

FLORIDA POLICY EXCHANGE CENTER ON AGING

Research Brief April 2022

THE ROLE OF SOCIAL CONNECTION/ENGAGEMENT IN EPISODIC MEMORY CHANGE IN STROKE

Keywords: stroke, cognition, memory, word recall, social connectedness, long term research

Purpose of the Study: To examine if social connectedness buffers the negative impact of strokes on cognitive functioning.

Key Findings:

- Participants who were lonely before stroke had *more decline* in word recall after stroke, while participants who had children within ten miles or who provided help to others before stroke had *less decline* in word recall after stroke.
- Overall, participants who gained a partner, friends, or helped others more after stroke than before stroke experienced a positive effect on word recall.

Major Policy/Practice Implication: Supporting opportunities for social connectedness is a low-cost, accessible way to improve overall health outcomes of older adults.

IMPORTANT BACKGROUND INFORMATION

Social connectedness can result in better selfrated health, lower mortality rates, improved mental health, and it can help older adults cope with chronic illness and disability. Despite its benefits, 24% of community-dwelling older adults feel socially isolated and 43% feel lonely. Some previous research indicates social connectedness may also positively impact older adults' cognitive function. For example, larger social networks and volunteering may mitigate the negative impacts of normal age-related cognitive decline and dementia. This study examines participants' social connectedness over fourteen years, and compares memory recall pre- and post-stroke to assess the buffering effects of social connectedness on cognitive function after serious brain injury.

STUDY METHODS

Researchers analyzed interview questions among 898 stroke survivors from 1998 to 2012. The data come from a larger-scale study that selects participants to be representative of the diverse adult population in the US. Participants were asked about their social connectedness (e.g., partnered status, children nearby, helping others, frequency of social visits), and thev were asked to recall a list of ten words read aloud both immediately and five minutes later, multiple times throughout the study period. Researchers also collected health and sociodemographic information. First, they assessed typical changes in memory recall over the fourteen year period, and then they analyzed the impact of social connectedness on memory recall pre- and post-stroke.

Time: Rate of word recall change per year Time2: Rate of acceleration in word recall change per year 11 Intercept: Level of word recall at baseline (= stroke event) Post-stroke: 9 Difference in word recall Word Recall between pre-stroke and post-stroke time periods Time*Post-stroke: Difference in rate of linear change between prestroke and post-stroke time periods 7 5 -14 -12 -10 -8 -2 0 10 Time-to/from-Stroke

KEY FINDINGS

- Word recall declined over time. Word recall declined by an average of 0.2 words per year, and one word post-stroke.
- Social connectedness had a positive impact on word recall after stroke.
 - Participants who had children within 10 miles showed less word recall decline
 - Participants who helped others before stroke showed less word recall decline
 - Participants who were lonely before stroke showed more word recall decline
- Participants who gained a partner, friends, or helped others more after stroke than before stroke experienced a positive effect on word recall.

PRACTICE AND POLICY IMPLICATIONS

- For policy makers: Social connectedness is an important, modifiable determinant of physical and mental health among older adults. It should be brought to the same levels of awareness and funding as other health risks, such as cigarette smoking and physical activity.
- For providers: Consider implementing "connection plans" for older adults in nursing homes and community settings that may include opportunities for in-person and virtual connection. The plans may include training on how to use virtual tools such as video conferencing, which are increasingly important in light of COVID-19.

ORIGINAL ARTICLE

Elayoubi, J., Nelson, M.E., Haley, W.E., Hueluer, G. (2022). The Role of Social Connection/Engagement in Episodic Memory Change in Stroke. *The Gerontologist*. 62(3). doi: 10.1093/geront/gnab095

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