From Message to Motivation: Where the Rubber Meets the Road

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This special issue of The Gerontologist, “Promoting Cognitive Health in Diverse Populations of Older Adults,” represents an important, empirically based contribution to our understanding of how ethnically, culturally, linguistically, and geographically diverse groups think about aging well and brain health. The reports describe a research database to further the development of public health messages targeting diverse groups of older Americans. In addition, the special issue provides information about preferences and practicalities of physical activity programs for older adults with and without cognitive impairment, and identifies gaps in scientific and public knowledge regarding specific guidelines for activities to improve cognitive health.

The Forum (Anderson et al., 2009) provides a context for the special issue with a review of the current scientific literature on public perceptions about cognitive health and dementia in the United States. All the reports identified in this extensive review were cross-sectional studies involving samples of convenience, and most of the studies focused on Alzheimer’s disease (AD) and dementia. There was considerable variability in the samples, questions, and data collection methodologies. The review identified common themes in the literature and highlighted recommendations for future research. Most respondents were aware of AD, but they lacked specific information about AD and other types of dementia. Definitions and perceptions of cognitive health and the meaning of “memory loss” varied across studies. Cultural beliefs about memory loss and aging appeared to be important in developing health promotion activities but were largely unexplored in the existing research literature. It is these cultural and individual differences in perceptions of memory loss, cognitive aging, and brain health that were the major foci of this special issue.

The Prevention Research Centers Healthy Aging Research Network (PRC-HAN) defines healthy aging as “the development and maintenance of optimal physical, mental, and social well-being and function in older adults,” and recognizes the importance of “supporting the adoption and maintenance of attitudes and behaviors known to promote health and well-being” (The Healthy Aging Research Network Writing Group, 2006). It was within this framework that the Promoting Cognitive Health Workgroup (J. Laditka et al., 2009) recognized the importance of community-based research to understand how diverse communities of older adults define and understand cognitive health. For the collaborative project that is the topic of much of this special issue, PRC-HAN collaborators reviewed existing literature and surveyed experts in cognitive health and public health interventions to identify research questions and develop a common focus group protocol and survey. Between 2005 and 2007, the workgroup conducted 55 focus groups, transcribed results, and analyzed transcripts using state-of-the-art qualitative methods (S. Laditka, Corwin, Laditka, Liu, Friedman, et al., 2009). The focus group sample included more than 450 participants from the nine participating states. As Bryant and colleagues (2009) report, groups were held in rural and urban...
areas, in English, Spanish, Mandarin, Cantonese, and Vietnamese. African Americans, American Indians, Asian Americans, Hispanics, non-Hispanic Whites, individuals caring for family or friends with cognitive impairment, and cognitively impaired individuals participated in these groups. A series of in-depth investigations of a diverse representation of older Americans’ knowledge, attitudes, and beliefs about cognitive health emerged from this rich qualitative data set. The reports in this special issue compare responses of groups of participants, highlighting common themes and unique perspectives across cultural, geographic, and other divisions.

S. Laditka, Corwin, Laditka, Liu, Tseng, and colleagues (2009) described how the focus groups viewed “aging well” and “brain health,” comparing these perceptions across six racial/ethnic groups. All racial/ethnic groups shared a core set of beliefs about what it means to age well, including living to an advanced age, having good physical health, having a positive mental outlook, being alert, having a good memory, and being socially involved. Group differences emerged as specific topics within the broad themes were identified, including living independently, driving, playing games or puzzles, and the importance of “good genes.” Similarities identified in themes and differences in specific topics within those themes suggest that race/ethnicity may influence how one interprets or defines broad themes related to aging well and brain health.

Perceptions and beliefs about links among physical activity, nutrition, and brain health were examined by Wilcox and colleagues (2009). Participants in all groups believed that physical activity, particularly walking, promotes brain health, but they were unsure about the frequency, duration, and intensity of walking that would be required to achieve benefits. Although a wide range of healthy physical activities were cited, including Tai Chi, gardening, and housekeeping, strength training was seldom mentioned by any of the groups. Many participants acknowledged difficulty translating their knowledge of what they “should” do into healthy actions.

Participants were aware of a link between diet and brain health, but they were more skeptical about this link than they were about the link between physical activity and brain health. There was also considerable variability among groups about what they considered a “healthy” diet; some focused more on moderation and portion size, whereas others on foods that should be avoided. Most participants recognized that fruits, vegetables, and lean meats are good for the brain, but they were not clear about what dietary changes were most important and expressed confusion over the role of dietary supplements.

Gender differences and the unique perspective of older adults in rural West Virginia were elucidated by Wu and colleagues (2009). This study of single-gender focus groups found that both genders were familiar with medical terms such as “Alzheimer’s disease” and “dementia” but were unsure of their meanings. Regardless of gender, many participants in these rural areas viewed memory loss as part of normal aging, rather than indicating a disease process. Gender differences were apparent in discussions of healthy lifestyle activities; women were more likely to engage in structured social activities and organized exercise programs, whereas men were more likely to engage in work-related or more solitary activities. Men and women agreed that a healthy diet is important to healthy aging, but women were primarily responsible for providing healthy meals for their families. Many participants expressed preferences for good-tasting but unhealthy food and recognized that eating healthfully is not always easy or convenient. Participants of both genders expressed skepticism about the effectiveness of lifestyle changes to prevent dementia and cited examples where people they knew with healthy lifestyles had developed cognitive impairment.

Individuals diagnosed with early-stage AD or mild cognitive impairment (MCI) and their support persons (family caregivers) described aging well as having good physical and mental health, being involved in social activities, remaining independent, and accepting and adapting to cognitive changes (Beard et al., 2009). Persons diagnosed with impairments tended to normalize memory loss as part of aging, speaking of “senior moments.” Support persons viewed memory loss as symptomatic of progressive cognitive decline, speaking of AD or dementia. Support persons also expressed concerns about changes in their own memory or health, and how such changes would affect their ability to care for their relative. Both diagnosed and support persons felt they could do things to help improve brain health, such as being mentally and physically active, eating fish, taking vitamins, and praying, but they also noted that a person may do everything “right” and still develop dementia. In particular, they expressed strong beliefs that it may not be possible to prevent AD.
through lifestyle changes. Many objected to the idea that people who have AD have done something wrong and are not aging well.

Sharkey and colleagues (2009) conducted a unique investigation of a seldom-studied and underserved population by engaging community health workers (promotoras) to conduct groups in Spanish with low-income residents of geographically remote, impoverished neighborhoods along the Texas–Mexico border. Participants in these groups agreed that derechita (being right in the mind) was important and could be achieved by keeping the mind occupied with a variety of activities, including thinking good thoughts, reading the Bible, gardening, playing games, caring for pets, and doing crafts. The concept of cognitive decline being caused by the “evil eye” and belief in Curanderismo (folk healing) to preserve the mind was unique to these groups and was tied to both medical and religious practices. These groups were distinct in that they did not explicitly link physical and cognitive health in their discussions.

Friedman and colleagues (2009) focused on participants’ experiences of mass media messages regarding brain health. Participants reported hearing little about brain health in the mass media, with most information coming from print media. Although most participants watched a lot of television, they reported little or no information about brain health coming from this source. All groups expressed confusion caused by conflicting and changing messages from the media, and many expressed distrust of media messages.

When asked for ideas to promote healthy brain activities for older adults, participants expressed many creative ideas, with some variation associated with ethnicity. African Americans, for example, linked brain health to spiritual health, whereas Chinese and Vietnamese participants linked a healthy body and healthy brain, and White participants emphasized that no matter what your age you can still be healthy and happy. Participants expressed ambivalence about using television for health promotion due to its association with unhealthy behaviors. Specific suggestions for using radio, newspapers, and print media, and language-specific messages were offered in all groups. Peer outreach and educational programs were identified as effective ways to reach people with messages about brain health, particularly within preexisting social networks such as clubs or senior centers.

Following the reports of the focus group investigation, the special issue continues with developmental research on two physical activity programs for older adults with early memory loss and MCI. Although a number of evidence-based activity programs have been developed for older adults without cognitive impairment, those individuals who are at greatest risk may experience difficulty participating in typical programs due to environmental and cognitive obstacles. Programs designed specifically for persons with cognitive difficulty are likely required to meet the needs of this population.

Prohaska and colleagues (2009) examined the association between cognitive functioning and walking patterns by identifying community settings in which individuals reported walking, and the frequency, intensity, and duration of walking. In interviews with 884 older adults in four geographically diverse locations across the United States, both intensity and location of walking for exercise were influenced by decline in cognitive functioning. After controlling for individual and neighborhood characteristics, worse cognitive functioning was associated with more indoor (shopping mall, gym) walking, as opposed to outdoor walking, and better cognitive function was associated with more “brisk” walking. This investigation concludes that the relationship between walking and cognitive health is bidirectional; brisk walking may protect cognitive capacity but cognitive capacity may also influence walking activities. Thus, community-based programs that promote walking to preserve cognitive health must identify “walkable” settings that address both physical and cognitive characteristics of the target group.

Logsdon and colleagues (2009) described the preliminary results of an exercise and health promotion intervention designed to facilitate regular physical activity for people living independently within retirement communities who have MCI. Resources and Activities for Life Long Independence (RALLI) is a structured group exercise program that includes endurance, strength, and balance exercises to optimize physical function. Further, each group session includes motivational and health promotion topics to encourage participants to make regular exercise a part of their daily routine. After participating in nine RALLI classes, participants increased their exercise time from about 9 min a day to more than 30 min per day and reported significant improvements in physical function. Clearly, further research is needed to develop interventions that are tailored to the specific needs of individuals with cognitive decline and to evaluate their impact on physical and cognitive health.
In the final report, Kruger and colleagues (2009) reviewed the literature on randomized controlled trials of the effects of physical activity on physical and cognitive health, and found that most studies have used shorter durations of physical activity per week than is recommended by current guidelines. Thus, there remains a need for further research to clarify the amount of activity required to achieve maximal cognitive, mental, and physical health benefits for older adults.

In summary, this special issue has examined the knowledge, attitudes, and beliefs of a large and diverse sample of older adults about the meaning of cognitive health and strategies to maintain cognitive health. Regardless of gender, race, ethnicity, language, or geographic region, these older adults indicated that cognitive health—memory, decision-making, and similar functions—is important to healthy aging. They shared their views on how to maintain a healthy lifestyle, including physical activity, a healthy diet, social involvement, participating in enjoyable activities, having a positive mental attitude, spiritual activities, and accepting and adapting to physical and cognitive changes. They also identified areas where their specific ethnic, cultural, geographic, or diagnostic group may have differences in perceptions and understanding of cognitive health. They expressed a distrust of the media and were concerned that mixed messages contribute to confusion about health promotion claims. In particular, participants had difficulty distinguishing between disease prevention and risk reduction—an important distinction in terms of expectations for benefits. Participants also provided many useful ideas that may be incorporated into public health messages about cognitive health. Health messages that build on existing perceptions, use cognitive health as a motivator for healthy behaviors, and involve “community champions” as advocates were viewed positively by these groups. Developmental research on physical activity programs emphasized a need for specific adaptations of programs depending on the cognitive status of the target group, and for more research on the types and amounts of activity that may influence cognitive health in older adults.

We hope that the research presented in this special issue will improve our ability to disseminate effective cognitive health messages. Further, we hope that these data will contribute to the development of interventions that generate action in local communities and eventually result in improved public health.

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References


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