## **Abstract**

The distraction hypothesis suggests that exercise enhances mood via diverting one's attention from stressful daily events. Findings have supported this notion and studies have begun to examine factors that might influence the exercise-induced mood improvements. Meanwhile, previous literature indicated that one's coping preference for a situation influenced the effectiveness of coping. Based on literature on the distraction hypothesis and coping effectiveness, this study investigated the role of compatibility between individual situational coping preference for academic stress and the mode of exercise in exercise-induced mood improvement when exercise was used as a coping strategy for handling academic stress. In this study, all participants participated in two 15-minute exercise conditions: walking only and reading academic materials while walking. While exercise alone significantly improved mood for all individuals, for individuals who were under high level of academic stress or had low level of learning and achievement motivation, the compatibility between individual's coping preference and the mode of exercise moderated the mood benefits derived from a brief session of light-intensity exercise. Individuals experienced greater mood enhancement in the form of negative mood reduction and increment in positive facial expression intensity when their coping preferences matched with the mode of exercise than when there was a mismatch. In particular, for individuals with the approach coping preference for academic stress, the exercise mode of reading while walking matched with their coping preference, and hence they experienced significantly greater mood improvement in this condition than that in the walking only condition. Both theoretical and practical implications of the results were discussed.

Keywords: exercise, mood improvement, coping preference