Exercise Beliefs and Baseline Physical Activity Levels as a Predictor of Depressive Symptoms Following Exercise Withdrawal

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Previous studies involving exercise deprivation have shown that habitual exercisers who stop their exercise regimen suffer from increased depressive symptoms. This study examines the importance of exercise beliefs and baseline physical activity levels in the development of depressive symptoms when participants (N=14) undergo 2 weeks of exercise cessation. It examines the hypothesis that greater baseline metabolic equivalent hours (MET-hours) per week and higher total scores on all subscales of the Exercise Beliefs Questionnaire (EBQ) are associated with greater depressive symptoms following both one and two weeks of exercise cessation. At baseline, participants were administered the EBQ and the Aerobic Center Longitudinal Study Physical Activity Questionnaire to determine their MET-hours. Depressive symptoms were assessed at baseline and at one and two weeks into the exercise cessation phase. Data analysis confirmed that depressive symptoms did increase following exercise cessation, which is consistent with findings of previous studies. Correlation and regression analyses both indicated that MET-hours does not appear to be a predictor of depressive symptoms during exercise cessation. Although not statistically significant, correlations between EBQ and depressive symptoms were promising. Regression analyses were suggestive of exercise beliefs determined by the EBQ being predictive of depressive symptoms, specifically symptoms indicated on the Profile of Mood States – Brief Version (POMS-Brief). In conclusion, more research is needed to determine the effectiveness of MET-hours and exercise beliefs reported on the EBQ as predictors of depressive symptoms following exercise cessation.

Note: The current study is a part of an ongoing larger dissertation study. Results will be re-run once the final sample (N=50) has been enrolled.