RELATIONSHIP BETWEEN ACADEMIC ANXIETY AND SELECTED PHYSICAL FITNESS VARIABLES OF SCHOOL CHILDREN

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Abstract: The purpose of the study is to know the relationship of academic anxiety of school children with their physical fitness variables. The present research is a descriptive survey method. For this purpose, 300 high school children studying in government (150) and non government schools (150) in Tumkur Urban District which are followed by Karnataka State Board syllabus were selected. Out of 300 students, 150 boys and 150 girls were considered. A stratified random sampling technique was used to select the sample. The Academic Anxiety was studied as dependent variable and it was assessed by administering Academic Anxiety Scale for Children (AASC) developed and standardized by By A.K. Singh and A. Sen Guptal. The Physical Fitness variables such as speed (50 Yard Dash in secs.); Agility (Shuttle Run in secs.); Pull ups [(Boys) and Flexed Arm Hang (girls) in numbers]; Endurance (600 yard Dash in minutes); Abdominal Strength (Flexed Leg Sit Ups in numbers) and Explosive Strength (Standing Broad Jump in cms) were considered as independent variable. The Karl Pearson Product Moment Coefficient of Correlation was used to find out the relationship between selected physical fitness variables and academic anxiety of school children. The level of significance was fixed at 0.05 level. It was found that there was a significant relationship of Academic Anxiety with speed (r=0.137), agility (r=0.154), shoulder strength (r=−0.132), endurance (r=0.242) and explosive strength (r=−0.327) of high school children and no significant relationship found with abdominal strength (r=0.088). Normal activities and including in physical exercises can lessen symptoms of anxiety and the impacts can be dependable. In this way, the school children who would be advised to fitness had less anxiety level and this will help to their academic execution and future point of view. Consequently, fitness is most significant factor that will lessen anxiety level among high school children.

Index Terms- Physical Fitness, Academic Anxiety, School Children, Relationship

I. INTRODUCTION

Physical fitness is a state of health and well-being and, even more specifically, the capacity to perform portions of games, occupations and everyday activities. Physical fitness is generally practiced through proper nutrition, moderate-energetic physical exercise, and satisfactory rest. Physical fitness is used concerning two ramifications: General fitness and specific fitness. A high physical fitness level is normal for a healthy network. As such, nations develop their own special physical fitness estimation procedures to evaluate the changes in game habits and physical fitness from immaturity on, guiding activity headway toward improve the health-related physical fitness. Routine physical activities can make lifelong health benefits. It can state of heart and lungs and fabricate strength and endurance.

Psychologists investigate ideas, for example, perception, cognition, attention, feeling, motivation, personality, behavior, and interpersonal relationships, stress, academic anxiety, and different territories. Academic Anxiety is a kind of anxiety which relates to the moving toward hazard from the states of the academic foundations including educator and certain subjects like Mathematics, Science and English, etc. Anxiety is a mental and physiological state of human direct. It is generally depicted by somatic, emotional, cognitive and social segments. The root significance of the word anxiety is inconvenience. David Barlow describes anxiety as a future organized demeanor state in which one is arranged or orchestrated to attempt to adjust to imminent negative occasions. Anxiety is identified with the mental feeling of uneasiness or distress in light of a situation that is seen negatively.

Ongoing investigations have appeared between the aerobic fitness and cognition in kids. Hillman et al. (2005) observed aerobic fitness to be decidedly connected with specific cognitive functioning related with attention and working memory in preadolescent youngsters, while Schott and Liebig (2007) observed physical fitness to be a critical indicator of cognitive functioning in 8 to multi year old German kids. Just one investigation that tends to physical activity, physical fitness and academic results in South African youngsters, could be found in the examination writing. Themane et al. (2006) found no solid proof for the positive relationship between physical activity, physical fitness and educational accomplishments in rural South

African youngsters, however credited the outcomes essentially to the one of a kind educational issues and abnormal amounts of physical activity and physical fitness of the gathering. No investigations led to distinguish the relationship of academic anxiety and physical fitness among younger students. Therefore, this study aims to determine the relationship between physical fitness and academic anxiety in high school children of urban area of Tumkur district.

II.   STATEMENT OF THE PROBLEM

"RELATIONSHIP BETWEEN ACADEMIC ANXIETY AND SELECTED PHYSICAL FITNESS VARIABLES OF SCHOOL CHILDREN"

III.   OBJECTIVE OF THE STUDY

The objective of the study is to find out the relationship of academic anxiety with physical fitness variables.

IV.   HYPOTHESIS OF THE STUDY

It was hypothesized that there would not be any significant relationship between academic anxiety of high school children and their physical fitness variables (Speed, agility, shoulder strength, endurance, abdominal strength and explosive strength).

V.   METHODOLOGY

5.1   Research Design: The present research is a descriptive survey method.

5.2   Operational Definitions:

Academic Anxiety: Academic anxiety is a kind of state anxiety which relates to the impending hazard from the environment of the academic including teacher, certain core subjects. Academic Anxiety considered as a painful or apprehensive uneasiness of mind usually over an impending or anticipated ill.

School children: In the present study both boys and girls studying in government and non-government (private schools) schools under Karnataka State Board Syllabus in Tumkur Urban District were taken into consideration.

5.3   Selection of Variables: The following variables were selected for the study.

Sl. No.	Variable	Tests	Units
I.	**Psychological Variable**		
1.	Academic Anxiety	Academic Anxiety Scale for Children (AASC) by A.K. Singh and A. Sen Gupta	In Scores
II.	**Physical Fitness Variables**		
1.	Speed	Fifty Yard Dash	In Seconds
2.	Agility	Shuttle Run	In Seconds
3.	Shoulder Strength	Pull-ups (Boys)	Completed Numbers
	Shoulder Strength	Flexed Arm Hang (Girls)	Completed Seconds held
4.	Endurance	600 Yard Dash	In minutes
5.	Abdominal Strength	Flexed Leg Sit-ups	Completed Numbers
6.	Explosive Strength	Standing Broad Jump	To nearest centimeters

5.4   Sample of the Study: A stratified random sampling technique was used to select the sample. The sample comprised 300 high school children studying in government (150) and non government schools (150) in Tumkur Urban District which are followed by Karnataka State Board syllabus. Out of 300 students, 150 boys and 150 girls were considered.

5.5 Statistical Procedure

The Karl Pearson Product Moment Coefficient of Correlation was used to find out the relationship between selected physical fitness variables and academic anxiety of school children. The level of significance was fixed at 0.05 level.

VI. RESULTS AND DISCUSSION

The relationship of selected physical fitness variables with academic anxiety of school children of Tumkur District were ascertained by the obtained values of coefficient of correlation. The results are presented in the following table.

Table-1: Correlation results shows between the Academic Anxiety and selected physical fitness variables of school children (N=300, df-298)

Sl. No.	Variable Academic Anxiety with	Mean	Standard Deviation	Pearson 'r' value	Level of Sig.
	Academic Anxiety with Physical Fitness Variables	11.136	3.062	××	××
1.	Speed	8.273	1.153	0.137	*
2.	Agility	9.261	1.560	0.154	*
3.	Shoulder Strength	9.970	4.815	−0.132	*
4.	Endurance	153.443	34.774	0.242	*
5.	Abdominal Strength	25.900	7.899	−0.088	NS
6.	Explosive Strength	169.276	30.480	−0.327	*

*Significant at 0.05 level (Table value 0.113); NS Not Significant

The above table shows Karl Pearson's Product Moment Coefficient of correlation results related to academic anxiety scores with selected physical fitness variables namely speed, agility, shoulder strength, endurance, abdominal strength and explosive strength of school children of Tumkur District. The table clearly reveals that there is correlation of academic anxiety with speed, agility, shoulder strength, endurance and explosive strength since the obtained 'r' values of 0.137, 0.154, −0.132, 0.242 and −0.327 are greater than the table value 0.113 at 0.05 level of significance and also clearly shows that there is no significant relationship of academic anxiety with abdominal strength since the obtained 'r' value of −0.088 is less than the table value at 0.05 level significance. The 'r' values are found to be negative in shoulder strength (in numbers), abdominal strength (in numbers) and explosive strength (in centimeters) it may be due to consideration of numbers and centimeters and higher anxiety scores indicates higher anxiety level.
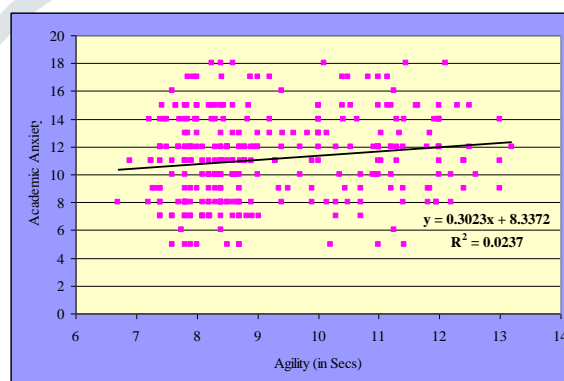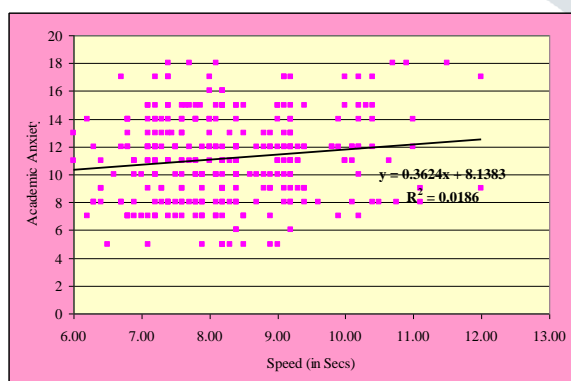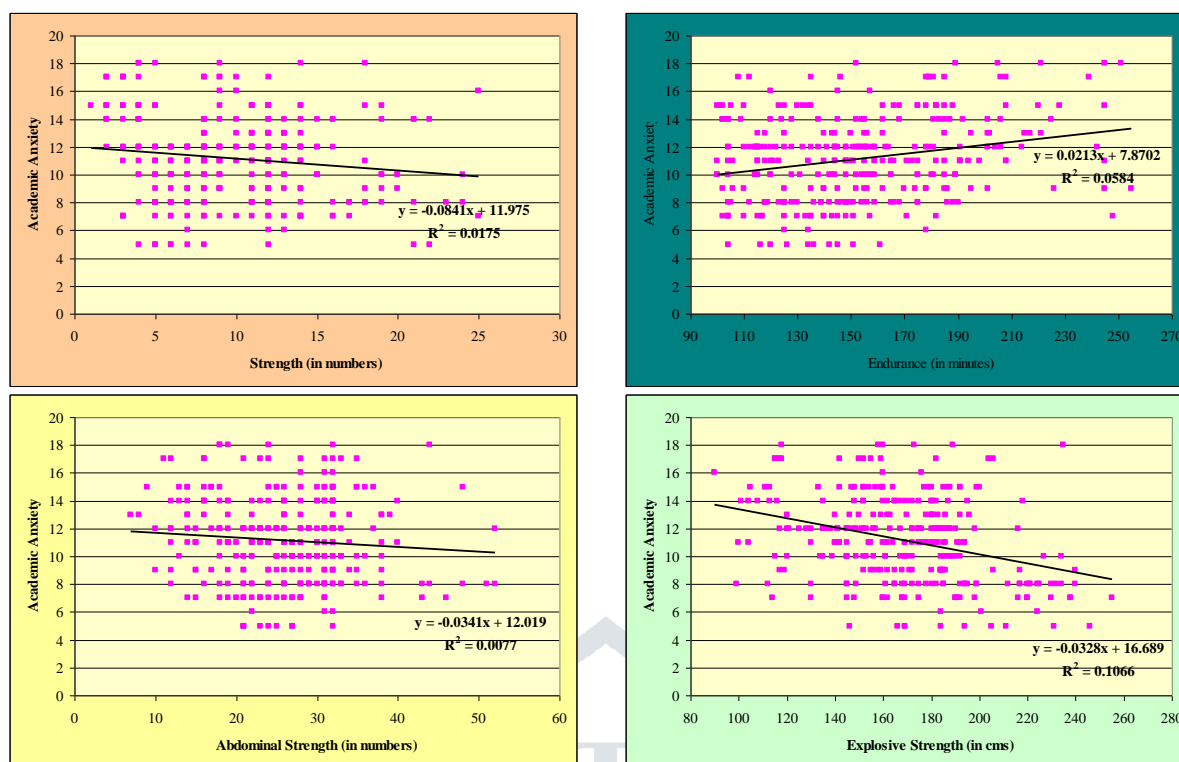
Fig.1:　Scatter diagram represents the values of Academic Anxiety and selected Physical Fitness variables of school children.

VII. FINDINGS

It was found that there was a significant relationship of Academic Anxiety with speed (r=0.137), agility (r=0.154), shoulder strength (r=−0.132), endurance (r=0.242) and explosive strength (r=−0.327) of high school children and no significant relationship found with abdominal strength (r=−0.088)

VIII. CONCLUSION

On the basis of the above result, it was found that there was significant correlation between selected physical fitness variables (speed, agility, shoulder strength, endurance and explosive strength) and academic anxiety of school children. Academic anxiety is a significant educational issue that influences numerous school children. In spite of the fact that a low dimension of anxiety can cause positive motivation for development of educational functioning, high dimensions of it can cause an aggravation in concentration, attention, gaining of knowledge, recall and educational reduction. Normal activities and including in physical exercises can lessen symptoms of anxiety and the impacts can be dependable. In this way, the school children who would be advised to fitness had less anxiety level and this will help to their academic execution and future point of view. Consequently, fitness is most significant factor that will lessen anxiety level among high school children.

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