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Abstract No.	Abstract Title
55	Low-frequency Aerobic Exercise And Stretching Improves Exercise Self-efficacy In Inactive Older Adults With Chronic Insomnia And Depressive Symptoms
Theme	C. Environment, health & active lifestyle
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Purpose / Background:

Insomnia is a distressing condition that is associated with significant impairment in daily life functioning. It is highly prevalent worldwide and in Hong Kong, especially in the community-dwelling elderly. Chronic insomnia is strongly associated with an increased risk of developing depression with both disorders having a high burden of disease. Consequently, comorbid insomnia and depression is an alarming public health problem and warrants immediate attention.

Physical activity and exercise have been shown to induce considerable improvements in insomniac and depressive populations. However, studies investigating the factors that influence long-term adherence to physical activity and exercise in depressed and insomniac populations are scarce. Specifically, studies investigating the role of low-frequency aerobic exercise in inducing improvements in exercise self-efficacy; a predictor of long-term exercise adherence are lacking. This study examined the effects of low-frequency moderate and vigorous-intensity aerobic exercise on exercise self-efficacy and exercise outcome expectations in inactive older adults with chronic insomnia and depressive symptoms.

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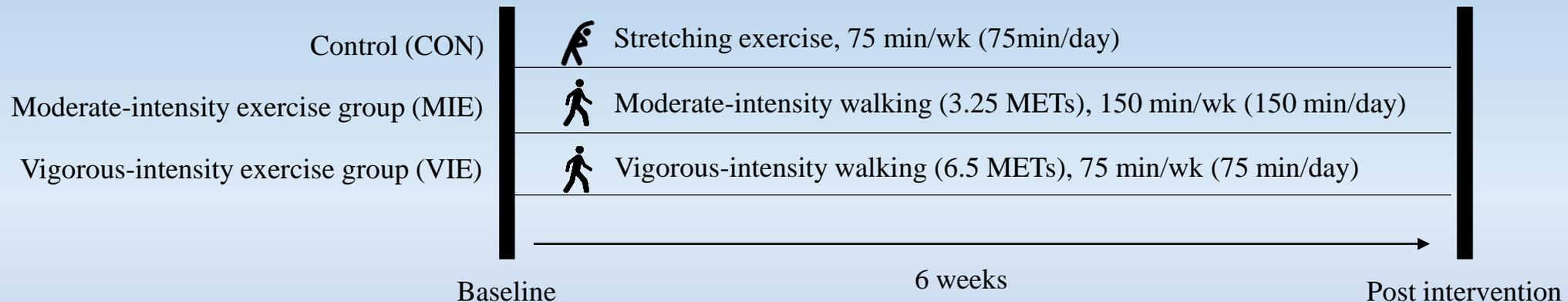
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Methods:

Twenty-one inactive older adults aged 50 or above with chronic insomnia and depressive symptoms were randomly assigned into one of three groups for 6 weeks: an attention control group (CON, n=7) which performed 75 minutes of stretching once a week, a moderate-intensity exercise group (MIE×1/wk, n=7) which performed 150 minutes of moderate-intensity aerobic exercise once a week at 3.25 metabolic equivalents (METs), and a vigorous-intensity exercise group (VIE×1/wk, n=7) which performed 75 minutes of vigorous-intensity aerobic exercise once a week at 6.5 metabolic equivalents (METs). The weekly exercise volume of the moderate-intensity exercise group and vigorous-intensity exercise group was matched. Exercise self-efficacy and exercise outcome expectations were assessed using the Self-Efficacy for Exercise Scale (SEE) and Outcome Expectations for Exercise Scale (OEE) and were examined at baseline and week 6. Data were analyzed using the generalized estimating equations with baseline as covariate. Differences among groups in both outcomes are indicated by a significant group-by-time interaction.



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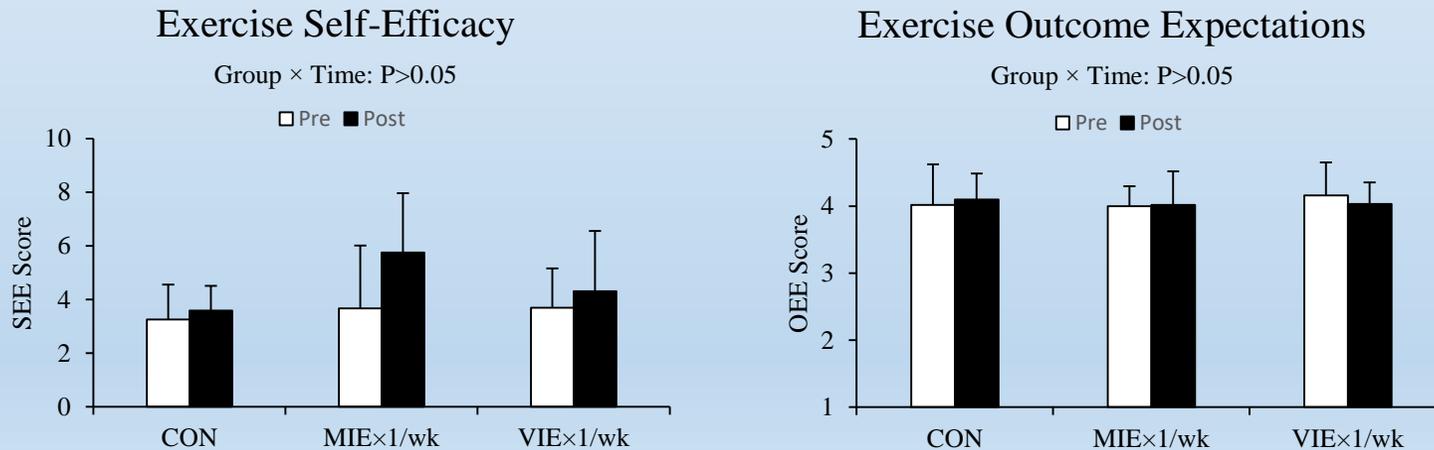
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Results & Conclusions:



Stretching, moderate-intensity aerobic exercise, and vigorous-intensity aerobic exercise demonstrated an increase of 10%, 57% and 17% respectively in exercise self-efficacy when compared to baseline. Exercise self-efficacy significantly improved in all three groups when compared to baseline ($P<0.05$), however, there was no significant difference between groups ($P>0.05$).

All three groups improved exercise self-efficacy when compared to baseline with moderate-intensity aerobic exercise exhibiting the greatest improvement. Moderate-intensity aerobic exercise may be more suitable for improving exercise self-efficacy in inactive older adults with chronic insomnia and depressive symptoms.