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Comparative Study on Health Related Physical Fitness of Students in Govt. Higher Secondary School Udinoor and Govt. Higher Secondary School Thrikkaripur

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Abstract:
Physical fitness is very essential in today's world. Physical fitness is becoming more and more popular day by day. There are many health benefits that are associated with cycling. Let's look at a few of the major benefits: You can ride a bicycle almost anywhere, at any time of the year, and without spending a fortune. Many people are put off doing certain sports because of the high level of skill that seems to be required, or perhaps because they can't commit to a team sport due to time pressures. In this comparative study Total of one thousand four hundred and sixty four was selected in both schools. Seven hundred and Seventy four students (N=774) of Govt. Higher Secondary School Udinoor and six hundred and ninety (N=690) students from Govt. Vocational Higher Secondary School Thrakaripur was selected and the age of the subjects ranged from 13 to 16 years. They were tested on selected health related physical fitness variables like Muscular Endurance, Shoulder Strength, Cardio Respiratory Endurance, Flexibility and Body Composition analysis such as mean and standard deviation were find out and this have given an idea of distribution scores and features obtained from the data collected for the purpose of the study. data collected from 774 students of Govt. Higher Secondary School Udinoor and 690 studentsof Govt. Higher Secondary School Thrikkaripur, Kasaragod District. In order to find out the difference among the groups Independent t' test was computed and tested for significance at 0.05 level of confidence, to find out comparative study on health related physical fitness of students govt. higher secondary school udinoor and govt. higher secondary school thrikkaripur

1. Introduction

Physical fitness is the basis of sports performance and it is a complete phenomenon consisting of various factors like strength, speed, endurance, agility, flexibility and these factors should be given important during training and each athlete should give importance on one or factor depending up on the nature and demand of sports. People all over the world are becoming more and more health conscious, the priority has been shifting from everything else to the fact that the most important thing in life, is to keep oneself in shape and fit, to enjoy things in life. In its most general meaning, physical fitness is a general state of good physical health. Obtaining and maintaining physical fitness is a result of physical activity, proper diet and nutrition and of course proper rest for physical recovery. In its simplest terms, physical fitness is to the human body what fine-tuning is to an engine. It enables people to perform up to their potential. Regardless of age, fitness can be described as a condition that helps individuals look, feel and do their best. The importance of physical activity as an integral part of a healthy lifestyle is becoming more widely recognised moreover, scientific evidence of the health benefits can be realized by individuals who regularly engage in physical activity of appropriate frequency, intensity and duration. Maintenance of adequate level of health related components of physical fitness – cardio vascular endurance, muscular strength and endurance, body composition and flexibility – can help to reduce the risk of heart disease, hypertension, non-insulin-dependent diabetes, osteoporosis, obesity, and some mental health problems such as depression. Reduction of incidence of stroke and maintenance of functional independence of the elderly are also benefits that may be realized through participation in regular physical activity. In order for one to be considered physically fit, the heart, lungs, and muscles have to perform at a certain level for the individual to continue feeling capable of performing an activity.

2. Background of the Study

Carrotte ER et al. (2015) conducted a study on Predictors of "Liking" Three Types of Health and Fitness-Related Content on Social Media: A Cross-Sectional Study. Adolescence and young adulthood are key periods for developing norms related to health behaviors and body image, and social media can influence these norms. Social media is saturated with content related to dieting, fitness, and health. Health and fitness-related social media content has received significant media attention for often containing objectifying and inaccurate health messages. Limited research has identified problematic features of such content, including stigmatizing language around weight, portraying guilt-related messages regarding food, and praising thinness. However, no research has identified who is "liking" or "following" (ie, consuming) such content. This exploratory study aimed to identify demographics, mental health, and substance use-related behaviors that predicted consuming 3 types of health and fitness-related social media content-weight loss/fitness motivation pages (ie, "fitspiration"), detox/cleanse pages, and diet/fitness plan pages-among young social media users. Participants (N=1001; age: median 21.06, IQR 17.64-24.64; female: 723/1001, 72.23%) completed a cross-sectional 112-question online survey aimed at social media users aged between 15-29 years residing in Victoria, Australia. Logistic regression was used to determine which characteristics predicted consuming the 3 types of health and fitness-related social media content.vA total of 378 (37.76%) participants reported consuming at least 1 of the 3 types of health and fitness-related social media content: 308 (30.77%) fitspiration pages, 145 (14.49%) detox pages, and 235 (23.48%) diet/fitness plan pages. Of the health and fitness-related social media content consumers, 85.7% (324/378) identified as female and 44.8% (324/723) of all female participants consumed at least 1 type of health and fitness-related social media content. Predictors of consuming at least one type of health and fitness-related social media content in univariable analysis included female gender (OR 3.5, 95% CI 2.5-4.9, P<.001), being aged 15-17 years (OR 3.0, 95% CI 2.2-4.0, P<.001), residing outside a major city (OR 2.0, 95% CI 1.4-2.9, P<.001), having no post-high school education (OR 2.2, 95% CI 1.7-2.9, P<.001), being born in Australia (OR 2.0, 95% CI 1.2-3.2, P=.006), having a self-reported eating disorder (OR 2.4, 95% CI 1.5-3.9, P<.001), being a victim of bullying (OR 1.7, CI 1.3-2.3, P<.001), misusing detox/laxative teas or diet pills (OR 4.6, 95% CI 2.8-7.6, P<.001), never using illegal drugs (OR 1.6, 95% CI 1.2-2.0, P=.001), and not engaging in risky single occasion drinking on a weekly basis (OR 2.0, 95% CI 1.3-3.0, P=.003). Consumers of health and fitness-related social media content were predominantly teenaged girls. There is a need to ensure that this social media content portrays responsible health messages and to research further the role of fitspiration pages, detox pages, and diet/fitness plan pages in influencing body image and health behaviors.

Villa-González E et.al (2015) Associations between Active Commuting to School and Health-Related Physical Fitness in Spanish School-Aged Children: A Cross-Sectional Study. Active commuting (walking or cycling) to school has been positively associated with improved fitness among adolescents. However, current evidence lacks information on whether this association persists in children. The aim of this study was to examine the association of active commuting to school with different fitness parameters in Spanish school-aged children. A total of 494 children (229 girls) from five primary schools in Granada and Jaén (Spain), aged between eight and 11 years, participated in this cross-sectional study. Participants completed the Assessing Levels of Physical Activity (ALPHA) fitness test battery and answered a self-reported questionnaire regarding the weekly travel mode to school. Active commuting to school was significantly associated with higher levels of speed-agility in boys ($p = 0.048$) and muscle strength of the lower body muscular fitness in girls ($p = 0.016$). However, there were no significant associations between active commuting to school and cardio respiratory fitness and upper body muscular fitness. Our findings suggest that active commuting to school was associated with higher levels of both speed-agility and lower body muscular fitness in boys and girls, respectively. Future studies should confirm whether increasing active commuting to school increases speed-agility and muscle strength of the lower body.

3. Methodology

In this chapter the selection of subjects, Selection of variables, Selection of tests, collection of data, and administration of test and statistical procedures that needs to be adopted for the study are explained.

3.1. Selection of Subjects

Total of one thousand four hundred and sixty four was selected in both schools. Seven hundred and Seventy four students (N=774) of Govt. Higher Secondary School Udinoorand six hundred and ninety (N=690) students from Govt. Vocational Higher Secondary School Thrakaripur was selected as subjects for the purpose of this study. The age of the subjects ranged from 13 to 16 years.

3.2. Selection of Variables

The following Health Related Physical Fitness variables were selected for the study.

Muscular Endurance, Shoulder Strength, Cardio Respiratory Endurance, Flexibility, Body Composition

i. Instrument reliability

The instrument used for the collection of data is of international standard and their test reliability was already set.

ii. Tester's reliability

The tester's competency was established by test retest method under the supervision of experts in the field of physical education and sports.

iii. Reliability of Data

The reliability of data was censured by establishing the instrument reliability and testers competency.

3.3. Criterion Measures

The criterion measures chosen to test hypothesis were:

3.3.1. Health Related Physical Fitness Variables

Sl. No	Items	Tests	Measurements
1	Muscular Endurance	Sit Ups	In number
2	Shoulder Strength	Pull Ups	In number
3	Cardio Respiratory Endurance	600 Yard Run	In minutes
4	Flexibility	Sit and Reach	In minutes
5	Body Composition a. Triceps b. Sub Scapula	Skin Folds Calliper	In cm

Table 1

3.3.2. Orientation of the Subject

Before measuring the Health Related Physical Fitness variables the investigator had briefly explained to the subject the purpose of study and their role in the study.

3.3.3. Collection of Data

The data pertaining to AAHPER Health Related Physical Fitness variables were collected by administrating the appropriate test.

3.4. Test Administration

3.4.1. Health Related Physical Fitness Variables

1. Bent knee sit-ups
Objective: To measure muscular endurance.
Equipment's: stop watch and a mat.
Procedure: the subject was asked to lie down on his back with the legs bent and the feet flat on the floor close to the body. The distance between the buttocks and the heels was twelve inches. The hands were clasped behind the head. On the signal 'go' the subject came up & touched the elbows to the knee and went back down to the floor to the starting position. He did as many sit-ups as possible in 60 seconds.
Scoring: The score was the completed sit-ups in seconds.

2. Pull ups
Objective: To measure arm and shoulder strength.
Equipment's: A horizontal bar positioned at a height and that allowed the subjects to hang without touching the ground.
Procedure: The bar was adjusted to a height that permitted the subjects to hang free from the floor. From the hanging position with an overhand grip (palms forward) the body was pulled upward until the chin rest over the bar, and then lowered until the arms were straight. This movement was repeated to exhaustion. The subjects were not allowed to kick, jerk or use a "hip" movement.
Scoring: The subjects score was the number of correctly executed chin-ups.

3. 600 Yard Run
Purpose: To measure the endurance.
Equipment's: 5 Stopwatch, wooden clapper.
Procedure: On 400 meters sandy track a curved starting line was marked. In the morning session 10 subjects took a position behind the starting line. The starter used the command Ready and on clapper sound the subjects took off for one complete lap and 200 meters and finish at end line only. One trial was permitted. Each timekeeper took time for two subjects.
Scoring: Time was recorded in seconds on completing 600 yard.

4. Sit and reach
Objective: To measure lower back and hamstring flexibility.
Equipment's: A testing box and yard stick.
Procedure: the subject is asked to shoes remove and place his or her feet against the testing box while sitting on the floor with straight knees. Now subject's is asked to place one hand on top of the other so that the middle fingers of both hands are together at the same length. The tester keeps his hand on the knees of the subject to kept them straight not allowing any binding of the knees. The subject is instructed to lean forward and place his hand or the measuring scale lying on the top of the box. Then the subject asked to slide his hands along the measuring scale as far as possible without bouncing and bold the position for at least once second.
Scoring: Each subject given three trails and highest score nearest to inch or centimetre is recorded and 10 inches are deducted from the recorded reading to obtain the flexibility score.

5. Body composition
The leanness and fatness condition help to diagnose obesity which is defined as excessive accumulation of body fat is tested to help out triceps and sub scapular skin folder.
Triceps skin fold measurement
Equipment: Skin folder calipers.
Procedure: the subject with a naked arm is asked to stand at is hanging arm. The midpoint of upper arm are for measuring upper arm circumference to provide a line mark for measuring biceps and triceps skins folds. The skin and continuous fat fold is the pick at 1 cm above the mark level on the posterior on the fold so that the marked horizontal line approximately at a level of midpoint of the jaw.
Scoring: The measurement is required correct to 0.2mm.
Sub scapular skins fold width
It the thickness of double layer of skin plus fat below the interior angle of left scapula.
Equipment: Skin folder calipers.
Method: The skin fold is picked diagonally below the interior angle of scapula almost too medial border of scapula. The jaws of caliper are applied about ½ a centimeter below the fold picking tip of the thumb. The measurement, as usually, is recorded after two seconds of releasing force pressure on the fold.

3.5. Statistical Technique
The data was statistically analyzed by applying Descriptive Statistics, Independent‘t’ test.

4. Analysis of data and results of the study
The statistical analysis of data collected from 774 students of Govt. Higher Secondary School Udinoor and 690 students of Govt. Higher Secondary School Thrikkaripur, Kasaragod District. In order to find out the difference among the groups Independent t’ test was computed and tested for significance at 0.05 level of confidence.

GROUP	N	MEAN	STD. DEVIATION	‘t’ value
G.H.S.S. UDINOOR	774	58.16	21.91	9.41*
G.V.H.S.S. THRIKARIPUR	690	48.14	18.45	

Table 2: Mean Comparison on Muscular Endurance of the Selected Schools
**Significant at 0.05 level (1463. 1)= 1.96*

It is observed from table 2 that the mean value of muscular endurance of G.H.S.S Udinoor and G.V.H.S.S. Thrikaripur is 58.16, 48.14. The standard deviation is 21.91, 18.45 respectively. The obtained t’ value 9.41* is higher than the table value 1.96, Showing a significant difference between the schools on muscular endurance.

GROUP	N	MEAN	STD. DEVIATION	‘t’ value
G.H.S.S. UDINOOR	774	64.56	31.17	5.86*
G.V.H.S.S. THRIKARIPUR	690	53.97	37.89	

Table 3: Mean Comparison on Shoulder Strength of the Selected Schools
**Significant at 0.05 level (1463. 1)= 1.96*

It is observed from table 2 that the mean value of shoulder strength of G.H.S.S Udinoor and G.V.H.S.S. Thrikaripur is 64.56, 56.97. The standard deviation is 31.17, 37.89 respectively. The obtained t’ value 5.86* is higher than the table value 1.96, Showing a significant difference between the schools on shoulder strength.

GROUP	N	MEAN	STD. DEVIATION	‘t’ value
G.H.S.S. UDINOOR	774	46.57	28.76	6.76*
G.V.H.S.S. THRIKARIPUR	690	37.61	20.79	

Table 4: Mean Comparison on Cardio Respiratory Endurance of the Selected Schools
**Significant at 0.05 level (1463. 1)= 1.96*

It is observed from table 4 that the mean value of cardio respiratory endurance of G.H.S.S Udinoor and G.V.H.S.S. Thrikaripur is 46.57, 37.61. The standard deviation is 28.76, 20.79 respectively. The obtained t’ value 6.76* is higher than the table value 1.96, Showing a significant difference between the schools on cardio respiratory endurance.

GROUP	N	MEAN	STD. DEVIATION	‘t’ value
G.H.S.S. UDINOOR	774	24.20	7.23	16.15*
G.V.H.S.S. THRIKARIPUR	690	18.94	4.83	

Table 5: Mean Comparison Onflexibility of the Selected Schools
**Significant at 0.05 level (1463. 1)= 1.96*

It is observed from table 5 that the mean value of flexibility of G.H.S.S Udinoor and G.V.H.S.S. Thrikaripur is 24.20, 18.64. The standard deviation is 7.23, 4.83 respectively. The obtained t' value 16.15* is higher than the table value 1.96, Showing a significant difference between the schools on flexibility

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	774	10.90	4.83	4.37*
G.V.H.S.S. THRIKARIPUR	690	11.97	4.56	

Table 6: Mean Comparison Onbody Fat (Triceps) of the Selected Schools
**Significant at 0.05 level (1463. 1)= 1.96*

It is observed from table 6 that the mean value of body fat (Triceps) of G.H.S.S Udinoor and G.V.H.S.S. Thrikaripur is 10.90, 11.97. The standard deviation is 4.83, 4.56 respectively.The obtained t' value 4.37* is higher than the table value 1.96, Showing a significant difference between the schools on body fat (Triceps)

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	774	6.65	3.39	28.11*
G.V.H.S.S. THRIKARIPUR	690	12.39	4.42	

Table 7: Mean Comparison Onbody Fat (Sub Scapula) of the Selected Schools
**Significant at 0.05 level (1463. 1)= 1.96*

It is observed from table 7 that the mean value of body fat (sub scapula) of G.H.S.S Udinoor and G.V.H.S.S. Thrikaripur is 6.65, 12.39. The standard deviation is 3.39, 4.42 respectively. The obtained t' value 28.11* is higher than the table value 1.96, Showing a significant difference between the schools on body fat (sub scapula).

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	435	66.31	18.73	10.66*
G.V.H.S.S. THRIKARIPUR	375	52.79	17.10	

Table 8: Mean Comparison on Boy's Muscular Endurance of the Selected Schools
**Significant at 0.05 level (809.1)= 1.96*

It is observed from table 8 that the mean value of muscular endurance for 66.31, 52.79. The standard deviation is 18.73, 17.10 respectively. The obtained t' value 10.66* is higher than the table value 1.96, Showing a significant difference between the schools boys on muscular endurance.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	435	84.09	18.51	6.87*
G.V.H.S.S. THRIKARIPUR	375	68.85	41.75	

Table 9: Mean Comparison on Boy's Sholder Strength of the Selected Schools
**Significant at 0.05 level (809. 1)= 1.96*

It is observed from table 9 that the mean value of shoulder strength for 84.09, 68.85. The standard deviation is 18.51, 41.75 respectively. The obtained t' value 6.87* is higher than the table value 1.96, Showing a significant difference between the schools boys on shoulder strength.

GROUP	N	MEAN	STD. DEVIATION	't'value
G.H.S.S. UDINOOR	435	45.88	29.67	5.62*
G.V.H.S.S. THRIKARIPUR	375	35.77	19.55	

Table 10: Mean Comparison on Boy's Cardio Respiratory Endurance of the Selected Schools
**Significant at 0.05 level (809. 1)= 1.96*

It is observed from table 10 that the mean value of cardio respiratory endurance for 45.88, 35.77. The standard deviation is 29.67, 19.55 respectively. The obtained t' value 5.62* is higher than the table value 1.96, Showing a significant difference between the schools boys on cardio respiratory endurance.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	435	24.45	7.55	12.49*
G.V.H.S.S. THRIKARIPUR	375	18.89	4.51	

Table 11: Mean Comparison on Boy's Flexibility of the Selected Schools
**Significant at 0.05 level (809.1)= 1.96*

It is observed from table 11 that the mean value of flexibility for 24.45, 18.89. The standard deviation is 7.55, 4.51 respectively. The obtained t' value 12.49* is higher than the table value 1.96, Showing a significant difference between the schools boys on flexibility.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	435	10.67	4.83	3.69*
G.V.H.S.S. THRIKARIPUR	375	11.97	4.56	

Table 12: Mean Comparison on Boy's Body Fat (Triceps) of the Selected Schools
**Significant at 0.05 level (809. 1)= 1.96*

It is observed from table 12 that the mean value of body fat (Triceps) for 10.67, 11.97. The standard deviation is 4.83, 4.56 respectively. The obtained t' value 3.69* is higher than the table value 1.96, Showing a significant difference between the schools boys on body fat (Triceps).

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	435	6.52	3.24	21.36*
G.V.H.S.S. THRIKARIPUR	375	12.45	4.63	

Table 13: Mean Comparison on Boy's Body Fat (Sub Scapula) of the Selected Schools
**Significant at 0.05 level (809. 1)= 1.96*

It is observed from table 13 that the mean value of body fat (sub scapula) for 6.52, 12.45. The standard deviation is 3.24, 4.63 respectively. The obtained t' value 21.36* is higher than the table value 1.96, Showing a significant difference between the schools boys on body fat (sub scapula).

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	339	47.20	21.27	3.27*
G.V.H.S.S. THRIKARIPUR	315	42.61	18.50	

Table 14: Mean Comparison on Girl'smuscular Endurance of the Selected Schools
**Significant at 0.05 level (653,1)= 1.96*

It is observed from table 14 that the mean value of muscular endurance for 47.20, 42.61. The standard deviation is 21.27, 18.50 respectively. The obtained t' value 3.27* is higher than the table value 1.96, Showing a significant difference between the schools girls on muscular endurance.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	339	39.50	25.73	1.74
G.V.H.S.S. THRIKARIPUR	315	36.23	22.29	

Table 15: Mean Comparison on Girl's shoulder Strength of the Selected Schools
**Significant at 0.05 level (653. 1)= 1.96*

It is observed from table 15 that the mean value of shoulder strength for 39.50, 36.23. The standard deviation is 25.73, 22.29 respectively. The obtained t' value 1.74 is higher than the table value 1.96, showing ano significant difference between the schools girls on shoulder strength.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	339	47.45	27.56	3.92*
G.V.H.S.S. THRIKARIPUR	315	39.78	22.02	

Table 16: Mean Comparison on Girl's cardio Respiratory Endurance of the Selected Schools
**Significant at 0.05 level (653. 1)= 1.96*

It is observed from table 16 that the mean value of cardio respiratory endurance 47.45, 39.78. The standard deviation is 27.56, 22.02 respectively. The obtained t' value 3.92* is higher than the table value 1.96, Showing a significant difference between the schools girls on cardio respiratory endurance.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	339	23.80	6.91	9.97*
G.V.H.S.S. THRIKARIPUR	315	18.99	5.21	

Table 17: Mean Comparison on Girl's flexibility of the Selected Schools
** Significant at 0.05 level (653. 1)= 1.96*

It is observed from table 17 shows that the mean value of flexibility for 23.80, 18.99. The standard deviation is 6.91, 5.21 respectively. The obtained t' value 9.97* is higher than the table value 1.96, Showing a significant difference between the schools girls on flexibility.

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	339	11.17	4.51	2.33*
G.V.H.S.S. THRIKARIPUR	315	11.95	4.05	

Table 18: Mean Comparison on Girl'sbody Fat (Triceps) of the Selected Schools
**Significant at 0.05 level (653. 1)= 1.96*

It is observed from table 18 that the mean value of body fat (Triceps) for 11.17, 11.95. The standard deviation is 4.51, 4.05 respectively. The obtained t' value 2.33* is higher than the table value 1.96, Showing a significant difference between the schools girls on body fat (Triceps)

GROUP	N	MEAN	STD. DEVIATION	't' value
G.H.S.S. UDINOOR	339	6.81	3.56	18.25*
G.V.H.S.S. THRIKARIPUR	315	12.32	4.17	

Table 19: Mean Comparison on Girl'sbody Fat (Sub Scapula) of the Selected Schools
**significant at 0.05 level (653. 1)= 1.96*

It is observed from table 19 that the mean value of body fat (sub scapula) for 6.81, 12.32. The standard deviation is 3.56, 4.17 respectively. The obtained t' value 18.25* is higher than the table value 1.96, Showing a significant difference between the schools girls on body fat (sub scapula).

4.1. Discussions on Findings

The investigator selected Seven Hundred and Seventy Four (N-=744) students from Govt. Higher Secondary School Udinoor and six hundred and ninety (N=690) students from Govt. Vocational Higher Secondary School Thrakaripur. The ages of the subjects ranges between 13-16 years. As per the study prove that the Govt. Higher Secondary School Udinoor health related physical fitness is higher compared to Govt. Vocational Higher Secondary School Thrakaripur. It has been noticed that students are using cycles for travelling to and come from school. They are using cycles regularly for travelling. Most of their houses are far by 6 to 8 kilometers. From this they are getting a good physical exercise every day. While gender wise study comparison the boys of the Govt. Higher Secondary School Udinoor had more health related physical fitness than the Govt. Vocational Higher Secondary School Thrakaripur and comparison the girls of the Govt. Higher Secondary School Udinoor had more health related physical fitness than the Govt. Vocational Higher Secondary School Thrakaripur. It is found that the student in Govt. Higher Secondary School Udinoor had more health related physical fitness and energetic.

4.2. Discussion on Hypothesis

The study found that there was significant difference in the health related physical fitness of Govt. Higher Secondary School Udinoor than the Govt. Vocational Higher Secondary School Thrakaripur.

Based on the findings of the study the hypothesis stated earlier:

The health related physical fitness of the student of Udinoor School will not differ when compared to the student of Government Higher Secondary School Thrikaripur has been rejected.

The health related physical fitness of the student of Udinoor School will be better when compared to the student of Government Higher Secondary School Thrikaripur has been accepted.

The health related physical fitness of the students of Udinoor school girls and boys will better when compared to the students of Vocational higher Secondary school Trikkarippur has been accepted.

5. Summary Conclusion and Recommendation

5.1. Summary

The purpose of the study was to find out the Health Related Physical Fitness level of high school students of Govt. Higher Secondary School Udinoor".

The sample of the present study consists of 774 of Govt. Higher Secondary School Udinoorand 690 students of Govt. Vocational Higher Secondary School Thrikkaripur, Kasaragod District were selected as subjects for the purpose of this study. The age of the subjects ranged from 13 to 16 years. For the purpose of finding out the health fitness status of both schools students were assess by using the AAHPER health related physical fitness test.

5.2. Conclusion

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i. Govt. Higher Secondary School Udinoorstudents have better muscular endurance than the students of Govt. Vocational Higher Secondary School Thrikkaripur.
ii. Govt. Higher Secondary School Udinoor students have better shoulder strength than the students of Govt. Vocational Higher Secondary School Thrikkaripur.
iii. Govt. Higher Secondary School Udinoor students have better cardio vascular endurance than the students of Govt. Vocational Higher Secondary School Thrikkaripur.
iv. Govt. Higher Secondary School Udinoor students have better flexibility than the students of Govt. Vocational Higher Secondary School Thrikkaripur.
v. Govt. Higher Secondary School Udinoor students have lower body fat (Triceps) than the students of Govt. Vocational Higher Secondary School Thrikkaripur.
vi. Govt. Higher Secondary School Udinoor students have lower body fat (Sub Scapula) than the students of Govt. Vocational Higher Secondary School Thrikkaripur.

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i. Govt. Higher Secondary School Udinoorboy's students have better muscular endurance than theboy's students of Govt. Vocational Higher Secondary School Thrikkaripur.
ii. Govt. Higher Secondary School Udinoor boy'sstudents have better shoulder strength than theboy's students of Govt. Vocational Higher Secondary School Thrikkaripur.
iii. Govt. Higher Secondary School Udinoorboy's students have better cardio vascular endurance than the boy's students of Govt. Vocational Higher Secondary School Thrikkaripur.
iv. Govt. Higher Secondary School Udinoor boy's students have better flexibility than the boy's students of Govt. Vocational Higher Secondary School Thrikkaripur.
v. Govt. Higher Secondary School Udinoor boy's students have lower body fat (Triceps) than the boy's students of Govt. Vocational Higher Secondary School Thrikkaripur.
vi. Govt. Higher Secondary School Udinoor students have lower body fat (Sub Scapula) than the students of Govt. Vocational Higher Secondary School Thrikkaripur.

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i. Govt. Higher Secondary School Udinoor girl's students have better muscular endurance than the girl's students of Govt. Vocational Higher Secondary School Thrikkaripur.
ii. Govt. Higher Secondary School Udinoor girl's students have better shoulder strength than the girl's students of Govt. Vocational Higher Secondary School Thrikkaripur.
iii. Govt. Higher Secondary School Udinoorgirl's students have better cardio vascular endurance than the girl's students of Govt. Vocational Higher Secondary School Thrikkaripur.
iv. Govt. Higher Secondary School Udinoorgirl's students have better flexibility than thegirl'sstudents of Govt. Vocational Higher Secondary School Thrikkaripur.
v. Govt. Higher Secondary School Udinoor girl's students have lower body fat (Triceps) than thegirl's students of Govt. Vocational Higher Secondary School Thrikkaripur.
vi. Govt. Higher Secondary School Udinoor girl's students have lower body fat (Sub Scapula) than the girl's students of Govt. Vocational Higher Secondary School Thrikkaripur.

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i. Govt. Higher Secondary School Udinoor students the better health related physical fitness as compared to students of Govt. Vocational Higher Secondary School Thrikkaripur.

5.3 Recommendations

On the basis of the present findings of the study the following recommendations are made.

i. It is recommended to conduct studies comparing on Government Schools and C.B.S.E Schools in Kerala.
ii. It is recommended to conduct similar studies Hill and Costal area.
iii. Similar studies can be conducted among the college students.

iv. It is recommended to conduct similar studies more number schools.
v. A further may be conducted to find out health status of urban and rural areas school children

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