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## Adopting active lifestyle: A study of school children's physical activity readiness, motives and decisional balance of physical activity

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### Abstract

The purpose of this research was to compare the gender wise differences in physical activity readiness, motives and decisional balance of physical activity among school children. For this descriptive comparative survey method was used. Total of 108 students (57 boys and 51 girls) from secondary schools in Pune city were selected as sample. Physical activity readiness was determined using stages of transtheoretical model, Motives or reasons for participation in physical activity was measured with the help of 30 item questionnaire developed by Kaczynski (2007). Scale comprised of 5 reasons namely, Enjoyment, Fitness, Social, Appearance, and Competence. Each reason consisted of 6 statements and all items to be rated on a 5-point likert scale ranging from strongly disagree (1) to strongly agree (5). A 16-item scale developed by Marcus, Rakowski, and Rossi (1992) was used to assess student's perceived "pros" and "cons" of physical activity. Ten items assess pros of physical activity, while six items assess cons of physical activity. Decisional balance represents the difference between summary scores for the pros and cons scales. Result shows that majority of the students are at preparation stage and some at action stage who needs to progress to maintenance stage as soon as possible. Fitness followed by Competence are the two important reasons why boys and girls participate in physical activity and Appearance is the list important reason for participation. Boys showed statistically stronger reason for participation in physical activity for all the five motives. Decisional balance score is positive indicating greater perceptions of pros of physical activity. On comparing the gender wise differences in scores of decisional balance of physical activity, there is no significant difference at 0.05 level of significance.

**Keywords:** Physical activity readiness, motives, decisional balance.

### 1. Introduction

Physical activity and physical fitness has been linked with longevity since ancient times. Even though youth are the most active group concern has been expressed about their levels of physical activity. Research concludes that at least fifty percent children and adolescent are insufficiently active for health benefits with girls less active than boys. Further a steep decline across the adolescent period, are robust and appear to hold across the world (Biddle, & Mutrie 2008) [4]. Many studies have shown inactivity as one of the ten leading global causes of death and disability (WHO 2003) [18]. ACSM in 1988 made eight specific recommendations about physical activity and health for children and youth. One of these recommendation is development of appropriate school physical education programs which emphasize on lifetime physical activity [1]. Physical activity forms the core of physical education programs at school levels. School years are the best time in any child's life when regular physical activity participation and the attitudes toward it can only be developed.

People trying to change themselves seem to move through 'stages of change'. This approach forms the base of transtheoretical model. This model when applied to physical activity studies, identifies five stages of change (Prochaska, & Velicer, 1997) [17], i.e. pre-contemplation, contemplation, preparation, action, and maintenance. Many studies have shown that people who are physically active during adolescence will go on to become physically active adults and exhibit a healthy and active lifestyle (Dishman, & Dunn 1988) [9]. Research shows relationship of physical activity and health and fitness benefits (Biddle 1995) [3]. The onset of physical inactivity and increased sedentary lifestyle during adolescence continue into the

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adulthood, posing a major challenge to the Physical Educationists & health professionals. Biddle states that despite knowing benefits of physical activity, only a minority of people in industrialized countries are sufficiently active. This necessitates a greater understanding of the correlates of involvement in physical activity. Decisional balance is one such core construct within the Transtheoretical Model (Prochaska & Marcus, 1994) [16]. The idea of decisional balance is based on the notion that people's propensity to undertake a behaviour (change) is a function of how they perceive the pros and cons of the behaviour.

Adolescents who had more experience with physical activity and sports prior to age fifteen had a higher psychological readiness for physical activity at thirty years of age (Hale, 2003) [10]. Research on children's participation by Mulvihill, Rivers, & Aggleton (2000) [15] has shown that children aged 5-11 years are often physically active and are enthusiastic about activity. They are motivated by enjoyment, and social elements of participation, while those aged 11-15 years, enjoyment was important, itself enhanced when an element of choice was evident and feelings of well-being. Despite the common knowledge that exercise or physical activity is helpful, many people are not regularly active. Coakley and White (1992) [7] in their studies interviewed children who had decided to participate in different sports and decided not to participate at all. The decision to participate or not appeared to be influenced by perceptions of competence, by external constraints, such as money and opposite sex friends, degree of support from significant others and past experiences, including school PE. Negative memories of school PE included feeling of boredom and incompetence, lack of choice and negative evaluation from peers. Feelings of embarrassment in sport settings, mainly due to perceived incompetence or concerns over self-presentation associated with their physique, have been reported in several studies. Brook's (1996) [5] study addressed the sedentary population and their reasons for leading an inactive lifestyle; he found that competing priorities, lack of exposure, lack of incentives, and lack of motivation, boredom and psychological barriers

were some important barriers.

Understanding and regularly assessing the different correlates is essential to reinforce the adoption of a healthy & physically active lifestyle. Hence the purpose of this study is to compare the gender wise differences in physical activity readiness, motives and decisional balance of physical activity among school children.

## 2. Materials and Methods

**Method:** A descriptive comparative survey was conducted to study the gender wise differences in physical activity readiness, motives and decisional balance of physical activity among school children from Pune city.

**Participants:** Total 108 students (57 boys and 51 girls) from secondary schools in Pune city were selected as sample.

**Instruments:** Physical activity readiness was determined using stages of transtheoretical model, Motives or reasons for participation in physical activity was measured with the help of 30 item questionnaire developed by Kaczynski (2007) [12]. Scale comprised of 5 reasons namely, Enjoyment, Fitness, Social, Appearance, and Competence. Each reason consisted of 6 statements and all items to be rated on a 5-point likert scale ranging from strongly disagree (1) to strongly agree (5). A 16-item scale developed by Marcus, Rakowski, and Rossi (1992) [13] was used to assess students perceived "pros" and "cons" of physical activity. Ten items assess pros of physical activity, while six items assess cons of physical activity. A high score on the pros scale indicates that the benefits of behaviour change are important, while a high score on the cons scale indicates that the costs of behaviour change are influential. Decisional balance represents the difference between summary scores for the pros and cons scales, with a positive score indicating greater perceptions of pros and a negative score indicating more cons than pros.

## 3. Results and Discussion

Classification of students based on their Physical activity readiness stage

**Table 1:** Physical Activity Readiness Stage

Gender	Stage				
	Pre-contemplation	Contemplation	Preparation	Action	Maintenance
Boys	--	--	27	06	24
Girls	--	--	36	06	09

From table no. 1 it is observed that some of the students are already regularly active as they are at maintenance stage (24 boys and 9 girls). But majority of the students are at

preparation stage and some are at action stage who needs to progress to maintenance stage as soon as possible.

**Table 2:** Analysis of Motives for participation in physical activity

Variable	Gender	Mean	S.D.	S.E.M.	t	df	Sig. (2-tailed)
Enjoyment	Boys	25.58	5.72	0.80	2.60	85.48	0.011
	Girls	23.12	3.81	0.50			
Fitness	Boys	27.89	2.51	0.33	3.55	77.57	0.001
	Girls	25.41	4.40	0.62			
Social	Boys	24.47	4.48	0.59	2.81	106	0.006
	Girls	21.94	4.88	0.68			
Appearance	Boys	23.95	4.10	0.54	3.53	83.02	0.001
	Girls	20.24	6.44	0.90			
Competence	Boys	26.89	3.42	0.45	3.00	89.50	0.003
	Girls	24.47	4.78	0.67			

Table no. 2 shows the statistics for motives for participation in physical activity. It is observed that Fitness followed by

Competence are the two important reasons why boys and girls participate in physical activity and Appearance is the list

important reason for participation. On comparing the gender wise differences in scores of different reasons for participation in physical activity, boys showed statistically

stronger reason for participation in physical activity for all the five motives.

**Table 3:** Analysis of Decisional Balance of Physical Activity

Variable	Gender	Mean	S.D.	S.E.M.	t	df	Sig. (2-tailed)
Pros	Boys	40.26	4.41	0.59	1.29	84.42	0.20
	Girls	38.82	6.76	0.95			
Cons	Boys	16.47	6.66	0.88	0.06	103	0.96
	Girls	16.41	5.00	0.70			
Decisional Balance	Boys	23.79	6.86	0.91	1.02	103.50	0.31
	Girls	22.41	7.17	1.00			

Table no. 3 shows the statistics for decisional balance of physical activity. It is observed that the average for each dimension were similar across the genders, with agreement with the ‘pros’ items falling well above the midpoint of the scale (40.26 for boys and 38.82 for girls out of 50) while lesser agreement was observed for the ‘cons’ items (16.47 for boys and 16.41 for girls out of 30). Decisional balance score is positive indicating greater perceptions of pros of physical activity. On comparing the gender wise differences in scores of decisional balance of physical activity, there is no significant difference at 0.05 level of significance.

One theoretical framework that has shown promise in the exercise domain over the past decade is the Transtheoretical Model (TTM) of health behavior change (Prochaska & Marcus, 1994; Prochaska & Velicer, 1997)<sup>[16, 17]</sup>. The TTM is sometimes referred to as the “Stages of Change Model,” although there are three other theoretical constructs of the TTM (i.e., decisional balance, self-efficacy, and processes of change). It has been reported that the higher the stages of change, the higher the levels of physical activity across various populations (Barke & Nicholas, 1990; Cardinal, 1995; Dannecker, Hausenblas, Connaughton, & Lovins, 2000; Marcus, Banspach *et al.*, 1992; Marcus & Simkin, 1994)<sup>[2, 6, 8, 12, 14]</sup>.

In the present study it is observed that some of the students are already regularly active as they are at maintenance stage but majority of the students are at preparation stage and some are at action stage who needs to progress to maintenance stage as soon as possible. The results for motives for participation in physical activity shows that Fitness followed by Competence are the two important reasons why boys and girls participate in physical activity and Appearance is the list important reason for participation which is a good sign. Decisional balance reflects the way perceived pros (benefits) and cons (barriers) of a behavior can affect adoption of a new behavior. Perceived pros and cons can vary systematically across the exercise stages of change (Prochaska & Marcus, 1994)<sup>[16]</sup>. In the present study it is observed that the average for each dimension were similar across the genders, with agreement with the ‘pros’ items falling well above the midpoint of the scale while lesser agreement was observed for the ‘cons’ items. Decisional balance score is positive indicating greater perceptions of pros of physical activity. So to promote active lifestyle students are already ready, if good facilities and infrastructure are available in their school and neighbourhood than chances of adopting active lifestyle will be very high

#### 4. Conclusions

Fitness followed by Competence are the two important reasons why boys and girls participate in physical activity and the Decisional balance score is positive indicating greater perceptions of pros of physical activity this will help majority

of the students who are at preparation and action stage to progress to maintenance stage as soon as possible.

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