectively. The common causes of these diseases were eating sweet, fatty and salty diets, drinking alcohol, smoking, lack of exercise and stress. Most of the deaths were in the working age population and they affected economic growth (Piyasakol Sakolsattayatorn, 2018 retrieved from https://www.hfocus.org/content/2018/08/16157).2 One of the effective methods for prevention or reduction of risk factors for NCDs is exercise. Exercise helps strengthen body muscles, increase power, slow down organ degeneration, better mental health, maintain good gastrointestinal system function, better sleep, stronger heart and lungs and make better sexual function (Banlu Siripanich, 2018 3 ; Karuhadej et al. 20184).

People who work in Bangkok and periphery are prone to stress because they have to work against time, rush to work and spend a lot of time in the streets due to traffic congestion. Therefore there is not enough free time to exercise. There are few numbers of fitness centers and they are far away from homes. Therefore they go to public parks for exercise. People in Bangkok and periphery who exercise are the group of people who practice health promotion to maintain their health without being forced to. They should have positive opinions towards exercise. However, there is no study of these opinions from literature review for the last 10 years. The researcher is interested in studying the opinions of the people in Bangkok and periphery on exercise behavior at public parks, Bangkok, Thailand.

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OBJECTIVE

To study the exercise behavior and the opinions of the people who exercise at public parks.

METHODOLOGY

Samples

The samples were the people who exercised at public parks, Bangkok. The public parks were Suan Luang Rama 9, Suan Taweewanarom and Suan Chaloem Phrakiat 80 Phansa. The samples were selected by convenient sampling. The sample size was calculated by Cohen Table (Cohen, 1992)[5] with $\alpha = 0.05$, ES = medium and the sample size was 177. To prevent incomplete data, the researcher collected additional 15% to make the total 206 samples.

Research tools

The research tools were the questionnaires constructed by the researcher and consisted of 2 parts. Part 1 was personal data of sex, age, occupation, education levels and marital status. Part 2 was the questionnaires of opinions on exercise behavior. The questionnaires were 5 rating scales divided into 3 items which consisted of 12 questions in benefits of exercise, 9 questions in barriers of exercise and 6 questions in personal ability of exercise. The opinions on exercise behavior were interpreted for 5 levels of highest, high, moderate, low and lowest. The questionnaires were tested for quality with content validity by 3 experts and reliability by Alpha-Coefficient Cronbach which the reliability was 0.89. Data collection was conducted by self-directed questionnaires at the public parks on Saturday and Sunday during August to December 2017. The data were analyzed by percentage, mean ($\overline{X}$) and standard deviation (SD).

RESULT

1. Personal data of 206 samples of the people who exercised at public parks, Bangkok showed 52.2% of female, 23.8% of age between 21-30 years, 33.5% of the employee, sales and private business, 57.8% of Bachelor degree education, 39.3% of 20,001-40,000 Baht income and 35.9% of single marital status.

2. Regarding to the number of samples according to types of regularly exercising, average times per week, average times for exercise, the average for exercise continuing practice as Table 1, found that the 3 most popular exercising of this sample were jogging, walking and aerobic dance. The exercising that the samples do almost every day were jogging and walking, with 60-90 minutes of the average time for exercise/times.

2. When considering the most popular exercising (Jogging) (n=106) of the sample, according the number of years of regular exercise, the average times for exercising per week, and times for exercising per time as Table 2, found that most of them have 5 years of running experience and running with an average time of 60 minutes at a time.

Table 1. Showed the number of samples according to types of regularly exercising, Average times per week, Average times for exercising, Average for exercise Continuing Practice (n=206)

Types of exercise	Number (%)	Average times per weak	Average time for exercise/times (Minute)	Average for exercise continuing practice (year)
Jogging	106 (51.5)	5	60-90	3
Walking	50 (24.3)	5	60-90	2
Aerobic Dancing	32 (15.5)	4	60	1
Football playing	12 (5.8)	1	60	2
Riding bicycle	6 (2.9)	1-2	60 -120	1

Table 2. Showed the most popular exercising (Jogging) of the sample, according the number of years of regular exercise, the average times for exercising per week, and times for exercising per time (n=106)

The number of years of regular exercise	times for exercising per time (minute)	
	60-90	>90
<1	9	19
2-5	71	2
>5	5	-

4. The opinions about exercise behavior in each item, the findings were the followings (Table 3)

4.1 The three opinions about benefits of exercise that the most average scored by the samples were: Exercise helped prevent various cancers in the early stage ($\bar{X}$ = 3.60), exercise helped strengthen muscles and bones ($\bar{X}$ = 2.71) and exercise helped relax and reduce stress ($\bar{X}$ = 2.65).

4.2 The three opinions about barriers of exercise that the most scored by the samples were: They could not provide exercise equipment for themselves ($\bar{X}$ =4.26), their children were not available to take them to the public parks ($\bar{X}$ = 4.22) and they did not know the method of exercise appropriate for each disease in case of existing diseases ($\bar{X}$ = 4.17).

4.3 The three opinions about personal abilities that the most scored by the samples were: They were able to go to the public parks by themselves ($\bar{X}$ = 3.34), they had transportation to the exercise places ($\bar{X}$ = 2.68) and they were able to exercise by themselves ($\bar{X}$ = 2.35).

Table 3. Showed the Mean and SD of opinion scores of the samples categorized by items.

The opinion of benefits of exercise	$\bar{X}$	SD	Opinion level
1. Exercise helped reduces or stabilize weight	2.54	1.21	Moderate
2. Exercise helped strengthen muscles and bones	2.71	1.24	Moderate
3. Exercise helped reduces of non-communicable disease such as heart disease, hypertension, diabetes mellitus, bone and joint	2.64	1.18	Moderate
4. Exercise helped prevent various cancers in the early stage	3.60	1.37	High
5. Exercise improve digestive system.	2.61	1.20	Moderate
6. Exercise helped reduces cost of treatment for communicable disease such as common cold and allergy.	2.64	1.19	Moderate
7. Exercise helped reduces muscle strain.	2.42	1.27	Low
8. Exercise improved sleep.	2.61	1.16	Moderate
9. Exercise helped relax and reduce stress.	2.65	1.15	Moderate
10. Exercise improved concentration at work.	2.57	1.14	Moderate
11. Exercise helped meet more people.	2.61	1.14	Moderate
Mean total	2.69	0.95	Moderate
The opinion of the barrier of exercise			
1. Did not know how to exercise appropriately.	2.42	0.99	Low
2. Did not know the method of exercise appropriate for each disease in case of existing diseases	4.17	1.06	High
3Unable to manage to manage time for regular exercise	4.05	1.05	High
4.Did not have company for exercise	4.18	1.02	High
5. Did not provide exercise equipment for themselves	4.26	1.01	High
6. Their children were not available to take them to the public	4.22	1.01	High

parks			
7.Too lazy to exercise	2.63	0.77	Moderate
8.Underlying disease that was contraindicate for exercise	2.53	0.82	Moderate
9. Unavailable transportation from relatives to for exercise	1.96	0.52	Lowest
10. Not convenient for frequent for exercise	3.82	0.87	moderate
Mean total	3.42	0.46	moderate
The opinion of the personal ability to exercise			
1. Able to go to the public parks by themselves	3.34	1.14	moderate
2. They had transportation to the exercise places	2.68	1.21	moderate
3. Able to exercise by themselves	2.34	1.45	low
4. Able to choose time for exercise	2.27	1.45	low
5. Able to choose appropriate exercise for own condition	2.34	1.38	low
6. Able to calculate exercise time suitable for physical conditions	2.35	1.37	low
Mean total	2.54	0.92	moderate

DISCUSSION

The research showed that the samples of the people who exercised at public parks, Bangkok had opinions on exercise behavior at moderate level. When classified into 3 items of benefits, barriers and personal ability of exercise, it was found that they also were at moderate levels. The mean ($\overline{X}$) of the benefits, barriers and personal ability of exercise were 2.69, 3.42 and 2.54 respectively. It was consistent with Waraporn Komyod, et al.6 who studied the Behavior and Accessibility for Exercise of Pasi Charoen Persons and found that the opinions on exercise of the people in Pasi Charoen District were at moderate level. The research of Kultida Mhaopech, Komgrich Choupanich, Pornpen Lapho and Warsittee Teamtaokerd7 on Behaviors for Exercises of Personnel in Kasetsart University, Kampheangsaen Campus also found the knowledge was at moderate level, the attitude was at good level and self-practice behavior was at moderate level. Somnuk Keawvilai8 who studied Predictive Factors on Exercise Behaviors of Undergraduate Students and found that the undergraduate students of Rajamangala University of Technology Phra Nakon perceived the barriers of exercise at moderate level and perceived the benefits and personal ability of exercise at good level. It was also similar to Jarunee Srithongthum 9 who studied factors affecting exercise behavior of people exercising at Lumpini park, Bangkok and found that the barriers of exercise were at low level.

The research showed the samples' opinions on three items of exercise behavior were at moderate levels. The result could be due to the samples represented the people with diversity in sex, age, occupation, income, education level and marital status as in the general population. The samples' opinions on the benefits of exercise at moderate level could result from some general knowledge and experience in exercise from media and internet without study deep into details. The questions in the questionnaires mainly concerned medical benefits of exercise, so the samples could not get the right answers for all questions. The samples' opinions on the barriers and personal ability of exercise at moderate levels should reflex true personal situation of the people who exercised in public parks because they were willing to travel some distances from home through congested traffic.

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