The Acute Effects of Vinyasa Yoga on Mood and Anxiety in Adults with Insomnia Symptoms

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Sleep is a vital aspect of health, however, poor and/or insufficient sleep may lead to negative health consequences. Yoga has shown to positively impact health, including mental health. Vinyasa yoga (VY), a form of yoga that connects breath with movement through various poses and sequences. However, it is unclear how VY may impact mental health in adults with insomnia symptoms. **PURPOSE:** To examine the acute effects of a single session of VY on mood and anxiety symptoms in adults with mild-to-severe insomnia symptoms. **METHODS:** 33 adults with self-reported insomnia symptoms (Insomnia Severity Index =15. ±3.9; 84.8% females; White =78.8%; body mass index =28.9±7.2 kg/m^2; age=34.9±10.6y) were randomized in either a 60-minute VY (n=17) or control ([CON] n=16) condition. The VY completed a supervised 60-min pre-recorded yoga sequence that utilized the Journey into Power sequence by Baron Baptiste. CON completed a seated 60-min quiet rest period that included watching a nature documentary. Mental health was assessed using validated questionnaires (i.e., Profile Mood of States Short Form [POMS], State Trait Anxiety Inventory [STAI]) that were administered pre- and post-experimental sessions. The POMS total mood disturbance (TMD) was calculated by summing the total sub-scales scores for tension, anger, fatigue, depression, and confusion and subtracting the sub-scales scores for vigor and esteem-related affect; constant of 100 was added to the TMD with higher scores indicating greater mood disturbances. The STAI scores were summed for a total that ranged from 20-80; higher scores indicating greater symptoms of anxiety. Linear mixed models with unstructured covariances were used to determine the change from pre- to post-experimental session between groups. **RESULTS:** Baseline POMS TMD (106.18±4.86 and 106.25±5.01) and STAI (43.29±1.34 and 40.19±1.39) for VY and CON, respectfully. Post experimental session POMS TMD (101.82±4.79 and 96.06±4.93) and STAI (43.77±1.52 and 40.56±1.56) for VY and CON, respectfully. There were no significant changes in POMS TMD or STAI scores from pre-to post-experimental session between VY and CON (TMD: F(1,31)=1.97, p=0.17; STAI: F(1,31)=0.003, p=0.96). Sub-scales showed significant main effects for time (each p<0.02); indicating lower scores post-experimental session for tension, fatigue, anger, depression, and confusion. **CONCLUSION:** A single session of VY did not significantly improve mood or anxiety symptoms for the VY compared to the CON. Additionally, mood and anxiety symptoms were not amplified following a single bout of VY. **SIGNIFICANCE/NOVELTY:** To our knowledge, this is the first study to examine a single session of VY on mental health effects in a sample of adults who self-report insomnia symptoms. Insomnia is the most prevalent sleep disorder, therefore investigating therapies to improve the negative mental health consequences, are urgently needed.