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RELATIONSHIP OF VARYING LEVEL OF MOTOR FITNESS TO SOCIO-ECONOMIC STATUS AND STRUCTURAL VARIATIONS AMONG SCHOOL CHILDREN OF UDAIPUR DIVISION

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INTRODUCTION

John (1979) mentions that Herophilus, physician to alexander the Gread, had said, "When health is absent, wisdom can not reveal itself, art can not become manifest, strength can not fight, wealth becomes useless, and intelligence can not be applied."

Accprdmg to Featjerstpme (1965), "Modern civilization has made life soft and luxurious. The diminished physical efforts and artificial life is responsible for a physically week population. People today lack both strength and endurance. The average man spends more time attending to his automobile than attending to the state of his health.

KEY WORDS: Relationship, Motor Fitness, Socio-Economic Status, Structural Variations, School Children.

REVIEW OF RELATED LITERATURE

Andersen LB et al. measured the physical activity, aerobic capacity, muscle strength, muscle endurance and flexibility in 550 boys and 710 girls, 15-19 years of age, randomly selected among adolescents attending school in Denmark. A lower of physical activity was expected with higher age, based on earlier report from Sweden. Other types of physical activity than sports decreased with age, but no difference was found between age groups in sports



Activity, neither in hours per week or percentage of subjects participating in sports. Strength increased in both genders with increasing age and no difference as found in muscle endurance.

SELECTION OF SUBJECTS

Fifty male students studying in school in the Udaipur division belonging to the age group of 12 years 17 years studying in classes VII to XII were randomly selected for the study. The subject was selected from government schools, public schools and privately managed schools as to have the true representation of the cross section of the society.

Table - 1

ANOVA FOR THE RELATIONSHIP OF SV AND SES RELATED TO MOTOR PERFORMANCE.

S.V.	df.	SS	MSS	F. Ratio	Tab F.05
Columns	1	17791.51	17791.51	231.751*	3.86
Rows	4	2320.72	580.18	07.58*	2.39
Interaction	4	7076.20	1769.05	23.04*	2.39
Error	49	37617.95	76.77	-	-
Total	49				



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*Significant at .05 level of confidence.

The ANOVA from table 3 for motor fitness indicated that the resultants F-Ratio 3.86 for columns was found significant as the obtained F-ratio of 231.75 was much greater than the value of Tab. F-Ratio (3.86) to be significant in relation to motor fitness. The calculated R-Ratio of 7.58 for Rows was also higher than Tab. Value of R-Ratio (2.39) to significant at .05 level. This showed that motor fitness is significantly affected with different age level.

The critical difference (C.D) for SV and SES were calculated to find out which of the difference were most significant. The difference between the means of SV and SES are shown in table2 and

Table - 2

CRITICAL DIFFERENCE (C.D) FOR SV AND SES OF DIFFERENT AGE GROUP

Means of Motor performance		
Age (GP)	Boys	C.D
13-13 (A)	47.97	2.44
13-14 (B)	47.65	2.44
14-15 (C)	46.22	2.44
15-16 (D)	46.36	2.44
16-17 (E)	44.61	2.44

Significant at .05 levels.



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C.D. For significance at .05 level=2.44

It is evident from table that the mean differences for Boys Group B, Group C, Group D, and Group E were found significant at .05 level. The mean gains by the different groups showed statistically significant difference amongst themselves, but the mean gain made by Group A and Group E and Group B and Group E were than the other Groups. Group A (47.97), Group B (47.65), Group D (46.36), Group C (46.22) and Group E (44.61).

Even though the mean gain by the groups (A,B,C,D and E) showed statistically significant differences amongst themselves, the mean gains made by Group E, Group D and Group A were better than the Group B. The means of all the groups have been graphically exhibited.

CONCLUSIONS

Based on the finding and within the limitations of the study, the following conclusions are drawn.

1. Significant relationship of height was exhibited by the subjects in the motor fitness test.
2. Height contributed significantly in motor fitness of boys.
3. Motor fitness of boys showed significant difference (increased) with the increase in age.
4. Motor fitness of boys was better in every age category except 12-13 years.



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