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Research Note

An Analytical Study on measuring diversity in Actual Participation in the Physical Activities

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Abstract: Physical Activities has paramount importance in building of the Nation. More the importance to Physical Activities the better is the character building and human resource development. Though, Participation in Physical activities is a result of variety of intermingling factors however role of Authorities, Teachers and Students is of utter most significance for overall ecosystem building and enabling environment for better participation in the physical activities.

Keywords: Reliability, Mean, Standard Deviation, ANOVA

INTRODUCTION

To measure the diversity among the determinant factors which drives the participation in the physical activities the focus was kept on the most dominating groups which make the optimum impact¹⁻³. Administrators are responsible for overall policy making and gives broad policy⁴ framework which affects the participation in physical activities the most. However, any policy without a proper implementation may not result the desired yield and teachers as an implementer plays a vital role in ensuring better participation in the physical activities⁵⁻⁶. Third important factor is students themselves who are the ultimate subject of all the initiatives for the participation in physical activities. School, its infrastructure, ethics & policy; is also an important aspect and can't be ignored while studying the participation level of the student in the physical activities⁷.

For a true representation a sample of 360 subjects covering all the diversifying factors such as type of Schools, Students, Teachers and Administrators (Principal & Head Master/Institute Head) was selected randomly. Response of the selected individuals was recorded on predesigned questionnaire through a five point⁸ Likert's scale where options were ranging from Always to Often, Seldom, Sometimes and Never^{9,10}.

RESEARCH DESIGN

A 3×2×2 ANOVA was calculated for three factors viz, Nature of Institution (Private/Government), Gender (Male/Female) and Category of Subject (Students/Administrators/Teachers). Following tables describes the composition of the sample for this ANOVA

Table-1: Sample Composition for the Survey

		Nature of Institution			
		Private		Government	
		Male	Female	Male	Female
Category	Students	N=30	N=30	N=30	N=30
	Administrators	N=30	N=30	N=30	N=30
	Teachers	N=30	N=30	N=30	N=30

Reliability of the questionnaire was established by using Split-Half Method; a correlation between corrected odd and even numbered items was established. Then the Spearman-Brown Prophecy Formula was employed. Reliability of test was found 0.82. Further, "t-test" was used to study the significance of the difference between the groups.

ANALYSIS OF THE DATA AND RESULT

The cumulative scores of all the respondents for their actual participation in the physical activities for the category of the subject (as per gender and type of institutions) was calculated and cumulative scores alongwith graphical representation through the subdivided bar diagram is given on **Table 2**.

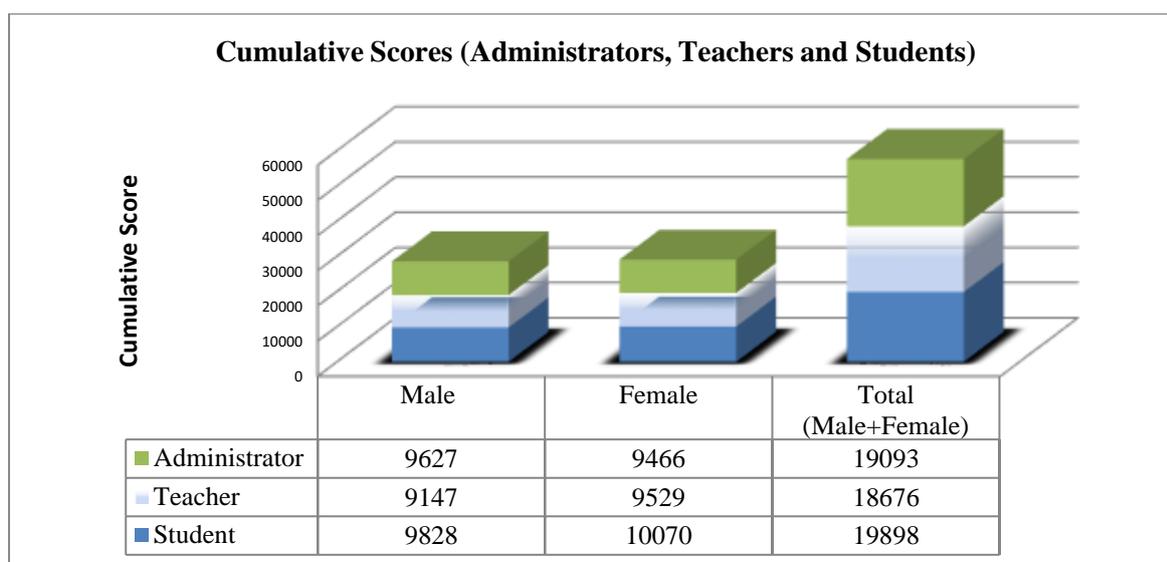


Figure1: Cumulative Respondents Scores- Category & Gender-wise

The graphical representation depicts the diversity among the various groups for their cumulative score. Further, drilling down on other criterion of diversity resulted in the following outcomes:

1. In Govt Schools, total score of all male administrators and students for their participation in physical activities was observed more than females. However, the score for all female teachers was more than male teachers.
2. In Private schools, sum of scores of all female administrators was higher than male for participation in physical activities.
3. The combined scores of female administrators and teachers of Govt and private school were more than combined scores of male administrators & teachers of private & govt schools.
4. The divergence in Mean and Standard Deviation of different groups for their actual participation in physical activities was also found and the same has been highlighted in following table-

Table 2: Mean & Standard Devastations for all the Categories

Students				
	Male Govt	Females Govt	Males Private	Females Private
Mean	327.60	335.67	322.07	312.83
S.D.	44.79	44.46	51.08	55.81
Teachers				
Mean	304.90	317.63	318.90	315.47
S.D.	44.83	46.50	49.33	42.43
Administrators				
Mean	320.90	315.53	321.17	334.57
S.D.	56.23	45.84	47.45	50.24

CONCLUSIONS

Summary of the responses on a Likert scale reveals that the divergence in participation in physical activities is discerning among various groups and effect of different factors varies widely. Furthermore, applying statistical test for hypothesis testing's resulted that:-

- a. Analysis of one way ANOVA of category of subjects on actual participation in physical activities gives that the F value is 1.640 which was not found significant at 0.05 level.
- b. Analysis of 3×2×2 ANOVA results in F Ratio for main effects among category of subject (Administrator/Teacher/Students), Gender and Nature of Institution was 0.869 which was not found significant at 0.05 level. F Value for Two way and three interactions were also found significant at 0.05 level.

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