Different psychosocial factors predict adoption, maintenance of physical activity program

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The health benefits of regular physical activity are well documented, yet only 32 percent of adults in the United States engage in regular exercise. Now a new study by researchers at The Miriam Hospital offers some new insight into the role of social and environmental influences on physical activity behaviors.

According to the study, published online by the Annals of Behavioral Medicine, a person who is starting a physical activity program is influenced by different psychosocial factors than a person who is trying to maintain such a program. These factors include access to home exercise equipment and the belief that one can succeed.

"What influences an individual to become physically active may not necessarily help them maintain their activity level over time, and vice versa," says lead author David Williams, PhD, of The Miriam Hospital's Centers for Behavioral and Preventive Medicine. "A better understanding of these variables will help us design more effective interventions that encourage individuals to initiate, and stick with, a physical activity program."

The study included more than 200 participants (84 percent female) who were already enrolled in a randomized controlled physical activity promotion trial. All individuals were initially sedentary and did not engage in regular physical activity, which was defined as participating in at least 150 minutes of moderate intensity exercise or at least one hour of vigorous exercise per week.

At six months and a year into the program, participants completed questionnaires designed to measure 12 psychosocial variables, including: physical activity levels, self-efficacy (or the beliefs about one's ability to perform and succeed), decisional balance (or perceived beliefs about the pros and cons of physical activity), outcome expectations, physical activity enjoyment, cognitive and behavioral processes of change, perceived satisfaction with physical activity, social support for physical activity from family and friends, and environmental access to convenient facilities, neighborhood and home exercise equipment.

Armed with this data, researchers set out to determine which psychosocial factors at six months were most likely to predict physical activity levels at 12 months. They then compared these predictors among participants who were physically active versus inactive at the six month mark.

Overall, self-efficacy emerged as the strongest predictor of physical activity status, with a 139 percent increase in the odds of being active at 12 months. Decisional balance, behavioral processes, outcome expectations and enjoyment were also significant predictors of physical activity.

Further analyses revealed that access to home exercise equipment was more predictive of physical activity adoption, whereas self-efficacy and perceived satisfaction were more important in predicting exercise maintenance.

"These findings were a little surprising since they were somewhat contradictory of other theoretical models of physical activity behaviors and interventions," says Williams, who is also an assistant professor of psychiatry at The Warren Alpert School of Medicine of Brown University. "Although it's premature to draw any definitive conclusions, our report suggests some directions for future research."

Source: Lifespan