

# **ABSTRACT**

## **INTRODUCTION**

Nursing students experience considerable amount of stress to meet their professional demands both academic and clinical requirements. However, yoga is an effective practice to reduce stress and improve psychological and physical well-being.

## **AIM**

To evaluate the effectiveness of an 8-week yoga intervention on psycho-physical functioning of nursing students.

## **MATERIALS AND METHODS**

This was a randomized wait-list control trial. We recruited 100 students from Kempegowda Institute of Nursing, Bangalore and randomized them into two groups (yoga=50 and wait-list control=50 students). The following instruments were used to collect the data, Freiburg Mindfulness Inventory (FMI), Self-Compassion Scale- short form (SCS-SF), Connor-Davidson Resilience Scale (CD-RISC), Satisfaction with Life Scale (SWLS), Jefferson Scale of Empathy HPS-Version (JSE-HPS), Perceived Stress Scale (PSS), Sit and Reach Test, Peak Flow Meter, Handgrip Dynamometer, Pinch Gauge and Purdue Pegboard. Data was analyzed using Repeated Measures Analysis of Variance (RM-ANOVA) followed by post-hoc Bonferroni correction for all the variables.

## **RESULTS**

Our study findings have revealed that an 8-week yoga intervention significantly improved mindfulness ( $p=.005$ ), self-compassion ( $p=.016$ ), low back and hamstring flexibility ( $p<.001$ ),

pinch strength chunk ( $p=.013$ ), and pulp ( $p=.024$ ) among nursing students in the yoga group than compared to the wait-list control (WLC) group. Also, there was a significant improvement in peak expiratory flow rate ( $p<.001$ ) in both the groups. And, in hand dexterity sub-scales there were significant improvements; right hand both the groups ( $p=.006$ ), left hand yoga group ( $p=.006$ ), WLC group ( $p=.001$ ), and in assembly test yoga group ( $p=.009$ ) and the WLC group ( $p=.027$ ) respectively. Even though, our results were non-significant the following improvements were witnessed among participants of the yoga group in contrast to the WLC group. There were improvements in resilience and perceived stress in the yoga group but not in WLC group. However, there were improvements in satisfaction with life and pinch strength (lateral) among both the groups though results were non-significant. Contrary to our expectation, decrease in empathy was reported in both the groups, but significant decrease in empathy ( $p=.049$ ) was noticed in the WLC group. Likewise, there was a significant decrease in left handgrip strength ( $p<.001$ ) in the WLC group and non-significant results in the yoga group for both hands.

## CONCLUSION

Overall, the present study has demonstrated mixed results. Though we could not elucidate significant improvements in all the variables, increase in mindfulness, self-compassion, low back and hamstring flexibility, and pinch strength are worth noting. This improvement in psycho-physical functioning aid nursing students to meet demands of the profession. Hence, yoga intervention can be recommended in the nursing education.

## Keywords

Hamstring Flexibility; Mindfulness; Nursing education; Perceived stress; Pinch Strength; Resilience; Self-compassion