

## **Academic Performance Improves with Emotional Intelligence Awareness and Physical Exercise among Medical Students**

### **ABSTRACT**

The importance of exercise and knowledge of emotional intelligence (EI) is gaining pace in academia, which is a positive development. Only a few single-blind research studies on the benefits of exercise and Emotional intelligence have indicated their effects on educational attainment among primary school children, but there are very few reports from young adult students. This longitudinal study aims to develop an intervention protocol to investigate the differential association between induced moderate physical exercise combined with emotional intelligence awareness on academic performance among 18-24-year-old private medical university students. Methods: Students are voluntarily enrolled in two groups: TEST (n = 180) and CONTROL (n = 180) based on inclusion criteria along with applicable consent's and ethical clearance. The groups' baseline data mapping was completed in three phases. For the TEST group, baseline data was obtained in three stages during Phase-1; -, which is the preintervention phase: Anthropometric data, haemoglobin concentration, and cardiorespiratory measurements were all measured in Stage 1. (Lab-based data). Stage 2: two questionnaires were used, one to measure EI awareness and the other to assess learning styles (VARK). Stage 3 entailed the simultaneous recording of pre-intervention academic grades, of a said end block examination for both TEST and CONTROL groups. Phase 2: This is the intervention phase, which included only two components for the TEST group: the first was a moderate exercise regime (BRISK WALKING) of 2-3 sessions per week for about 30 minutes per session, and the second was addressing EI awareness. Which refers to knowing the current status of EI level, and fostering EI knowledge through various teaching-learning methods. Following the end of Phase -1 baseline data mapping, the two intervention components for the TEST group run concurrently for about 6months/24weeks, for the TEST group. Phase-3: is the post-intervention phase which included repeating of Phase-1; Stages 1, 2, and 3 for the TEST group, as well as a concurrent record and analysis of post-intervention academic grades, of the final professional examination for both TEST and CONTROL groups was done after Phase-2. The outcomes of Phase-1 and Phase-3 differential association compared. Results: The Statistical Package for Social Science (SPSS) Version 21.0 software was used to analyse all data from phases 1 and 3. A statistically significant correlation was found between the TEST group ( $p = 0.0001$ ) and the CONTROL group ( $p = 0.406$ ) when the pre-intervention period of multifactorial components subjected to intervention was compared to

the post-intervention period. Conclusion: Intervention protocol with combined effect of emotional intelligence awareness and induced moderate physical exercise (BRISK WALKING) has shown significant improvement in academic grades.