

Abstract of thesis entitled:

A pilot randomized controlled trial of lifestyle intervention with and without the support of self-tracking tool for individuals with depressive symptoms

Submitted by MA, Duan Yang

for the degree of Master of Social Sciences in Clinical Psychology

at The Chinese University of Hong Kong in August 2023

Based on increasing evidence suggesting that various lifestyle factors contribute to the development of depression, a "lifestyle medicine" approach could be a potentially cost-effective and safe method for treating depression. To explore the impact and acceptability of a multiple-component and group-based lifestyle medicine intervention for managing depressive symptoms, a pilot randomized controlled trial (RCT) was conducted in a Chinese adult population. In addition, self-tracking tools including an Ecological Momentary Assessment (EMA) mobile application and wearable actigraphy unit were utilized to examine the effects on adherence to intervention. A total of 51 participants with depressive symptoms above the clinical cutoff, as measured by the Patient Health Questionnaire-9 (PHQ-9), were recruited from the general community in Hong Kong and randomly assigned to either the lifestyle medicine or the care-as-usual groups. Results from linear mixed-effects model analyses indicated that both the lifestyle intervention groups with or without the self-tracking tools enjoyed significantly alleviated depressive symptoms at follow-ups when compared to baseline, as reflected by the changes in PHQ-9 total score. However, comparable reduction of depressive symptoms was observed in the control group as well. Nevertheless, our findings indicated that significant increase in overall health promoting

behaviors was observed exclusively among the lifestyle intervention groups. Medium to large effect sizes were observed in both the immediate post-intervention and the 3-month follow-ups, suggesting that the lifestyle intervention was able to induce sustainable changes in different lifestyle subdomains over time. The intervention demonstrated safety and cost-effectiveness as well, suggesting its potential as a treatment option or augmentation for depression. However, more comprehensive analyses and future research with larger sample sizes and longer follow-up periods are necessary to further elucidate the potential of lifestyle interventions in the management of depression.