ANALYSE THE HEIGHT AND WEIGHT ON SELECTED FUNDAMENTAL MOVEMENT SKILL AND SELF-ESTEEM AMONG RURAL SCHOOL CHILDREN

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Abstract

    The purpose of the study was to analyse the height and weight on selected fundamental movement skill and self Esteem among rural school children.450 children were selected from rural area in Tirunelveli, Tamilnadu, India were using heterogeneous purposive sample method. between the age group of 10 to 12 years. selected a fundamental skill and Self-Esteem scale developed by Rosenberg was used to collect the data. The collected data were analysed by ANOVA and schefee's post hoc test, the results were discussed at 0.05 level of confidence. The results of the study indicate, significant difference exist between fundamental movement skill and Self-Esteem among rural school children.
Key word: *Fundamental skill, Self-Esteem, Rural children*

Introduction

    Height is measure of vertical distance, either vertical extent or vertical position. Heights provide different opportunities for children in school are still debated, because taller students could have more access to sports related activities.

    Not all high achievers are giants but socially, height has advantages. It could be that we naturally associate height with "greatness" and "dominance". Height is usually seen as attractive, taller men and women are considered to be more dominant, healthy, and intelligent, and are more likely to be chosen for more competitive jobs. Height and intelligence are positively correlated (Gale, 2005).

    Those who participate in weight-class sports such as wrestling, karate, taekwondo and martial arts and kabaddi may be required to lose or gain weight to qualify for a specific weight category. Body-conscious sports, such as dance, gymnastics, figure skating, or diving, may need to lose weight to have better performance. There are several issues regarding the relationship between body weight and mental health problems among children and adolescents. Weight status has been shown to have a negative impact on children's competence in performing motor skill activities (Bryant, 2014).

    Fundamental Movement Skills (FMS) are an important part of human life, and they are interrelated with a child's physical, cognitive and social development. FMS are considered to be the building blocks for movement and provide the foundation for specialized and sport-specific motor skills required for participation in a variety of physical activities (Payne, & Isaacs, 2011). In a review of the literature, Smith, (1999) found that only half of the available studies showed lower self-esteem in obese children and adolescents, but found that white children had more evidence of lower self- and body-esteem associated with overweight than black children.

Purpose of the study

    The purpose of the study was to analyse the height and weight on selected fundamental movement skill and Self-Esteem among rural school children.

Methodology

    To achieve the purpose of the study, 450 children were selected 2019-20 from various rural area schools in Tirunelveli, Tamilnadu, India were using heterogeneous purposive sample method. The age of the subjects ranged from 10 to 12 years.

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Analysis of the data

Table 1
Analysis of Variance on Running among Normal Height / Underweight,
Below normal height / Normal Weight, and Normal Height / Normal Weight

*Significant at 0.05 level.

Mean ± Standard deviation			Variables	Sum of Squares	Df	Mean Square	F
Normal Height/ Under Weight	Below normal height/ Normal Weight	Normal Height/ Normal Weight	Between Groups	6.499	2	3.250	
							361.111*
4.6032 ± .11923	4.6340 ± .08560	4.3602 ± .07028	Within Groups	3.961	447	.009	

(Running performance in sec)
(The table value required for significance at 0.05 level with df 2 and 447 is1.96)

Table 1 shows the mean values of normal height / underweight, below normal height / normal weight, and normal height / normal weight are 4.6032, 4.6340 and 4.3602 respectively. The obtained F-ratio value among normal height / underweight, below normal height / normal weight, and normal height / normal weight is 361.111. The obtained F-ratio value is greater than the table value of 1.96 with df 2 and 447 required for significance at 0.05 level. Hence the result of the study indicated that, there are significant differences among normal height / underweight, below normal height / normal weight, and normal height / normal weight groups on running performance.

To determine which of the paired means had a significant difference, Scheffe's post-hoc test was applied and the results are presented in table II.

Table II
Scheffe's Test for the differences between the Paired Means of Running among Normal Height / Underweight, Below normal height / Normal Weight, and Normal Height / Normal Weight

Mean values			Mean difference	Confidence interval
Group-1 Normal Height/ Under Weight	Group-2 Below normal height/ Normal Weight	Group-3 Normal Height/ Normal Weight		
4.6032	4.6340		0.0308*	0.02
4.6032		4.3602	0.243*	0.02
	4.6340	4.3602	0.2738*	0.02

Significant at 0.05 level.

Table II shows that, the mean difference on running among normal height / underweight, below normal height / normal weight, and normal height / normal weight are 0.0308, 0.243 and 0.2738 respectively, which are higher than the confidence interval value of 0.02 at 0.05 level of confidence.

The result of the study indicates that there was a significant difference between normal height /under weight, and Below normal height / normal weight, normal height / underweight, and normal height / normal weight, below normal height / normal weight, and normal height / normal weight on running performance.

However, the mean value of normal height/normal weight group is found to be better than normal height/underweight and below normal height/normal weight on running performance.

The mean values of normal height / underweight, below normal height / normal weight, and normal height / normal weight on running performance are graphically represented in the figure I

**Figure I: Mean values of normal height/ underweight, below normal height/
Normal weight and normal height/normal weight groups on running**

Table III

Analysis of Variance on Self-Esteem among Normal Height / Underweight, Below normal height / Normal Weight, and Normal Height / Normal Weight

*Significant at 0.05 level.

Mean ± Standard deviation			Variables	Sum of Squares	Df	Mean Square	F
Normal Height/ Under Weight	Below normal height/ Normal Weight	Normal Height/ Normal Weight	Between Groups	1963.454	2	981.727	
							145.293*
18.4527 ± 2.77338	14.8659 ± 2.70088	19.7391 ±2.26140	Within Groups	3020.326	447	6.757	

(Self -Esteem performance is in scoring)
(The table value required for significance at 0.05 level with df 2 and 447 is1.96)

Table III shows the mean values of normal height / underweight, below normal height / normal weight, and normal height / normal weight are18.4527, 14.8659 and 19.7391 respectively. The obtained F-ratio value among normal height / underweight, below normal height / normal weight, normal height / normal weight is 145.293.

The obtained F-ratio value is greater than the table value of 1.96 with df 2 and 447 required for significance at 0.05 level.

Hence the result of the study indicated that, there are significant differences among normal height / underweight, below normal height / normal weight, and normal height / normal weight groups on Self-esteem.

To determine which of the paired means had a significant difference, Scheffe's post-hoc test was applied and the result are presented in table IV.

Table IV

Scheffe's Test for the differences between the Paired Means of Self-esteem among Normal Height / Underweight, Below normal height / Normal Weight, and Normal Height / Normal Weight

| Mean values			Mean difference	Confidence interval
Group-1 Normal Height/ Under Weight	**Group-2** Below normal height/ Normal Weight	**Group-3** Normal Height/ Normal Weight		
18.4527	14.8659		3.5868*	0.59
18.4527		19.7391	1.2864*	0.59
	14.8659	19.7391	4.8732*	0.59

Significant at 0.05 level.

Table IV shows that, the mean difference on self-esteem among normal height / underweight, below normal height / normal weight, and normal height / normal weight are 3.5868, 1.2864 and 4.8732 respectively, which are higher than the confidence interval value of 0.59 at 0.05 level of confidence.

The result of the study indicates that there was a significant difference between normal height / underweight, and below normal height / normal weight, normal height / underweight, and normal height / normal

weight, Below normal height / normal weight, and normal height / normal weight on self-esteem.

However, the mean value of normal height / normal weight is found to be better than normal height / underweight, and Below normal height / normal weight, on self-esteem.

The mean values of normal height / underweight, below normal height / normal weight, and normal height / normal weight on self-esteem are graphically represented in the figure II.
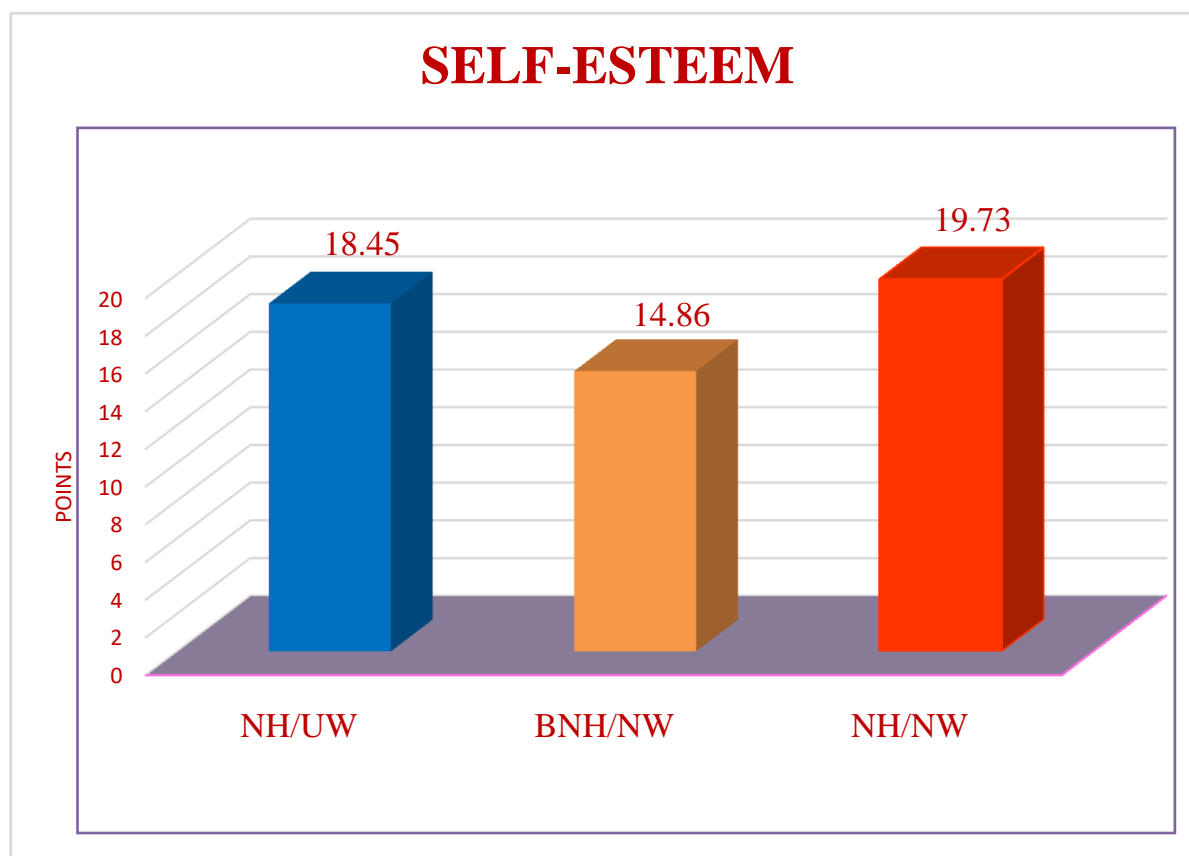
Figure II : Mean values of normal height/ underweight, below normal height/ normal weight and normal height/normal weight groups on self-esteem

Conclusion

There was a significant difference among normal height/underweight, Below Normal height/normal weight, and normal height/normal weight on selected FMS such as running.

There was a significant difference among normal height/underweight, Below Normal height/normal weight, and normal height/normal weight on selected psychological variables such as self-esteem.

Discussion

Running is a method of terrestrial locomotion allowing humans and other animals to move rapidly on foot (Lubans, Morgan, Cliff, Barnett, & Okely, (2010). Running is fundamental forms of human locomotion which assist the child in learn any sports skills rapidly. The result of the present study indicates that there was a significant difference between normal height/underweight, below normal height/normal weight, and normal height/normal weight on running. However, the mean value of normal height/normal weight is found to be better than below normal height/normal weight and normal height/underweight on running performance.

In general, taller students saw more attractive and more persuasive, and overall taller people like to hold positions of power, authority, and social status.

Mostly tall people enjoy certain psychological benefits when compared with below normal height. According to Lara (2011) the children studying low economic status schools significantly lower on self-esteem than children in the high social economic status school.

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