

# The Long and Winding Road to Physical Activity Maintenance

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**Objectives:** To build upon state-of-the-art theory and empirical data to estimate the strength of multiple mediators of the efficacious Keep Active Minnesota (KAM) physical activity (PA) maintenance intervention. **Methods:** The total, direct, and indirect effects through which KAM helped randomized participants (KAM n=523; UC n=526) maintain moderate or vigorous PA (MVPA) for up to 2 years were estimated using structural equation modeling. **Results:** Multiple mediators explained half ( $\beta=.052$ ,  $P=.13$ ) of the effect of KAM on MVPA ( $\beta=.105$ ,  $P=.004$ ). Self-efficacy was the upstream variable in 2 endogenously mediated effects,

and the self-concept mediator emerged as the strongest predictor of MVPA. **Conclusions:** KAM positively impacted self-efficacy, which was associated with PA enjoyment, integration into the self-concept, and PA maintenance. Successful long-term PA maintenance appears to be influenced by multiple small interrelated mediational pathways. Future research evaluating maintenance models should specify recursive relationships among mediators and outcomes.

**Key words:** maintenance, physical activity, multiple mediation, behavioral intervention, structural equation modeling

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