

# MARKETING FACTORS AFFECTING PEOPLE'S INTENTION TO EXERCISE IN NAKHON PATHOM MUNICIPALITY

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## ABSTRACT

The purposes of this research were to find out marketing factors affecting the intention to exercise among people. The study sample consisting of 200 people aged 30-59 years who exercise >3 times per week from Nakhon Pathom Municipality were recruited by the convenience sampling method. The questionnaires were used as instruments in two areas: marketing, and intention. Its reliability was 0.95. The data were analyzed by pearson product moment correlation coefficient. The results presented along with the 7P's marketing factors and the others were as follows.

- 1) Products: People choose to exercise in such types as walking, yoga, and Tai Chi.
- 2) Price: It was at a high level and found that low-income people should not pay sports facility entrance fees
- 3) Place: They prefer to exercise in a public park with shady and natural atmospheres
- 4) Promotion: Exercising should be publicized and promoted by governmental agencies to be done in local celebrating seasons
- 5) People the staff were friendly, polite, and neat, and they always greeted, invited, encouraged, and reminded them to exercise, assisted and facilitated people during the exercised
- 6) Process: It was at the high level found that the place had good management as there were exercise instructions, how-to-use equipment, and security protection for life and property.
- 7) Physical evidence should be publicized and presented in attractive dimensions of traveling and parking convenience, a clean modern, and beautiful design with some relaxing seats

The correlation coefficient, medium level of intention to exercise as follow: Motivation, Perception, Personality, Product, Price, Promotion, People, and Physical Evidence.

The correlation coefficient, low level of intention to exercise as follows, Reference group, Social status, Price, and Processes.

**Keywords:** Marketing, People, Intention, Exercise.

## INTRODUCTION

The evidence reviewed in this report showed that the population of Nakhon Pathom Province is 922,171 people, childhood 0-14 years 139,370 people, working age 15-59 years 597,392 people, ageing >60 years 171,236 people, cannot classify age 14,173 people, National Statistical Office (2022) People live in Nakhon Pathom Municipality 71,635 people, working age 20-59 year 54894 people, aging>60 years 14,318people. Most of the people are sick with

endocrine diseases, Nutrition, Metabolic, and circulatory diseases correspond to World Health Organization (2022) said that Key facts Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 74% of all deaths globally. Each year, 17 million people die from NCD before age 70; 86% of these premature deaths occur in low- and middle-income countries. Of all NCD deaths, 77% are in low- and middle-income countries. Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million including kidney disease deaths caused by diabetes). These four groups of diseases account for over 80% of all premature NCD deaths. Tobacco use, physical inactivity, the harmful use of alcohol, and unhealthy diets all increase the risk of dying from an NCD. Detection, screening, and treatment of NCDs, as well as palliative care, are key components of the response to NCDs Noncommunicable diseases (NCDs) are the number one killer in Thailand. The four main NCDs - cancer, cardiovascular diseases, diabetes, and chronic obstructive pulmonary disease (COPD) - claim 400 000 lives annually or more than 1000 lives every day, and are responsible for 74% of all deaths in the country. Premature deaths and reduced or lost productivity, when employees cannot fully function (“presenteeism”) or leave the workplace (absenteeism) because they have an NCD are known to result in an economic burden, but exact numbers were not available. This study has shown that NCDs cost the Thai economy THB 1.6 trillion annually, equivalent to 9.7% of its 2019 gross domestic product (GDP). These costs include THB 139 billion to treat NCDs and THB 1.5 trillion in lost productive capacity due to absenteeism, “presenteeism” or early withdrawal from the labor force due to premature death or disability. The productivity losses due to NCDs account for 91% of all NCD-related costs. NCDs thus negatively affect socioeconomic development and the long-term fiscal sustainability of Government and public services. This report provides evidence that Thailand would benefit from investing in four policy intervention packages that reduce exposure to behavioral risk factors (tobacco use, harmful use of alcohol, unhealthy diet, and physical inactivity) and in key clinical interventions for the four most prevalent NCDs. (Ministry of Public Health, Thailand, 2019).

Physical inactivity is one of the causes of non-communicable diseases. Obesity can cause many diseases such as hyperlipidemia, coronary artery disease, and cerebrovascular disease. high blood pressure, and high blood sugar cause diabetes, and kidney failure. People’s exercise can improve physical performance, delay physical deterioration, restore deteriorated organs, and be helpful for the cardiovascular system, respiration, and blood. Exercise with a long duration and endurance can increase the heart volume, strengthen muscles, pump lots of blood out of the heart, increase and disperse capillaries around heart muscles leading to enough blood for the heart, decrease triglyceride, and reduce the blocked state of arteries. In terms of mental health, exercise can help decrease stress and depression. Moreover, endorphins that are produced during the exercise help us fresh. These are consistent with suggesting that exercise enables the elderly to become physically and mentally healthy. It can help to significantly reduce both systolic and diastolic hypertension and decrease the probability to have cerebrovascular diseases. People without exercise have the two-time possibility to die more than those with. Sirikul (2022)

Department of Physical Education survey in 2022 on sports and exercise behaviors, it showed that people among 40.38% of the 15-year-or-over population (Male 45.37%, Female 35.82%), In the municipality 39.91%, Outside the municipal area 40.78% People who come to exercise Without chronic disease 80.58% And People who don’t exercise with No underlying disease 71.94% with underlying disease 28.06%. Physical activities were 43.90% walking, 19.97% running, and 6.96% cycling. Sports activities Football 9.48% Futsal 2.05% Badminton 1.35%. Places used for exercise House/residential areas are 39.44% Exercise area/sports areas are 14.68% and Park areas are 9.49%. Time to exercise or play sports 17.00-18.00: 32.63%, Reason for Exercising or playing sports, i.e. being physically strong 77.53% using free time usefully 24.89% stress relief/resting 16.63%. The reason for not exercising is I don't have time to exercise 56.20%, the situation of COVID-19 27.06%, Lazy 12.71%. Suggestions or needs of the public

Sponsor sports equipment 27.68% Build more parks 21.92% Organize campaign activities 18.56% (Department of Physical Education, 2022)

The principles of exercise consist of mode/type of activities, frequency, duration, and intensity. Modes of activities refer to brisk walking, jogging, and cycling. The exercise is repeated: 3 – 5 days weekly, etc. Duration refers to the length of time that the exercise lasts or continues: 20 – 60 minutes, etc. Finally, intensity refers to the state or quality of exercise: 55/65 – 90 percent of the maximum heart rate. Appropriate exercise for people depends on their physical conditions and strength. Exercise and physical activity are good for everyone, there are four main types and each type is different. Doing them all will give you more benefits, and endurance, aerobics, activities increase your breathing and heart rate. Brisk walking or jogging, dancing, swimming, and biking are examples. Strength exercises make your muscles stronger. Lifting weights or using a resistance band can build strength. Balance exercises help prevent falls. Flexibility exercises stretch your muscles and can help your body stay limber.

The theory of intention is from Ajzen's concept (Ajzen, 1991): The theory of Planned Behavior/ TPB which suggests that human behavior is guided by 3 types of beliefs: behavioral beliefs, normative beliefs, and control beliefs. As for the marketing factors, they are from the theory of the Marketing Mix of 7P to be used as instruments to change people's behavior towards exercising. According to Boom and Bitner (1981), the Marketing Mix focuses on creating a tangible form of service, and the 7P's in terms of the exercise/physical activities for people are referred to as follows: Product – it refers to modes/types of physical activities: walking, running, Tai chi, Yoga, bike-cycling, swimming, social dance, Ramwong (Thai traditional) dance, etc. Price- it refers to membership fee (for community exercise club), expenses on sports instruments and clothes, etc. Place -it refers to the public park and stadiums. Promotion refers to exercise promotion for the people to those concerned with exercise management for the people. Process– refers to that in exercise management or contest. Physical Evidence and Presentation are conducted by exercise service centers such as convenient traveling and safe facilities.

According to previous studies, some other factors affecting people's decision-making to exercise are social factors such as reference groups, and social classes, and psychological factors such as motivation, perception, attitude, and personality, etc. The author is interested to determine the marketing factors which affect people's intention to exercise. The study sample is the group of people who spend 3 days or over per week in exercise in public parks and provincial stadiums. The study results are useful to change/modify people to regularly do exercise, to increase the number of people to do so, and are practical guidelines to provide physical activities, to the campaign, and to promote efficient and sustainable exercise / physical activities.

**Purposes:** This study's purposes were as follows: To determine the marketing factors that affect people's intention to exercise.

**Methodology:** This study was a survey. The population was the people in Nakhon Pathom Municipality 71635 were recruited by the Convenience Sampling method.

The sample which was composed of 200 people from the public park in October-December 2022 was selected by Convenience Sampling. Thus people who exercise 3 days or over 3 times per week at public parks. Data collection was done through a 4-point-rating scale questionnaire. The 4-point-rating scales represented respective degrees of opinion perception: the most, much, less, the least. The content validity of the questionnaire containing 90 questions was checked by relevant experts. The index of item objective congruence (IOC) of it was more than 0.5, and its reliability or Cronbach was at 0.95.

## RESULTS

**Table 1** Demographic characteristics of the subjects. (n = 200)

	Properties	Frequency (n).	Percent (%)
Sex	Male	108	54
	Female	92	46
Age	30-44 years	84	52.50
	45– 59 years	116	37.00
Education	Undergraduate	62	31
	Bachelor Degree	124	62
	Master Degree	13	6.5
	Doctor of Philosophy	1	0.50
Occupation	House keeper	40	20
	Trader	56	28
	Employee	68	34
	Farmer	22	11
	Other	14	7
Status	Single	14	7.00
	Marry	140	70.00
	Separated	7	3.60
	Widow	31	15.80
	Divorce	8	3.40
Congenital disease	Healthy	158	44.70
	Disease	42	55.30
Kind of Exercise, Answer more one	Sport	20	10
	Walk- run	118	60
	Aerobic	19	9.5
	Outdoor Fitness	17	10
	Cycling	6	3
	Yoka	5	2.5
	Ti chi	15	7.5
Exercise/ week	Exercise 3 times	70	35
	Exercise more than 3 times	85	42.50
	Exercise every day	45	22.50

Preliminary data showed that most people are male 54%, 30-44 age of 52.50%, Bachelor's degree of 62%, employee 34%, marital status, spouse of 70%, have congenital diseases 55.30%, have physical activity walk-run 60% and exercise more than 3 times 42.50%, which showed in table 1

**Table 2** showed that the mean and standard deviation of the marketing factor

No	Factors affecting intention to exercise of aging	priority		
		M	S.D.	level
Marketing factor				
1	Product	2.59	0.67	much
2	Price	2.55	0.83	much
3	Place	2.88	0.60	much
4	Promotion	2.53	0.74	much
5	People	2.75	0.85	much
6	Physical Evidence	2.94	0.58	much
7	Processes	2.78	0.73	much
8	Reference group	2.54	0.75	much
9	Social status	3.23	0.54	much
10	Motivation	3.34	0.54	most
11	Perception	2.85	0.63	much
12	Attitude	3.28	0.61	most
13	Personality	3.24	0.63	much
14	Intention	3.22	0.46	much
Total		2.88	0.67	much

Market factors that affect its intention to exercise the people found that overall the marketing is in a class by  $M = 2.88$   $S.D. = 0.67$ , and considering that it was found. Motivation and attitude are at the highest level, with  $M = 3.34$   $S.D. = 0.54$  and  $M = 3.28$   $S.D. = 0.61$ , which shows in Table 2.

**Table 3** Result of the correlation coefficient of the influencing variables on exercise intention variables of people in Nakhon Pathom municipality

	X 1	X 2	X 3	X 4	X 5	X 6	X 7	X 8	X 9	X 10	X 11	X 12	X 13	Y1
X 1	-	.569**	.242**	.358**	.162**	.240**	.462**	.344**	.321**	.422**	.392**	.273**	.329**	.262**
X 2		-	.270**	.397**	.109**	.210**	.408**	.394**	.292**	.502**	.438**	.377**	.425**	.230**
X 3			-	.413**	.474**	.500**	.191**	.201**	.256**	.212**	.295**	.371**	.285**	.442**
X 4				-	.425**	.452**	.444**	.400**	.368**	.477**	.374**	.356**	.313**	.408**
X 5					-	.697**	.164**	.123**	.242**	.105**	.135**	.232**	.149**	.448**
X 6						-	.252**	.213**	.337**	.213**	.245**	.294**	.214**	.487**

<b>X</b>	-	-	-	-	-	-	-	.485	.435	.557	.451	.320	.324	.346
<b>7</b>								**	**	**	**	**	**	*
<b>X</b>	-	-	-	-	-	-	-	-	.495	.572	.604	.392	.438	.297
<b>8</b>									**	**	**	**	**	**
<b>X</b>	-	-	-	-	-	-	-	-	-	.438	.450	.456	.423	.381
<b>9</b>										**	**	**	**	**
<b>X</b>	-	-	-	-	-	-	-	-	-	-	.630	.396	.481	.325
<b>1</b>											**	**	**	**
<b>0</b>														
<b>X</b>	-	-	-	-	-	-	-	-	-	-	-	.458	.580	.337
<b>1</b>												**	**	**
<b>1</b>														
<b>X</b>	-	-	-	-	-	-	-	-	-	-	-	-	.653	.358
<b>1</b>													**	**
<b>2</b>														
<b>X</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	.295
<b>1</b>														**
<b>3</b>														
<b>Y</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>1</b>														

\*\* p< .01

\* p< .01 X1 = Reference group, X2 = Social status, X3 = Motivation, X4 = Perception, X5 = Attitude, X6 =Personality, X7 = Product, X8 = Price, X9 = Place, X 10 = Promotion, X11 = People, X 12 = Physical Evidence, X13 = Processes, Y1 = Intention to exercise.

The Relationship analysis results between Marketing Factors and Intention to Exercise. There was relationship with statistical significance at the level of 0.01 when considered as income found that the correlation coefficient, medium level of intention to exercise as follows Motivation (X 3) (r = .442), Perception (X 4) (r = .408), Attitude (X 5) (r = .448), Personality (X 6) (r = .487), Product (X 7) (r = .346), Place (X 9) (r = .381), Promotion (X 10) (r = .325), People (X 11) (r = .337), Physical Evidence (X 12) (r = .358)

The correlation coefficient, low level of intention to exercise as follows, Reference group (X 1) (r = .262), Social status (X 2) (r = .230), Price (X 8) (r = .297 ), and Process (X 13) (r = .295) Cohen (1988) an absolute value of r of 0.1 is classified as small, an absolute value of 0.3 is classified as medium and of 0.5 is classified as large

## DISCUSSION

The research on marketing factors affecting intention to do physical activity of the people would be discussed as follows:

1. Motivation: The people had health problems like diabetes and high blood pressure. Therefore, wishing for better health conditions is the internal motivation resulting in the determination of physical activity for the illness treatments. Healthy people focus on

entertainment, friend meeting, and socializing in accordance with the concept and motivation that were the internal individual motivation as the factor influencing the consumers' decision to buy.

2. Attitude: The people had good attitudes toward physical activity and its benefits because physical activity can reverse aging, balance body figures, and reduce the risk of diseases and illness treatment. According to the model of consumer buying decision process's inputs were to display the consumers' attitudes toward the product, attitude toward health promotion in positive feedback from the physical activity, and behavioral health promotion of the elderly due to the attitudes that originated from psychological characteristics of individuals assessing what was beneficial or harmful to them –satisfied or dissatisfied. If something was assessed to be beneficial, they would be satisfied and ready to do it.

3. Personality: The people focused on well-proportioned figures and good personal socialization in accordance with Erikson's Theory of Personality Development. It stated that personality development of people. The product is a form of exercise that people choose to be physically fit and be able to take into account the report of the Executive Directors. Many are walking, jogging, tai chi, yoga, and fitness with outdoor air, which is consistent with the theory. 7 P in the marketing mix, the product must meet a real need and a necessity

4. Social status: The people exercising together from the same village and occupation were found to be at the high level of the determinants.

5. Perception: Other high-level determinants were that looking at other people exercising makes one healthy and they got information about physical exercises from advertisements, radio, and television.

6. Reference group: It was found to be at the high level of the determinants from members of the people club or friends

7. Product: The patterns of physical activity for the people depending on their physical fitness regarding their sports competency. Most of them walked, ran, and practiced Tai Chi and Yoga as well as outdoor physical activities. According to the 7Ps Marketing Mix, products would meet real needs and necessities.

8. Place: The place was required to be convenient, near the household, and easily accessible. They must be designed to have both outdoor and indoor stadiums with high security because people had a high tendency to have accidents; moreover, physically exercising in a public park should be in a beautiful and serene environment attracting the elderly to come for the exercises.

9. Physical Exercise Promotion: There must be public relations inviting people as well as educating and advising them. To establish the people competition in accordance with the Activity Theory/Development Task Theory believing that the people must have activity participation or social interaction to make them continue participating Physical exercise promotion is related to Marketing Mix (7Ps) and advertising because these activities are to provide information about the organization and product services, news and PR to stimulate public interests

10. Physical Evidence: The places must have clear entrances and exits that were easily observed and accessible. Parking lots, beautiful and innovative designs, and restrooms were specially required for the people that physical evidence was the concrete things that could be seen or perceived and acted as facility service and exterior design indicators. Physical evidence defined the visible quality service demonstration such as the environment's buildings, design, and area distribution to appeal to people.

Relationship analysis results between Marketing Factors and Intention to Exercise. There were relationships with statistical significance at the level of 0.01 when considered as income found that. The correlation coefficient, medium level of intention to exercise as follows Motivation, Perception, Attitude, Personality, Product, Place, Promotion, People, and Physical Evidence. The correlation coefficient, low level of intention to exercise as follows, Reference group, Social status, Price, and Process.

## CONCLUSION

Pahasing (2022) specifying that consumer behavior, including reference, motivation, attitude, personality, influences consumption behavior on exercise. the results of the level of the consumer behavior determinants intentions to exercise of the people from the data analysis, it was found that the marketing determinants at the high level by considering each of the following below: Reference group: It was found to be at the high level of the determinants from members of the people club or friends. Social class: The people exercising together from the same village and occupation were found to be at the high level of the determinants. Motivation: It was at the highest level of determinants being that the people wished for good health and happiness, and when they had a health problem. Perception: Other high-level determinants were that looking at other people exercising makes one healthy and they got information about physical exercises from advertisements, radio, and television. Attitude: It was at the highest level of determinants, for example, physical exercises make one healthy, and cheerful, reduce the risk of illness, and act as a treatment for diseases. Personality: It was at the high level of determinants as people exercising had good body figure, was bright, friendly and good at socializing, and had confident leadership. (Schiffman & Kanuk, 2004)

Chartered Institute of Marketing (2015) Marketing and the 7Ps is a factor that affects exercise as follows Product: It was at the high level that was walking, Tai Chi, Yoga, a wooden club used as an outdoor sports instrument, and club activities like cycling and running clubs. Price: It was at a high level and found that low-income people should not pay sports facility entrance fees. Place: Also, it was at the high level found that the physical exercising places in public parks were serene, relaxing, close to nature, and near houses. Marketing Promotion: at the high level of the determinants, it was found that there was an announcement inviting information about physical exercises through radio, television, and the internet, as well as the government organization provided a budget promoting the elderly physical exercises and activities promoting their physical exercises during the festival periods. Physical Activity Organizers: It was at the high level and found that the staff was friendly, polite, and neat, and they always greeted, invited, encouraged, and reminded the elderly to exercise. The staff also assisted and facilitated people during the exercise conducted by a sport-specialized trainer who was hired by the organization. Physical Evidence of Physical Activity Place: It was at a high level and found that the sports facility had clear entrance-exit that could be easily observed, easy-to-access, parking lots, innovatively beautiful and clean design, and rest areas. Process: It was at the high level found that the place had good management as there were exercise instructions, how-to-use equipment, and security protection for life and property. Exercise Intention: It was at a high level found that people's determination in physical exercises was from the desire for health, risk of illness reduction, and sickness prevention.



## SUGGESTION

1. The marketing factors that affected the individual or group of people's decision making in physical activity participation should be studied.
2. The customers' behavior and the elderly's physical activity should be studied.
3. The causal factors of the elderly's physical activity should be studied.

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