

Prevention or Risk? A Pilot Randomized Study Assessing Alzheimer's Disease Prevention Message Framing

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BACKGROUND



Dementia prevention messages are increasingly used in public health campaigns.



However, dementia-related stigma remains high.



The way prevention information is framed may influence attitudes, emotions, and health behaviors.

OBJECTIVE



To compare the immediate effects of prevention-oriented versus risk-oriented Alzheimer's disease prevention messages on attitudes, emotional responses, cognition, and willingness to undergo AD biomarker testing.

STUDY DESIGN



Participants

25 cognitively healthy community-dwelling older adults

- Mean age: 74.9 ± 6.4 years
- 56% women

Randomization (1:1), double-blind



Prevention-Oriented Message (n = 13)

Emphasizes factors that promote Alzheimer's disease prevention.

Example of message

"People who maintain healthy lifestyles have 35% greater protection against Alzheimer's disease."



Risk-Oriented Message (n = 12)

Emphasizes factors that increase Alzheimer's disease risk.

Example of message

"People who have high blood pressure have 55% greater risk of Alzheimer's disease."



Intervention

- 5-minute educational PowerPoint presentation
- Neutral information about aging
- Embedded with prevention-oriented or risk-oriented framing

Outcomes (assessed before and after exposure)



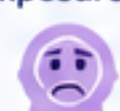
Memory



Executive functioning



Attitudes toward brain health



Fear/anxiety about developing dementia



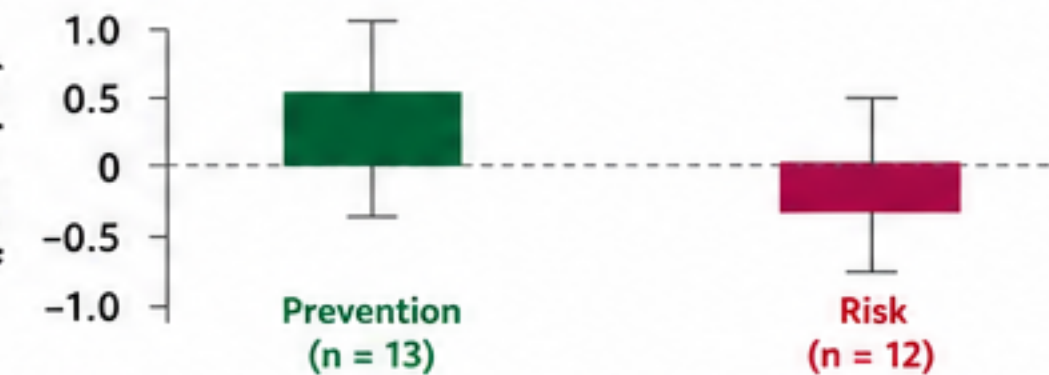
Willingness to undergo AD biomarker testing

MAIN FINDINGS



Positive attitudes toward brain health in older adulthood

Change in score (post - pre)

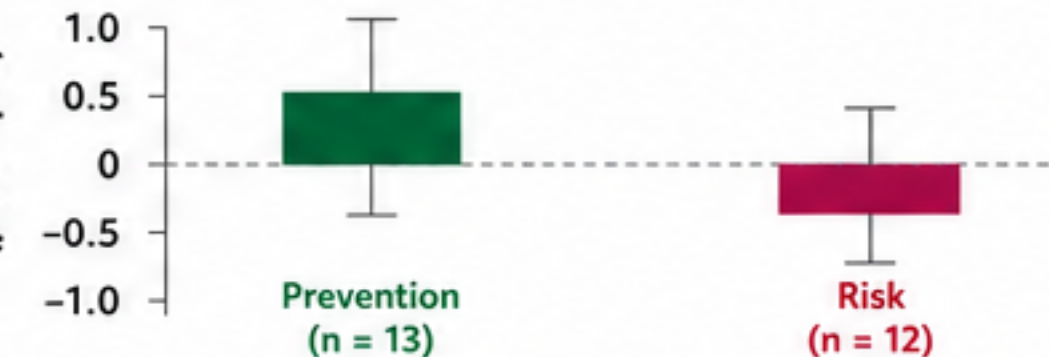


$p = 0.018$



Willingness to undergo AD biomarker testing

Change in score (post - pre)

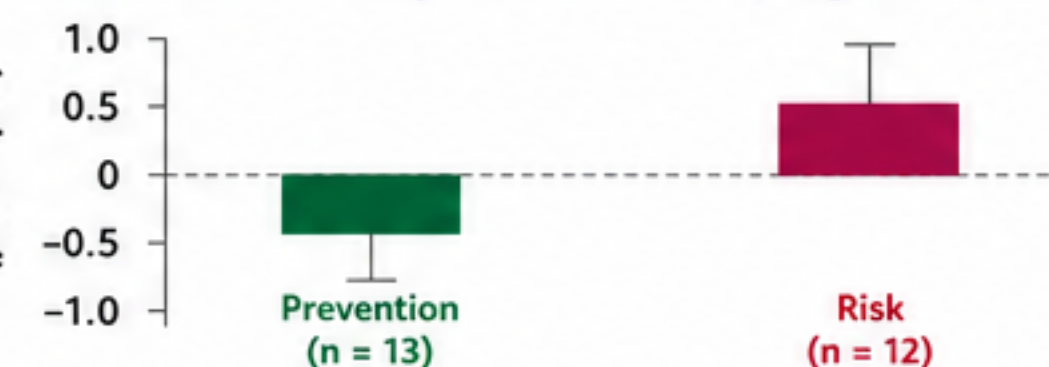


$p = 0.011$



Fear and anxiety about developing dementia

Change in score (post - pre)



$p = 0.047$

NO SIGNIFICANT DIFFERENCES



Memory
($p = 0.673$)



Executive Function
($p = 0.688$)

KEY MESSAGE

Prevention-oriented Alzheimer's disease messages may foster more positive attitudes toward brain health, reduce fear of dementia, and increase willingness to undergo predictive biomarker testing compared with risk-oriented messages.



IMPLICATIONS

How dementia prevention messages are framed may influence public engagement with prevention initiatives and future dementia risk assessment programs.



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