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COMPARISON OF SELF-BODY WEIGHT PERCEPTION BETWEEN INDIAN AND ETHIOPIAN UNIVERSITY PLAYERS

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ABSTRACT

Present study aimed to assess and compare the perception of self-body weight appropriateness among the female sports persons between India and Ethiopia. Total 121 sports persons were included randomly after their informed consent. The data was collected with the help of weigh- machine, anthropometric rod and score sheet. The BMI were calculated and classified as obese, normal and underweight. Collected data was analysed with SPSS 18 applying ppercentages distribution and comparative (ANOVA) analysis. result showed that most of the female sports persons under estimated their body weight. The normal female players were closer to accuracy. The Indian female players under estimated and Ethiopian over estimated their body weight.

KEYWORDS: *female players, weight-perception, hockey, handball, basketball*

INTRODUCTION

The hypo-kinetic problems such as obesity are now considered to be a major public health concern in the global including India and Ethiopia. The successful weight loss or weight maintenance and self-perception of weight aptness seem to be difficult. A strong association between self-perceived weight status and weight control behaviour. Self-perceived weight appropriateness may bea crucial point of focus to design to opt as public health initiatives. Self-evaluation of weight status, however, is not simply an autonomous, individual response; it is likely subjectto social patterning. The body size andlevels of fatness perceptions mayvary in predictable ways among the population. In this study, an intercollegiate sports personwas asked to percept body weight. In thisstudy, the focus is on the perception ofweight appropriateness itself.

MATERIAL AND METHOD

For this study, total 121 sports persons from India and Ethiopia, out of those 44 were basketball female players, 15 were hockey female player, 17 Football female players, and 45 were handball female player, were included randomly after their informed consent. The selected female players were further classified, based onBMI, as 105 normal, 12under weight and 4 overweight or obese subjects. The entireplayer from the present study represented their college in the InterCollegiate tournament. The data was collected with the help of weigh-machine, anthropometric rod and score sheet. The BMI were calculated and classified as obese, normal and underweight.In the present study, the food habit of the subjects, the cognitive ability, atmospheric conditions were not taken care of.

STATISTICAL DESIGN

Percentages distribution and comparative (ANOVA) analysis was performed to test the hypothesis of the

present study.

Results

Table 1: showing the percentages distribution of weight perception of female players of respective game

	Basket Ball			Hockey			Football			Handball			All		
	Under	Over	Accurate	Under	Over	Accurate	Under	Over	Accurate	Under	Over	Accurate	Under	Over	Accurate
N	18	21	5	6	5	4	6	8	3	11	23	3	41	57	15
%	40.9	47.7	11.3	40.0	33.3	26.7	35.3	47.1	17.7	29.7	62.2	18.8	36.3	50.4	13.3

Result of the weight perception of basketball, hockey, football, and handball are presented in table 1. Result of the table showed that the mainstream of (47.73%) the players over percept their weight in the group of basketballs. Very few (11%) of the subjects' percept accurately. The 41 % of basketball female player percept underweight. Result of the weight perception of hockey players showed that 40% players percept underweight their weight, 26.7% of the subject percept accurately. While 33.3 % of hockey female players over percept their weight.

Similarly, result of the weight perception of football female player showed that the mainstream of (47%) the players over percept their weight in the group of footballs. Very few (18%) of the subject percept accurately. The 35% of football female players under percept their weight. In handball (62.2 %) the players over percept their weight in the group of handballs. Very few (18.8%) of the subject percept accurately. The 29.7 % of handball female playerunder percept their body weight.

Result of the weight perception of pooled data showed that the mainstream of (50.4 %) the players over percept their weight. Very few (13.3%) of the subject percept accurately. The 36.3% of female player percept themselves as underweight (table 1).

Comparison of weight perception as function of games

Table 2: Showing the descriptive statistics of weight perception as functions of games

	N	Mean	Std. Deviation	Std. Error
Basketball	44.00	0.10	3.26	0.49
Hockey	15.00	0.07	1.71	0.44
Football	17.00	-0.53	3.47	0.84
Handball	45.00	0.48	3.50	0.52
Total	121.00	0.15	3.22	0.29

Table 3: Showing the comparison (ANOVA) of weight perception as function of games

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.83	3.00	4.28	0.41	$p>0.05$
Within Groups	1231.03	117.00	10.52		
Total	1243.86	120.00			

Table No. 2 demonstrated the characteristics of weight perception as functions of game in the studied. It is clearly seen that the weight perception of hockey players were close to acuracy (0.07kg) while the football (-0.53kg) and handball (0.48kg) players deviated from accurate perception amongst the studied groups. The football players under percept and hanball players over percept their body weight in the study.

The inferential analysis (ANOVA) revealed statistically ($p > 0.05$) insignificant difference amongst the studied groups i.e. basketball, hockey, football and handball players (table 3).

Comparison of weight perception as function of BMI

Table 4: Showing the descriptive statistics of weight perception as functions of BMI

	N	Mean	Std. Deviation	Std. Error
Normal	105	0.26	3.00	0.29
Underweight	12	0.81	3.23	0.93
Obese	4	-4.75	5.56	2.78
Total	121	0.15	3.22	0.29

Table 5: Showing the comparison (ANOVA) of weight perception as function of BMI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	102.47	2.00	51.23	5.30	$p<0.01$
Within Groups	1141.39	118.00	9.67		
Total	1243.86	120.00			

Table 6: Showing the multi comparison (post – hoc, LSD) of weight perception as function of BMI

(I) BMI	(J) BMI	Mean Difference (I-J)	Std. Error	Sig.
Normal	Underweight	-0.55	0.95	$p=0.56$
	Obese	5.01*	1.58	$p<0.01$
Underweight	Normal	0.55	0.95	$p=0.56$
	Obese	5.56*	1.80	$p<0.01$
Obese	Normal	-5.01*	1.58	$p<0.01$
	Underweight	-5.56*	1.80	$p<0.01$

*the mean difference is significant at the 0.05 level

Table No. 4 demonstrated the characteristics of weight perception as functions of body mass index (BMI) of the studied groups. On the basis of table it is clearly seen that the weight perception of normal BMI players were closer to acurate (0.26kg) waight, while under weight (0.81kg) and obese (-4.75kg) players deviated from

accurate perception of weight amongst the studied groups.

The inferential analysis (ANOVA) revealed statistically ($p < 0.05$) significant difference amongst the studied groups i.e. normal, underweight, and obese players (table 5&6). The under weight female players significantly ($p<0.05$) over percepted their body weight. In contrast, The obese female players significantly ($p<0.05$) under percepted their body weight.

Table 7: Showing the descriptive statistics of weight perception as functions of domicile

	N	Mean	Std. Deviation	Std. Error
Indian	62	-0.50	2.58	0.33
Ethiopian	59	0.83	3.67	0.48
Total	121	0.15	3.22	0.29

Table 8: Showing the comparison (ANOVA) of weight perception as function of domicile

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	53.245	1	53.245	5.322	$p<0.05$
Within Groups	1190.617	119	10.005		
Total	1243.861	120			

Table No. 7 demonstrated the characteristics of weight perception as functions of domicile of the studied groups. On the basis of table it is clearly seen that the weight perception of deviated from accurate perception of weight amongst the studied groups. Indian female players under percept (-0.05kg) their body weight while the Ethiopian female playes over (0.82kg) percept their body weight in the present study.

The inferential analysis (ANOVA) revealed statistically ($p< 0.05$) significant difference between the studied groups. The Indian female players significantly ($p<0.05$) under percepted their body weight. In contrast, The Ethiopia female players significantly ($p<0.05$) over percepted their body weight.

DISCUSSION AND CONCLUSION

Result of the present study showed that 50.4% o of the subjects over percept their body weight, 36.3% percept as underweight, and 13.3% of subjects accurately percept their body weight. This study contradicts with the findings of Zainuddin et.al. (2014) that 13.8% of adolescents underestimated their weight, 35.0% overestimated, and 51.2% correctly judged their own weight. In present study, more girls overestimated their body weight.

When the relationship between type of the game and weight perception is seen insignificant ($p>0.05$) difference is witnessed in the study. Type of the game effects is not witnessed in the present study. While the relationship of body mass index and perception of self-weight appropriateness was seen the obese (body mass index {BMI} 25-29kg) female sports person under percept and underweight (body mass index {BMI}below 18kg) female sports person over percept themselves. The normal (BMI 18-25kg) female players were closer to the accuracy. This study contrast the previous study (Zainuddin et.al.; 2014) that significantly more normal weight girls felt they were overweight.

Present study is corroborated with previous study done by Lynch and Kane (2014). Lynch and Kane (2014) revealed that 86% of overweight (body mass index [BMI], 25-29.9) women and 40% of obese (BMI > 30) women, the self-figure was not defined as overweight, obese, or too fat. Among participants with BMI ≥3 56,5 % did not classify their self-figure as obese and 29% did not classify their self-figure as overweight.

Yang et.al. (2014) Examined the relationship between actual and self-perceived body weight, and weight management behaviours among US adolescents. Approximately 15% were overweight, and 20% were obese; 26% inaccurately perceived their weight. Overweight adolescents had a higher rate of inaccurate weight perception than obese adolescents.

Comparison in weight perception appropriateness between India and Ethiopia demonstrated that significant difference. The Indian female players under estimated their body and the Ethipian female players over estimated their body weight.

REFERENCES

1.Lynch E.B.; and Kane J (2014) Body size perception among African American women. J Nutr Educ Behav. 2014 Sep-Oct;46(5):412-7. doi: 10.1016/j.jneb.2014.03.002.
2.Yang K, Turk MT, Allison VL, James KA, Chasens E. (2014). Body mass index self-perception and weight management behaviors during late adolescence. J Sch Health. 2014 Oct;84(10):654-60. doi: 10.1111/josh.12195.
3.Zainuddin AA, Manickam MA, Baharudin A, Omar A, Cheong SM, Ambak R, Ahmad MH, Ghaffar SA (2014). Self-perception of body weight status and weight control practices among adolescents in malaysia. Asia Pac J Public Health. 2014 Sep;26(5 Suppl):18S-26S. doi: 10.1177/1010539514542422. Epub 2014 Jul 28.

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