Engaging in Group Activities Slows Cognitive Decline

Older people who are more socially active tend to have better cognitive health. But certain types of activities and relationships seem to have more health benefits than others.

Focus of Study

This study explores the cognitive health benefits for older populations of staying socially active. It uses population data from the English Longitudinal Study of Ageing to compare the effects on cognitive abilities of engaging in group activities versus individual, or one-on-one, activities as people age.

Background

A growing body of longitudinal studies has confirmed that social factors have a substantial effect on the cognitive health of older people. Those who are more socially connected have stronger cognitive ability and are less vulnerable to decline over time.

Applying these findings effectively requires an understanding of what determines the quality and nature of beneficial social engagement, and the physiological processes through which this engagement impacts cognitive ability. The main thrust of research to date has been the latter. Little is known about the psychological processes underlying these effects and how social engagement influences the biological processes.

Most studies on aging have focused on individual social engagement (e.g., with a spouse, child, close friend) and have not distinguished between its effects and those of group engagement such as being part of social groups (e.g., recreational clubs, community or church groups). Some research has found that the quality of social relationships, such as the extent of active participation, is more important than the size of any one social network. This leads to the question: what makes social engagement and support possible?

Social identity theory argues that the cognitive or other health benefits from social ties come from their influence on social identity. People are more likely to participate in social activities with others if they feel a sense of belonging and purpose — and shared identity. To test this theory directly, this study assesses the effect on cognitive ability of individual versus group engagement over time.
Findings

The contribution of group engagement and relationships to cognitive function is independent from individual engagement. Both group and individual engagement were strongly associated with cognitive function at the different time points analyzed. They are, however, two distinct components of social relationships that should be examined separately in studies of the relationship between cognitive decline and aging.

People who remain members of multiple social groups perform better in cognitive tests than those involved in one-on-one relationships. Group engagement had a greater impact on cognitive ability than individual engagement even though one-on-one relationships did play some part in predicting cognitive robustness. This result persisted even when taking age, gender, socioeconomic status, ethnicity and initial mental and physical health into consideration.

Connection to social groups has a greater impact on cognitive health as people grow older. Group engagement was of moderate importance for those closer to age 50, but much more important to those at the older end of the age spectrum. A 50-year-old with a large number of group ties performed at the level of a 45-year-old, while an 80-year-old had the ability of a 70-and-a-half-year-old. There was a significant decline on all social measures over time, particularly in participation and contact, and in two cognitive measures, immediate and delayed memory. The number of social ties or groups did not affect health outcomes.

Methodology

The researchers compared the impact of different types of social engagement on cognitive health over a four-year period using data collected by Waves 3, 4 and 5 of the English Longitudinal Study of Ageing. The 3,413 participants were aged 50 and over, with a mean age of 62. The database contains data on changes in health, economic, and social circumstances.

The researchers focused on the following measures:

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<tr>
<th>SOCIAL ENGAGEMENT MEASURES</th>
<th>COGNITIVE FUNCTION MEASURES</th>
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<td>Participation in cultural activities</td>
<td>Orientation</td>
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<td>Community activities</td>
<td>Verbal fluency</td>
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<td>Number of group memberships</td>
<td>Prospective memory</td>
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<td>Relationship quality</td>
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<td>Frequency of contact</td>
<td>Delayed memory</td>
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Investing in efforts to promote collective forms of engagement provides the chance to create low-tech, cost-effective treatments that can improve people’s lives and save money at the same time — without using pills.

They also controlled for age, gender, socioeconomic status, ethnicity and perceived physical health to rule them out as alternative explanations for the patterns observed.

The data set did not define the social engagement measures as either group or individual engagement. The researchers conducted factor analysis for both sets of measures at each time point. The factors identified were subjected to correlational analysis to look at the stability of the relationships between these variables over time.

The research team then used hierarchical regression to test the prediction that group engagement would be more important in supporting cognitive health over time. And they undertook three sensitivity analyses to look at the possibility of reverse causation where cognitive decline could explain changes in social relationships.

→ Implications

The finding that group engagement helps to slow cognitive decline more effectively than individual engagement as people age highlights the types of social relationships that people should invest in to keep themselves mentally active and independent for longer -- those that include group activity. It also has implications for the allocation of community resources for older adults. To help people get and stay involved in social groups, communities must invest in appropriate resources and infrastructure such as transportation, accessible spaces, relevant activities, etc.

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Reference:
Haslam, C. “The we's have it: Evidence for the distinctive benefits of group engagement in enhancing cognitive health in aging.” Social Science and Medicine, 120:57 (2014).

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