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**A STUDY CONDUCTED ON THE EFFECTS OF SPORTS AND YOGA ACTIVITY WITH SPECIAL
REFERENCE ON 11TH REFRESHER COURSE PARTICIPANTS FOR A PERIOD OF THREE WEEKS**

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ABSTRACT

The research is conducted on the participants of 11th Refresher Course at Dr. Baba Saheb Ambedkar University, Aurangabad, varying between 28 to 58 years of age. In all, the activity continued for three hours in morning on around 33 participants for 21 days (around three weeks) regularly. Initial data of the participants in height, weight, anaerobic capacity, basal pulse rate, pulse rate before activity, during activity, after activity were monitored everyday. The sports activity was according to age, but incorporated with jog, run, sprint, exercises, ball games, hill climbing etc. and the yoga activity with prayer therapy, pranayama, asanas, bandhas, meditation etc. on the last day the data was compared with day one and found significant reduction in weight, increase in ponderal index (anaerobic capacity), adaptation of load was evaluated through the pulse rate noted at four different times. From the above study it is concluded that the effect of sports activity followed by yoga will have positive effects on the sportsman as well as retired sportsman.

Introduction:

As we all know that there is always a relationship between cause and effect. Here a research is conducted on the 11th Refresher Course participants who vary between the ages of 28 to 58 years. The subjects in all were 33 and were given physical activity in the morning session for 3 hours for a period of three weeks i.e., 21 days. Here they were made to follow a rapid and vigorous physical training according to their age for around one and half hour and then after complete recovery they were imparted with yogic exercises. In vigorous activity the subjects were made to jog, run, play different games and then taken over for steep training (hill climbing). In yoga they were given prayer therapy, followed by various pranayama. In this program the subjects were asked to count 30 seconds pulse during basal pulse rate, pulse rate before activity, during activity, and after yoga activity. In this study weights were noted on the first and last day as well their heights are also noted once. In this study variables noted were reduction in weight, increase in load adaptation, and anaerobic capacity comparison by using Lewis Nomogram-Pondoral Index.

The following table shows the code of the subjects with their height, final weight, and ponderal index with initial and final weights, the difference, and pulse rate on first and last with difference of basal pulse rate, pulse rate before activity, during activity, after activity and the remarks.

Table:

Depicting the data collected on the first day and the last day of the refresher course in different variables modified due to training in fast activity and yoga on 33 participants for 21 days at Dr. B.A.M. University, Aurangabad.

S. No.	Height Inches	Dates in Oct. 2004	Weight in Kilo-grams	Anaerobic Capacity	Basal Pulse Rate	Before Activity Pulse	During Activity Pulse	After Activity Pulse
1	2	3	4	5	6	7	8	9
1	65	5 th	73	12.00	33	35	75	40
		24 th	71.5	12.01	38	38	68	40
		Diff.	1.5	0.10	05	03	07	00
2	63	5 th	80	11.25	32	37	42	43
		24 th	77	11.40	33	38	40	45
		Diff.	03	0.15	01	01	02	02
3	71	5 th	74	13.05	35	36	72	45
		24 th	73	13.10	35	34	64	42
		Diff.	01	0.05	00	02	08	03
4	64	5 th	51	13.25	34	38	71	44
		24 th	49	13.50	34	38	62	41
		Diff.	03	0.25	00	00	09	03
5	69	5 th	100	11.40	38	36	70	52
		24 th	94	11.70	29	31	80	45
		Diff.	06	0.30	09	05	10	07
6	67.5	5 th	54	13.80	29	38	60	39
		24 th	54	13.80	29	34	56	38
		Diff.	00	0.00	00	04	04	01
7	71	5 th	88	12.25	32	34	68	38
		24 th	87	12.30	30	33	65	35
		Diff.	01	0.05	02	01	03	03
8	70	5 th	73	12.90	35	32	72	48
		24 th	71.5	13.00	35	39	70	38
		Diff.	1.5	0.10	00	07	02	10
9	72	5 th	100	11.90	35	39	70	35
		24 th	97	12.05	34	41	83	40
		Diff.	03	0.15	01	03	13	05
10	68	5 th	85	11.90	42	48	80	40
		24 th	82	12.05	40	48	82	43
		Diff.	03	0.15	02	00	02	03
11	66	5 th	69	12.40	34	40	68	45
		24 th	66	12.55	35	39	65	42
		Diff.	03	0.15	01	01	03	03
12	64	5 th	67	12.15	33	40	69	44
		24 th	63	12.40	35	42	76	46
		Diff.	04	0.25	02	02	07	02

13	67	5 th	70	12.50	32	41	64	41
		24 th	69	12.60	32	38	51	48
		Diff.	01	0.10	00	03	13	07
14	61.5	5 th	67	11.65	38	45	72	68
		24 th	64	11.80	40	45	65	54
		Diff.	03	0.15	02	00	07	14
15	65	5 th	74	11.95	32	35	69	40
		24 th	70.5	12.10	30	32	60	50
		Diff.	3.5	0.15	02	03	07	10
16	69	5 th	68	13.00	35	38	66	43
		24 th	66	13.15	35	39	80	44
		Diff.	02	0.15	00	01	14	01
17	65	5 th	68	12.30	33	42	73	45
		24 th	65	12.45	32	34	66	48
		Diff.	03	0.15	01	08	07	03
18	63	5 th	60	--	32	43	45	45
		24 th	--	--	32	36	43	45
		Diff.	--	--	00	07	02	00
19	67	5 th	56	13.45	29	44	64	46
		24 th	55	13.60	32	35	48	38
		Diff.	01	0.15	03	09	16	08
20	66	5 th	67	12.50	32	38	65	43
		24 th	67	12.50	33	35	68	39
		Diff.	00	00	01	03	03	04
21	71	5 th	77	12.80	34	40	66	42
		24 th	75	12.95	33	37	73	41
		Diff.	02	0.15	01	03	07	01
22	64	5 th	58	12.70	32	45	68	44
		24 th	55	12.95	32	36	71	43
		Diff.	03	0.25	00	09	03	01
23	71	5 th	90	12.15	33	42	72	41
		24 th	87	12.30	33	36	64	42
		Diff.	03	0.15	00	06	08	01
24	69	5 th	63	13.20	33	35	75	43
		24 th	61	13.50	36	38	65	38
		Diff.	02	0.30	03	03	10	05
25	70	5 th	63	13.55	34	38	72	45
		24 th	61.5	13.65	41	45	76	44
		Diff.	1.5	0.10	07	07	04	01
26	63	5 th	60	--	35	37	76	44
		24 th	--	--	36	40	70	38
		Diff.	--	--	01	03	06	06
27	65	5 th	77	11.75	36	39	68	42
		24 th	72.5	12.00	35	40	65	41
		Diff.	4.5	0.25	01	01	03	01

28	67	5 th	79	12.05	38	42	68	38
		24 th	76	12.15	36	35	76	40
		Diff.	03	0.10	02	07	08	02
29	63	5 th	57	12.60	39	43	68	43
		24 th	56.5	12.65	36	38	70	45
		Diff.	0.5	0.05	03	05	02	02
30	65.6	5 th	71	12.15	41	45	70	43
		24 th	79	12.30	32	36	78	38
		Diff.	02	0.15	09	09	08	05
31	64	5 th	53	13.10	43	45	68	46
		24 th	51.5	13.25	34	37	65	41
		Diff.	1.5	0.15	09	08	03	05
32	63	5 th	68	11.90	40	40	69	44
		24 th	69	11.85	32	34	58	40
		Diff.	01	0.05	08	06	11	04
33	64	5 th	71	--	42	42	57	47
		24 th	--	--	32	34	52	42
		Diff.	--	--	10	08	05	05
Ave rage	66.46	5 th	70.63	12.45	35	39.75	67.66	42.90
		24 th	69.18	12.59	33.96	37.42	63.66	41.15
		Diff.	1.45	0.14	1.04	2.33	04	1.75

Findings:

1. The average weight on initial day found to be 70.63 Kgs.
2. The average weight on final day found to be 69.18 Kgs.
3. The average reduction in weight is around 1 Kg. and 450 Grams.
4. The average height found to be 66.46 Inches.
5. The average pondoral index with initial weights is 12.45.
6. The average pondoral index with final weights is 12.59.
7. The average increase in pondoral index is 0.14.
8. The average basal pulse rate on the first day found 70 beats per minute.
9. The average basal pulse rate on the final day found 67.92 beats per minute.
10. The average decrease in basal pulse rate is found to be 2.08 beats per minute.
11. The average pulse rate before activity on first day found 79.50 beats per minute.
12. The average pulse rate before activity on final day found 74.84 beats per minute.
13. The average decrease in before activity pulse rate is 04.66 beats per minute.
14. The average pulse rate during activity on first day found 135.32 beats per minute.
15. The average pulse rate during activity on final day found 127.32 beats per minute.
16. The average decrease in during activity pulse rate is 8 beats per minute.

17. The average pulse rate after activity on first day found 85.80 beats per minute.
18. The average pulse rate after activity on final day found 82.30 beats per minute.
19. The average decrease in pulse rate after activity is 3.50 beats per minute.

Conclusions:

From the above all findings it can be concluded that there is significant reduction of weight in the participants, increase in anaerobic capacity (pondoral index), decrease in the basal pulse rate, pulse rate before activity, pulse rate during activity and pulse rate after activity which gives a clear picture of the adaptation of load after sports training followed by Yoga activity.

A STUDY ON 11TH REFRESHER COURSE PARTICIPANTS IN PHYSICAL EDUCATION ON THEIR PERSONLITY

A psychological test of personality on 11th Refresher Course (Physical Education) participants was conducted during the course for which “Eysenck Personality Inventory” was used. In this inventory there are 57 questions in total out of which 24 were on extraversion scale, 24 on neuroticism scale and remaining 9 were on social desirability.

There were 31 subjects from age grip [30 to 58 years who took part in attempting the inventory. The group consisted of 5 female and 26 male subjects.

During this inventory attempt the subjects were asked to answer the, the way they behave. The questions have only two options of ‘yes’ or ‘no’. They were asked to answer by just marking a tick of their choice with their first reaction, but not a long drawn thought process. They were given 15 minutes to answer without omitting any question.

The inventory than collected and scrutinized with secured numbers in different variable. They are shown in the following table:

S. No.	Code of the Subject	Social Desirability	Extraversion	Neuroticism
1		6	4	6
2		6	12	4
3		5	10	9
4		5	10	10
5		3	14	9
6		6	9	8
7		5	11	9
8		1	7	11
9		5	11	12
10		5	14	7
11		6	15	6
12		5	12	19
13		4	14	19
14		4	12	19

15		3	11	15
16		5	11	20
17		6	13	14
18		3	14	13
19		5	10	7
20		5	14	2
21		6	12	3
22		6	12	10
23		5	10	12
24		4	13	2
25		6	13	16
26		5	14	14
27		4	17	6
28		5	14	9
29		5	16	12
30		4	14	17
31		4	14	6

The scores are than compared with the following standardized scale:

- (I) Social desirability 6 and more.
 (II) 1. Extraverts 17 and more.
 2. Ambiverts 8 to 16.
 3. Introverts 7 and below.
 (III) 1. Emotional Stable 4 and below.
 2. Mild Neurotic Tendencies 5 to 8.
 3. Moderate Neurotic Tendencies 9 to 13.
 4. Neurotic Tendencies 14 and more.

After comparing the scores with the standard scale the findings are shown in the following table:

S. No.	Variables	Sub-Variables	Number of subjects			Percentage of the total	Remarks
			Male	Female	Total		
1	Social / Lie Scale	Desirable	7	1	8	25.76%	Helpful in society
2		Undesirable	19	4	23	74.24%	Counseling Required
1	Extraversion Scale	Extravert	1	0	1	3.22%	Helpful in Society
2		Introvert	1	1	2	6.44%	Need Exposure
3		Ambiverts	24	4	28	90.16%	Counseling Required
1	Neurotic Scale	Neurotic	6	2	8	25.76%	Required Medical Aid
2		Mild Neurotic	3	2	5	16.10%	Counseling Required

3		Moderate	13	1	14	45.08%	Counseling Required
4		Emotionally Stable	4	0	4	12.88%	Good for Society

The findings of the inventory of the participants of 11th Refresher Course with social desirability of 25.76%. In extraversion scale they found to be 3.22% extravert, 6.44% introvert and remaining 90.16% Ambiverts. In neuroticism scale 12.88% found to be emotionally stable, whereas 16.10% fall in mild neurotic tendencies, 45.08% in moderate neurotic tendencies and 25.76% found to be neurotic.

The subjects are than counseled in their relevant deficiencies and made aware to be more emotionally stable,