

ANALYSIS OF PHYSICAL ACTIVITIES FOR SCHOOL GOING CHILDREN OF UTTAR PRADESH


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The purpose of the present study was to survey the physical activity and of school going children of Uttar Pradesh. The study employed a stratified random sampling, where the participants for the study, 3000 primary and high school children and from representative samples from different schools; aided, unaided and government. The sample selection was done following a stratified random sampling to include representative samples in the different categories. Apart from the physical data on the physical activity of school going children were collected by using a self-made questionnaire to present the physical activity of school going children of Uttar Pradesh, descriptive statistics and percentage analysis were used. The independent t-test was used to compare the physical and health status of school going children on selected parametric variables with respect to gender. The level of significance to test the selected hypothesis was set at 0.05.

Keywords: Physical Activity, Muscular Fitness, Health Parameters

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Introduction

Physical activity is well-defined as any physical movement produced by skeletal muscles that results in energy spending. Physical activity may include activities such as; professional sports, fitness and conditioning, household, transport or other activities. At the Fifty-third World Health Assembly (May 2000) WHO affirms "physical inactivity as a key risk factor in the prevention and control, and a resolution (WHA53.17) was adopted encouraging the WHO to provide leadership in combating physical inactivity and associated risk factors". According to WHO, "for children (in the age group in between 5–17 years old) physical activity includes wide range of activity including play, games, sports, recreation, physical education or planned exercise, in the context of family, school, and community activities. Some of the following physical activities are necessary to improve cardio-respiratory and muscular fitness, bone health, cardiovascular and metabolic health biomarkers and also to reduced symptoms of anxiety and depression.

>Children and young people aged 5–17 years old should accumulate at least 60 minutes of moderate to vigorous-intensity physical activity daily.

> Physical activity of amounts greater than 60 minutes daily will provide additional health benefits.

> Most of daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week".

The available scientific evidence indicates that higher levels of physical activity are associated with favorable health parameters and improvement in health indicators. This supports the conclusion that physical activity provides fundamental health benefits for children and youth.

Review of Related Literature

Kwan et al (2012) to distinguish the methods of physical activity based on gender and educational level showed the results: as "(24%) decrease in physical activity during the period of 12 years. A remarkable decrease in physical activity was observed during the transition of young adults into early adulthood, and the decline was clear among men who started college or university.

The results also indicated an increase in many health risk behaviors during adolescence although smoking and binge drinking decreased gradually after their maturity".

Bauman and Miller, (2004) reports that "Regular moderate physical activity is a very cost-effective way of improving and maintaining people's health. The promotion of physical activity should therefore be a fundamental component of public health work".

Goodwin, (2006) and Lloyd, (2005) investigated the effects of physical activity on health behavior and healthy lifestyle. Goodwin's (2006) study reports that "male youths were more likely to participate in physical activity and less likely to feel depressed"

Methodology

Preparation and administration of Questionnaire The investigator had a thorough study of surveys conducted on physical activity and prepared a draft questionnaire with different dimensions related to physical activity of school children. The draft questionnaire was sent to experts for opinion and suggestions. Accordingly, the questionnaire was modified and administered to a sample of school students. According to the responses of the subjects and the coding of data, necessary modifications were made.

Statistical Technique and Procedure

After collecting the data on the physical activity of school going children of Uttar Pradesh, descriptive statistics and percentage analysis were used. The independent t-test was used to compare the physical and health status of school children on selected parametric variables with respect to gender. The level of significance to test the selected hypothesis was set at 0.05. (Figure Enclosed as Annexure 01)

Analysis of Data

Table 1 indicates that 48.4% of participants mentioned that their school was below 3 kilometers from their home; 18.5% of participants mentioned that their home was between 3 to 5 kilometers from school; 14% of participants mentioned it as 5 to 8 kilometers and 19.1% of participants had their school above 8 kilometers from home. The graphical representation of the responses of the participants for the above is shown in figure 1. (Enclosed as Annexure 02)

Table 2 indicates that 5% of participants rated their mode of conveyance from home to school was by own car; 2.8% of participants by return vehicle; 27.2% of participants by school bus; 22.3% of participants by bicycle and 32.7% of participants by walk. The graphical representation of the responses of the participants for the above is shown in figure2. (Enclosed as Annexure 03)

Table3 indicates that 59.1% of participants mentioned that they engage in some sort of exercise at least once a week, whereas 40.9% of participants did not engage in any sort of exercise. The graphical representation of the responses of the participants for the above is shown in figure3. (Enclosed as Annexure 04)

Table4 indicates that 7.8% of participants engaged in strenuous exercise for at least three times a week; 32.1% of participants engaged in moderate exercise; 33.9% of participants in mild exercise and 26.3% of participants did not engage in any sort of exercise. The graphical representation of the responses of the participants for the above is shown in figure 4. (Enclosed as Annexure 05)

Table5 indicates that 39.1% of participants mentioned that they engage in dusting and cleaning; 21.7% of participants engage in washing clothes and dishes and 39.2% of participants did not engage in any household work. The graphical representation of the responses of the participants for the above is shown in figure5. (Enclosed as Annexure 06)

Table 6 indicates that 48.8% of participants mentioned that they involve inhousehold work every day; 15% of participants 3-5 times a week; 25.9% of participants 1-3 times a week and 10.3% of participants never engaged in any house holdwork. The graphical representation of the responses of the participants for the above is shown in figure 6. (Enclosed as Annexure 07)

Discussion of Findings

The study physical activity of primary and high school children of Uttar Pradesh revealed the following findings and observations.

> The findings indicated that almost 75% of the participants rated their quality of life as good and very good. 79.1% of the participants were satisfied with their 166 health. 53% of the respondents mentioned that they visited the doctor at least once

During the last one month. 48% of students had missed classes at least once during the last one month due to illness or being sick. 55% of students travelled to school by walk or using bicycle. 40.9% of students mentioned that they do not engage in some sort of physical exercise at least once in a week. Almost 40% of the students do not involve in any sort of household activities as well.

> Gender was associated with quality of life among primary and high school children of Uttar Pradesh. Visit to doctor, distance of school from home, mode of conveyance to school showed variations with respect to gender. Involvement in household work also indicated differences with respect to gender.

> The general trend of lower height and weight of girls accompanied by higher resting heart rate and greater BMI suggest the progressive reduction in outdoor physical activity among girls, who might be restricted to indoor activities.

> The non-availability and lack of provision of quality physical activity sessions in the school environment is also a matter of concern with respect to development of physical status and health of children.

Conclusion

- More than 70%of primary and high school children of Uttar Pradesh rated their quality of life as good and were satisfied with their health.
- Almost 40.9% of students mentioned that they do not engage in any sort of physical exercise for at least once in a week; and almost 40 % of the students do not involve in any sort of house hold activities as well.
- Boys had significantly greater weight, higher height, lower heart rate and lower BMI as compared to girls.
- Gender was associated with quality of life, frequency of visit to doctor, distance of school from home, mode of conveyance to school and involvement in household.

Recommendations

- Evaluation of health and physical fitness status be made part of the annual student evaluation to monitor progress in physical and health status of children.
- Knowledge and awareness

- programme about the ill effects of non-active children and its consequences may be provided in schools.
- A major project as this may be undertaken covering the entire sample of school children in the state of Uttar Pradesh to provide a wider database for mentoring and evaluating physical and health status of children.

Annexure

Annexure 01

Annexure 02

Annexure 03

Annexure 04

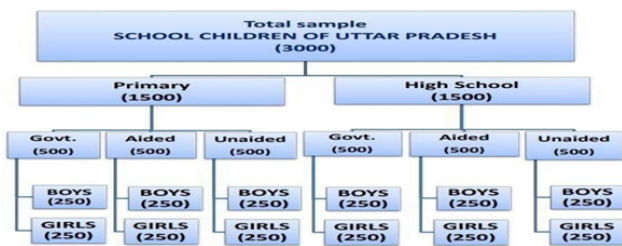
Annexure 05

Annexure 06

Annexure 07

Annexure

01



02

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Below 3 Km	1451	48.4	48.4	48.4
3 to 5 Km	555	18.5	18.5	66.9
5 to 8 Km	420	14.0	14.0	80.9
Above 8 Km	574	19.1	19.1	100.0
Total	3000	100.0	100.0	

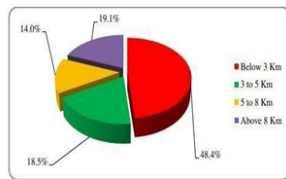


Table1: Response to the Question – How far is your school from home?

03

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Own car	149	5.0	5.0	5.0
Returned vehicle	385	12.8	12.8	17.8
School bus	816	27.2	27.2	45.0
Bicycle	668	22.3	22.3	67.3
By walk	982	32.7	32.7	100.0
Total	3000	100.0	100.0	

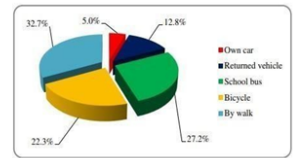
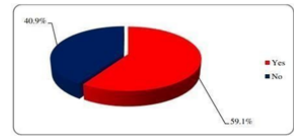


Table 2 indicates that 5% of participants rated their mode of conveyance from home to school was by own car;

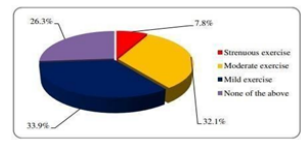
04

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1773	59.1	59.1	59.1
No	1227	40.9	40.9	100.0
Total	3000	100.0	100.0	



05

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strenuous exercise	233	7.8	7.8	7.8
Moderate exercise	962	32.1	32.1	39.8
Mild exercise	1017	33.9	33.9	73.7
None of the above	788	26.3	26.3	100.0
Total	3000	100.0	100.0	



06/07

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Everyday	1464	48.8	48.8	48.8
3-5 times a week	449	15.0	15.0	63.8
1-3 times a week	778	25.9	25.9	89.7
Never	309	10.3	10.3	100.0
Total	3000	100.0	100.0	

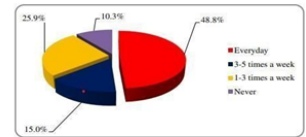


Table6: Responses to the Question – How frequent do you involve in household work?

Reference

Arpita Mandal (Nandi), Gopal Chandra Mandal, (2012). Prevalence of overweight and obesity among the urban adolescent English Medium School girls of Kolkata, India, IJPH, 2012, Volume 9, Number 3, retrieved from <https://ijphjournal.it/article/viewFile/7535/6794>. [Crossref][Google Scholar]

DeMoor, M. H. M. , Beem, A. J., Stubbe, J.H., Boomsma, D.I., and DeGeus, E.J.C. (2006). Regular Exercise, Anxiety, Depression and Personality: A Population-Based Study. Preventive Medicine, vol. 42, pp.273-279 retrieved from https://www.theseus.fi/bitstream/handle/10024/101060/MburuMatiba_Lucy%20Wang%20thesis.pdf?sequence=1 [Crossref][Google Scholar]

Mandeep Singh (2010). Evaluation And Improvement Of Sports Techniques Through Biomechanical Updated Analyzing Technology, University News, Journal of Higher Education Association of Indian Universities,

Association of Indian Universities, Vol:48:Issue. 05;2010 Pp45-57, 2010. J., Stubbe, J.H., Boomsma, D.I., and DeGeus, E.J.C. (2006). *Regular Exercise, Anxiety, Depression and Personality: A Population-Based Study*. *Preventive Medicine*, vol. 42, pp.273-

279retrievedfromhttps://www.theseus.fi/bitstream/handle/10024/101060/MburuMatiba_Lucy%20Wangui%20thesis.pdf?sequence=1 [Crossref][Google Scholar] [Crossref][Google Scholar]

. . 05;2010 Pp45-57, 2010. J., Stubbe, J.H., Boomsma, D.I., and DeGeus, E.J.C. (2006). *Regular Exercise, Anxiety, Depression and Personality: A Population-Based Study*. *Preventive Medicine*, vol. 42, pp.273-

279retrievedfromhttps://www.theseus.fi/bitstream/handle/10024/101060/MburuMatiba_Lucy%20Wangui%20thesis.pdf?sequence=1 [Crossref][Google Scholar] [Crossref][Google Scholar] [Crossref][Google Scholar]

Mandeep Singh Nathial, A Study of Adjustment and Emotional Intelligence of University Coaches in India, *American Journal of Applied Psychology*. Volume 3, Issue 6, November 2014 , pp. 122-126. doi: 10. 11648/j.ajap.20140306.11 [Crossref][Google Scholar]

Nathial, Mandeep Singh. A COMPARATIVE AND ANALYTICAL STUDY OF SELF-ESTEEM AND JOB SATISFACTION IN ATHLETES AND NON ATHLETES. *Journal of Advances in Social Science and Humanities*, 2(10). <https://doi.org/10.15520/jassh210123> [Crossref][Google Scholar]

Singh, M. , Kour, R. , & Kour, A. ., *A collaborative diversified investigation of respective responses of sports person coaches and organizations on criminalization of doping*.*International Journal of Health Sciences*,6(S3), 11295-11310. [Article][Crossref][Google Scholar]

Mandeep Singh. , Assessment of Vocational Interests of Pahadi&Bakarwal School Students In Relation To Their Gender. *Int J Recent Sci Res*. 9(3), pp. 24817-24819. DOI: [Article][Crossref][Google Scholar]

Fox K. R. (2004), Childhood obesity and the role of physical activity. *The Journal of the Royal Society for the Promotion of Health* 124, 34-39, retrieved from <http://researchonline.ljmu.ac.uk/6157/1/571161.pdf> mention in Ch ii fox KR et al 2004 [Crossref][Google Scholar]

mention in Ch ii fox KR et al 2004 [Crossref][Google Scholar]

Fox K. R. , Cooper A. , and Mckenna, J. (2004), *The school and promotion of children's health enhancing physical activity* *Journal of School Health* 23, 338-358, retrieved from [Article][Crossref][Google Scholar]

SINGH SIDHU, A. , & SINGH, M. (2022). KINEMATICAL ANALYSIS OF HURDLE CLEARANCE TECHNIQUE IN 110M HURDLE RACE. *International Journal of Behavioral Social and Movement Sciences*, 4(2), 28-35. Retrieved from [Article][Crossref][Google Scholar]

Singh, A. , & Singh , D. M. (2013). *PROMOTION OF RESEARCH CULTURE –ENHANCING QUALITY IN HIGHER EDUCATION*. *International Journal of Behavioral Social and Movement Sciences*, 2(2), 202-208. Retrieved from [Article][Crossref][Google Scholar]

SINGH, M. , & SINGH SIDHU, A. (2016). A COMPARATIVE STUDY OF BODY COMPOSITION AND RELATIVE HEALTH STATUS AMONG RESIDENT AND NON-RESIDENT STUDENTS IN DIFFERENT SCHOOLS OF J&K. *International Journal of Behavioral Social and Movement Sciences*, 5(3), 08-13. Retrieved from [Article][Crossref][Google Scholar]

Singh Nathial, D. M. (2012). ANALYZING THE CREDIT BASED SYSTEM IN PHYSICAL EDUCATION. *International Journal of Behavioral Social and Movement Sciences*, 1(3), 172-176. Retrieved from [Article][Crossref][Google Scholar]

SHARMA, N. P. , & SINGH, M. (2014). *SENIOR AGE GROUP RELATIVE EXERCISES AND IMPACT ON THEIR LIFESTYLE*. *International Journal of Behavioral Social and Movement Sciences*, 3(04), 78-82. Retrieved from [Article][Crossref][Google Scholar]

CHAND PURI, P. , MISHRA, P. , JHAJHARIA, B. , & SINGH, M. (2014). *COORDINATIVE ABILITIES OF VOLLEYBALL IN DIFFERENT AGE GROUPS: A COMPARATIVE STUDY*. *International Journal of Behavioral Social and Movement Sciences*, 3(3), 56-68. Retrieved from [Article][Crossref][Google Scholar]

J. Woo, S. C. Ho, L. M. Yu, J. Lau and Y. K. Yuen, (1998), *The Gerontological*

Society of America Impact of Chronic Diseases on Functional Limitations in Elderly Chinese Aged 177 70 Years and Over: A Cross Sectional and Longitudinal Survey, Journal of Hematology: Medical Sciences 1998, Vol. 53A, No. 2 [Crossref][Google Scholar]

The U. S. Department of Health and Human Services (HHS) Chapter 1: Introducing the 2008 Physical Activity Guidelines for Americans retrieved from <https://health.gov/paguidelines/2008/chapter1.aspx> [Crossref] [Google Scholar]