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Fostering Engagement and Independence: Opportunities and Challenges for an Aging Society

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Abstract

Older adults, persons aged 65 or older, are growing in number faster than any other age group both nationally and internationally. In 2011, there were 41.4 million older adults in the United States. This means that one in eight people was an older adult (Administration on Aging, 2012). Globally by 2015, it is expected there will be more people over age 65 than young people aged 15 and younger (United Nations Population Fund & HelpAge International, 2012). This transformative demographic shift presents numerous challenges that are well documented and many opportunities that are less well examined.

Concurrently, research in the field of aging and health has witnessed an exponential growth over the past several decades. This research has resulted in increasing awareness about promoting healthy aging and how much we can influence health, functioning, and well-being of individuals through behavioral and biopsychosocial approaches. Furthermore, within the field of public health, in 2006 the Society for Public Health Education (SOPHE) adopted a "Promoting Healthy Aging Resolution" and among the specified actions was the development of a special issue in *Health Education & Behavior*. This supplement issue was developed to highlight the scope and potential of behavioral research and health education in contributing to the optimal health of older adults.

Potential for Optimal Aging

Rowe and Kahn introduced the concept of "successful aging" and in turn helped build the foundation for strategies designed to optimize the health of older adults rather than just addressing the negative consequences of disease or functional loss (Rowe & Kahn, 1998). Although the definition of successful aging has evolved over time, and has been reframed as

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healthy or optimal aging, most definitions recognize three core components: (a) minimizing the risk of disease and disability and addressing chronic conditions through selfmanagement, (b) maintaining a high level of physical and mental functioning, and (c) supporting active social and civic engagement (Marshall & Altpeter, 2009). An extension of this work has been the inclusion of these components of successful aging within the socialecological model. Although not new to readers of *Health Education & Behavior*, the socialecological model emphasizes the need to address interventions at multiple levels individual, interpersonal, institutional, community, and system levels (McLeroy, Bibeau, Stecker, & Glanz, 1988). These elements have been documented to be relevant to healthy aging. An illustration of the recognition of these major components is reflected in the definition of healthy or optional aging provided by the Centers for Disease Control and Prevention's Health Aging Research Network (HAN; The Healthy Aging Research Network Writing Group, 2006):

Healthy aging is the development and maintenance of optimal physical, mental and social well-being and function in older adults. It is most easily achieved when physical environments and communities are safe and support the adoption and maintenance of attitudes and behaviors known to promote health and well-being and when health services and community programs are used effectively to prevent or minimize the impact of acute and chronic disease on function.

Promising Advances in Aging Research

This supplement issue is organized around the principles underlying the HAN definition. The first article describes the development of an integrated framework to promote mobility among older adults. Anderson and colleagues explore the importance of mobility that refers to movement in all its forms from basic ambulation to transportation options (Anderson et al., 2014). Using concept mapping, more than 200 participants helped generate a set of actions and a framework of nine domains that could lead to positive change in mobility for older adults. A subsequent phase of the project examined the opinions of state and local public health professionals to reveal perceived priority state and local public health actions to affect mobility. These include the importance of promoting environmental strategies through collaborative initiatives aimed at planning and best practices expanding environmental or transit options, training of professionals, and integration of mobility into state and local public health plans.

Preparing the workforce to implement healthy aging–related programs is elucidated by Frank and colleagues. They describe an evaluation of a model undergraduate certificate program, the Skills for Healthy Aging Resources Program (SHARP; Frank et al., 2014). SHARP is a competency-based career technical education program designed to prepare personnel to work in community aging service organizations and deliver evidence-based programs. A total of 106 people participated in the SHARP courses and provided baseline data, and 85 completed the program and obtained their certificate. The courses were offered through two community colleges. Student enrollees reported increased competencies in all areas. The program addresses an unmet need for a well-prepared workforce to plan, deliver, and evaluate the growing number of evidence-based health promotion and disease management programs.

Community collaboratives have been a cornerstone in public health efforts to build local capacity, reduce fragmentation and duplication, promote efficiency, and help create synergies in program delivery for older adults. In this third study, Altpeter and colleagues identify specific strategies that foster systems change and help the organizations pursue program sustainability and expand their evidence-based health programming through community collaborations (Altpeter, Scheider, & Whitelaw, 2014). Representatives from eight geographically diverse agencies and their community collaborators were interviewed. Applying qualitative methods, four strategies emerged across sites, including engagement of non-traditional partners, forging new partnerships with health care, creating innovative systems of structures and tools, and being attentive to ethnic, racial, and rural populations.

The Chronic Disease Self-Management Program (CDSMP) is one of the more widely disseminated community-based disease-management programs for older adults. However, there is a paucity of findings on its long-term effectiveness. CDSMP is a 6-week intervention with established outcomes related to positive psychological health status, increased physical activity, and enhanced confidence (self-efficacy) in ability to manage chronic conditions (Brady et al., 2013). Ory and colleagues examined the long-term effectiveness of CDSMP among two age cohorts (i.e., aged 50–64 and 65 or older; Ory et al., 2014). For both groups (N = 1,012), health outcomes such as social activity limitations and communication with doctors significantly improved. For those aged 50 to 64, overall quality of life and unhealthy mental health days were also found to improve. This study documented the effectiveness of CDSMP at two life stages and underscores the importance of engaging adults who are experiencing chronic conditions in their 50s.

While walking is the most commonly reported physical activity of older adults (Ashe, Miller, Eng, & Noreau, 2009), motivating older adults to initiate and maintain a walking routine has proven to be difficult. Kullgren and colleagues conducted a 24-week randomized trial to determine whether financial incentives and/or peer networks could increase walking among older adults (n = 92) and assess the feasibility of using eHealth technology (Kullgren et al., 2014). During the intervention period (16 weeks), no differences were found between the three intervention groups (financial incentive alone, peer network via online message board, or combined interventions) or a comparison group. The use of eHealth technology such as the Internet among older adults was found to be feasible. The Internet plays an increasingly important role in connecting persons in the United States to information and services. For example, in 2013, 59% of older adults reported going online with a 6% increase from the previous year (Smith, 2014).

Concurrent with the demographic trends associated with increased numbers and proportion of older adults in the United States, there have been rapid changes and a proliferation in many forms of technology that can benefit older adults (Lindeman, 2012). Lazar and colleagues reviewed the literature on the use of information and communication technologies for facilitating reminiscence therapy (Lazar, Thompson, & Demiris, 2014). Reminiscence therapy is a nonpharmacological intervention involving the prompting of past memories, often with artifacts such as old photographs or music. It is designed to promote positive outcomes such as the facilitation of social interactions or the increase of selfesteem. To assess the current state of the evidence and identify future trends, a total of 44

media.

studies were reviewed. Findings from their review revealed several benefits to using information and communication technologies for reminiscence therapy interventions, including access to rich and engaging multimedia reminiscence materials, opportunities for people living with dementia to participate in social interactions and take ownership of

About 20% to 30% of falls in older adults result in moderate to severe injuries, which in turn can affect an individual's mobility and ability to live independently (Sterling, O'Conner, & Bonadies, 2001; Stevens, 2006). The feasibility of a cognitive training program among community-dwelling Black older adults and its effects on gait and balance was examined by Smith-Ray and colleagues. The study used a pretest/posttest randomized control design with assignment to cognitive training (computer-based class 2 days/week for 60 minutes over 10 weeks) or control condition (Smith-Ray, Makowski-Woidan, & Hughes, 2014). Eligibility included having a history of falls but minimal or no cognitive impairment (n = 45). Intervention participants had significant improvement in balance and gait compared to the control group. Although a number of established community-based fall intervention programs have been identified focusing on exercise, home modification, and multifaceted approaches (Stevens, 2010), this pilot program is one of the first to focus on cognitive training to improve gait and balance.

conversations, and a reduction of barriers due to motor deficits during interactions with

Activity engagement as a therapeutic modality has the potential to enhance quality of life and reduce behavioral symptoms in persons with cognitive decline such as dementia. Trahan and colleagues conducted a review of the literature that evaluated one or more modifications to activities designed to increase engagement or decrease behavioral and psychological symptoms in persons with dementia (Trahan, Kuo, Carlson, & Gitlin, 2014). Examples of activity engagement interventions include activities with intrinsic interest, changes in environmental cues (lighting, music), and social interactions. None of the modifications were found to result in negative behavioral outcomes or decreases in engagement. They conclude that evidence is growing regarding modifications to foster engagement in activities and reduce behavioral and psychological symptoms.

Strategies to promote social and civic engagement to enhance well-being are an emerging field in aging. However, to date, research on volunteering in later life has largely focused on the physical and mental health of volunteers. Morrow-Howell and colleagues interviewed 338 new Experience Corps® volunteers at baseline and 3 to 4 years later (Morrow-Howell, Lee, McCray, & McBride, 2014). Experience Corps is a national program that trains older adults to work with public elementary school students to improve academic achievement. Participants reported that Experience Corps volunteer experiences resulted in their increased: desire to do things outside of the home and confidence, motivation, and realization about the importance of organized outside activities. These were subsequently further demonstrated through reported increased engagement in productive and civic activities such as beginning new work or new volunteer, community, or educational activities.

The Villages movement is a grassroots strategy by which organizations provide a set of services to help older adults remain in their homes. This represents a promising community model to enhance the social engagement, independence, and well-being of community-dwelling older adults. Graham and colleagues explored the perceived effects of village membership on factors associated with the likelihood of aging in place including social engagement, service access, and health and well-being (Graham, Scharlach, & Price Wolf, 2014). Survey data from 282 active members from five Village sites in California were examined. Three quarters of the participants reported that Village membership increased their ability to age in place. Among the positive effects reported include reduced social isolation, improved well-being, and increased confidence to remain living in the community. Given these findings and documentation that most older adults want to stay in their homes and communities as long as possible (Keenan, 2010), the Village model presents opportunities for future research and practice.

The importance of eliminating health disparities in the growing diverse group of older adults is a critical public health goal. Wyatt and colleagues provide information about older Chinese adults living in New York City areas with a high density of Asian Americans who were included in the Racial and Ethnic Approaches to Community Health (REACH) U.S. Risk Factor Survey (n = 805; Wyatt, Trinh-Shevrin, Islam, & Kwon, 2014). The findings highlight health behaviors and outcomes by various demographic and health factors. Results point to the need for future programs and policies to address culturally appropriate health promotion and disease prevention approaches.

Taken together, this set of articles illustrates the breath of opportunities in aging research and practice. Efforts have been made in recent years to address healthy aging by constructing, implementing, and evaluating interventions that target specific dimensions within the socio-ecological model and Frieden's (2010) Health Impact Pyramid. Exemplifying this, the studies in this supplement issue address the different levels of influence and context. For example, they range from investigations at the individual or group level such as the Chronic Disease Self-Management Program (Smith-Ray et al., 2014) to investigations of system-level modifications such as the Villages model (Graham et al., 2014).

Although multiple-level models can help facilitate the design of intervention approaches and their evaluation, another important aspect of these studies is the placement of older adults within a life course/span perspective. For example, the Experience Corps (Morrow-Howell et al., 2014) is based on an intergenerational association between older mentors and younger students in need of mentoring. Similarly, the CDSMP has witnessed a wider age range of participants than was originally targeted. Finally, many of the actions generated to address mobility in the study by Anderson et al. (2014) pertain to persons with mobility disability, regardless of age.

It should also be noted that these studies are in various stages of translation and dissemination. Several are in early stages of establishing efficacy and effectiveness such as the computer-based cognitive training program to reduce falls and the financial incentives intervention to promote walking. Even among programs that may be considered well

established such as CDSMP and Experience Corps, CDSMP is more widely disseminated and has more documentation of its effectiveness and efficacy than Experience Corps. Translation research is required for the majority of these programs, even more, when these interventions are embedded in community settings and applied to diverse targeted populations such as in Villages and with inner-city Chinese older adults.

Future Directions

This supplement provides several examples of the diversity of focus, designs, and application in health and aging research. Future healthy aging research and application should simultaneously address more than one level of influence—individual, interpersonal, organizational, community, and social or environmental approaches. Environmental strategies could be combined with individual and community efforts. Such strategies might include changes to the physical environment (e.g., Complete Streets) or the creation of or access to places for physical activity (e.g., developing walking trails, building exercise facilities; Guide to Community Preventive Services, 2014). Individual strategies might include organized physical activity programs, chronic disease self-management, and point-of-decision prompts.

Efforts by SOPHE to bring together investigators from a range of disciplines holds promise for turning knowledge about aging into health education and behavior research and practice. The studies contained within this special issue illustrate the potential contribution of behavioral research and health education to promoting optimal health in older adults. We encourage public health educators to contribute to this body of research and hope that they will find new methods to promote health and well-being through multi-sectoral and multilevels of influence. Such efforts surely promise to advance the field of health and aging and contribute significantly to optimizing the lives of older adults and the communities in which they live.

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References

- Administration on Aging, U.S. Department of Health and Human Services. A profile of older Americans: 2011. 2012. Retrieved from www.aoa.gov/AoAroot/Aging_Statistics/Profile/2011/docs/ 2011profile.pdf
- Altpeter M, Schneider EC, Whitelaw N. Examining strategies to build and sustain healthy aging programming collaboratives. Health Education & Behavior. 2014; 41:27S–33S. [PubMed: 25274708]
- Anderson LA, Slonim A, Yen IH, Jones DL, Allen P, Hunter RH, McPhillips-Tangum C. Developing a framework and priorities to promote mobility among older adults. Health Education & Behavior. 2014; 41:10S–18S. [PubMed: 25274706]

- Ashe MC, Miller WC, Eng JJ, Noreau L. the Physical Activity and Chronic Conditions Research Team. Older adults, chronic disease and leisure-time physical activity. Gerontology. 2009; 55:64– 72. [PubMed: 18566534]
- Brady, TJ.; Murphy, L.; O'Colmain, J.; Beauchesne, D.; Daniels, B.; Greenberg, M.; Chervin, D. A meta-analysis of health status, health behaviors, and health care utilization outcomes of the Chronic Disease Self-Management Program. 2013. Retrieved from http://www.cdc.gov/pcd/issues/ 2013/12_0112.htm
- Frank JC, Altpeter M, Damron-Rodriguez J, Driggers J, Lachenmayr S, Manning C, Robinson P. Preparing the workforce for healthy aging programs: The Skills for Healthy Aging Resources and Programs (SHARP) model. Health Education & Behavior. 2014; 41:19S–26S. [PubMed: 25274707]
- Frieden T. A framework for public health action: The health impact pyramid. American Journal of Public Health. 2010; 100:590–595. [PubMed: 20167880]
- Graham CL, Scharlach AE, Price Wolf J. The impact of the "village" model on health, well-being, service access, and social engagement of older adults. Health Education & Behavior. 2014; 41:91S– 97S. [PubMed: 24799128]
- Guide to Community Preventive Services. Environmental and policy approaches to increase physical activity: Creation of or enhanced access to places for physical activity combined with informational outreach activities. 2014 Jan. www.thecommunityguide.org/pa/environmental-policy/ improvingaccess.html.
- The Healthy Aging Research Network Writing Group. The Prevention Research Centers Healthy Aging Research Network. Preventing Chronic Disease. 2006; 3(1) Retrieved from http://www.cdc.gov/pcd/issues/2006/jan/05_0054.htm.
- Keenan, TA. Home and community preferences of the 45+ population. Washington, DC: AARP; 2010 Nov. Retrieved from http://www.aarp.org/home-garden/livable-communities/info-11-2010/homecommunity-services-10.html
- Kullgren JT, Harkins KA, Bellamy SL, Gonzales A, Tao Y, Zhu J, Karlawish J. A mixed-methods randomized controlled trial of financial incentives and peer networks to promote walking among older adults. Health Education & Behavior. 2014; 41:438–508. [PubMed: 25274710]
- Lazar A, Thompson H, Demiris G. A systematic review of the use of technology for reminiscence therapy. Health Education & Behavior. 2014; 41:51S–61S. [PubMed: 25274711]
- Lindeman, D. Technology and aging. In: Prohaska, TR.; Anderson, LA.; Binstock, RH., editors. Public health for an aging society. Baltimore, MD: Johns Hopkins University Press; 2012. p. 253-274.
- Marshall VW, Altpeter M. Cultivating social work leadership in health promotion and aging: Strategies for active aging interventions. Health & Social Work. 2005; 30:135–144. [PubMed: 15974374]
- McLeroy KR, Bibeau D, Stecker A, Glanz K. An ecological perspective on health promotion programs. Health Education Quarterly. 1988; 15:351–377. [PubMed: 3068205]
- Morrow-Howell N, Lee YS, McCrary S, McBride A. Volunteering as a pathway to productive and social engagement among older adults. Health Education & Behavior. 2014; 41:84S–90S. [PubMed: 25274715]
- Ory MG, Smith ML, Ahn S, Jiang L, Lorig K, Whitelaw N. National study of chronic disease selfmanagement: Age comparison of outcome findings. Health Education & Behavior. 2014; 41:34S– 42S. [PubMed: 25274709]
- Rowe, JW.; Kahn, RL. Successful aging. New York, NY: Pantheon; 1998.
- Smith A. Older adults and technology use. 2014 Apr. Retrieved from http://www.pewinternet.org/ 2014/04/03/older-adults-and-technology-use/.
- Smith-Ray RL, Makowski-Woidan B, Hughes SL. A randomized trial to measure the impact of a community-based cognitive training intervention on balance and gait in cognitively intact Black older adults. Health Education & Behavior. 2014; 41:62S–69S. [PubMed: 25274713]
- Sterling DA, O'Connor JA, Bonadies J. Geriatric falls: Injury severity is high and disproportionate to mechanism. Journal of Trauma. 2001; 50:116–119. [PubMed: 11231681]
- Stevens JA. Fatalities and injuries from falls among older adults—United States, 1993–2003 and 2001–2005. MMWR. Morbidity and Mortality Weekly Report. 2006; 55(45):1222–1224.

- Stevens, JA. A CDC compendium of effective fall interventions: What works for community-dwelling older adults. 2nd ed.. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2010.
- Trahan MA, Kuo J, Carlson MC, Gitlin LN. A systematic review of strategies to foster activity engagement in persons with dementia. Health Education & Behavior. 2014; 41:70S–83S. [PubMed: 25274714]
- United Nations Population Fund, & HelpAge International. Ageing in the twenty-first century: A celebration and a challenge. New York, NY: United Nations Population Fund; 2012. Retrieved from http://unfpa.org/ageingreport
- Wyatt LC, Trinh-Shevrin C, Islam NS, Kwon SC. Health-related quality of life and health behaviors in a population-based sample of older, foreign-born, Chinese American adults living in New York City. Health Education & Behavior. 2014; 41:98S–107S. [PubMed: 25274716]