

PERCEIVED BARRIER, PERCEIVED BENEFIT AND SELF-EFFICACY FACTORS INFLUENCING PHYSICAL ACTIVITY BEHAVIOUR

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Abstract: Physical activity is the body movement that increases the use of energy in the body. Furthermore, physical activity can also improve a person's health and prevent chronic diseases such as heart attack, obesity, and others. Nowadays, the community in Malaysia, especially teenagers, do less physical activity due to a lack of awareness and knowledge about the benefits of doing physical activity in daily life. In this study, perceived barriers, perceived benefits, and self-efficacy are used as key points of determinants of physical activity behaviour

Keywords: Wellness, Fitness, Physical Activity, Behaviour

Introduction

Physical activity is any bodily movement produced by skeletal muscles that uses the energy and that it can characterize by its modality, frequency, intensity, duration and others (David et al., 2018). Through physical activity, people can do the activities with moderate physical activity or vigorous physical activity. Physical activity can benefit the health of the body and reduce chronic diseases such as heart disease, diabetes, stroke, and cancer. Physical activity is not the same as exercise as it improves or maintains one or more physical fitness components. Physical fitness is a person's achievement, related to a person's ability to perform physical activity which can improve the quality of life.

The lack of physical activity also can cause teenagers to be obese and 1.9 million overweight aged 18 years old and above. In Malaysia, obesity has increased in ageing the population by year. However, physical activity among adults is decreased, leading to an increase in obesity, which is as much as 39% of adults were overweight and 13% were obese in 2018 (Chan et al., 2018). According to National Health and Morbidity Survey (2019), 74.9% of adults in Malaysia are physically active. Through the research done, the percentage for men is 77.9%, while the percentage for women is 71.8%, which shows that men are more active than women. According to National Health and Morbidity Survey (2015), 5.6 million Malaysians adults are overweight and 3.3 million are obese.

Physical activity is important to everyone because physical activity is an activity that can help in determining the level of good health of a person. Physical activity is an important part of keeping teenagers healthy. It can also improve the quality of life because a person who does physical activity can help the body get enough nutrients and vitamins. A Healthy lifestyle is a person's behaviour that can affect internal and external health. When a person adopts a healthy lifestyle, it can organize the daily activity by doing various physical activity (Lim et al., 2015). This activity also helps to burn calories in the body



Physical activity can be referred through the Health Belief Model (HBM). This model is very important to identify the factors related to the physical activity behaviour. The Health Belief Model (HBM) have several constructs that predict, perceive, and use to develop effective interventions change about health. The main element of the Health Belief Model can make a person change the behaviour when doing the physical activity because it can get healthy health. The tenacity of this quantitative study was to determine the perceived barrier, perceived benefits and self-efficacy that influenced the physical activity behaviour.

Theoretical Framework

The Health Belief Model is a health theory being used to present a good image of healthcare and show healthcare value. The main component in health-related behaviours that lead to individual actions often depends on the perception of the benefits and barriers associated with health behaviours is the desire to avoid disease or want to be healthy if already ill, and there is a belief that certain health actions will prevent the diseases (Wayne et al., 2019). Besides, it inducing factors include awareness and cultural factors that can affect health expectations (Champion et al., 2008). People will engage in health activities because they believe the situation is serious as a result of perceived severity, believing in taking action will reduce its vulnerability to the situation or its severity, believing in the cost of taking action is greater than its benefits and is always exposed to the factors that drive action (Warner et al., 2014). In addition, understanding a person about exposure to disease be the factor of doing an activity (Thivel et al., 2018).

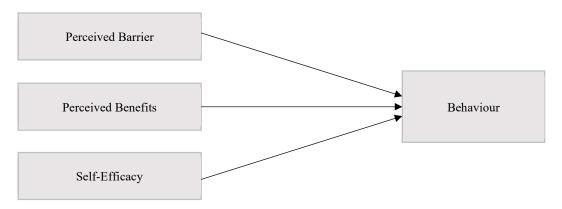


Figure 1: The Health Belief Model

Perceived Barrier

Perceived barrier is an individual estimation of the obstacles level in social life, personal, environmental and economic (Cerin et al., 2010). An individual will feel the obstacles in achieving goal status on the behaviour such as financial costs, phobic reactions, physical barriers, side effects, accessibility factors, and personal characteristics (Cerin et al., 2010). There are two types of perceived barriers which are internal and external perceived barrier. The history of individual, perceptions of the risks or threats that individuals are concerned about, and perceived social support influence beliefs about barriers (Rongen et al., 2014).

Perceived Benefit

Perceived benefit can be defined is an individual effects on the advantages of reducing the threat of illness or disease (Cerin et al., 2010). Perceived benefit is a subjective construct that is the difference for an individual. This can be different because of individual culture and time



changes (Sabiote-Ortiz. et al., 2016). The perceived benefit from doing physical activity is a great psychological outlook, can prevent health problems, enhance life, and improve social interaction. (Leung, 2013). One of the strategies that can be done is determining the trends and benchmarks of the level of sports and physical activity among young people to participate in physical activity while maintaining health

Self-Efficacy

Self-efficacy is individual perception of doing something or a task (Baretta, Sartori, Greco, D'Addario, Melen, & Steca, 2019). Self-efficacy is individual expectation and belief in the capabilities to complete an action (McAuley et al., 2011). Every individual can change the perception if they have enough self-efficacy and self-confidence because a high level of self-efficacy will lead to healthy behaviour (Rachmah et al., 2019). Evidence suggests that self-efficacy is the key potential mediator for the effects of physical activity and psychological outcomes (McAuley et al., 2011).

Results

The Role of Perceived Barrier in Influencing Physical Activity Behaviour

Table 1 shows the frequency of responses to questions of the perceived barrier. These questions are answered using the Likert scale method with 5 choices: strongly agree, disagree, neutral, agree, and strongly agree. Eight items have been chosen for this variable which are I have a problem while walking because have to carry many item, I feel tired, I feel ashamed if I do physical activity, I think my body shape does not suit to do physical activity, I have the disease and cannot do physical activity, I don't have extra energy to do physical activity after finishing my work, I do a physical activity based on weather factors as well as I think physical activity is not beneficial to my health.

Table 1: Descriptive Analysis for Perceived Barrier

Perceive barrier	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	n (%)	n (%)	n (%)	n (%)	n (%)
I have problem when walking	56	68	77	39	15
because have many item to carry	(22.0)	(26.7)	(30.2)	(15.3)	(15.9)
I feel tired	39	52	93	44	28
	(14.9)	(20.4)	(36.5)	(17.3)	(11.0)
I feel ashamed if I do physical	77	63	63	33	19
activity	(30.2)	(24.7)	(24.7)	(12.9)	(7.5)
I think my body shape do not	85	58	62	28	22
suit to do physical activity	(33.3)	(22.7)	(24.3)	(11.0)	(8.6)
I have disease and cannot do	125	52	53	13	12
physical activity	(49.0)	(20.4)	(20.8)	(5.1)	(4.7)



I don't have extra energy to do physical activity after finishing my work	60 (23.5)	74 (29.0)	85 (33.3)	22 (8.6)	14 (5.5)
I do physical activity based on weather factors	15	29	82	71	58
	(5.9)	(11.4)	(32.2)	(27.8)	(22.7)
I think physical activity is not beneficial to my health	139	44	48	15	9
	(54.5)	(17.3)	(18.8)	(5.9)	(3.5)

There were 77 respondents (30.2%) strongly disagree with the statement of "I feel ashamed if I do physical activity". Most of the individual are embarrassed to do physical activity due to the environmental factors and lack of confidence. An individual should have the self-confidence to do exercise or physical activity and keep the body healthy and energetic. By doing physical activity, it can eliminate the feeling of shame to stay healthy and active. Chaudhury et al., (2016) found that the person-environment fit model points out that health and well-being are outcomes of the optimal match of the person and home environment. Through environmental factors, it can affect a person's daily activities. Based on the result, some respondents feel ashamed do physical activity because some individuals do not know how to start it, especially when in a community area, and it affects the health-related practices of individuals.

Meanwhile, the item of "I think physical activity is not beneficial to my health" shows 139 (54.5%) respondents are strongly disagree and only 9 (3.5%) respondents are strongly agree to that. The interaction of perceived barriers of a personal and social nature is explained by the social-cognitive theory that affects individuals' health-related practices. Most of the teenagers feel physical activity is not beneficial, burdensome, tiredness, and sweating. According to Sampasa et al. (2017), the perceptions of body weight have been identified as strong determinants of physical activity among adolescents because it has shown that dissatisfaction with body weight can act as either a motivator or a barrier to teenager physical activity. Furthermore, based on the results of the respondents, the researcher found that some respondents agreed that physical activity provides benefits to personal health.

The Role of Perceived Benefits in Influencing Physical Activity Behaviour

Table 2 below reveals the frequency of responses to the perceived benefits. This set of questions also use the likert scale as the indicator in answering the questions. The items for descriptive analysis of perceived benefits are physical activity makes me healthy, I feel confident when doing my physical activity, physical activity make me fit, I can reduce my back pain by doing physical activity, physical activity make my weight maintain, I get more energy when I do my physical activity, and I feel better about myself which have the total of 7 items.



Table 2: Descriptive Analysis for Perceived Benefits

Perceive benefit	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	n (%)	n (%)	n (%)	n (%)	n (%)
Physical activity makes me	4	6	43	49	153
healthy	(1.6)	(2.4)	(16.9)	(19.2)	(60.0)
I feel confident when doing my	7	15	65	72	96
physical activity	(2.7)	(5.9)	(25.5)	(28.2)	(37.6)
Physical activity makes me fit	6	9	50	63	127
v	(2.4)	(3.5)	(19.6)	(24.7)	(49.8)
I can reduce my back pain by	6	9	91	64	85
doing physical activity	(2.4)	(3.5)	(35.7)	(25.1)	(33.3)
Physical activity makes my	3	14	74	65	99
weight maintain	(1.2)	(5.5)	(29.0)	(25.5)	(38.8)
I get more energy when I do my	5	16	86	68	80
physical activity	(2.0)	(6.3)	(33.7)	(26.7)	(31.4)
I feel better about myself	6	5	68	66	110
v	(2.4)	(2.0)	(26.7)	(25.9)	(43.1)

The highest percentages of respondents which is 153 (60.0%) strongly agree with the statement of "Physical activity makes me healthy". Physical activity can provide many benefits to the body and is also a way to improve the health of the body. This results was supported by Tremblay (2020) which stated that, by doing an aerobic activity it can improve the physical function. Furthermore, according to Nijs et al., (2011), physical activity is the modifiable behavioural risk factor related to people's quality of life and health. When an individual knows the benefits of doing physical activity, the person will feel healthier and more energetic without any disease problems, and daily life becomes more positive. Besides that, Bozzato et al. (2020) found that a healthy state is reached and supported in the environmentally friendly natural and spiritual social environment by a healthy lifestyle. It is including preventive health the supporting spiritual and corporal clarifications, and also physical exercises of normalization. It can be seen, a healthy lifestyle is a key to be a healthy body which that the person does activity physical can make a healthy lifestyle.

Meanwhile, there were 127 (49.8%) respondents who choose strongly agree to the item of "Physical activity makes me fit". There are many positive benefits when a person practices physical activity in daily life. For example, an inactive lifestyle contributes to weight gain, leading to various diseases such as obesity. Furthermore, the health benefits of physical activity levels include better blood cholesterol levels, reducing body fat, increasing blood pressure, and keeping the body fit. In the United States, physical activity among youths has increased, and only 27% of high school students adhere to physical activity guidelines. Physical activity includes all movements performed throughout the day, including when resting or while moving



from one place to another. Most of the teenagers who do this activity will make the body more fit and energetic in any situation.

The Role of Self-Efficacy in Influencing Physical Activity Behaviour

Table 3 presents the frequency of responses to questions of self-efficacy using the likert scale. Self-efficacy consists of 7 items which are I can do physical activity when I am in a bad mood, I have ability to plan my physical activity, I am motivated about physical activity, I can handle challenge about physical activity, I planned my physical activity schedule, I can do my physical activity even though I have a health problem, and I feel enjoyed when doing my physical activity.

Table 3: Descriptive Analysis for Self-Efficacy

Self-Efficacy	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	n (%)	n (%)	n (%)	n (%)	n (%)
I can do physical activity when I	25	65	99	39	27
in bad mood	(9.8)	(25.5)	(38.8)	(15.3)	(10.6)
I have ability to plan my physical	3	27	110	77	38
activity	(1.2)	(10.6)	(43.1)	(30.2)	(14.9)
I am motivated about physical	7	18	98	84	48
activity	(2.7)	(7.1)	(38.4)	(32.9)	(18.8)
I can handle challenge about	5	16	109	83	42
physical activity	(2.0)	(6.3)	(42.7)	(32.5)	(16.5)
I planned my physical activity	9	28	101	81	36
schedule	(3.5)	(11.0)	(39.6)	(31.8)	(14.1)
I can do my physical activity even	25	53	97	46	34
though I have health problem	(9.8)	(20.8)	(38.0)	(18.0)	(13.3)
I feel enjoyed when doing my	6	7	82	61	99
physical activity	(2.4)	(2.7)	(32.2)	(23.9)	(38.8)

There were 84 respondents (32.9%) agree with the statement of "I am motivated about physical activity". An individual needs to be confident and motivated about physical activity to maintain a healthy lifestyle. This is because individuals who regularly exercise and do physical activities can improve the cardiovascular system, improve thinking ability, and control their emotions. Verloigne et al. (2016) found that the individual who has high self-efficacy will easily motivated about something. A person who practices physical activities in daily life can provide benefits or advantages to the external and internal of the body that can make a person more motivated.

Meanwhile, the item of "I can handle challenge about physical activity" shows 83 (32.5%) respondents are agree and only 5 (2.0%) respondents are strongly disagree to that. Individuals who are physically fit and able to deal with challenges regarding physical activity without



having trouble doing so. Nijs et al. (2011) examined self-efficacy to address the challenges regarding physical activity which related to the health behaviours directly and indirectly. Therefore, the effect can be on the goal already set by the individual. For example, for individuals who can cope with challenges, it is to provide a variety of other benefits, including increased strength, flexibility, and endurance and decreased risk of cardiovascular and metabolic syndromes, improved bone health, and improved cognition and mood.

Conclusion

The Health Belief Model contains the elements of perceived barriers, perceived benefits, and self-efficacy. Perceived barriers affected someone behaviour when a person feels that there are some obstacles ahead that preventing from doing physical activities, which caused the opportunity to engage in physical activity decrease and barriers can come from attitudes, motivation, people perception, influence from close people, and environment. Physical behaviour is related to perceived benefits in improving the quality of life where physical activity can strengthen the muscles and heart and prevent individuals from suffering various diseases. Self-efficacy can be defined as a person's self-belief in determining whether can successfully change the lifestyles and behaviours, and people with low self-efficacy will more easily be immersed in the problems and not overcome them. In contrast, people with high self-efficacy are being said to do their best in overcoming the obstacles around them to successfully do physical activity.

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