



# ANALYSIS OF SELECTED PHYSIOLOGICAL VARIABLES AMONG HIGH SCHOOL BOYS OF DIFFERENT ETHNIC GROUPS

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## Abstract:

Religion is a practically universal establishment in human culture. It is found in all social orders. Religion is any cultural arrangement of assigned practices. Generally acknowledged that the physiological elements of the body increase with utilization and decrease with abandonment. Pupils belonging to different ethnic groups (Hindu, Muslim and Christian) vary in their physiological fitness due to their life styles, physical activities, culture, food intake and heredity. In this article, the researcher analyses the selected physiological variables of high school boys studying in Government secondary schools belonging to different ethnic groups in Tumkur District, Karnataka. One hundred and eighty high school boys of government secondary schools from different ethnic groups (each ethnic group of 60 subjects) of Tumkur District with the age ranging from 13 to 15 years were selected randomly. The physiological variables like Breath Holding Time by manual and Resting Heart Rate by Omran Monitor.

The result concludes that there exists significant difference in Breath Holding Time among high school boys of Hindu, Muslim and Christian religion except Resting Heart Rate. Games are plays a important role for the physical & physiological development of the individual of any ethnic.

**Keywords:** Physiological, high school boys, ethnic groups.

## INTRODUCTION

Religion is a universal establishment in human culture. It is found in all social orders. Religion is any cultural arrangement of assigned practices, world perspectives, texts, sanctified places, ethics, or associations that relate humanity to the otherworldly or supernatural. It is the social establishment that with arranged holy things, that guides an individual lie past our knowledge and control.

It is by and large recognized that the physiological components of the body upgrade with use and diminishing with relinquishment. More especially, the heart, lungs and muscles wind up evidently more grounded and more sound the more they are used. Human being requires breathing life into action. Exactly when the whole body is subjected to standard strong development, requiring an enthusiastic weight on the heart, lungs and muscles, the

general efficiency of physiological limit makes progress. Research now soundly supports the theory that reliable, eager exercise keeps heart sound and may prevents cardiovascular diseases.

**Vinothkumar, Savanam and Samraj (2011)** took the picked physiological components among school men Basketball, Football and Volleyball players. To achieve this reason, each twenty school level B-ball, Football and Volleyball players were picked as subjects from Pondicherry. Data was accumulated on the picked factors, specifically, resting heart rate and inhale holding time. One way ANOVA was used for quantifiable investigation. The delayed consequence of the examination exhibited that there was critical complexity among players in pulse rate and there was no tremendous refinement in breathe in holding time.

Religion is Generally universal establishment in human culture and is found in all society Religion is any cultural arrangement of assigned practices. Pupils belonging to different ethnic groups vary in their physical & physiological fitness due to their physical activities, social behaviour, cultural activities food intake and ancestry. In this article the researcher analyses & compares the selected physiological variables of high school boys studying in Government secondary schools belonging to different ethnic groups in Tumkur District, Karnataka.

## 2. OBJECTIVE OF THE STUDY

The purpose of the study is to know the physiological variables and also compare the physical fitness of high school boys of different ethnic groups (Hindu, Muslim and Christian).

## 3. HYPOTHESES OF THE STUDY

It was hypothesized that there was no significant difference in the selected Physiological variables (Breath Holding Time: Manual (In Secs.)

Resting Heart Rate: Omran Monitor (In Minute)) of the high school boys of different ethnic groups (Hindu, Muslim and Christian).

## 4. METHODOLOGY:

### 4.1 Selection of Subjects

One hundred and eighty high school boys of government secondary schools from different ethnic groups (each ethnic group of 60 subjects) of Tumkur District with the age ranging from 13 to 15 years were selected randomly.

### 4.2 Selection of Variables and criterion measures

The following variables were selected for the study

1. Breath Holding Time: Manual (In Secs.)
2. Resting Heart Rate: Omran Monitor (In Minute)

### 4.3 Statistical Technique

The One-way Analysis of Variance (ANOVA) was used to find the significant difference among the different ethnic groups. The Scheffe's Post Hoc test was used to find the significant difference in the paired means.

## 5. RESULTS OF THE STUDY

The One-way ANOVA (F test) results on the selected Physiological variables scores of the High school boys of different ethnic groups are presented in the following tables.

**Table-1**

Variables	Groups	Sum of squares	df	Mean squares	F vlaue	Level of sig.
Breath holding capacity (in sec)	Between the groups	21945.688	2	10972.845	81.67	Significant at 0.01
	Within the groups	23769.254	177	134.354		
	Total	45714.942	179			
Resting heart rate (in minute )	Between the groups	218.964	2	109.482	1.03	Not significant
	Within the groups	18.658.768	177	105.416		
	Total	18877.732	179			

Groups: of Hindu, Muslim & Christian (N=180)

Table value 0.05(3.06) Table value at 0.01(4.75)

From the table 01 it is observed that the obtained 'F' value of 1.03 for Resting Heart Rate is less than the table value of 3.06 for df'2 and 179' required for the significance at 0.05 lelvel of confidence. The results of the indicated that "there is no significant difference in Resting Heart Rate among high boys of different ethnic groups." From the table it is also shows that the obtained 'F' values of 81.67 for the Breath Holding Time is greater than the table value of 4.75 for df '2 and 179' required for the significance at 0.01 level of confidence. The results of the study indicated that "there is significant difference in the Breathing Holding Time among High school boys of different ethnic groups." To determine the significant difference in the criterion variables among these paired means, the 'Scheffe's test was applied as the Post hoc analysis and the results were presented in Table-2.

**Table-2**

Post Hoc Test for the Mean Difference in relation to Breath Holding Time among high school boys of different ethnic groups.

Variable	Groups			Mean Difference	Critical Difference
	Hindu	Muslim	Christian		
Breath Holding Time	28.884	45.724	-	16..840	5.066
	-	45.724	28.766	16.958*	
	28.884	-	28.766	0.118	

It is quite seen from table-2 that there is significant difference at 0.05 level on Breath Holding Time among ethnic groups of high school boys, as the obtained mean differences of 16.840 (between Hindu and Muslim) and 16.958 (between Muslim and Christian) were greater than the critical difference of 5.086; but the mean difference of 0.118 (between Hindu and Christian) is not significant at 0.05 level as the obtained mean difference is less than the critical difference value of 5.066.

## 6. Discussion of findings

From the 'F' Test it was found that there exists significant difference in the Breathing Holding Time among High school boys of different ethnic groups. The high school boys from Muslim community (M=45.724) would do well to breath holding capacity when contrasted and Hindu (M=28.884) and Christian (M=28.766). This might be because of their nourishment and the way of life among the students. Yoga and Aerobics assumes a significant part in improving breathing time. The study also proved that insignificant difference found in the Resting Heart Rate of the high school boys of different ethnic groups.

## 7. Conclusion

The result concludes that there was significant difference in Breath Holding Time among high school boys of Hindu, Muslim and Christian religion except Resting Heart Rate. Sports are very important for the physical, physiological development of the individual of any religion.

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