ORIGINAL RESEARCH PAPER

Physical Education

PHYSICAL ACTIVITY ATTITUDE OF COLLEGE STUDENTS IN KERALA STATE, INDIA A RELIGION WISE SURVEY

KEY WORDS: Physical activity attitude, positive attitude, Neutral attitude, Christian, Hindu and Muslim college students.

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ABSTRACT

The purpose of this study was to investigate the physical activity attitude of college students in Kerala state. This questionnaire study sample consisted of 2500 degree college students comprising 1182 Hindu students, 681 Christian students and 637 Muslim students aged between 18 to 21 years. The subjects were randomly selected from different colleges of the entire 14 districts of Kerala state. A 56 items Likerts Type five points scale ranging from strongly agree to strongly disagree, measuring physical activity attitude was modified and revalidated with the help of experts in public health, nutrition and social behavioral science. Validation and reliability studies were done through pilot studies on 56 item scale. The Cronbach alpha for the scale was obtained as .96 and coefficient of correlation was .98. Descriptive statistics, t ratio and ANOVAs were analyzed by SPSS 2016.

Results: Christian and Hindu students exhibited positive attitude and Muslim students exhibited neutral attitude towards physical activity.

INTRODUCTION

One of the major concerns of world today is health of the people. Worldwide, health is being influenced by three trends: population, rapid unplanned urbanization, and globalization, all of which result in detrimental environments and behaviours. As a product, the growing prevalence of NCDs (non communicable diseases) and their risk factors has become a global issue affecting both under developed and developing countries. Virtually 45% of the adult disease burden in these countries is now attributable to NCDs. Many under developed and developing countries are beginning to suffer the double burden of communicable and non-communicable diseases, and health systems in these countries now have to deal with the additional costs of treating both. It has been shown that participation in regular physical activity reduces the risk of non communicable diseases. Additionally, physical activity is a key determinant of energy expenditure, and thus is fundamental to energy balance and weight control.

Physical inactivity (lack of physical activity) has been identified as the fourth leading hazard factor for global mortality (6% of deaths globally). Moreover, physical inactivity is likely to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of heart disease burden. Physical inactivity has been identified as the fourth leading threat factor for global mortality (6% of deaths globally). This follows high blood pressure (13%), tobacco use (9%) and high blood glucose (6%). Overweight and obesity are responsible for 5% of global mortality. India is the second most populated country in the world with wide regional variations of caste, religion, socioeconomic status, lifestyle and food habits. These variations reflect not only in the epidemiology of diabetes but also in its care. Non-communicable diseases (NCD) contribute a huge burden on the healthcare system in India as compared to past when the burden was due to infectious diseases. More than half of the deaths in India are attributed to NCD of which diabetes is on the forefront and has emerged as an epidemic in India. India is following a trend of other developing countries that are steadily becoming more obese. Unhealthy, processed food has become much more accessible following India's continued integration in global food markets. Indians are genetically susceptible to weight accumulation especially around the waist. A new study released by the Registrar General of India indicated that obesity-related diseases have joined malnutrition as leading causes of death. As India's economy grows, so does the temptation for many people to eat more and do less physical work. Fatty food is just a phone call away. The severity of the present situation in the Indian context can be judged from the alarming figures that during 2004, diabetes has been directly responsible for 109,000 deaths, 1157 years of life lost and 2263 disability adjusted life years.

According to recent data, 62.4 million Indians have been reported to have diabetes and the figures are expected to reach 87 million by the year 2030. The occurrence rates of diabetes for urban, semi urban and rural population vary from 5-15%, 4-6% and 3-5%, respectively, showing wide regional disparities with respect to different local settings. Rural population has exhibited a 3 times shift (2.4% to 6.4% during last 14 years) in the prevalence similar to urban population and the number is increasing rapidly. Improved socioeconomic status, motorized transport a switch into occupational structure with increased mechanization and constricting urban/rural disparity account for this shift. This is evident from rural prevalence rates in Kerala, those who have even overtaken urban prevalence rates since, whole of Kerala can now be considered to be urbanized.

Allport (1968) described attitude as being "the most distinctive and indispensable concept in Contemporary psychology". Attitude is defined as the degree to which a person likes or does not like something. A person's attitude toward any given object can have either a positive or negative impact. Thus, attitude has the ability to strongly influence a person's behavior. The Theory of Reasoned Action guides much of the attitude research in physical education; it posits that a person's belief system guides their attitude, which ultimately impacts their behavior.

One area where attitude is particularly important is physical activity. There is emerging evidence to suggest that students who exhibit a more positive attitude toward physical activity in physical education are more likely to participate in physical activity outside of school. This carry over value in terms of attitudes toward physical activity is critical to participation in lifetime physical activity. Positive attitudes formed toward physical activity in physical education can play an important role in maintaining an active lifestyle outside school. In addition, active children are more likely to become active adults. Impacting upon student attitudes toward physical activity through school physical education programs is a logical initial step in helping students participate in physical activity—both now and in the future. The formation of positive attitudes toward physical activity in physical education is all the more important given the increase in physical inactivity among youth internationally, emphasized that ''by engaging children and adolescents in enjoyable physical activity and teaching them the skills related to developing and maintaining appropriate physical activity, physical education could help future generations of adults avoid becoming so sedentary''. In addition, people's attitudes have been found to be the key role in the formation of intentions to participate in physical activity. Impacting students' attitudes toward physical activity in physical education, therefore, could have a major effect on public health. It has been documented that participation in moderate to vigorous physical activity on a regular basis provides numerous physical and mental health benefits.

Researchers in the field of Physical Education (PE) indicated that identifying and understanding the factors that are associated with children's physical activity participation are critical to the

promotion of current and lifelong physical activity participation. Among many factors, the children's attitude is considered to be a key factor that influences physical activity participation. Rikard and Banville (2006) stated that attitudes are born from beliefs that one's has about him or herself and things. Attitudes shape one's behaviors in many ways and determine one's involvement in him or her daily activities. In addition, active children are more likely to become active adults. In addition, people's attitudes have been found to be the key influence in the formation of intentions to participate in physical activity. Impacting students' attitudes toward physical activity in physical education, therefore, could have a major effect on public health.

Methods & Materials

Population:

The entire degree college students of Kerala state was the population of the study

Sample:

Sample consisted of 2500 degree college students comprising 1182 Hindu students, 681 Christian students and 637 Muslim students aged between 18 to 21 years. The subjects were randomly selected from different colleges of the entire 14 districts of Kerala state.

Data collection tool:

A 56 items Likerts Type five points scale ranging from strongly agree to strongly disagree, measuring Attitude towards Physical Activities (ATPAS) was developed suitable for Indian conditions by modifying and revalidating attitudes measurement model suggested by Kenyon (1968) with the help of experts in sports psychology and sociology. Validation and reliability studies were done on total 68 questions and 56 questions accepted and 12 were rejected. Validation evidence was gathered through pilot studies. In estimating the internal consistency of the scales, the Cronbach's alpha for the scale was .96 and coefficient of correlation for the scale was .98. 56 items summed across resulting in a range from 56 to 280 points. A score of 56 indicates the most negative attitude; a score of 57- 113 indicates a negative attitude; 114-170 a neutral attitude; 171-227 a positive attitude; and 228-280 the most positive attitude.

Statistical technique used

Descriptive statistics and t value and ANOVAs were used for analyzing data.

Method of data collection

The ATPAS was distributed among 2500 students (1145Male &1355Female) of different colleges of Kerala state .The convenient sampling procedure was adopted in selecting the students having the representation of all areas of Kerala state. The scale was administered personally and the 2500 students returned the scale with the response rate of 100%.The collected data was then analyzed using SPSS 2016.

Data analysis and presentation

Table I Descriptive statistics of Attitude towards physical activity scores - Religion Wise

Religion	N	Mean	Median	Std. Dev.	Skewness	Kurtosis
Christian	681	187.72	192.00	18.807	-1.123	1.851
Hindu	1182	177.72	181.00	20.949	-0.521	-0.173
Muslim	637	163.65	164.00	21.544	-0.388	0.824

Observation: It is observed from table 4.11 that, the mean value for attitude towards physical activity of Christian group was 187.72, for Hindu group it was 177.72 and for Muslim group it was 163.65. The median value of attitude towards physical activity for Christian group was 192.00, for Hindu group was 181.00 and for the Muslim group was164.00. The standard deviation was 18.807 for Christian group, 20.949 for Hindu group and 21.544 for Muslim group. The skewness of Christian group was -1.123, for Hindu group was -0.521and -0.388 for Muslim group. The kurtosis was 1.851 for Christian group, -0.173for Hindu group and 0.824 for Muslim group.

Figure I Graphical representation of Attitude towards physical activity scores of religion groups

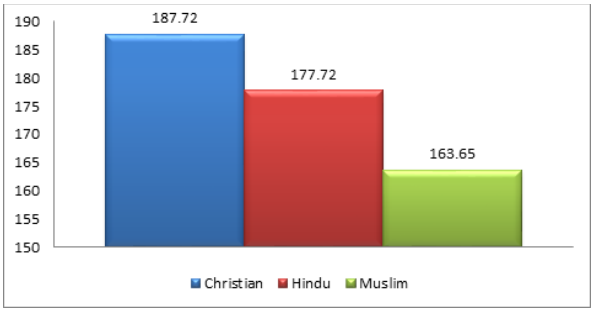

Table 2 ANOVA of Attitude towards physical activity scores of religion groups

Source	Sum of Squares	DF	Mean Square	F ratio	Sig
Between	32720.825	2	16360.412	37.865*	0.00
Within	214740.077	497	432.073		
Total	247460.902	499			

*the mean difference is significant at 0.05 levels

Observation: Table 4.12 shows that the obtained F value of 37.865 was significant since it was greater than the required value of 2.62, thus showing a difference among the group on attitude towards physical activity. In order to find which group was more attitude, pair wise comparison analysis would be carried out in the following table.

Table 3 Pair wise comparison of Attitude towards physical activity scores of religion groups

Christian	Hindu	Muslim	MD	CV	Sig
187.72	177.72		9.993*	7.25	0.00
187.72		163.65	24.066*	7.25	0.00
	177.72	163.65	14.074*	7.25	0.00

*the mean difference is significant at 0.05 levels

Interpretation:

From the table 4.13, it was cleared that the mean difference value of 9.993 and 24.006, when Christian students were compared with Hindu and Muslim Students respectively, proved to be significant since these values were higher than the critical value of 7.25. And the mean difference value of 14.074, when Hindu students were compared with Muslim Students respectively, proved to be significant since these values were higher than the critical value of 7.25.

Results:

The results of the study showed that Christian and Hindu group students in Kerala state have positive attitude towards physical activities. The study also revealed Muslim students exhibits neutral attitude towards physical activities. The mean difference among groups was significant. Christian students have more positive attitude towards physical activity followed by the Hindu and Muslim students.

Discussions:

The religion group wise result shows that Christian and Hindu groups reveals positive attitude towards physical activity (falls between 169-224), but Muslim students reveals neutral attitude (fall between 113-168). Christian students have more positive attitude towards physical activity followed by the Hindu and Muslim students. The difference in attitudes may be due to the social, geographical and cultural differences among religion groups.

Christian students have more positive attitude towards physical activity followed by the Hindu and Muslim students. The difference in attitude towards physical activity may be due to the social and cultural differences among religions. Christian students are more related with agricultural related activities and are residing away

from cities. They are more physically active with their routine and they are more active in sports also.

Reference

1. www.who.int/topics/physical_activity/en/
2. Global health risks: mortality and burden of disease attributable to selected major risks. Geneva, World Health Organization, 2009.
3. The global burden of disease: 2004 update. World Health Organization, Geneva, 2008.
4. A guide for population-based approaches to increasing levels of physical activity: Implementation of the WHO Global Strategy on Diet, Physical Activity and Health Geneva, World Health Organization, 2007.
5. Preventing chronic diseases: a vital investment. Geneva, World Health Organization, 2005.
6. Resolution WHA57.17. Global Strategy on Diet, Physical Activity and Health. In:Fifty-seventh World Health Assembly, Geneva, 17–22 May 2004. Resolutions and decisions, annexes. Geneva, World Health Organization, 2004.
7. Indian Journal of Endocrinology and Metabolism, Vol. 18, No. 3, May-June, 2014, pp. 254-263
8. Gupta R, Misra A. Review: Type 2 diabetes in India: Regional disparities. Br J Diabetes Vasc Dis; 7:12-6, 2007
9. Vijayakumar G, Arun R, Kutty VR. High prevalence of type 2 diabetes mellitus and other metabolic disorders in rural Central Kerala. J Assoc Physicians India 2009; 57:563-7.
10. Brown, D. W., et al.. Associations between physicalactivity dose and health-related quality of life. Medicine andScience in Sports and Exercise,2004, 36(5): pp. 890–896.Centers for Disease Control and Prevention. 2000. MeasuringHealthy Days. Atlanta: CDC.
11. Ajzen, I., &Fishbein, M. Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, 1980.
12. Biddle, S. J. H. Psychology of promoting physical activity, exercise, and health in physical education. In Y. VandenAuweele, F. Bakker, S. Biddle, M. Durand, & R. Seiler (Eds.), Psychology for physical educators (pp. 1–3). Champaign, IL: Human Kinetics,1999.
13. McKenzie, T. L. Health-related physical education: Physical, activity fitness, and wellness. In S. J. Silverman, & C. D. Ennis (Eds.), Student learning in physical education: Applying research to enhance instruction pp. 207–226. Champaign, IL: Human Kinetics,2003.
14. Telama, R., Yang, X., Laakso, L., &Viikari, J. Physical activity in childhood adolescence as predictor of physical activity in young adulthood. American Journal of Preventive Medicine, 13, pp.317–323, 1997.
15. Biddle, S. J. H., & Goudas, M. Analysis of children's physical activity and its association with adult encouragement and social cognitive variable. Journal of School Health,66(2), pp.75–78, 1996.