



▼ FACULTY ABSTRACTS

F - 01 : A COMPARATIVE STUDY OF THE DIFFERENTIAL EFFECTS OF SHORT TERM ASANA AND PRANAYAMA TRAINING ON REACTION TIME

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Background: Numerous studies have reported long and short term effects of Yoga training on reaction time (RT) but few on differential effects of training in asana and pranayama. Present study was done to elucidate effects of differential training on RT in health professions students attending Yoga training.

Materials: 134 healthy young adults studying BSc Nursing at KGNC were recruited for study and informed consent obtained from them. 89 from 1st year were randomly divided into two groups. 44 received one week training in asana while 45 received parallel training in pranayama. 45 control subjects were recruited from 2nd year who didn't receive Yoga training. Auditory and visual RT (ART and VRT) were measured before and after one week study period and appropriate statistical methods applied for intra and inter group comparisons.

Results: Both asana and pranayama training resulted in significant ($p < 0.001$) shortening of ART and VRT. ART was significantly ($p < 0.05$) prolonged in controls with no significant change in VRT. Intergroup comparisons

revealed that changes were more pronounced following pranayama training especially with regard to VRT.

Discussion: Present study provides evidence that even a short term, one week training in asana and pranayama can shorten RT in novices which is more pronounced in pranayama training that may be attributed to enhanced central processing ability resulting from better sense of perception, sensitivity, alertness and awareness occurring as a result of Yoga practice. As pranayama practice tends to be more introspectional (with eyes closed), this may have more pronounced effects than asana where awareness is more externalized in novices. It is also plausible that conscious alterations of respiratory patterns may influence ascending pathways resulting in more pronounced changes after pranayama.

Conclusion/Suggestion: One week training in asana and pranayama can shorten RT in novices. It is suggested that Yoga training of even a short duration can enhance central processing ability and that such training especially in pranayama may be utilized to enhance learning capabilities in students of health professions education.