

# International Research Journal of Human Resources and Social Sciences ISSN(O): (2349-4085) ISSN(P): (2394-4218)

Impact Factor- 5.414, Volume 5, Issue 2, February 2018

Website- www.aarf.asia, Email: editor@aarf.asia, editoraarf@gmail.com

# Physical Fitness of Girls' between Divers and Swimmers of Manipur

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#### Abstract

The study was planned to explore the relative investigation of particular fitness variable of swimmers and divers. For the persistence of this study thirty girls 14 to 16 years from SAI, Manipur were selected randomly as participant. All participants were assessed and associated on sit-up, push up, sit and reach, vertical jump and back-bridge flexibility with the assistance of abdominal strength, shoulder strength, flexibility back and legs, legs strength and spine flexibility respectively. t-test was used to find the significant difference at the 0.05 level. The judgments of the study exposed that there were no difference between female's swimmers and divers in relation to the sit-up, sit and reach, vertical jump and back-bridge flexibility.

**Keywords:** Sit-up, Push up, Sit and reach, Vertical jump, Back-bridge flexibility, Driver, Swimmers

#### Introduction

Arrange predictable effort competently and to encounter unexpected appearance very efficiently is physical fitness to bring available sensibly fine many methods of physical accomplishments deprived of presence overly exhausted and comprises qualities vital to the individual's health and welfare. On the nature of game and also exterior circumstances, physical fitness of a player influence by such as agility, speed, flexibility, endurance and strength to accurate and keep of body weight. The determination of study was to find out girls' swimmers and divers in relation to the sit-up, push up, sit and reach, vertical jump and back-bridge flexibility.

# Methodology

To attain the determination 15 swimmers and 15 divers were certain from SAI, Manipur.

# **Selection of participants**

The girl's swimmers and divers age group of 14 to 16 years were nominated as participant for this study. The participants were selected by simple random method.

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#### Selection of variable

Table 1: The following variables of the physical fitness test

Variables	Test items	Unit	
Sit-up test	Abdominal strength	Number/min.	
Push up	Shoulder strength	Number/min.	
Sit and reach test	Flexibility back and legs	Number	
Vertical jump	Legs strength	ft	
Back-bridge flexibility	Spine flexibility	cm	

#### **Administration of test**

The assessment was directed at the sports complex of SAI, the data was composed for each variable by directing their particular test.

# Statistical technique used for analysis of data

To relate the particular physical fitness component of girl's swimmers and divers t-test was employed. The criterion for statistical significance was set at 0.05 level of confidence.

# Result and analysis of data

The findings of the study of each variable for physical fitness test were presented on tabulations and interpretation of the data by Mean and standard deviation values on scores and the tratio computed to compare swimmers and divers of Manipur.

Table 2: Mean, Standard Deviation and t-value for means scores of sit-up of girls' between swimmers and divers of Manipur

Sit-up test	Mean	SD	t-value	
Swimmers	43.53	6.21	-1.258	
Divers	46.73	7.65	1.230	

It stood marked from Table 2 on sit-up test for abdominal strength that the mean values of swimmers were 43.53 and divers were 46.73. There was a difference of 3.2. The result displayed that swimmers were having lesser sit-up match to the divers. The calculated value of t-test (-1.258) was lesser than tabulated value so there was an insignificant difference between the sit-up of girls' swimmers and divers at 0.05 levels of confidence.

Table 3: Mean, Standard Deviation and t-value for means scores of push up of girls' between swimmers and divers of Manipur

Push up	Mean	SD	t-value
Swimmers	50.67	8.38	-2.761
Divers	60.27	10.54	

It raised obvious from Table 3 on push up test for shoulder strength that the mean values of swimmers were 50.67 and divers were 60.27. There was a difference of 10.4. The result displayed that swimmers were having lesser push up match to the divers. The calculated value of t-test (-2.761) was greater than tabulated value so there was significant difference between the shoulder strength of girls' swimmers and divers at 0.05 levels of confidence.

Table 4: Mean, Standard Deviation and t-value for means scores of sit and reach test of girls' between swimmers and divers of Manipur

Sit and reach test	Mean	SD	t-value	
Swimmers	14.1	1.78	0.247	
Divers	13.93	1.91	0.247	

It stood marked from Table 4 on sit and reach test for flexibility back and legs that the mean values of swimmers were 14.1 and divers were 13.93. There was a difference of 0.17. The result displayed that swimmers were having good sit and reach contest to the divers. The calculated value of t-test (0.247) was lesser than tabulated value so there was an insignificant difference between the sit and reach test for flexibility back and legs of girls' swimmers and divers at 0.05 levels of confidence.

Table 5: Mean, Standard Deviation and t-value for means scores of vertical jump of girls' between swimmers and divers of Manipur

Vertical jump	Mean	SD	t-value	
Swimmers	1.22	0.18	-0.838	
Divers	1.27	0.13	-0.636	

It mounted noticeable from Table 5 on vertical jump test for legs strength that the mean values of swimmers were 1.22 and divers were 1.27. There was a difference of 0.05 ft. The result displayed that swimmers were having lesser vertical jump match to the divers. The calculated value of t-test (-0.838) was lesser than tabulated value so there was an insignificant difference between vertical jump test for legs strength of girls' swimmers and divers at 0.05 levels of confidence.

Table 6: Mean, Standard Deviation and t-value for means scores of Back-bridge flexibility of girls' between swimmers and divers of Manipur

Back-bridge flexibility	Mean	SD	t-value	
Swimmers	57.96	8.24	1.095	
Divers	54.41	9.5	1.093	

It stood marked from Table 6 on back-bridge flexibility test for spine flexibility that the mean values of swimmers were 57.96 and divers were 54.41. There was a difference of 3.55 cm. The result displayed that swimmers were having good back-bridge flexibility competition to the divers. The calculated value of t-test (1.095) was lesser than tabulated value so there was no significant difference between the back-bridge flexibility for spine flexibility of girls' swimmers and divers at 0.05 levels of confidence.

#### **Discussion and conclusion**

Outcomes of the study relating to the sit-up, sit and reach, vertical jump and back-bridge flexibility were found to be similar. There are no difference between girls' swimmers and divers in relation to the sit-up, sit and reach, vertical jump and back-bridge flexibility of junior level players. In associated to the push up equally swimmers and divers were found difference and swimmers were found more efficient than divers. Consequences were created that swimmers were further competent in push up aptitude.

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