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A Scientific Study on Assessment and Regulation of Trigunain Context of Quality of Life

Indu Kumari[1], Srikanta Kumar Panda[2*], Nishi Arora[3]

[1]PG, Department of KriyaSharir, Ayurvedic and Unani Tibbia College and Hospital, Ajmal Khan Road, Karol Bagh, New Delhi, India.

[2]Associate Professor, Department of KriyaSharir, Ayurvedic and Unani Tibbia College and Hospital, Ajmal Khan Road, Karol Bagh, New Delhi, India.
*Corresponding author

[3]Associate Professor & Head, Department of KriyaSharir, Ayurvedic and Unani Tibbia College and Hospital, Ajmal Khan Road, Karol Bagh, New Delhi, India.

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Abstract

Background: The manifestation of the Gunas and their influence on the human mind and behavior has interested psychologists and researchers across the world. The present study was conducted to assess Triguna and quality of life followed by Yogic Kriya intervention. **Methods:** 60 healthy volunteers were assessed using questionnaire of WHO QOL and David Wolf VPI before and after the intervention of Suryanamaskar and Pranayama. Assessment was done clinically on the basis of improvement of subjective parameters. Triguna and quality of life assessment of volunteers was evaluated on the basis of David Wolf VPI and WHO QoL (BREF) scale before and after the intervention of Yogic Kriya. **Results:** The mean value of physical health was 59.73 before Yogic Kriya and it is enhanced to 74.53 after Yogic Kriya, mean value of psychological state parameter was 61.67 before Yogic Kriya and it is enhanced to 75.82 after Yogic Kriya, mean value of social relation was 67.18 before Yogic Kriya and it is enhanced to 84.82 after Yogic Kriya. The mean value of Sattva was 43.68 before Yogic Kriya and it is enhanced to 48.25 after Yogic Kriya, the mean value of Raja was 30.72 before Yogic Kriya and it is lowered down to 29.43 after Yogic Kriya, mean value of Raja was 25.63 before Yogic Kriya and it is lowered down to 22.32 after Yogic Kriya. **Conclusion:** Yoga has the potential to become an essential baseline modality in all health work, be it for cure or prevention or the promotion of positive QoL.

Keywords: Sattva, Rajas, Yoga.

INTRODUCTION

The Indian perspective of personality deals with the tri-dimensional classification of Gunas (Sattva, Rajas, and Tamas) entailing physical, mental, and spiritual elements of personality.[1] Psychologists over the years have defined human personality using many models and theories. The Guna theory of tri dimensional classification of human personality emanates from Indian psychology (IP).[2] The manifestation of the Gunas and their influence on the human mind and behavior has interested psychologists and researchers across the world. While IP is indigenous in origin, its appeal is universal.[3] It has been said that IP is a "complex subject variously viewed as esoteric and spiritual, philosophical and speculative, practical and ritualistic, and of course,

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systematic and scientific understanding of human nature."[4]

The Guna theory originates from the Sankhya school of Indian philosophy which states that the entire physical universe or "Prakriti" is made up of three constituents – Sattva, Rajas, and Tamas.[5] The World Health Organization defines "health" as a dynamic state of complete physical, mental, social, and spiritual wellbeing and not merely as the absence of disease or infirmity.[6] A century ago, most medical research and expertise was directed towards the handling of problems such as nutritional deficiencies and epidemics. With the advances in medicine over the years, the types of ailments being treated have changed. Today, most of the common health problems are traceable to lifestyle.7 The present study was conducted to assess Triguna and quality of life followed by Yogic Kriya intervention.

MATERIALS & METHODS

In present study a series of 60 healthy volunteers attending the outpatient department and studying in Ayurvedic and Unani Tibbiacollege and hospital, Karol Bagh, New Delhi, fulfilling the criteria of inclusion were selected irrespective of sex, caste, race and religion for the present study. Enrolled volunteers are assessed using questionnaire of WHO QOL and David Wolf VPI. Pre and post interventional study on 60 healthy volunteers has been done and assessed before and after the intervention of Suryanamaskar and Pranayama.

Assorted Yogic Kriya includes Rhythmic Pranayama and Surya Namaskarpractised daily for 1 hour, 6 days a week for 8 weeks. Then follow up of 3 weeks. Instruction were given to the volunteer to imagine positivity going inside the body while inhaling followed by a hold of breath so as to let that positivity dispersed in the body. Also imagine as if all the negativity of the body going out while exhaling during pranayama followed by a hold of breath again so that exhaled negativity can disperse away from body. In general practice, Anuloma-Viloma should be practiced till perspiration starts.

Assessment was done clinically on the basis of improvement of subjective parameters. Triguna and quality of life assessment of volunteers was evaluated on the basis of David Wolf VPI and WHO QoL (BREF) scale before and after the intervention of Yogic Kriya. Results were assessed by the changes in subjective parameters of Triguna and Quality of life after Yogic Kriya intervention that were graded and statistically analysed. P value less than 0.05 was considered significant.

RESULTS

Table 1: Age Wise Distribution

Age group	Frequency	Percent
26-30	49	71.66
31-35	11	18.34

[Table 1] shows that out of total 60 participants 49 (81.66%) belong to 25- 30 age group and remaining 11 (18.34%) belong to 31-35 age group.

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Table 2: Prakriti wise Distribution

Prakriti	Frequency	Percent
Vata-Pitta	4	6.67%
Pitta-Vata	14	23.33%
Pitta-Kapha	31	51.67%
Kapha-Pitta	11	18.33%

[Table 2] shows that out of total 60 participants, 4 belonged to (6.67%) Vatta-Pitta, 14 (23.33%) Pitta-Vata,31 (51.67%) Pitta-Kapha and 11 (18.33%) Kapha-Pitta Prakriti.

Table 3: Physical Health Parameter of QoL

Physical Health	Mean		SD	SE	T value	P value	Df	Result
	BT	AT						
	59.73	74.53	7.111	.918	-16.121	.001	59	HS

Table 4: Psychological state parameter of QoL

Psychological	Mean		SD	SE	T value	P value	df	Result
	BT	AT						
	61.67	75.82	7.582	.979	-14.456	.000	59	HS

Table 5: Social Relations Parameter of QoL

Social Relation	Mean		SD	SE	T value	P value	df	Result
	BT	AT						
	67.18	84.82	17.859	2.306	-7.648	.001	59	HS

Table 6: Assessment of parameters

Parameters	BT	AT	P value
Sattva	43.68	48.25	0.001
Raja	30.72	29.43	0.001
Tama	25.63	22.32	0.001

Table 7: Co-relation between physical health parameter of QoL with Triguna

Correlations					
		Physical Health	Sattva	Raja	Tama
Physical Health	Pearson Correlation	1	.247	-.209	-.113
	Sig. (2-tailed)		.058	.108	.389
	N	60	60	60	60

Table 8: Psychological Parameter of QoL with Triguna

Correlations					
		Psychological	Sattva	Raja	Tama
Psychological	PearsonCorrelation	1	.467**	-.104	-.396**
	Sig. (2-tailed)		.000	.427	.002
	N	60	60	60	60

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Table 9: Correlation of Social Relations with Triguna

Correlations					
		SocialRelation	**Sattva**	**Raja**	**Tama**
Social Relation	Pearson Correlation	1	.158	-.184	-.053
	Sig. (2-tailed)		.229	.159	.685
	N	60	60	60	60

[Table 3] shows that mean value of physical health was 59.73 before Yogic Kriya and it is enhanced to 74.53 after Yogic Kriya with SD± 7.111 and SE± 0.918. The "t" value was -16.121 which was statistically highly significant at p value <0.001. [Table 4] shows that the mean value of psychological state parameter was 61.67 before Yogic Kriya and it is enhanced to 75.82 after Yogic Kriya with SD± 7.582 and SE± 0.979. The "t" value was -14.456 which was statistically highly significant at p value <0.001.

[Table 5] shows that mean value of social relation was 67.18 before Yogic Kriya and it is enhanced to 84.82 after Yogic Kriya with SD± 17.859 and SE± 2.306. The "t" value was -7.648 which was statistically highly significant at p value <0.001.

[Table 6] shows that mean value of Sattva was 43.68 before Yogic Kriya and it is enhanced to 48.25 after Yogic Kriya, the mean value of Raja was 30.72 before Yogic Kriya and it is lowered down to 29.43 after Yogic Kriya, mean value of Raja was 25.63 before Yogic Kriya and it is lowered down to 22.32 after Yogic Kriya which was statistically highly significant at p value <0.001.

[Table 7] shows pearson correlation to determine the relationship between Physical health along with Sattva, Raja, and Tama. Significant positive correlation between physical health and Sattva at r = 0.247 and P>0.05. Significant Negative correlation between physical health with Raja at r = - 0.209 and P>0.05. Significant Negative correlation between physical health with Tama at r = - 0.113 and P>0.05.

[Table 8] shows Pearson correlation is run to determine the relationship between psychological along with Sattva, Raja, and Tama. Significant positive correlation between psychological and Sattva at r = 0.467 and P<0.05. Significant Negative correlation between psychological with Raja at r = - 0.104 and P>0.05. Significant Negative correlation between psychological with Tama at r = - 0.396 and P>0.05.

[Table 9] shows Pearson correlation is run to determine the relationship between Social relation along with Sattva, Raja, and Tama. Significant positive correlation between Social relation and Sattva at r = 0.158 and P>0.05. Significant Negative correlation between Social relation with Raja at r = - 0.184 and P>0.05. Significant Negative correlation between Social relation with Tama at r = - 0.053 and P>0.05.

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DISCUSSION

Different cultures have reported that characteristics associated with the three Gunas correlate with well-being (though using different models) in ways similar to those that are supported by this study. Greater the presence of Sattva, greater is the experience of Ananda (bliss). Fruit and vegetable rich diets (a Sattvic quality) have been found to correlate with well- being.[8]

The present study aimed to bridge this gap by focusing on the human temperament from a more holistic perspective. Further, this study attempted to address the shortcoming of relying only on Western psychological constructs for understanding the psychology of indigenous peoples. Instead of creating a forced equivalence with constructs borrowed from Western thought, studying human nature in terms of Guna classification may offer the scope to deal with some nuances inherent to non Western cultures.[9]

Based on the review of the literature, it was hypothesized that Sattva would be positively correlated with quality of life indicators, while Rajas and Tamas would be negatively correlated with Quality of life indicators. Ayurveda suggests certain means to overcome such negativities.[10] The present study was conducted to assess Triguna and quality of life followed by Yogic Kriya intervention.

In present study, out of total 60 participants 49 (81.66%) belong to 25-30 age group and remaining 11 (18.34%) belong to 31-35 age group. 4 belonged to (6.67%) Vatta-Pitta, 14 (23.33%) Pitta-Vata,31 (51.67%) Pitta-Kapha and 11 (18.33%) Kapha-Pitta Prakriti.

The practice of suryanamaskara as a whole gives a great number of benefits which are following suryanamaskar, or Sun Salutations, ideally done facing the early morning sun, helps our body to soak in its benefits — sun rays are a rich source of vitamin D and helps to strengthen our bones and also helps to clear our vision. This Asana, apart from improving one's posture, also gives a proper workout to the body and so helps in losing unwanted body flab.[11]

We found that mean value of physical health was 59.73 before Yogic Kriya and it is enhanced to 74.53 after Yogic Kriya. The mean value of psychological state parameter was 61.67 before Yogic Kriya and it is enhanced to 75.82 after Yogic Kriya. The mean value of social relation was 67.18 before Yogic Kriya and it is enhanced to 84.82 after Yogic Kriya. To make a breakthrough in the field of research of effects of pranayama have to be studied extensively. By learning to control your breath, you can gain control over your emotions and other mental states as well. Becoming aware of our breath, we gradually become more sensitive to our mind and to the flow of energy throughout the body and a stronger energy awareness

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develops within us.[12] How you breathe also affects the heart, brain and nervous system, with a direct correlation between the breath and anxiety or well-being. When stressed, the breath is shorter, more frequent and quite shallow. This breathing pattern maintains a level of arousal. Slower and deeper breathing results in a more relaxed state via autonomic reflexive stimulation and decreases the partial pressure of carbon dioxide in the lungs and bloodstream.[13]

We observed that mean value of Sattva was 43.68 before Yogic Kriya and it is enhanced to 48.25 after Yogic Kriya, the mean value of Raja was 30.72 before Yogic Kriya and it is lowered down to 29.43 after Yogic Kriya, mean value of Raja was 25.63 before Yogic Kriya and it is lowered down to 22.32 after Yogic Kriya.

It is advisable that Increasing the flow of air in the right nostril stimulates the sympathetic nervous system and increases the heart rate, produces more sweaty palms, dilates the pupils and opens up the lungs i.e. the fight or flight reaction. Increasing the flow of air through the left nostril however, stimulates the parasympathetic nervous system and increases digestion, lowers the heart rate and relaxes the body.[14] So by practisingnadishodhanpranayam, we are helping to balance both of these systems in relation to each other as well as balancing brain activity.[15]

CONCLUSION

Authors found that Yoga has the potential to become an essential baseline modality in all health work, be it for cure or prevention or the promotion of positive QoL. Yoga, as a mindfulness practice, tries to correct the basic limitations of the mind by improving self- awareness, self-control and self- esteem.

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