

Attitudes Toward Aging, Physical Activity, and Functional Limitations Ten Years Later in Middle and Older Adults



Yen T. Chen¹, Carole K. Holahan¹, & Charles J. Holahan²

¹Department of Kinesiology and Health Education, The University of Texas at Austin

²Department of Psychology, The University of Texas at Austin

BACKGROUND

- Functional limitations significantly predict number of physician and hospital visits, nursing home admissions, and mortality.
- Positive attitudes toward aging have been associated with better functional health (Bryant et al., 2012; Levy, Slade, & Kasl, 2002; Sargent-Cox, Anstey, & Luszcz, 2012).
- Physical activity carries significant health benefits; however, physical activity tends to decrease with age.
- The current study examined the mediational role of leisure-time physical activity (LTPA) in the relationship between attitudes toward aging and functional limitations ten years later among middle-aged and older adults.

METHODS

Sample

- Participants were 2,209 adults ranging in age from 40 to 75 at baseline (M = 56.19; 51.2% women) from the second and the third waves of the Survey of Midlife Development in the United States (MIDUS).

Measures

- Attitudes toward aging. Two single questions to generate a latent variable for attitudes toward aging: subjective age and health expectations 10 years later from MIDUS 2.

METHODS

Measures (continued)

- Leisure-time physical activity. Four items asked respondents to indicate how often they engaged in both moderate and vigorous physical activity during their leisure or free time in the summer and winter. The items were reverse-scored and coded as 1 = never, 2 = less than once a month, 3 = once a month, 4 = several times a month, 5 = once a week, and 6 = several times a week. To obtain a continuous measure of physical activity, scores were summed and averaged for the four items.
- Functional limitations. Respondents were asked how much health limited their ability to eight physical tasks (e.g., lifting or carrying groceries, bathing or dressing, walking more than a mile) from MIDUS 3. Response options range from 1 = a lot to 4 = not at all. Scores were reverse-coded and averaged across each of the eight items, with lower scores indicating less functional impairment.
- The mediation model was tested in Mplus 7.4.

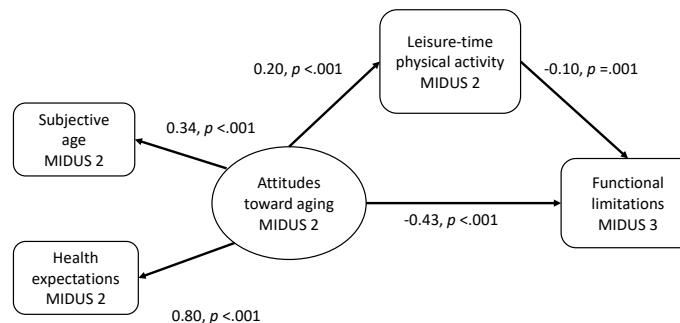


Figure 1. Mediation model, controlling for Age, sex, race/ethnicity, education, marital status, and number of chronic conditions. Standardized coefficients are presented for each path.

RESULTS & DISCUSSION

- Individuals with more positive attitudes toward aging reported less functional limitations ten years later ($\beta = -.43, p < .001$). Further, more positive attitudes toward aging related to higher levels of LTPA ($\beta = .20, p < .001$), which in turn predicted less functional limitations ten years later ($\beta = -.10, p < .01$) (see Figure 1).
- The indirect effect of attitudes toward aging on functional limitations through LTPA was statistically significant (indirect effect = $-.02, p < .01$).
- Positive attitudes toward aging operating through higher levels of LTPA may play an important role in functional health among middle-aged and older individuals.
- Further investigation of determinants that could influence attitudes toward aging is needed.
- Future interventions could target attitudes toward aging and promote physical activity as a way of enhancing physical functioning of middle-aged and older adults.

CONTACT INFORMATION

Yen T. Chen, PhD
Postdoctoral Fellow
Department of Physical Medicine and Rehabilitation
University of Michigan
Email: yentchen@med.umich.edu