PERCEPTION OF ADOLESCENT GIRLS TOWARDS PHYSICAL ACTIVITY

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Abstract

Adolescence is a crucial period of life, since dramatic physiological and psychological changes take place at this age. Likewise, lifestyle and healthy/ unhealthy behaviour are established during these years may influence adult behaviour and health status. Hence this study was taken to collect information on perception of adolescent girls towards physical activity with objectives such as To assess the perception of the adolescent girls with regard to physical activity, the attitude of the adolescent girls with regard to physical fitness and the physical activity level of the adolescent girls. Survey method and questionnaire was the tool used. Sample consisting of 120 adolescent girls were selected through purposive random sampling technique. A Likert scale was used in the questionnaire to assess the perception on physical fitness, Barriers and benefits of physical activity among adolescent girls. The data revealed that higher percentage of the respondents fall under light active physical activity level. Most of the respondents had some barriers to engage in the physical activities. Higher percent of the adolescent girls agreed that physical activity enhance concentration, sense of achievement, increased flexibility, self esteem, confidence and feeling physically good, stress relief and relaxation. Further 44.2 percent remained neutral for pride as a perceived benefit of physical activity. Perception on physical fitness by adolescent girls varied from low to moderate.

Key words: *Adolescent, Physical activity, Physical activity Level, Health*

Introduction

Adolescence is the most crucial stage in the life of an individual. According to World Health Organization, adolescence covers 10 to 19 years of life. Adolescents form significant proportion of the population of any nation, and the care of adolescents is the need of the hour as they have to shoulder future responsibility of the country. The word 'adolescence' originated from the Latin word – 'Adolescere' which means – 'to grow to maturity'. As cited by Beena Johnson (2009) Adolescence refers to the long transitional developmental period between childhood and adulthood, and to a maturational developmental process involving major physical, psychological and social transformations. The importance of physical activity for children is unparalleled. The years of infancy, adolescence and the early teens are the only ones with scope for building a good physique through interactive play and communication. The physiological and psychological aspects of physical activity empower children to take on the stress of adulthood and work related restrictions. Childhood obesity and excessive exposure to screen-oriented gaming and entertainment need to be addressed with urgency. The kinds of steps taken by teens to lose weight fast and address teen obesity are not amusing. Early negligence towards establishing the right kind of physical activity results in mental and physical submission to stress later.

Physical activity refers to a simple exercise regime, play and even leisure time indulgences like gardening, biking, rock climbing and rigorous volunteering. Supported by a well balanced diet, physical activity enables parents and guardians to reduce the likelihood of health complications setting in early. Children who are overweight suffer the risk of reduced life expectancy and quality. On the other hand, regular physical activity keeps heart disease, osteoporosis and juvenile diabetes at bay. The outdoor activities also assure mental well-being. Physical activities for adolescents are essential from the point of view of the various pollutants and lifestyle changes that have crept in across the globe. The result is that adolescents are succumbing to a number of ailments and health issues that are more environment and lifestyle related.

Review of Related Literature

Sallis and Patrick, (1994), cites that, in 1993 the International Consensus Conference on Physical Activity established two general physical activity guidelines that are believed to improve several health aspects for all adolescents while minimizing known health risks. The adolescent group was defined as ages 11 through 21 years whereby it was found that all adolescents should be physically active daily, or nearly every day, as part of play, games, sports, work, transportation, recreation, physical education, or planned exercise in the context of family, school and community and that adolescents should engage in three or more sessions per week of activities that last 20 minutes or more at a time and that requires moderate to vigorous levels of exertion.

Saeid Khanmohammadi et al (2007), states that one of the best methods to improve healthy life is promotion of physical activity level in community. Physical activities are very important in today's society in combating non communicable diseases. Statistics show that in different countries, 40 to 60 percent of adults don't do physical activity up to recommended level. Only 20 percent of the individuals do proper physical activity program. The

study was conducted in Tarbiz private and public high schools. Five hundred students were selected by random sampling method. Finding shows that the mean level of physical activity among teenagers was 67.64 of 100 points and it also shows that 46.8 percent of teenagers were doing physical activity most time, 53.2 percent of teenagers said they watch TV programs more often and only 43.6 percent believe it will help them to improve their health.

Objectives

1. To assess the perception of the adolescent girls with regard to physical activity.
2. To know the attitude of the adolescent girls with regard to physical fitness.
3. To assess the physical activity level of the adolescent girls.

Methodology

To elicit information on perception of adolescent girls towards physical activity, a survey method and questionnaire was the tool used. For conducting survey, a sample consisting of 120 adolescent girls in Bangalore city were selected with the age range of 16 - 19 years through purposive random sampling technique.

A questionnaire was prepared to secure information on perception of adolescent girls towards physical activity. Details regarding their family background, Anthropometric measurements, and physical activity level. A Likert scale was used in the questionnaire to assess the perception on physical fitness, Barriers and benefits of physical activity among adolescent girls. As cited by Swain (2008) A Likert scale is a type of psychometric scale (attitude scale) often used in questionnaires and is the most widely used scale in survey research. It asks the respondents to specify their level of agreement to each of a list of statements.

The Physical activity level of healthy, well nourished adolescents is a major determinant of their total energy requirements. The physical activity levels of the respondents were measured by using Factorial approach. Factorial approach involves the summation of energy expended during the periods that a person is sleeping and resting or engaged in occupational. Discretional or maintenance physical activities, plus the energy needed for tissue accretion. The physical activity level was calculated by this method involved two sets of data which are time allocated to the various activities and energy cost of those activities.

The questionnaire was sent to subject expert and statistician to assess the Reliability. Reliability implies extent to which a measuring device is consistent in measuring whatever it measures. To study the feasibility of this investigation and assess the responses from the adolescent girls, a pilot study was undertaken. A pilot study trains the investigator in the use of the questionnaire, helps to develop confidence and skill in the investigation, and aids in modifying and improving the questionnaire in the light of the result of the pilot study.

Twenty percent of the sample was taken to ascertain the validity of the tool. Validity provides a direct check on how well the test fulfills its function. The questionnaires were distributed and the data collected was consolidated & analyzed. Based on the results of the pilot study, the questionnaire was modified and finalized for the main study. The data was analysed using appropriate statistical methods.

Results and Discussion

Table 1

Classification of Respondents by Personal Characteristics

Characteristics	Category	Respondents	
		N	%
Age Group (years)	16-17	36	30.0
	18-19	84	70.0
Class studying	PUC	41	34.2
	B.Sc	79	65.8
Ordinal Position	First	58	48.3
	Second	45	37.5
	Third	17	14.2
Type of Family	Nuclear	85	70.8
	Joint	35	29.2
Number of Family members	3-4	48	40.0
	5-6	48	40.0
	Above 6	24	20.0
Family Income/month	<Rs.6,000	24	20.0
	Rs.6,001-10,000	54	45.0
	Rs.10,000-20,000	25	20.8
	>Rs.20,000	17	14.2
Occupation of Father	Government	22	18.3
	Private	32	26.7
	Business	59	49.2
	Agriculture	7	5.8
Occupation of Mother	Private	16	13.3
	Business	6	5.0
	House wife	98	81.7
Number of Earning members in Family	One	67	55.8
	Two	43	35.8
	Three	10	8.4

Source: Field Survey

Table 1 depicts the personal characteristics of the respondents. Most of the adolescent girls were in the age group of 18 to 19 years followed by 16 to 17 years. Higher percentage (65.8%) of the respondents in I B.Sc. followed by I and II PUC. Further, table shows that most of the respondents were in the first ordinal position followed by second and third respectively. The study further shows that the size of the family consisted of 3 to 4 members and 5 to 6 members in their family. Regarding the family income per month, 45 percent of the

respondents were in the income range of Rs. 6001 – 10,000 per month followed by Rs. 10,000 – 20,000 and less than Rs. 6000. Further the data shows that 98 percent of the respondent's mothers were housewife (home makers). The number of earning family members was one (55.8%) followed by two (35.8%) and 3 (8.4%) respectively.

Anthropometric Measurement

Table 2

Comparison of Height and Weight with NCHS Standard

Age	NCHS Height (cm)			't'	NCHS Weight (kg)			't'
(years)	Std	Mean	SD	Value	Std	Mean	SD	Value
16	162	155.2	5.5	1.75 NS	53.0	46.1	8.5	1.15 NS
17	163	155.6	8.5	1.23 NS	54.0	48.5	11.3	0.69 NS
18	164	153.7	8.5	1.71 NS	54.4	44.8	6.8	2.00*
19	165	151.0	10.8	1.83 NS	54.8	46.6	8.3	1.40 NS

Source: Field Survey *Significant at 5% Level, NS: Non-Significant, t (0.05, 119df) = 1.96

Table 2 reveals the mean height and weight of the adolescent girls. The mean height of the respondents varied from 151 cm to 156 cm and weight 44 kg to 49 kg. The mean anthropometric measurement of the respondents were compared with age and NCHS standards and analyzed statistically by using t - test. It was found that the mean height of the respondents of the age 16, 17, 18 and 19 years were lower than the NCHS standards but however there was a non significant difference between the age, mean height and NCHS standards when analyzed statistically. The mean weight of the respondents of the age 16, 17, 18 and 19 years were lower than the NCHS standard. But when analyzed statistically it was found that there was a non significant difference between the respondents age of 16, 17 and 19 years, mean weight and NCHS standard and significant difference between the age of 18, mean weight and NCHS standard.

Physical activity level

Table 3

Classification of Respondents on PAL Value

Classification	PAL Value	Respondents	
		N	%
Light Active	1.10-1.69	105	87.5
Moderately Active	1.70-1.90	15	12.5
Vigorously Active	2.00-2.40	0	0
Total		120	100.0

Source: Field Survey

Table 3 states that higher percentage of the respondents were light active followed by moderately active. None of them were vigorous workers.

Perception on Physical Activity

Table 4

Respondents Perceived Barriers to Physical Activity

No.	Aspects	Respondents Perception Barriers (%)						
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Weighed mean
1	Self Efficacy	20.0	48.3	26.7	4.2	0.8	100.0	25.5
2	Preference for indoor Activities	10.0	41.6	44.2	2.5	1.7	100.0	23.7
3	Low Energy level	4.2	32.5	41.6	19.2	2.5	100.0	21.1
4	Lack of Motivation	7.5	40.0	34.2	17.5	0.8	100.0	22.4
5	Time Constraints	16.6	39.2	38.3	4.2	1.7	100.0	24.3
6	Peer Pressure	8.3	32.5	45.0	10.7	3.3	100.0	22.1
7	Lack of Facilities	20.0	32.5	29.2	15.8	2.5	100.0	23.4

Source: Field Survey

Adolescents should view physical activity as being interesting and fun. However, there can be important and significant barriers to engage in physical activity. Table 4 shows the respondents perceived barrier to physical activity. Most of the adolescent girls agreed that self efficacy as a barrier to physical activity and 26.7 percent were neutral, 41.6 percent preferred indoor activities and 44.2 percent of the respondents were neutral. Regarding low energy level 41.6 percent of the adolescent girls were neutral whereas 32.5 percent did agree as a barrier to physical activity. Majority of the adolescent girls agreed lack of motivation time constraints and lack of facilities were the barriers to physical activity.

Respondents Perceived Benefits of Physical Activity

Table 5

Respondents Perception Barriers (%)

No.	Aspects	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Weighed mean
1	Enhance Concentration	21.7	58.3	19.2	0.8	0.0	100.0	26.7
2	Sense of achievement	26.7	56.7	15.0	1.6	0.0	100.0	27.2
3	Increased Flexibility	16.7	45.0	33.3	4.2	0.8	100.0	24.8
4	Self Esteem	10.0	54.2	27.5	8.3	0.0	100.0	24.4
5	Pride	11.7	36.7	44.2	6.6	0.8	100.0	23.5
6	Confidence	23.3	59.2	16.7	0.8	0.0	100.0	27.0
7	Feeling good Physically	21.6	59.2	16.7	2.5	0.0	100.0	26.7
8	Stress Relief	7.5	55.8	30.8	4.2	1.7	100.0	24.2
9	Relaxation	18.3	55.8	23.4	1.7	0.8	100.0	25.9

Source: Field Survey

The perceived benefits of physical activity have been positively associated with physical activity in adolescents. Table 5 dealt with the respondents' perceived benefit of physical activity. Higher percentage of the adolescent girls agreed that physical activity enhances concentration (58.3 %), sense of achievement(56.7%), increased flexibility (45%), self esteem(54.2%), confidence and feeling physically good (59.2%), stress relief and relaxation (55.8%). Further 44.2 percent remained neutral for pride as a perceived benefit of physical activity.

Perception on Maintaining Physical Fitness

Table 6

Respondents Perception Barriers (%)

No.	Aspects	Very low	Low	Moderate	High	Very High	Total	Weighed mean
1	Maintain a consistent work out	26.7	25.0	25.8	10.8	11.7	100.0	14.7
2	Capacity for Aerobic activities	34.2	23.3	28.3	10.0	4.2	100.0	15.1
3	Muscular strength	25.8	18.3	29.2	19.2	7.5	100.0	17.6
4	Body Flexibility	26.7	16.7	25.8	21.7	9.2	100.0	18.0
5	Current energy level	23.3	10.8	21.7	22.5	21.7	100.0	20.6

Source: Field Survey

Table 6 reveals the perception of the respondents on maintaining physical fitness. Most of the adolescent girls' maintenance of a consistent work out varied from very low to moderate. Perception on capacity for aerobic activities, muscular strength, body flexibility and current energy level varied from very low to high.

Conclusion

From the study it can be concluded that higher percentage of the adolescent girls fall under light active physical activity level. Most of the respondents had some barriers to engage in the physical activities. To be healthy the adolescent girl engaged in more of physical activity related programs. Adolescence being a very crucial period for growth and development, the parents have to give due importance to the food intake, nutritional requirement, physical activities and physical fitness to keep them healthy. The educational institution has to provide increased playground facilities and safe play areas. They have to encourage the students to participate in the physical activity and fitness related programs and include as a part of the curriculum.

References

Beena Johnson, *Adolescence to excellence* Posted on January 17, 2009, www.google.com.

Hallal P C, Victora C G, Azevedo M R, Wells J C, Adolescent physical activity and health: a systematic review *Sport Medicine*, 2006,36:1019-1030

Ortega1 FB, Ruiz1 JR, Castillo1 MJ and M Sjo¨stro¨m Physical fitness in childhood and adolescence: a powerful marker of health *International Journal of Obesity* (2008) 32, 1–11; doi:10.1038/sj.ijo.0803774; published online 4 December 2007

Renu Bala Sharma and Monika Hardikar "Effect of Socio Economic Factors on Physical fitness of college going Girls of Sagar" *International Referred Research Journal*, October 2010, ISSN- 0974-2832 II(21)26 – 28.

Riddoch CR. *Northern Ireland health and fitness survey - 1989*. Belfast: Queen's University of Belfast, Division of Physical and Health Education, 1990.

Saeid Khanmohammadi, Rezagholi Vahidi and VahidehSadeghi Physical activity level of Tabriz teenagers Research Journal of Biological sciences, 2(6) 677 – 679 2007.

Sallis JF, Patrick K. Overview of the international consensus conference on physical activity guidelines for adolescents Pediatric Exercise Science, 6, 299-301, 1994.

Swain A K P C (2008) *Text book of Research Methodology* New Delhi: Kalyani Publishers