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## Effect of Yoga Practice on Personality Traits of Prisoners

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**Abstract** It was deemed important to evaluate some of these changes scientifically since yoga is thought to be a discipline that promotes deeper psychological introspection and long-lasting behavioral changes. Yoga is an authentic, nonreligious practice of mind-control and purification. This study set out to find out how certain yoga practices affected the inmates' personality attributes. The study used a quasi-experimental research methodology, with 200 volunteer prison inmates from the Meerut district jail in Uttar Pradesh (100 in the Experimental group and 100 in the Control group) who were between the ages of 18 and 30 being favorably considered for the study.

**Keywords** Yoga Practice, Personality Traits, Prisoners

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### 1. Introduction

Since yoga is believed to be technique that facilitates deeper psychological introspection and bring about lasting behavioral changes, it was considered worthwhile to assess some of these changes in scientific manner. Yoga is genuine non sectarian methodology for mind control and purification. The question arises what for yoga be practiced in prison life is a cruised life. In traditional sense, it is worst life in every sense. It blocks overall unfolding of personality. It takes away freedom from individual. For the inmates life inside prison is bizarre, torturous, painful, unhealthy, suffocating and slave like. The purpose is to make prison life better, to add humanistic dimension too. To help the inmates introspect and examine themselves and possibly understand the purpose of better life. It is believed that yoga has a great role in transformation of prisoner's life.

The purpose of this study was to investigate the effect of selected yogic practices on the Personality traits of prisoners. The study employed Quasi-Experimental research design in which 200 voluntary jail inmates (Experimental group-100, Control group-100) aged between 18 to 30 years were positively considered for the study from Meerut district jail, Uttar Pradesh.

### 2. Methodology

The yogic exercise was practiced by experimental group daily (Except Sunday) for a 25 weeks period. Each 70 min yoga session included 10 min respiratory exercises, 15 min of yogasanas and 30 Minute Pranayama without Kumbhaka (Kapalbhati, abdominal breathing, NadiShodhan, Anulom Vilom, Ujjai and Shitali), 15 min Om chanting and meditation. The personality traits were scores were recorded pre-exercise (Base line) and the 25<sup>th</sup> week intervention programme for assessment through Dr. Raymond Cattle's 16 PF Questionnaire (revised version of Dr. S. D. Kapoor).



**3. Results and discussion on findings**

Analysis of co-variance for the means of the experimental, control and adjusted group of personality factors after 25 weeks yogic practice

**Table: P1**

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
<b>A (Warmth)</b>	pre test	Mean	5.19	5.07	With in	379.9	198	1.919	0.375**
		S.D	1.4474	1.32	Between	0.72	1	0.72	
	Post test	Mean	5.16	6.7	With in	484.44	198	2.447	48.466*
		S.D	1.8131	1.2673	Between	118.58	1	118.58	
	adjusted	Mean	5.319	4.941	With in	366.336	197	1.86	7.294*
					Between	13.564	1	13.564	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**4. Discussion on findings:** In this personality test factor ‘A’ denotes the warmth factor of personality in jail inmates. At the beginning of the yoga programme the warmth nature of prisoners was insignificant (see the table no.P1) whereas after participation in various selected yogic practices, significant improvement has been seen. Under the limitation of the study they tends to became more easy going, emotionally impressive, ready to cooperate soft hearted and better ask to remember names of peoples.

**Table: P2**

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
<b>B (Reasoning)</b>	pre test	Mean	3.97	3.94	With in	916.55	198	4.629	0.010**
		S.D	2.1342	2.16874	Between	0.045	1	0.045	
	post test	Mean	3.99	3.04	With in	670.83	198	3.388	13.319*
		S.D	2.2042	1.38477	Between	45.125	1	45.125	
	adjusted	Mean	3.818	4.092	With in	847.508	197	4.302	16.049*
					Between	69.042	1	69.042	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**5. Discussion on findings:** In this personality test factor ‘B’ in the Dr. Raymond cattle personality questionnaire denotes the intelligence in terms of reasoning factor of personality in jail inmates, which was insignificant before the innervations of yogic programme (as shown in table no. P2). The difference of average score of reasoning ability was not so high but it was sufficient to conclude that there is a significant change in reasoning in such a ways; to grasp ideas soon and learning fast.

**Table: P3**

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	d f	Mean square	F-ratio
<b>C (Emotional Stability)</b>	pre test	Mean	4.87	4.69	With in	558.7	198	2.822	0.574**
		S.D	1.7676	1.58716	Between	1.62	1	1.62	
	post test	Mean	4.98	6.37	With in	391.27	198	1.976	48.886*
		S.D	1.6696	1.07923	Between	96.605	1	96.605	
	adjusted	Mean	5.057	4.503	With in	530.41	197	2.692	10.507*
					Between	28.29	1	28.29	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant



**6. Discussion on findings:** Emotional stability plays an important role in behavior of a person. Mostly commitment of crime is a result of emotional imbalance. This personality factor ‘C’ was insignificant in control and experimental group at baseline (as shown in table no P3). Usually the persons with unstable emotions are frustrated, neurotically fatigued, fretful and dissatisfied from their life’s. The researcher found that the jail inmates of experimental group are tend to emotionally mature, realistic about life and better able to maintain social relations.

Table: P4

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
E (Dominance)	pre test	Mean	4.7	4.84	With in	646.44	198	3.265	0.300**
		S.D	1.9514	1.64973	Between	0.98	1	0.98	
	post test	Mean	4.93	6.2	With in	468.51	198	2.366	34.082*
		S.D	1.8382	1.16342	Between	80.645	1	80.645	
	adjusted	Mean	4.894	4.646	With in	602.732	197	3.06	14.286*
					Between	43.708	1	43.708	

(P<0.05) (1, 198)= 1.65

\*significant\*\* not significant

**7. Discussion on findings:** 16PF questionnaire’s Factor ‘E’ denotes humble, accommodating and conforming nature of individual another side when it reaches its height it denotes assertiveness, self assured independent and sometime hostile and disregard authority. In the light of above research there is a significant difference between experimental and control group after 25weeks of yogic innervations, which approves that yoga is effective in the modification of dominance nature.

Table: P5

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
F (Liveliness)	pre test	Mean	4.1	4.74	With in	396.24	198	2.001	10.234*
		S.D	1.446	1.38258	Between	20.48	1	20.48	
	post test	Mean	4.02	5.89	With in	313.75	198	1.585	110.340*
		S.D	1.5569	1.86334	Between	174.845	1	174.845	
	adjusted	Mean	4.291	4.549	With in	383.209	197	1.945	6.699*
					Between	13.031	1	13.031	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**8. Discussion on findings:** According to the mean values shown in the table no. P5, in experimental group mostly prisoners were restrained, reticent, and introspective. The control group prisoners were shown average liveliness whereas experimental group has below average score. Data support that there was significant difference among both experimental group at base line and significant difference exists between the experimental and control group after yogic innervations. It concludes that prisoners tend to tends to become cheerful active, talkative, frank, expressive, effervescent, and carefree.

Table: P6

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
G (Rule Consciousness)	pre test	Mean	5.85	5.95	With in	415.5	198	2.098	.238**
		S.D	1.5067	1.38808	Between	0.5	1	0.5	
	post test	Mean	5.67	6.99	With in	401.1	198	2.026	43.006*
		S.D	1.7059	1.06832	Between	87.12	1	87.12	
	adjusted	Mean	6	5.8	With in	394.854	197	2.004	10.301*
					Between	20.646	1	20.646	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant



**9. Discussion on findings:** Usually criminal minded people like's freedom and not interested in following rules and regulations. In rule Consciousness control group had mean score of 5.95 in pre test where as the experiment group had the mean score of 5.85 having 0.10 advantages for the control group. On post test control group despite of mean score of 6.99 whereas the experimental group had the mean score of 5.67 again having the loss of 1.22 points against of experimental group. Results in table P6 indicates that post test F ratio of prisoners were significantly higher than those of control group. This suggest that the yogic programme tends to become Conscientious, Persevering, staid, rule bound.

Table: P7

Personality Factor	Test	Experimental Group	Control Group	Source of variance	Sum of square	d f	Mean square	F-ratio	
<b>H (social Boldness)</b>	pre test	Mean	5.58	5.84	With in	299.8	198	1.514	2.232**
		S.D	1.3118	1.14345	Between	3.38	1	3.38	
	post test	Mean	5.02	6.65	With in	266.71	198	1.347	98.621*
		S.D	1.3483	0.93609	Between	132.845	1	132.845	
	adjusted	Mean	6.03	5.39	With in	218.515	197	1.109	73.282*
					Between	81.285	1	81.285	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**10. Discussion on findings:** In social boldness control group had mean score of 5.84 in pre test where as the experiment group had the mean score of 5.58 having 0.26 advantages for the control group. On post test control group despite of mean score of 6.65, whereas the experimental group had the mean score of 5.02 again having the loss of 1.63 points against of experimental group. Results in table P6 indicates that there is significant difference between and control after the yogic innervations i.e. experimental group prisoners tends to be shy, withdrawing, cautious, retiring, a 'Wallflower'. They tends to be slow and impeded in speech and in expressing himself, dislikes occupations with personal contacts, prefer one or two close friends to large groups whereas control group prisoners tends to be careless of detail ignore danger signals, and consume much time talking. He tends to be pushy and actively interested in the opposite sex

Table: P8

Personality Factor	Test	Experimental Group	Control Group	Source of variance	Sum of square	d f	Mean square	F-ratio	
<b>I (Sensitivity)</b>	pre test	Mean	5.61	5.24	With in	1076.03	198	5.434	1.260**
		S.D	2.3133	2.34895	Between	6.845	1	6.845	
	post test	Mean	5.39	6.39	With in	657.58	198	3.321	15.055*
		S.D	2.0494	1.56279	Between	50	1	50	
	adjusted	Mean	5.868	4.982	With in	900.389	197	4.571	38.429*
					Between	175.641	1	175.641	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**11. Discussion on findings:** According to factor I group have low score in sensitivity tends to be practical, realistic, masculine, independent, responsible, but skeptical of subjective cultural elaborations. Whereas the group obtain high score tends to be tender minded, day dreaming, artistic, fastidious, and feminine. He is sometimes demanding of attentions and help, impatient, dependent, and impractical. Table P8 showed that the there was insignificant difference between the groups at base line but after the innervations there is a significant difference among the groups i.e experimental group prisoners tends to become practical, realistic, masculine, independent, responsible but at the same time control group prisoners , impatient, dependent, and impractical.



Table: P9

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	mean square	F-ratio
L (Vigilance)	pre test	Mean	6.07	6.41	With in	526.7	198	2.66	2.173**
		S.D	1.6284	1.63358	Between	5.78	1	5.78	
	post test	Mean	6.19	7.32	With in	455.15	198	2.299	27.774*
		S.D	1.8074	1.15365	Between	63.845	1	63.845	
	adjusted	Mean	6.269	6.211	With in	470.067	197	2.386	23.734*
					Between	56.633	1	56.633	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**12. Discussion on findings:** According to factor L the group has low in score in vigilance tends to free of jealous tendencies, adaptable, cheerful, un-competitive, concerned about other people, a good team worker. But high score denotes a person tends to be mistrusting and doubt full. He is often involved in his own ego, is self opinionated, and interested in internal mental life. As the above table showed that insignificant difference in experimental and control group at base line. Significant difference was found after the innervations of yogic programme, i.e control group prisoners became more mistrusting and doubt full but experimental group tends to become jealous free, cheerful, uncompetitive and concerned about other people.

Table: P10

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
M (Abstractness)	pre test	Mean	4.69	4.48	With in	950.35	198	4.8	.459**
		S.D	2.1494	2.23146	Between	2.205	1	2.205	
	post test	Mean	4.35	5.86	With in	504.79	198	2.549	44.718*
		S.D	1.696	1.49085	Between	114.005	1	114.01	
	adjusted	Mean	5.086	4.084	With in	811.684	197	4.12	33.655*
					Between	138.666	1	138.67	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**13. Discussion on findings:** we can see in the table no P10 that pre test mean difference is not significant where as post test difference is highly significant with respect to abstractness in prisoners. The group who scores low on factor M (Abstractness) tends to be anxious to do the right things, attentive to practical matters, and subject to the dictation of what is obviously possible. But the group got high score tends to be unconventional over every day matters, Bohemian, self motivated, imaginatively creative, concerned with 'essentials' and oblivious of particular people and physical realities. Hence, we can say that experimental group tends to more anxious to do right things but control group tends to become more unconventional over every day matters, self motivated imaginative creative after the yogic innervations.

Table: P11

Personality Factor	Test		Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio
N (Privateness)	pre test	Mean	6.64	6.48	With in	704	198	3.556	.360**
		S.D	1.9255	1.84489	Between	1.28	1	1.28	
	post test	Mean	6.95	7.6	With in	512.75	198	2.59	8.157*
		S.D	1.893	1.26331	Between	21.125	1	21.125	
	adjusted	Mean	6.752	6.368	With in	642.624	197	3.262	18.815*
					Between	61.376	1	61.376	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant



**14. Discussion on findings:** Table P11 showed that the higher mean scores in control group rather than experimental group in both pre-post data. F ratio showed that there was insignificant difference among control group and experimental group with respect to *Privateness*, whereas after the programme data showed that significant difference of *Privateness* among prison inmates. It can be concluded that experimental group prisoners were tends to became more polished, experienced, worldly, and shrewd than control group.

**Table: P12**

Personality Factor	Test	Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio	
<b>O (Apprehensiveness)</b>	pre test	Mean	6.77	6.85	With in	460.46	198	2.326	.138**
		S.D	1.5882	1.45904	Between	0.32	1	0.32	
	post test	Mean	6.59	7.69	With in	413.58	198	2.089	28.964*
		S.D	1.6823	1.16076	Between	60.5	1	60.5	
	adjusted	Mean	6.923	6.697	With in	428.528	197	2.175	14.680*
					Between	31.932	1	31.932	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**15. Discussion on findings:** *Apprehensiveness* is the factor which denotes a mature unanxious confidence in himself and his capacity to deal with things at lower score but at higher score it denotes depressed, moody, a worrier, full of foreboding, and brooding. Table P12 showed that the F value at base line was not significant at all but it is highly significant after the innervations, hence we can conclude that experimental group showed unanxious confidence with good capacity to deal with things where as in control group prisoners become more depressed, moody and full of foreboding.

**Table: P13**

Personality Factor	test	Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio	
<b>Q1 (Openness to Change)</b>	pre test	Mean	5.59	6.04	With in	616.03	198	3.111	3.254**
		S.D	1.7644	1.76338	Between	10.125	1	10.125	
	post test	Mean	5.53	7.13	With in	490.22	198	2.476	51.699*
		S.D	1.7948	1.31545	Between	128	1	128	
	adjusted	Mean	5.825	5.805	With in	573.607	197	2.912	14.570*
					Between	42.423	1	42.423	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**16. Discussion on findings:** *Openness to change* is that factor of personality which denotes Conservative, Respecting, Established Ideas, Tolerant of traditional difficulties and Experimenting, Critical, Liberal, Analytical, Free thinking nature of human being. In this research paper table P13 showed that insignificant difference between the groups at base line and significant different after the yogic innervations, hence we can conclude that the experimental group prisoners tends to become more conservative, respecting. Whereas control group prisoners were tends to became crtical, liberal and analytical due to not participating in yoga programme.

**Table: P14**

Personality Factor	test	Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio	
<b>Q2 (Self Relience)</b>	pre test	Mean	5.55	5.51	With in	593.74	198	2.999	.027**
		S.D	1.7137	1.74943	Between	0.08	1	0.08	
	post test	Mean	5.69	6.87	With in	434.7	198	2.195	31.711*
		S.D	1.6618	1.27648	Between	69.62	1	69.62	
	adjusted	Mean	5.768	5.292	With in	534.347	197	2.712	21.897*
					Between	59.393	1	59.393	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant





**17. Discussion on findings:** this factor showed that the Group dependence, A ‘Joiner’ and sound followerSelf sufficient, prefer own decisions, resourceful. Hence this statistical finding clearly implies that the yogic practices had significant effect on Factor Q<sub>2</sub>(self reliance). On basis of above findings the null hypothesis is rejected and alternative hypothesis is accepted which concluded that yogic practices are beneficiary to modify the Factor Q<sub>2</sub> (self reliance) of the prisoners.

Table: P15

Personality Factor	Test	Experimental Group	Control Group	Source of variance	Sum of square	df	Mean square	F-ratio	
Q3 (Perfectionism)	pre test	Mean	5.81	5.57	With in	461.9	198	2.333	1.235**
		S.D	1.5872	1.46512	Between	2.88	1	2.88	
	post test	Mean	5.67	6.98	With in	406.07	198	2.051	41.839*
		S.D	1.5895	1.25513	Between	85.805	1	85.805	
	adjusted	Mean	6.037	5.343	With in	413.031	197	2.097	23.309*
					Between	48.869	1	48.869	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**18. Discussion on findings:** Perfectionism is that factor of personality which denotes the quality of person which includes Indiscipline self- conflict, careless of protocol, follows own urges at lower score but with high score it denotes Controlled, Socially precise, Following, Self image. As the table no P15 showed that there was insignificant difference between the groups at base line, but after the yogic innervations significant difference has been witnessed between the groups. Hence we can conclude that prisoners participated in yoga programme has tend to control and socially precise instead of indiscipline, careless of protocol. Whereas control group table value is the influence of external factors which was not under control of the investigator.

Table: P16

Personality Factor	test	Experimental Group	Control Group	Source of variance	Sum of square	d	Mean square	F-ratio	
Q4 (Tension)	pre test	Mean	5.03	5.68	With in	606.67	198	3.064	6.895*
		S.D	1.7664	1.73427	Between	21.125	1	21.125	
	post test	Mean	4.78	6.68	With in	432.92	198	2.186	82.553*
		S.D	1.5928	1.35498	Between	180.5	1	180.5	
	adjusted	Mean	5.375	5.335	With in	549.428	197	2.789	20.524*
					Between	57.242	1	57.242	

(P<0.05) (1,198)=1.65

\*Significant \*\*not significant

**19. Discussion on findings:** Factor Q4 in 16PF is the represented the parameter of tension in human being. Its low score showed Relaxed, Tranquil, Torpid, Unfrustrated nature of a human being. Its high score showed tense, Frustrated, Driven, overwrought nature. The data showed in the table P16 indicates insignificant difference between control and experimental group at base line but after the 25week of yogic innervations significant difference has been witnessed which exemplifies that yogic practioners (experimental group) tends to more relaxed, tranquil and Unfrustrated after the yogic programme but at the same time non participants (control group) tends to more tense, frustrated and overwrought in nature.

**20. Conclusion**

It is clear from the above discussion mean scores of all sixteen factors has significantly improved through yogic intervention provided to prisoners but somewhere in control group significant difference has been seen which the influence of uncontrolled factors.



Thus it is clear that yogic practices have a greater influence on the personality of the prisoners. Present study is effective on personality of prison inmates.

### References

- [1]. Cattell, Dr. Raymond (1949), 16 P F test, (Form A) Revised by Dr. S.D. Kapoor, New Delhi, 1970
- [2]. Aminabhavi Vijayalaxmi A. (1996). Effect of yogic practice on attitudes toward yoga and mental health of adults, Prachi Journal of psycho-cultural dimensions, 12 (2).
- [3]. Betal Dr. C. & Nayak Dr. Alka, Effects of Surya Namaskara on Behavioural Maladjustment of High School Student, Vyayam- Vidnyan, Vol. No. 39, No.2, May, 2006.
- [4]. Clay John, "Personality Traits of female Inter Collegiate Athletic Coaches", Dissertation Abstracts International (Feb 1975).
- [5]. Dewey, R and Humber, W. J.: The Development of Human Behaviour. The Macmilan Company, New York. USA, (1951).
- [6]. Groover, P., Varma V.K., Persad, D., and Verma, S.K. (1994) Role of yoga in the treatment of neurotic disorders: Current status and future directions. Indian Journal of psychiatry, Vol. 36(4).
- [7]. Jai Prakash Sharma & D.C. Sharma "A Study of Effect of Yogic Training on Attitude of Secondary School Level Boys.", Vyayam Vidyan Vol – 37 NO -3 August 2004
- [8]. Johnson. S.J., 'Effects of yoga- therapy on conflict resolution, self- concept and emotional adjustment', Dissertation. Abst. Int., 34 (10-A); 6385, 1974.
- [9]. Krishna, Usha. (1993), Adolescent's delinquent behaviour and personality. Indian journal of criminology, 21(3).
- [10]. Mehrabain, A., & O' Reilly, E (1990); Analysis of personality measures in term of basic dimension of temperament, Journal of personality of broad psychology, no. 38.
- [11]. Meicer John, "Relationship between sixteen personality factor of University first string and reserved varsity athletes", Completed Research in Recreation and Physical Education (1973).
- [12]. R. Smith, "A comparison of coaches, subjective evaluation of personality traits of Athletes to actual personality traits scores and measured by the 16 P.F. Questionnaire", Completed Research (1978).
- [13]. Rucker Lila; Yoga and restorative justice in prison: An experience of "response ability harm". Contemporary justice review, Vol. 8, issue. I, March 2005,
- [14]. Sarawati Swami Niranjananada, "The Impact of yoga practices on jail inmates: A report from 24 jails in Bihar. (Unpublished paper). Bihar Yoga Bharati, Munger, Bihar. (1996)
- [15]. Scientific research department, Kaivalyadham: "Yoga for prevention and control of suicidal tendency and restoring mental health in Indian adolescent students", Published on [www.kavalyadham.com](http://www.kavalyadham.com).

