

Comparative Study of Strength among Girls of Uttar Pradesh

Abstract

For the purpose of the study of the total four hundred and fifty girls were selected as a subject from different areas of Uttar Pradesh which were which were urban semi urban and rural. The subject selected following procedure of random selection the average age of the subject was form 12 to 15 years. The study was delimited to abdominal Muscular strength and shoulder muscular strength only.

The necessary data was collected by administrating the test after collecting data from four hundred and fifty subject were analyzed by utilizing descriptive is descriptive statistics including mean, SD, Analysis of variance (F ratio) and critical. (LSD) was found.

Result revealed a significant difference among girls urban, semi urban and rural of government schools in relation to strength at 0.05 level of confidence.

Keywords: Government Schools, Urban, Semi-Urban, Rural Government Schools, Strength, Muscular Strength, Abdominal Muscular Strength, Shoulder Muscular Strength

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Introduction

Women's health is not only influenced by genetics, biology, and physiology but also by women's role in the society. The field of women's health has developed in response to increasing knowledge of the non-reproductive difference between men and women, with physicians, scientists, nurses, advocates, social workers, coach, health consultant, fitness, experts and administrators collaborating in a multidisciplinary effort to understand and promote women's health and general well being. The National Academy of Women's Health Medical Education Published a comprehensive definition which reflects a multidisciplinary approach to considering Women's health. Women's health is devoted to facilitating the preservation of wellness and prevention of illness and includes screening, diagnosis and management of conditions which are unique to women, are more common in women, are serious in women and have manifestations, risk factors or interventions which are different in women."¹

Women's health also recognizes the importance of the study of gender differences, recognizes the values and knowledge of women and their. Experience of health and illness, diversity of women's health needs over the life cycle and how these needs reflects differences in race, class, ethnicity, culture, areas, sexual preference and level of education and access to medical care; includes the empowerment of women, as for all patients, to be informed participants in their own health care."²

Therefore the research scholar was making and attempt to determined the comparison Abdominal and Shoulder muscular strength among girls of urban, semi urban, and rural government schools of Uttar Pradesh.

Review of Literature

Yoshimura¹ health promoting school activities have been implemented in developing countries, but their experiences have not been fully shared. Our objective is to explore the difference of health promoting school status in urban, semi urban and rural areas in Lao PDR. To accomplish this we evaluated 138 schools in three provinces using a checklist developed by the government school health taskforce. We interviewed first through fifth grade pupils, school principals, food vendors, community chiefs, and observed school environments. We found that urban and semi-urban schools had higher scores than rural school in the areas of, "personal health and life skills," "healthy school environment," health and nutrition services," and "common disease control and prevention." However, semi-urban and rural schools showed better results than urban schools for some questions with in the "school and community

partnership" component. When the result of individual schools was examined, there was considerable variation. We found a tendency for higher scores in urban areas, which went down for semi-urban areas and further decreased for rural areas. However, we also found differences among schools within each study site. In conclusion, we found not only a large difference among urban, semi-urban and rural schools but also clear difference in health promoting school status among schools within each study site in Lao PDR. Based on the result, we recommend that each school adopt a tailored approach for the health promoting school programme based upon an analysis of its own scores.

Matre² The increasing prevalence of overweight in youth has been well chronicled, but less is known about the unique patterns and risks may exist in rural and urban environments. A better understanding of possible rural-urban differences in physical activity profiles may facilitate the development of more targeted physical activity intervention. Methods : Participants (1,687 boys; 1729 girls) were recruited from fourth, fifth, and sixth grade classes in schools from urban areas, small cities, and rural areas. Multilevel modelling analysis was used to examine rural-urban differences in physical activity and prevalence of overweight. Physical activity was assessed by self-report and body mass index was calculated from measured height and weight. Findings prevalence of overweight was higher among rural children(25%; $p<.001$) than children from urban areas(19%) and small cities(17%). Urban children were at school ($d= -0.9$ to -1.1). children from small cities reported the highest levels of physical activity. Conclusions: The results of this study suggest there are rural-urban differences in children's prevalence of overweight and physical activity even within a fairly homogenous Midwestern state.

Rose³ investigated the two motivators physical activity are health and appearance. The public sector focuses on health as the primary motivator when creating physical activity promotion campaigns, while the fitness industry uses appearance as its main motivator. Despite the call by some theorists that social marketers should include both health and appearance as motivator in physical activity campaigns, whether these factors can be successful independently and how they may interact, remain to be determined. Therefore, the purpose of this dissertation was to examine whether televised health promotion exercise advertising had great effects on viewers than appearance- based exercise advertising. Four separate experiments examined this question experiment one used undergraduates participants (N=103) to examine whether the two types of exercise advertising would have different effect on three depend variables; exercise attitude, social physique anxiety and self-presentation in an exercise setting. Experiment two examined the same question in a group of participants aged 44 to 67 years (N=20) . Experiment three used an undergraduate sample (N=89) to test the effect of

exercise advertising on the three dependent variables, but also include socio culture attitudes towards appearance as a dependent variables. Experiment four used an independent variables. Experiments four used an undergraduate sample (N=97) to test whether the two forms of exercise advertising had different effect on stage of behaviour change, self-efficacy for exercise, and decisional balance (from the trains theoretical model). All four experiments used a pre-test / post-test experimental design. Participants filled out pre-test questionnaires one week prior to viewing a twenty minute video Japanese culture that made no reference to exercise or sport. Imbided into the video were advertising breaks that contained six neutral advertisements and three target advertisements. The target advertisements in one video were promoting physical activity for health. The second video contained exercise for appearance advertisements, and the third was a control video with three more natural advertisements. After viewing a video participants completed the post-test questionnaires. The main findings across the series of experiments were the post-test questionnaires. The main findings across the series of experiments were that health based exercise advertising positively influence exercisers and older participants, that appearance based exercise advertising had effects on men only; and that there is a distinction between self-presentation concerns in a non-competitive exercise environment compared to a competitive exercise environment.

Lashbrook⁴ took ten healthy ,untrained volunteers (nine females and one male), ranging in age 13-17 years, were studied to determine the effect of hatha yoga practice on the health related aspects of physical fitness, including muscular strength and endurance ,flexibility ,cardio respiratory fitness, body composition, and pulmonary function. Subjects were required to attend a minimum of two yoga classes per week for a total of 8 weeks. Each yoga session consisted of 10 minutes of Pranayamas (breath control exercise), 15 minutes of dynamic warm-up exercise,50 minutes of Asanas (yoga postures) ,and 10 minutes of supine relaxation in Savasana (corpse pose). The subjects were evaluated before and after the 8-week training program. Isokinetic muscular strength for elbow extension, elbow flexion and knee extension increased by 31%,19% and 28%($p<0.05$), respectively, whereas isometric muscular endurance for knee flexion increased 57%($p,0.1$). Ankle flexibility, shoulder elevation, trunk extension, and trunk flexion increased by 13% by 13% ($p<0, 01$), 15% (p, 0.001), 188%($p<0.001$) and 14%($p,0.05$), respectively absolute and relative maximal oxygen uptake increased by 7% and 6%, respectively ($p<0.01$). These findings indicate that regular hatha yoga practice can elicit improvements in the health related aspects of physical fitness.

Objective of the problem

The purpose of the study was to compare the strength among girls of urban, semi urban and rural government schools of Uttar Pradesh.

Hypothesis

From the scholar’s own understanding of the problem and as gleaned through the literature it was hypothesized that there would not be significant difference in Abdominal muscular and shoulder muscular strength among girls of rural urban, and semi urban government schools of Uttar Pradesh.

Delimitations

1. The study was delimited to female subjects only
2. Study was further delimited to the age group of 12-15 yrs
3. The study was further delimited to the rural, urban and semi urban, government schools only.

Administration of Test

1. To find out the abdominal muscular strength scholar had taken bent knee sit-ups in thirty second.
2. To find out the shoulder muscular strength had taken bent arm hang

Definition and Explanation of Terms

Muscular Strength

It is maximum amount of force a muscle or muscle group can exert. To measure the muscular strength, it was divided into two areas:

1. Abdominal muscular strength
2. Shoulder muscular strength

Government Schools

In India Government schools are those which for the education of the children of a community , district ,village, city etc and that constitute a part of a

system of a free public education commonly including primary and secondary level education.

Urban Government School

Government schools of girls which are situated in cities.

Semi Urban Government School

Government Schools of girls which are situated in just (outside of the cities) at the country side.

Government Girls School

Government schools of girls which are situated in villages or town.

Analysis of Data and Result of The Study

The necessary data was collected by administrating the test. Pretest Randomized group design was employed. After collecting data from four hundred and fifty girls subjects were analyzed by utilizing descriptive statistics including Mean, SD, analysis of variance and critical difference (L&D) was found.

Result revealed a significant among girls, urban, semis urban and rural of government schools and Abdominal and shoulder muscular strength.

Further the findings of the study reveals that according to analysis of data presented in Table-1, it was evident that there was a significant difference among groups (I,II,III) in Abdominal Muscular strength. The calculated F ratio 59.692 which was greater than (Tabulated) F value of 4.66 at 0.05 level.

Table-1. Analysis of Variance of Abdominal Muscular Strength Among Girls of Different Schools

Source of various	Degree of Freedom (df)	Sum of squares (SS)	Mean Squares (M.S)	F-Ratio
Between the group	2	2053.618	1026.809	59.692*
Within the group	447	7689.147	17.202	

*Significant at 0.05 levels

F 0.05 (2,447) =4.66

To find out the mean difference where F ratio is significant, the critical difference (LSD test) was this is presented in table 2.

Table-2

Post-Hoc Test for the Means of all Difference Type of Government girls Schools in Relation To Abdominal Muscular Strength

Means (M)			Mean Difference (M.D.)	Critical Difference (CD)
I Urban	II Semi Urban	III Rural		
12.49	11.37		1.12*	.076
12.49		16.36	3.86*	
	11.37	16.36	4.98*	

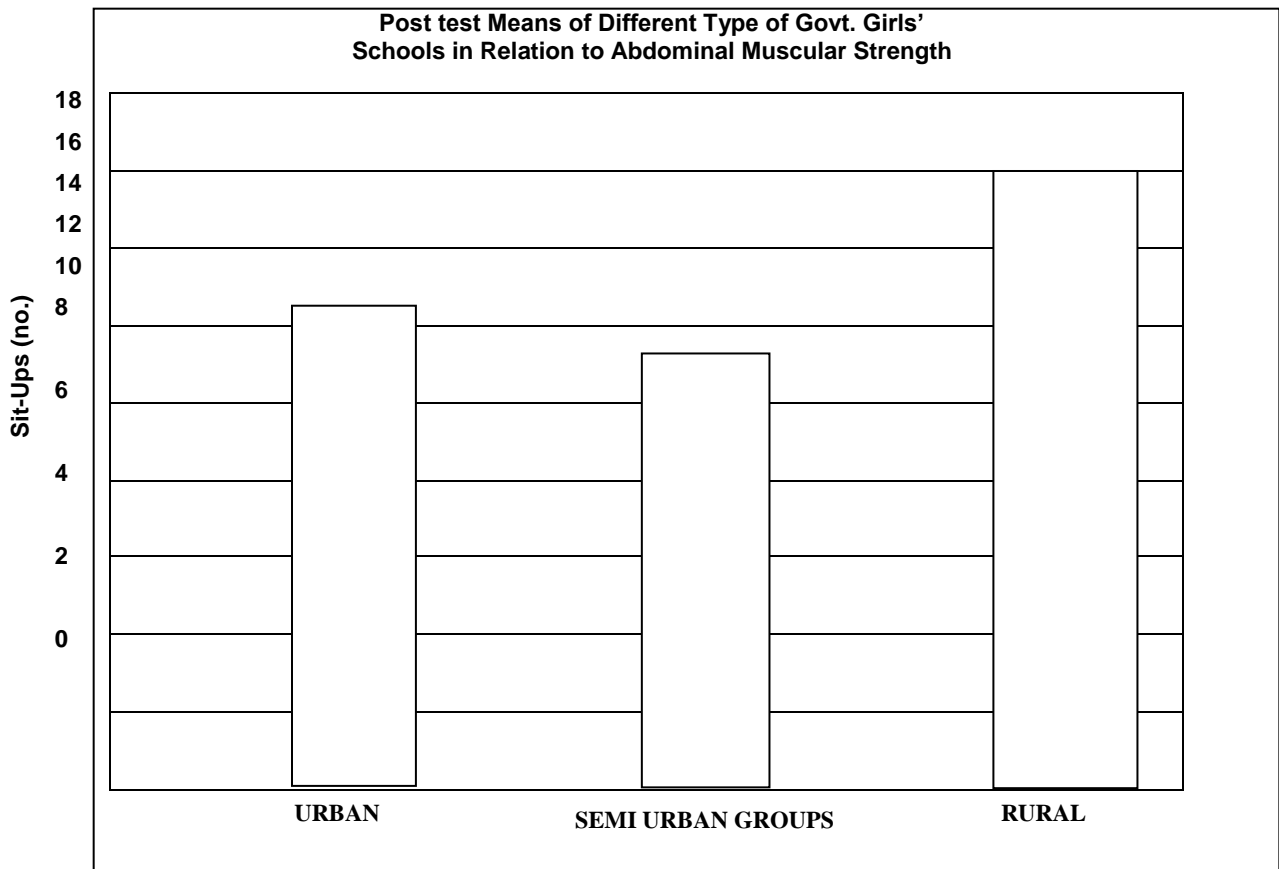
*Significant at 0.05 levels

The result clearly shows the group III Rural Government school showed the best result in Abdominal Muscular strength in comparably of other groups because the mean difference between group II and group III is 4.98 which is greater than critical

difference .076 was highly significant between urban and rural group.

The sequence of means performance in relation to Abdominal Muscular strength Rural Government schools >than urban Government schools >than semi urban Government schools.

Figure-1



The findings of the study reveals that according to analysis of data presented in Table-3 it was evident that there was a significant difference

among groups (I,II,III) in shoulder muscular strength. The calculated F ratio 19.797 which was greater than (Tabulated) F value of 4.66 at .05 level.

Table-3
Analysis of Variance of Shoulder Muscular Strength Among Girls of Different Schools

Source of various	Degree of Freedom (df)	Sum of squares (SS)	Mean Squares (M.S)	F-Ratio
Between the group	2	4248.444	2124.222	19.797*
Within the group	447	47963.013	107.300	

*Significant at 0.05 levels
F 0.05 (2,447) =4.66

To find out the mean difference where F ratio is significant, the critical difference was used and the data pertaining to this is presented in table -4 the result clearly shows the group III rural Government School showed the best result in shoulder muscular

incomparably of other groups because the mean difference between group I and group II is 7.33 which is greater than critical difference .191 was higher significant between urban and rural group.

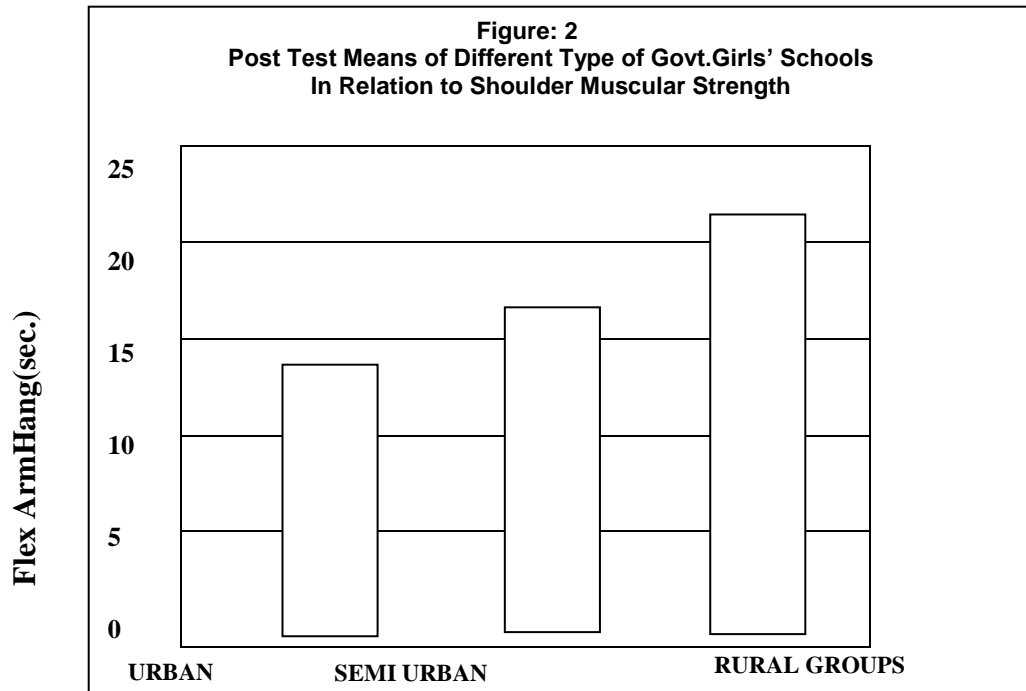
Table -4
Post-Hoc Test for The Means of Different Type of Government Girls' Schools in Relation To Shoulder Muscular Strength

Mean (M)			Mean Difference (M.D.)	Critical Difference (CD)
I Urban	II Semi Urban	III Rural		
13.96	16.16		2.2*	.191
13.96		21.29	7.33*	
	16.16	21.29	5.13*	

*Significant at 0.05 levels

The sequence of means performance in relation to shoulder Muscular of rural Govt. Schools>

semi Urban Govt. Schools> Urban Govt. Schools.



Findings

In the present study result revealed that Government girls school of rural area were better than other than other Government girls schools of urban and semi urban groups. The performance of muscular strength was better in Government girls school of Rural area in comparison to other groups which may be attributed to the fact that in villages the girls were laborious, they have to work at home like filling the buckets with water and carry it from far away from home, use hand pumps, work at farms like harvesting with their parents, wash cloths. Which are their routine life they are more active in physical activities. They don't have vehicles to go to so mostly they walk. There is no much restrictions from parents for performing any type of movements.

Result of the Hypothesis

The findings of the study clearly indicate that there was significant difference in Abdominal and Shoulder Muscular Strength among girls of rural, urban and semi urban government schools.

Therefore based on the findings the hypothesis as stated earlier that there would not be significant difference in Abdominal and Shoulder Muscular Strength among girls of rural, urban and semi urban government schools stands rejected.

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