

Supplement 1. Mediation analysis.

SF-36 gains were significantly correlated with decreased body mass ($r=-0.63$, $p<0.01$) and BDI score ($r=-0.35$, $p<0.01$), and increased performance on 6MWT ($r=0.59$, $p<0.01$), SE-ADL ($r=0.24$, $p<0.05$), BBS ($r=0.38$, $p<0.01$), BESTest ($r=0.43$, $p<0.01$) and DGI ($r=0.39$, $p<0.01$) from pre- to posttest. We performed conditional process mediation (Process macro; 5000 bootstrap samples, bias-corrected confidence interval (CI)) to determine if changes in these variables mediated the effects of EXE and CYC vs. CON on SF-36.

For EXE and CYC vs. CON, SF-36 gains were mediated by decreased body mass (EXE: relative direct effect=-0.28, SE=1.32, 95% CI[-2.90, 2.34], relative indirect effect=4.63, SE=1.18, 95% CI[2.52, 7.15]; CYC: relative direct effect=-1.54, SE=1.37, 95% CI[2.61, 8.26]; relative indirect effect=5.05, SE=1.44, 95% CI[2.61, 8.26]) and increased 6MWT performance (EXE: relative direct effect=1.09, SE=1.27, 95% CI[-1.44, 3.62], relative indirect effect=3.27, SE=1.10, 95% CI[1.50, 5.79]; CYC: relative direct effect=0.46, SE=1.26, 95% CI[-2.05, 2.96], relative indirect effect=3.05, SE=0.95, 95% CI[1.49, 5.24]). For EXE vs. CON only, SF-36 gains were mediated by increased performance on DGI (relative direct effect=4.36, SE=1.26, 95% CI[1.85, 6.86], relative indirect effect=1.60, 95% CI[0.37, 3.46]), BBS (relative direct effect=2.60, SE=1.39, 95% CI[-0.17, 5.36], relative indirect effect=1.76, 95% CI[0.37, 3.61]) and BESTest (relative direct effect=1.96, SE=1.38, 95% CI[-0.79, 4.71], relative indirect effect=2.40, 95% CI[0.85, 4.47]) from pre- to posttest. Changes in BDI, SE-ADL and BDI did not mediate SF-36 gains for EXE or CYC vs. CON.

Reference

1. Hayes, AF. Introduction to Mediation, Moderation, and Conditional Process Analysis, A Regression-Based Approach. Second Edition, Guilford Publications. ProQuest Ebook Central, 2017. <https://ebookcentral.proquest.com/lib/rug/detail.action?docID=5109647>.