

Physical Activity and Overall Health of Older Adults in Rural & Appalachian Populations

By: Jennifer Alvis

Overall Cognitive & Mental Health Effects



Physical activity (PA) improves:

- Depressive symptoms and scores. (Pears et al., 2022; Rosenbaum et al., 2014)
- Cognitive function (Haverkamp et al., 2020)

Overall Physical Health Effects

Physical activity (PA):

- Improves brain health and sleep (CDC, 2022; MayoClinic, 2021)
- Reduces the risk of CVD, Type II diabetes, and falls (CDC, 2022)
- Helps with weight control, management of metabolic syndrome, and sex drive (MayoClinic, 2021)



Trends in Rural & Appalachian Communities



- Individuals who reside in rural and Appalachian communities often report high levels of inactivity (ARC, 2019; CDC, 2016; Hoogland et al. 2019).
- being physically inactive which is 5% higher than the national value. (ARC, 2019).

Barriers in Rural & Appalachian Communities

- financial stress & demands
- lack of resources
- environmental factors
- travel times
- familial commitments
- negative experiences

Barriers are obstacles that must be overcome to facilitate PA. These make it difficult for individuals to partake in or maintain regular PA.

Jones et al., 2021; Kruger et al., 2012; Turner et al. 2022

Older Adults in Rural & Appalachian Communities



- 18.8% of Appalachia consists of older adults (65+) which is 2.3% higher than the U.S overall.
- Older adult composition in Appalachia grew 3.6% between 2010 and 2019, this growth is expected to continue

Pollard & Jacobsen, 2021

Mental & Cognitive Effects on Older Adults

- Effects of PA on mental and cognitive health do not vary significantly in older age.
- PA results in a significantly lower level of depression (Kruger et al. 2021)



Physical Effects on Older Adults

- Reduction of waist circumference (Kim et al., 2021)
- Increase in balance and thus a decreased risk of falls (Patti et al., 2017)
 - Falls are very prevalent in older adults, with 3 million adults being treated for falls each year (CDC, 2021).
- Improved pain perception (Patti et al., 2017)



Future Implications

- Further research is needed with more inclusive sample populations.
 - Several studies included sample populations that were predominantly female.
 - (Hoogland et al., 2019; Jones et al., 2021; Kim et al., 2021; Kruger et al., 2012; Middleton et al., 2018; Pears et al., 2022; Weaver et al., 2018)
 - Multiple studies included sample populations that were predominantly caucasian.
 - (Hoogland et al., 2019; Jones et al., 2021; Kruger et al., 2012; Middleton et al., 2018; Pears et al., 2022; Weaver et al., 2018)
- Additional research is needed to allow for better generalization.

