

**Table 1: Pranayam – Paired sample statistic & test**

Parameter	Mean	S.Error Mean	t	Sig(2 tailed)
FEV1 & Post	113 118	5.7 6.1		
Pair test	-4.1	4.0	-1.0	.331
FEV1 & Post	109 107	2.5 2.9		
Pair test	1.8	2.1	.87	.402
ART & Post	167 156	8.0 7.4		
Pair test	10.4	3.9	2.5	.025*
VRT & Post	200 193	7.0 7.9		
Pair test	6.9	2.1	3.2	.008**

**Table 2: Meditation - Paired sample statistic & test**

Parameter	Mean	S.Error Mean	t	Sig(2 tailed)
FEV1 & Post	108 106	5.9 5.0		
Pair test	2.3	4.0	.543	.610
%FEV1 & Post	108 106	1.0 3.2		
Pair test	2.3	2.7	.863	.428
ART & Post	173 157	6.1 5.8		
Pair test	15.9	7.9	2.00	.063
VRT & Post	206 186	3.3 3.4		
Pair test	20.5	4.2	4.8	.000**

118 2, probably due to efficient use of abdomen and diaphragm muscles. In the 'Meditation group' FEV1 decreased from 108 to 106 only it works by causing mental relaxation. In the 'Asana group', FEV1 increased from 112 to 116, which could be due to efficient use of abdominal wall which helps in moving diaphragm better, than by helping, the lungs to empty efficiently. These findings are in line with work of many investigators<sup>2,4,5</sup>. Visual and auditory reaction time showed a significant increase in all the 3 groups<sup>3</sup>, except ART in the Asana group. This finding is consistent with the findings of other

**Table 3: Asanas - Paired sample statistic & test**

Parameter	Mean	S.Error Mean	t	Sig(2 tailed)
FEV1 & Post	112 116	10.7	9.4	
Pair test	-3.8	1.8	-2.0	.071
%FEV1 & Post	111 107	2.2 2.8		
Pair test	4.7	2.7	1.7	.123
ART & Post	184 170	16.1 10.6		
Pair test	14.3	8.3	1.7	.113
VRT & Post	205 191	7.0 9.6		
Pair test	13.9	5.1	2.7	.019*

workers<sup>6,7</sup>.

It is known that the effect on reaction time by the reticular formation is primarily upon "central integrative time" (C.I.T.) Quick reaction time in young adults, was possibly be due to fast C.I.T. caused by relatively more experiences in young adults as compared to children and older age group. As seen from table 1, 2, & 3 the VRT is possibly more, because of a longer reflex pathway than the auditory pathway. Yogic exercise involves physical, mental and spiritual task in a comprehensive manner. It brings about the behavioral changes. Yoga of long duration affects the hypothalamus, which leads to reduction in sympathetic tone and peripheral resistance<sup>8</sup>. With regard to the central nervous system as seen by 'effective reaction time', the RR(Relaxation Response) activates areas in the brain responsible for emotion, attention, motivation and memory(eg. anterior cingulate, hippocampal formation, amygdala) and may also control the autonomic nervous system<sup>9,10</sup>.

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