

Mind-Body Practice, Personality Traits, and Cognitive Performance: A 10-Years Study in US Adults

KEY FINDINGS

- Mind-body practices (MBP), such as yoga and tai chi, have positive effects on thinking abilities.
 - They may improve episodic memory over time.
- More research is needed concerning the relationship of personality and engagement in MBP.
- Healthcare providers could play an important role in educating patients about the positive effects of MBP on cognitive performance.

BACKGROUND

Cognitive decline is becoming increasingly prevalent due to population aging. Because of the limited benefit of current medical treatments for dementia, efforts to establish alternative therapies to improve cognition are crucial. Physical activity is associated with better cognitive outcomes, and studies show that mind-body practices (MBP) that connect the body and mind and impact both brain and behavior (e.g., movement therapies, such as yoga) may yield similar cognitive benefits.

Personality is also related to daily activities and cognition, but its role in the relationship between MBP and cognition is not well established.

This study examined personality traits, mind-body practices, and cognition in community-dwelling midlife and older adults to better understand individual cognitive decline.

STUDY METHOD

The present study used data from the national survey of Midlife in the United States (MIDUS), a probability sample of community-dwelling adults spanning 20 years. Wave 1 (1995-96) of MIDUS included 7,108 participants ranging in age from 24-75 years. This study included data from 2,050 MIDUS participants who participated at wave 2 (2004-05) and wave 3 (2013-14), which included cognitive tests that measured episodic memory and executive function.

Regarding MBP, participants were asked to rate how often they engaged in exercise or movement therapy (e.g. yoga, tai chi). Cognitive function was assessed using the Brief Test of Adult Cognition by Telephone (BTACT) that included two measures of episodic memory and five measures for executive function. The big five personality traits include openness, conscientiousness, extraversion, agreeableness, and neuroticism, and were measured in MIDUS using 25 self-descriptive adjectives. Age, gender, race, marital status, educational level, and employment status were the six demographic variables used as covariates. Other covariates included measures of difficulty in activities of daily living and instrumental activities of daily living, participation in physical activities, body mass index, tobacco and alcohol usage, number of chronic conditions (e.g. heart problems, diabetes) and depression.

Other than descriptive information, the present study examined associations between MBP, cognitive functions, and personality traits over time while controlling for covariates at wave 2.

FINDINGS

Only 17% of participants reported that they had used MBP in the past 12 months. MBP engagement was more common among individuals who were aged 35-44 and 55-64, women, not married, and with higher education levels. Participants who engaged in MBP in the past 12 months showed higher rates of physical activity, better self-reported health, and higher levels of openness. Cross-lagged models examining associations between MBP, cognition, and personality showed that MBP participation was associated with higher scores in episodic memory, but not in executive functioning. Although there is some evidence for cognition and personality associations over time, this study did not show any bidirectional associations between personality traits and MBP.

POLICY/PRACTICE ANALYSIS

Healthcare providers could play an important role in educating patients about the positive effects of MBP on cognitive performance.

This study found that MBP has positive impacts on cognition and may improve episodic memory over

time. The association between MBP and cognition was relatively independent of personality traits. More research is necessary to confirm whether personality dispositions can protect older adults from cognitive decline through alternative practices to maintain and improve overall health.

Original Article

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