Effect of yoga on somatic indicators of distress in professional computer users

Comments to:

Association between occupational asthenaopia and psycho-physiological indicators of visual strain in workers using video display terminals
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Dear Editor,

Ophthalmologic and psycho-physiological indicators confirmed the subjective perception of visual strain due to visual display terminal [VDT] work in two hundred and eight professional computer users [1]. The report also mentioned that easily accessible and simple examinations could be used to evaluate strain at the work place related to preventive programs or interventional studies.

Various interventions have been used to reduce visual discomfort, including breaks during work, modifying the computer location, lighting and reflection, modifying the indoor environment, and the use of certain eye drops [2].

Yoga is an ancient Indian science which includes the practice of specific postures, cleansing practices, regulated breathing, and meditation [3]. A controlled trial was carried out to evaluate the effect of a combination of yoga practices on self-rated symptoms of visual discomfort in professional computer users in India [4]. At the end of sixty days of yoga practice there was a significant decrease in self-rated visual discomfort, while the non-yoga control group showed an increase.

Apart from visual strain, VDT workers experienced a greater subjective perception of stress than office workers [5]. Stress is related to high work load, high work pressure, diminished job control and stress related to the use of new technology. The practice of yoga has been shown to reduce psycho-physiological indicators of mental stress in persons with high baseline stress levels associated with a physical disability [6], their social circumstances [7] or their occupation [8].

Somatic indicators of distress were assessed in two hundred and ninety one professional computer users with ages between 21 and 49 years, who were randomly assigned to two groups, yoga (YG, n=146) and wait-list control (WL, n=145). The participants were from a software company in Bangalore city (India) and they all used a computer for more than six
hours each day, for five days a week. All of them had normal health based on a clinical history and examination. Both groups had comparable job assignments and responsibilities as rated by the human resource personnel from the software company. Both groups were assessed at baseline and after sixty days. At the end of sixty days there were 62 persons in the YG group and 56 in the WL group.

The YG group (average age of 32.8 years (±8.6 S.D.); 11 females) practiced yoga for sixty minutes each day for five days in a week. The practice consisted of joint loosening techniques (shishilikarana vyayama) for 10 minutes, physical postures (asanas, 15 minutes), regulated breathing practices (pranayamas, 10 minutes), eye cleansing exercises (trataka, 10 minutes) and guided relaxation techniques (15 minutes). The WL group (average age of 31.9 years (±10.2 S.D.); 13 females) spent the same time talking to friends (60%), watching television (16%), playing indoor games (12%) or exercising in the gym (12%). This was how they usually spent the time allotted as a work break. Hence they were carrying on with their usual routine.

A section of the symptom checklist 90 – Revised [SCL-90-R] specific to ‘somatization’ with 12 items was administered to both groups at baseline and after two months of the interventions. The checklist was administered and scored by the investigator who was blind to the allocation of subjects interventions. The checklist was administered and scored by the human resource personnel from the software company. Both groups were assessed at baseline and after sixty days. At the end of sixty days there were 62 persons in the YG group and 56 in the WL group.

The YG group showed a decrease in scores [average score of 12.82 (±8.24 S.D.), (p<0.05)]. At the end of two months the YG group showed a decrease in scores [average score of 6.34 (±6.13 S.D.)], (p<0.001) whereas the WL group showed an increase in the score [average score of 12.82 (±8.24 S.D.)], (p=0.003).

The somatization dimension of the SCL-90-R reflects distress related to the way physical sensations are perceived [9]. The cardiovascular, gastrointestinal, respiratory, and other symptoms with autonomic mediation are included. It has already been reported that physical and psychological symptoms have significantly decreased following a 10 week behavioral medicine intervention, with a greater reduction in those who were ‘high somatizers’ at baseline [10].

Hence in the present study practicing yoga for sixty days reduced somatic indicators of distress in professional computer users. Based on these results it may be interesting to determine whether yoga practice prevents the development of actual somatic illness in asymptomatic professional computer users.

Sincerely,
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REFERENCES:


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