

Attitudes Toward Physical Activities Among College Students

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This study examined perceived benefits and barriers of physical activities among college students. Exercises Benefits/Barriers Scale (Sechrist, Walker, & Pender, 1987) was administered to 80 participants. Results indicated that the most common perceived benefits to physical activity for both female and male students were enjoyment of exercises, and decreased feelings of stress and tension. The female students also reported that exercise improves mental health, while for male students it improves strength. Among females students, the most common barrier to exercising is having no time to exercise, whereas for male students wanting to do other things with their time. Costly to exercise, lack of encouragement from family, taking too much time to exercise, and embarrassment are the other common barriers to physical activity.

Keywords: physical activity, attitude, adolescence, perceived barriers, perceived benefits, exercise

Regular physical activity has long been regarded as an important component of healthy lifestyle. Epidemiological studies have shown that physical activity protects against premature mortality and on average, physically active people live longer than those who are sedentary (Kaplan, Strawbridge, Cohen, & Hungerford, 1996; Kujala, Kaprio, Sarna, & Koskenvuo, 1998; Paffenbarger et al., 1993). Moreover, physical activity positively influences physical and psychosocial health at all stages of the life cycle and also helps to enhance the quality of life for people of all ages. Despite the benefit, Bray and Born (2004) found that 56% among university students in Canada were not vigorously active and over 30% had become inactive despite having been regularly active during their year of high school.

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Studies that investigated physical activity patterns among adolescents suggested a difference between genders (Malina, 1996). Similarly, relationship of physical activity with gender had been reviewed and observed that female adolescents were 15% to 20% less active than male adolescents (Sallis, 1993).

Therefore, perceived barriers and benefits are likely to influence a person's decision to participate in physical activity and adopt a recommended preventive health action (Deflandre, Antonini, & Lorant, 2004). Thus, it is important to examine what are the perceived benefits and barriers beliefs because it influences an individual's physical activity level, which subsequently can lead to undertake an action. A number of researchers (see, for example, Broadkin & Weiss, 1990; Cash, Novy, & Grant, 1994; Gill & Overdorf, 1994) had examined motives for participation in physical activity among adolescence. Study on primary motives for participation in physical activity and exercises on 289 Chinese students in China and 180 American students in United States was done by Chen (1998). It was found that social interaction is a primary motive for American men and Chinese women; contrary to this, primary motive for American women was their body weight. However, none of these motives contributed as a primary motive for Chinese men.

According to Grubbs and Carter (2002) in their study on exercise behaviors among 147 undergraduate university students, regular exercise habits were found to be related to physical performance and appearance. Physical activity is associated with enhanced self-esteem and body image (Plaisted, 1995; Snyder & Spreitzer, 1977). Men are concerned with size, strength, and power (Gill, 1995; Tergerson & King, 2002), whereas, women are greatly interested in weight control to keep a slender figure, an ideal thin shape (Tergerson & King, 2002) as portrayed by media and societal images and such a desire for weight control probably raises their interest in physical activity and exercises.

On the other hand, pertaining to barriers to physical activity, numerous researches show that adolescence having barriers to physical activity are less active (Zakarian, Hovell, Hofstetter, Sallis, & Keating, 1994). A variety of barrier categories existed in the relevant literature. With regard to barriers most often associated with sporadic or nonexistent exercise habits relate to physical exertion and time constraints (Grubbs & Carter, 2002). It is possible that perceptions of the degree of physical activity and the time constraints related to various reasons interfere with physical activity that fluctuate over time in a dynamic manner. Tergerson and King (2002)

found the most common barrier to exercising among women was "having no time to exercise," whereas, men were most likely to report "wanting to do other things with my time". Adolescence is still the period of studying in college or university. Being a student there is a lot of homework or assignments to be done, thus this deters them from doing physical activity regularly.

Another study on the relationship between perceived barriers and participation in vigorous physical activity was done in a large Metropolitan Toronto school district (Allison, Dwyer, & Makin, 1999). Their findings were similar to the previous study whereby participants considered the most important barriers as time constraints due to school work, other interests, and family activities (see also Zunft et al., 1999). Other barriers related to physical activity mentioned by other studies are lack of social support from family and friends (Treiber et al., 1991); lack of social network, separation from family and friends (Eyler et al., 1998); cultural differences (Haase, Steptoe, Sallis, & Wardle, 2004); lack of money, geographical distance, lack of facilities, lack of parental encouragement and peer group regarded as barrier that inhibit participation in physical activity (Coakley & White, 1999). Similarly, Malaysian women reported lack of time, laziness, disinterest, no friends to exercise with, shyness, not allowed by family as barriers to do exercise (Nordin, Shamsuddin, Jamaludin, & Noor Hanizah, 2002).

A greater understanding of perceived benefits and barriers to physical activity may assist health care providers and educators to establish methods for promoting exercise for the improved physical and mental health of a college-age population (Grubbs & Carter, 2002). In view of the paucity of data availability in this under-researched area in Malaysia, this study intends to examine perceived benefits and barriers among college adolescence for engaging in physical activity. The study's findings can assist in designing a physical activity promotion program and can help in proposing recommendations for specific strategies/interventions in order to promote exercise culture and healthy living among college students.

Method

Sample

A total of 80 students studying in semesters 1, 3 and 5 of Physiotherapy Program in the Faculty of Health Science in one of the universities in Malaysia served as participants in the present study.

The questionnaires were given to them and two students did not return, which resulted in a final analysis of 78 respondents (corrected response rate of 97.5%). Approximately more than half of the students were women (62.8%) and the rest were men (37.2%) with mean age 19.36 and 20.85 years, respectively. Racial distribution of sample group was 97.4% Malays and 2.6% was of other races. The body mass index (BMI) for female students was 19.65 and for male students was 21.79.

Instruments

A questionnaire that consisted of two sections was administered for data collection. The first section targeted at demographic data that was prepared to get information on the highest education level achieved, participation in games/sport activity during secondary school, gender, age, race, and body mass index. The second section was the following scale to collect information on perceived benefits and barriers of physical activity.

Exercises Benefits/Barriers Scale (EBBS). It was a 43-item (Sechrist, Walker, & Pender, 1987) Likert-type scale developed to explore perceived benefits and barriers to exercise using constructs of Pender's Health Belief Model (Pender, 1996). It included items like "I enjoy exercise"; "exercise decreases feelings of stress and tension for me"; and "exercising takes too much of my time". It was based on 4-point, rating scale to obtain strength of agreement with the item statements. Choices were scored as: 4 = *strongly agree*, 3 = *agree*, 2 = *disagree* and 1 = *strongly disagree*. The researchers reported the alpha reliabilities of EBBS as .95 and .87 for Benefits subscale (29 items) and Barriers subscale (14 item), respectively. To ensure stability reliability, the survey instrument was piloted on convenient sample of students from another university. The internal consistency of the instrument was tested and achieved Cronbach alphas .91 and .78 for Benefits and Barriers subscales, respectively.

Procedure

A consent letter from the Physiotherapy Course Coordinator was obtained for the study. A written consent letter for permission was given prior to the study. The questionnaire were distributed and collected by the respective lecturer.

Results

After analyses through SPSS 12, the mean and standard deviations on each items of EBBs were calculated. These were calculated separately for each gender and three most likely perceived benefits (Table 1) and barriers (Table 2) are reported.

Table 1

The Three Most Likely Perceived Benefits of Physical Activity by Male and Females Students (N = 78)

Perceived benefits	M	SD
Female students ^a		
Exercise improves mental health.	3.40	0.57
I enjoy exercise.	3.36	0.57
Exercise decreases feelings of stress and tension for me.	3.32	0.80
Male students ^b		
Exercise increases my muscle strength.	3.41	0.62
I enjoy exercises.	3.34	0.48
Exercises decreases feeling of stress and tension for me.	3.24	0.63

Note. ^an = 49. ^bn = 29.

In response to the scale items, the most likely benefits of physical activity among female students was "exercise improves mental health"; and for male students "exercise increases my muscle strength"; "I enjoy exercises"; and "exercise decreases feeling of stress and tension for me" are other most likely benefits of exercise as endorsed by both genders (Table 1).

Table 2

The Three Most Likely Perceived Barriers to Physical Activity by Male and Females Students (N = 78)

Perceived barriers	M	SD
Female students ^a		
It costs too much money to exercise.	3.30	0.65
My family members do not encourage me to exercise.	3.22	0.72
I am too embarrassed to exercise.	3.14	0.61
Male students ^b		
Exercises take too much time from family relationship.	3.10	0.55
I am too embarrassed to exercise.	3.06	0.59
Exercise takes too much time from my family responsibilities.	3.03	0.56

Note. ^an = 49. ^bn = 29.

In their response to perceived barrier to exercise, the three most likely barriers among female students were "It costs too much money to exercise"; "My family members do not encourage me to exercise"; and "I am too embarrassed to exercise". Among male students, the three most likely barriers to exercise were "Exercises take too much time from family relationship"; "I am too embarrassed to exercise"; and "Exercise takes too much time from my family responsibilities" (Table 2).

Discussion

In agreement to the studies done by Broadkin and Weiss (1990) and Zunft et al. (1999), adolescents' perceived benefit to be physically active is due to several factors, including "to maintain health" and "to get fit", whereas study by Gill (1995) showed that men are concerned with size, strength, and power (see also Tergerson & King, 2002). Physical activity is directly related to physical fitness. Developing muscle strength is important to improve one's ability to perform tasks, to reduce the potential for injury and improve muscular function (Fox, Bowers, & Foss, 1989). These findings are consistent with the current study, whereby the primary motivation among male students to exercise is related to health i.e., "to increase my muscle strength". It may be related to the physiological and cultural demands which are strength and power-based that creates pressure for boys to conform to ideals of a masculine body (Daley & Hunter, 2001). This could be the reason why male students in this study perceived strength as the greatest benefit of physical activity.

On the other hand, the female students reported "Exercise improves mental health" the most significant benefit. This finding is also similar to the study done by Broadkin and Weiss (1990) that many individuals exercise for mental health reason. In general, research has demonstrated that engaging in exercise and physical activity significantly enhances mental health. Therefore, participating in an exercise program creates a positive impact on elevating mood and improving self-concept and self-esteem of the students (Brandon & Loftin, 1991; Mutrie & Biddle, 1995). So the results of the study show that university students value exercise which promotes mental health and self-esteem crucial to succeed in their studies and life.

On the other hand, both male and female students considered "I enjoy exercise"; and "Exercise decreases feelings of stress and tension for me" as the most likely benefits at second and third level.

Thus, it means that the powerful motivators in participating and maintaining sport or physical activity are the desire to have enjoyment and fun. Perhaps enjoyment and fun is a result of meeting a challenge, learning a skill and participating in physical activity. Another reason for participation of individual is emotional release as deduced by Raugh and Wall (1987). Being a college student and having to study almost 32 hours per week incur a pressure and stress to them. At the time of the data collection for the present study, these students were preparing for their semester examination which may be causing them more tension. As a result, possibly the students in this study felt that physical activity provides a distraction from problems and exercise can offer a change in routine and divert one's mind away from anxious thoughts (Martinsen & Stephens, 1994; Page & Tucker, 1994) and thus make them to relax.

For the perceived barrier, the primary constraint for female students is "It costs too much money to exercise". This is similar to finding achieved by Coakley and White (1999). These students might have perceived participating in a structured exercise program such as aerobic classes or fitness program/clubs, where one is needed to pay registration fees. Being a student, having limited resources, this perhaps makes them to feel a constraint to engage in physical activity. Another barrier mentioned is "embarrassed to exercise", which is the second most likely barrier for male students and third most likely barrier for female students. Robbins, Pender, and Kazanis (2003) concluded that the barrier to physical activity which emerged for the girls was that they were self-conscious about their looks while exercising. However, embarrassment cited by the students is not related to obesity because average body mass index for present sample is within ideal normal body weight i.e., 19.1-25.9 for female students and 20.7-26.4 for male students. However, Haase et al. (2004) in their study related that inactivity varies with culture, especially in the developing country.

A study done in Malaysia among women showed that the female Malay Muslims are socially conditioned to act in groups and need someone to accompany. Therefore, this would be a factor to poor exercise opportunity, especially, if the type of exercise is individualistic type or if there are few like minded family members or friends to participate in these exercises (Nordin et al., 2002). Surprisingly, why male students feel embarrassed to exercise is unexplained. Perhaps the male students are shy by nature or just not bothered to do exercises. Is really Malay culture cultivates shyness? This area needs to be explored in future studies. Other barriers related

to physical activity, as reported earlier, are lack of social support from family and friends (Treiber et al., 1991); lack of social network, and separation from family and friends (Eyler et al., 1998). Similarly, in this study, the female students cited lack of family encouragement as another constraint to exercise. Traditionally, family or parents discourage girls to participate in physical activity/sports because of the stereotype considering these as masculine activities not corresponding to feminine social expectation, especially in Asian culture/values. Therefore, women receive less support and encouragement to physical and sport activity (Gottlieb & Chen, 1985; Hasbrook, 1986). Unlike boys, girls are also expected by their family member to be homely and play routine feminine roles including house works rather than actively participating in physical activity. This may be the reason for female adolescents reporting lack of family encouragement as a barrier to exercise.

It is interesting to note that male adolescents mentioned "exercises take too much time from family relationship" and "exercise takes too much time from my family responsibilities" as their perceived barriers. Although, it is unclear why the male students perceive these as a barriers, but it is in accordance to Allison et al. (1999) and this area needs to be explored in future studies. The students from the university starts their daily routine from 6.30 am and pack up at 5.00 pm and perhaps the perceptions of lack of time might really represent a lack of interest or commitment to physical activity (King et al., 1992). Most probably, they want to do other things in their spare time such as doing their homework, revising lessons or resting/sleeping after a long hours of studying in the college during day time.

Conclusion and Suggestions

It is suggested to the faculty management to involve mass education strategies, for example, to develop a physical activity program that addresses students' perceived barriers to physical activity. Changes in institutional policies may be necessary to enable students to have the opportunity to do exercise or physical activity. Allocate compulsory time for college students to participate in physical activity and give a credit point for their active participation. The management should also provide facilities such as a gymnasium for the students to do their work out. This is to ensure increasing opportunities for physical activity that can facilitate activity

maintenance for motivated individuals and increase readiness to change among the less motivated to maintain an adequate level of activity. The limitation of this study is the sample consisting of one ethnic group only i.e., the Malay college students. Therefore, it is recommended that further study should be carried out including different ethnic groups, with variation in age of adolescence and from different geographic area and socioeconomic statuses.

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