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PLAYERS (A COMPARATIVE STUDY)**

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Pittsburgh Insomnia Rating Scale among Male and Female Basket Ball Players (A Comparative Study)

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Abstract – The aim of this study was Pittsburgh Insomnia Rating Scale among Male and Female Basket Ball Players (A Comparative Study). The objectives of the present study were (1) To determine insomnia rating scale after normal training (not very high intensity or volume) of female and male basketball players age ranged from 17 to 23 years for duration of an interval of one week. (2) To determine the effect on insomnia rating scale just before the competition of female and male basketball players age ranged from 17 to 23 years. (3) To compare between female and male basketball players after normal training (not very high intensity or volume) and before the competition of age ranged from 17 to 23 years. The study was delimited to 15 males and 15 females basketball players age ranged from 17 to 23 years. Insomnia Rating Scale was studied using Pittsburgh Insomnia Rating Scale. The dietary intake, life style and some unavoidable factors of males and females basketball players are considered as the limitations. PIRS were administered after normal training, just before the competition and to compare between insomnia rating scale of male and female basketball players age ranged from 17 years to 23 years. Conclusions of the study were (1) There are significant difference in the variables of PIRS namely distress score after normal training, total score after normal training and sleep parameter before competition found to be significantly difference between females and males players of basketball at 0.05 level of significance. (2) There are not significantly different in the variables of pirs namely sleep parameter after normal training, quality of life after normal training, distress score before competition, quality of life before competition and total score before competition were found not to be significantly difference between females and males players of basketball at 0.05 level of significance.

INTRODUCTION:-

Sleep is one of nature's greatest invention and blessings of life. It is a periodic rest of the body which is absolutely essential for its efficient functioning. It has been called "most cheering restorative of tired bodies". Sleep is the indispensable condition to the recuperation of energy. We go to bad fatigue and get up refreshed. Sleep repairs the wear and tear of the body and mind incurred during waking hours. Nothing is so restorative to the nerves as sound and uninterrupted sleep. Sleep is thus a vital element in a total way of life. It is a basic need in man's mental as well as physical life. During sleep most of the functions of the body are carried on at the lowest level possible in health. Heat production is from 10% to 15 % below the basal level. The mechanisms regulating the body temperature are less sensitive then in the waking state and are depressed by 0.5 to 1.0 degree F. The rate of heart is reducing by 10 to 30 beats per minute and a decline in blood pressure of about 20 mm/ hg occurs in quite restful sleep. The urine volume is considerably reduced but its concentration in solids is increase. The tone of all the skeletal muscle is lessened. The eyes

are usually rolled upward and the pupils constricted. Loss of sleep exerts seriously detrimental effects upon the nervous system. Long period of wakefulness may cause profound psychological changes such as loss of memory, irritability, hallucination and even schizothrenic manifestations (Carskadon, 2010).

INSOMNIA OR SLEEPLESSNESS

Insomnia or Sleeplessness has assumed alarming proportions in present time. This is evident from the wide range of medication for this condition described by physicians and sold by chemist. Insomnia deprives a person of mental rest and thereby interferes with his activities in the daytime. It constitutes severe health hazard when it became a habit.

Sleep is a periodic state of rest for the body which is absolutely essential for its efficient functioning. Sleep gives relief from tension, give rest to the brain and body and person wakes up in the morning fresh and relaxed after sleep. The amount of sleep, however, varies within very wide limits from individual to

individual. Normally, seven to eight hours sleep every night is adequate for most people some, however, do well with four to five hours because their sleep is deeper and more refreshing.

PITTSBURGH INSOMNIA RATING SCALE

PIRS is a widely used instrument for assessment and research practice. Designed to rate the severity of insomnia. Subjects score the items that have three broad sections. First, the subjective distress score had 46 items, second subjective sleep parameters had 10 items and third is the quality of life had 9 items then forth is the grand total of all the score i.e. total score. The items have to be scored according to the last week sleep experience and related variables PIRS have been mentioned as Section A of the scale have a 10 centimeter to mark the quality of sleep in the past last week. This answer is not used for the scoring. Section B has 46 questions which have to be answered on the likert scale from 0 to 3 (0 means not at all bothered, 1 means slightly bothered, 2 means moderately bothered, 3 severely bothered). Sum of the scores of 46 items is the grand score of the distress score. Section C has 10 questions which have to be answered on the likert scale 0 to 3 with variable answers depending on the question. Sum of the scores of 10 items is the grand score termed as sleep parameters score. Section D has 9 questions which have to be answered on the likert scale from 0 to 3 (0 is excellent, 1 is good, 2 is fair, 3 is poor). Addition of all the answers gives the final score is Quality of life score. Section E is comments which the patient gives but it is not added in the scoring. Final score is the grand total of all the three scores. Minimum score is 0 (good) and maximum is 195 (bad) (www.ncbi.nlm.nih.gov > NCBI > Literature > PubMed Central (PMC))

OBJECTIVES OF THE STUDY

- To determine insomnia rating scale after normal training (not very high intensity or volume) of female and male basketball players age ranged from 17 to 23 years for duration of an interval of one week.
- To determine the effect on insomnia rating scale just before the competition of female and male basketball players age ranged from 17 to 23 years.
- To compare between female and male basketball players after normal training (not very high intensity or volume) and before the competition of age ranged from 17 to 23 years.

DELIMITATIONS OF THE STUDY

- The study was delimited to 15 males and 15 females basketball players age ranged from 17 to 23 years. Insomnia Rating Scale was

studied using Pittsburgh Insomnia Rating Scale.

LIMITATIONS OF THE STUDY

- The dietary intake, life style and some unavoidable factors of males and females basketball players are considered as the limitations.

HYPOTHESES OF THE STUDY

- It was hypothesized that there will be difference after normal training (not very high intensity or volume) of female and male basketball players age ranged from 17 to 23 years for duration of an interval of one week.
- It was hypothesized that there will be difference between males and females before the competition.
- It was hypothesized that there will be significantly difference between female and male basketball players after normal training (not very high intensity or volume) and before the competition of age ranged from 17 to 23 years.

Selection of Subjects

Keeping in view the purpose of the study, a large number of male and female basketball players were randomly selected. Total 30 subjects (15 males and 15 female) were selected the age of the subjects were ranged from 17 to 23 years.

Selection of Variables

The PIRS include following variables:

- a) Distress Score
- b) Sleep Parameter
- c) Quality of Life
- d) Global Score

Administration of the Test

- PIRS were administered to determine the insomnia rating scale after normal training of male and female basketball players age ranged from 17 years to 23 years.
- The PIRS were administered to determine the insomnia rating scale just before the competition of male and female basketball players age ranged from 17 years to 23 years

- PIRS were administered to compare between insomnia rating scale of male and female basketball players age ranged from 17 years to 23 years

FINDINGS OF THE STUDY

Table 1

Descriptive Statistics of PIRS of Male and Female Basket Ball Players

Variables	Gender	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Distress Score after normal training	Female	15	7.4667	1.45733	.37628	5.00	10.00
	Male	15	6.2667	1.22280	.31573	5.00	9.00
	Total	30	6.8667	1.45586	.26580	5.00	10.00
Sleep parameter after normal training	Female	15	2.0000	.65465	.16903	1.00	3.00
	Male	15	1.6000	.82808	.21381	.00	3.00
	Total	30	1.8000	.76112	.13896	.00	3.00
Quality of life after normal training	Female	15	.4667	.51640	.13333	.00	1.00
	Male	15	.2000	.41404	.10690	.00	1.00
	Total	30	.3333	.47946	.08754	.00	1.00
Total Score after normal training	Female	15	9.9333	1.57963	.40786	7.00	13.00
	Male	15	8.0667	1.66762	.43058	6.00	12.00
	Total	30	9.0000	1.85695	.33903	6.00	13.00
Distress Score before competition	Female	15	45.5333	12.96075	3.34645	30.00	72.00
	Male	15	40.2000	12.03685	3.10790	26.00	60.00
	Total	30	42.8667	12.58552	2.29779	26.00	72.00
Sleep Parameter before competition	Female	15	9.3333	.72375	.18687	8.00	10.00
	Male	15	8.6667	1.04654	.27021	6.00	10.00
	Total	30	9.0000	.94686	.17287	6.00	10.00
Quality of life before competition	Female	15	8.6667	1.04654	.27021	6.00	10.00
	Male	15	8.4000	1.24212	.32071	6.00	10.00
	Total	30	8.5333	1.13664	.20752	6.00	10.00
Total Score before competition	Female	15	63.5333	12.82780	3.31212	48.00	91.00
	Male	15	57.2667	12.59516	3.25206	38.00	77.00
	Total	30	60.4000	12.89106	2.35357	38.00	91.00

Total= Male +Female

The analysis in table 1 documented the descriptive statistics of PIRS. The Group wise Mean + SD of variable distress score after normal training of female, distress score after normal training of males, distress score before competition of females distress score before competition of were 7.4667 + 1.45733, 6.2667 + 1.22280 , 45.5333 + 12.96075 and 40.2000 + 12.03685 respectively.

The group wise Mean + SD of variable Sleep Parameter after normal training of female, Sleep Parameter after normal training of males, Sleep Parameter before competition of females Sleep Parameter before competition of were 2.0000 + .65465, 1.6000 + .82808, 9.3333 + .72375 and 8.6667 + 1.04654 respectively.

The group wise Mean + SD of variable quality of life after normal training of female, quality of life after normal training of males, quality of life before competition of females and quality of life before competition of were .4667 + .51640, .2000 + .41404, 8.6667 + 1.04654 and 8.4000 + 1.24212 respectively.

The group wise Mean + SD of variable quality of life after normal training of female, quality of life after normal training of males, quality of life before competition of females and quality of life before competition of were 9.9333 + 1.57963, 8.0667 + 1.66762, 63.5333 + 12.82780 and 57.2667 + 12.59516 respectively.

The descriptive statistics of PIRS have been graphically illustrated in Fig.1 to 8



Fig.1 Mean of Distress Score after Normal Training

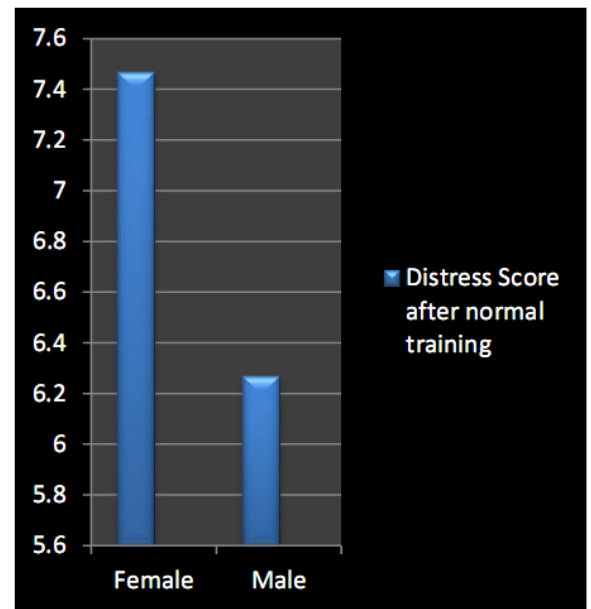


Fig. 2 Mean of Distress Score before Competition

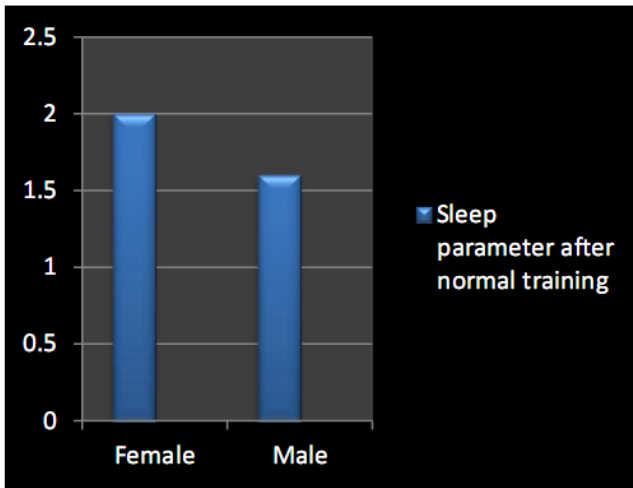


Fig.3 Mean of Sleep Parameter after Normal Training

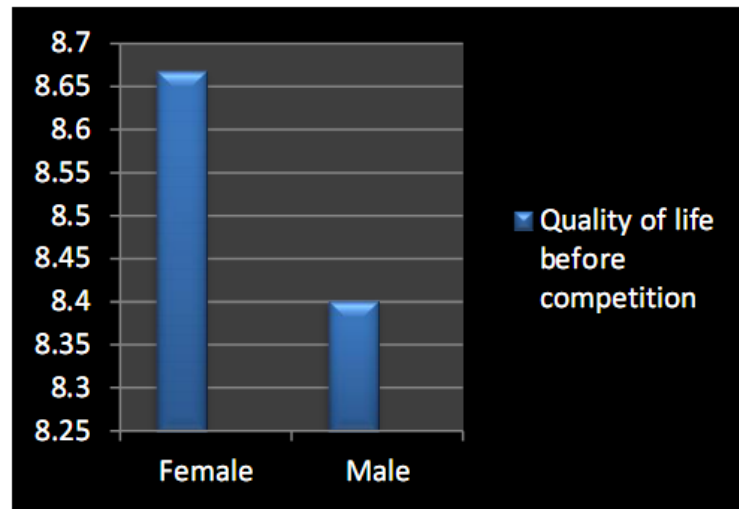


Fig. 6 Mean of Quality of Life before Competition

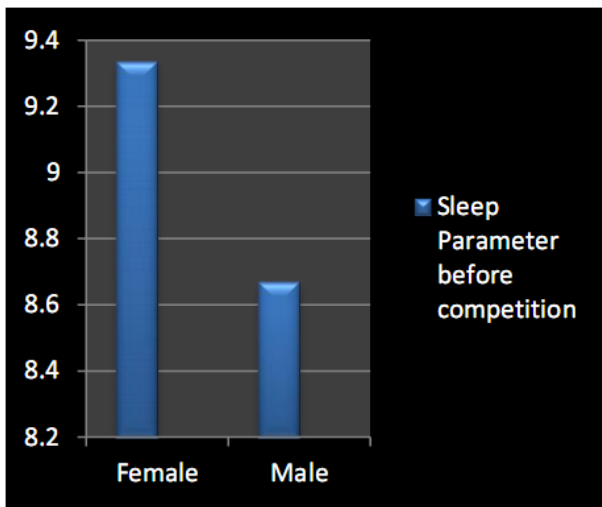


Fig. 4 Mean of Sleep Parameter before Competition

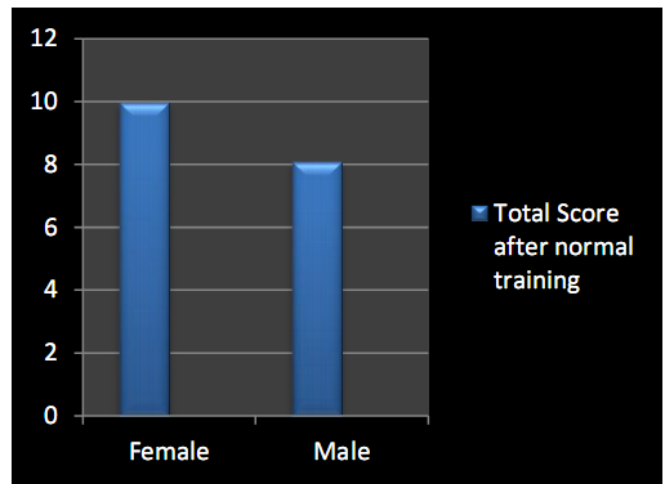


Fig 7: Mean of Total Score after Normal Training

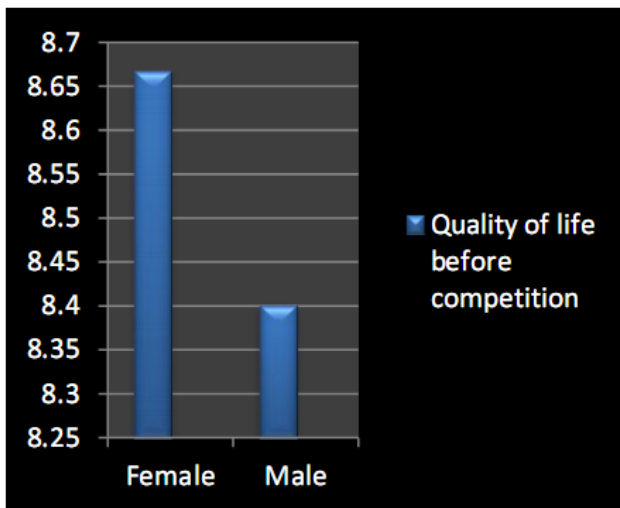


Fig. 5 Mean of Quality of Life after Normal Training

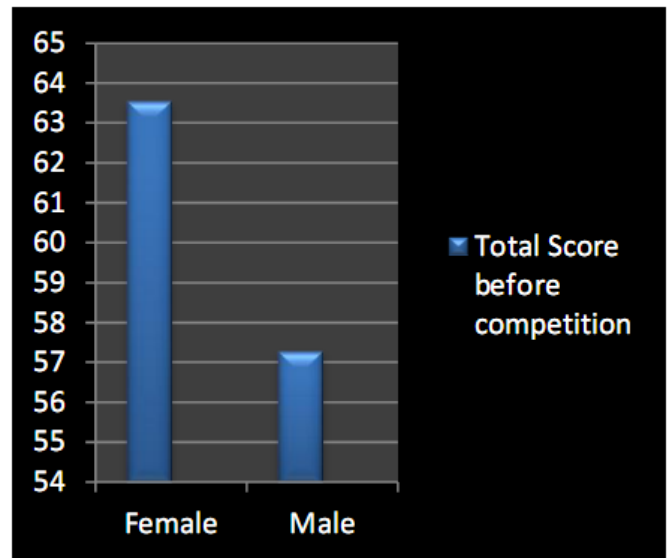


Fig.8: Mean of Total Score before competition

Table 2
Analysis of Variance of PIRS

		Sum of Squares	df	Mean Square	F	Sig.
DS After Normal Training	Between Groups	10.800	1	10.800	5.968	.021
	Within Groups	50.667	28	1.810		
	Total	61.467	29			
SP After Normal Training	Between Groups	1.200	1	1.200	2.154	.153
	Within Groups	15.600	28	.557		
	Total	16.800	29			
QL After Normal Training	Between Groups	.533	1	.533	2.435	.130
	Within Groups	6.133	28	.219		
	Total	6.667	29			
TOTS After Normal Training	Between Groups	26.133	1	26.133	9.906	.004
	Within Groups	73.867	28	2.638		
	Total	100.000	29			
DS Before Competition	Between Groups	213.333	1	213.333	1.364	.253
	Within Groups	4380.133	28	156.433		
	Total	4593.467	29			
SP Before Competition	Between Groups	3.333	1	3.333	4.118	.052
	Within Groups	22.667	28	.810		
	Total	26.000	29			
QL Before Competition	Between Groups	.533	1	.533	.404	.530
	Within Groups	36.933	28	1.319		
	Total	37.467	29			
TOTS Before Competition	Between Groups	294.533	1	294.533	1.823	.188
	Within Groups	4524.667	28	161.595		
	Total	4819.200	29			

N=N1 (Female) + N2 (Male) =30

The analysis of data in table 2 demonstrated significant differences in the variables of pirs namely distress score after normal training, total score after normal training, and sleep parameter before competition found to be significantly difference between females and males players of basketball.

The analysis of data in table 2 demonstrated not significantly different in the variables of pirs namely sleep parameter after normal training, quality of life after normal training, distress score before competition, quality of life before competition and total score before competition were found not to be significantly difference between females and males players of basketball.

CONCLUSIONS

1. There are significant difference in the variables of PIRS namely distress score after normal training, total score after normal training, and sleep parameter before competition found to be significantly difference between females and males players of basketball at 0.05 level of significance.
2. There are not significantly different in the variables of pirs namely sleep parameter after normal training, quality of life after normal training, distress score before competition, quality of life before competition and total

score before competition were found not to be significantly difference between females and males players of basketball at 0.05 level of significance.

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