

SOCIETY'S GRAND CHALLENGES

Insights from Psychological Science

PROLONGING VITALITY

Society's Grand Challenges Insights from Psychological Science

As a society, we face many challenges, and we depend on science to help. Whether we seek to halt global climate change, cure devastating diseases, reduce crime, end poverty, diminish health disparities, or achieve vitality in old age, advances in modern science are expected to help.

The science of psychology contributes to deeper understanding of these and many other societal challenges. The American Psychological Association is devoting significant resources and energy to bringing the best of psychological science to the forefront. In partnership with other fields of science, solutions will be found.

This booklet is one in a series, examining the insights of psychological science into challenges facing society. Each booklet focuses on a key challenge, provides a sampling of what we currently know, and suggests promising avenues for future research. The published work of scientists is cited, so that readers can learn more on their own.

We indeed face many challenges, and together we can solve them!

Alan E. Kazdin
2008 President
American Psychological Association

PROLONGING VITALITY



Our society is aging.

With Americans living longer, the number of older people in the US is skyrocketing. According to the US Census Bureau, people aged 85 and older are already the fastest-growing age group in the country. By 2030, nearly one in five Americans will be 65 and older.

Making sure those longer lives are healthy lives is one of the grand challenges our society faces. And psychologists are working hard to help the older people of today and tomorrow prolong their vitality.

Psychologists are finding ways to help older people live as independently as possible and stay involved in their workplaces and communities. They are identifying ways to support caregivers and offering suggestions for improving the health-care system. They are also exploring the ever-growing diversity of older adults.

This booklet offers just a few examples of the many contributions psychologists are making to the field of aging. It ends with experts' thoughts about the contributions psychologists may make in the future.



PROMOTING AGING IN PLACE

For an older person, small problems like memory lapses or poor eyesight can escalate into big ones that lead to the loss of home, community and independence. And moving into an assisted-living facility or nursing home can be costly, both to individuals and society.

Fortunately, psychologists are finding ways to help older people remain as independent as possible by making sure that their homes help rather than hinder them.

Take Wendy Rogers and Arthur Fisk of the Georgia Institute of Technology. Together with colleagues, they are developing technology that transforms homes into something like supplemental brains for their occupants. By bridging the gap between cognitive demands and capabilities, they say, an “aware home” can help older people maintain their independence.

Rogers and Fisk have already developed several prototype devices. An automated “technology coach,” for example, guides people through the process of using complicated devices like blood glucose meters. The automated system records activities, recognizes when errors have been made, and provides corrective feedback. A “memory mirror” serves as a visual reminder of whether someone has already taken a pill or performed some other task. By visually recording specific actions and storing this information in memory, the system can display visual reminders and alerts to its user.

Sounds like science fiction, right? But according to Rogers, companies are now developing products based on this research that could be on the market in the next five years.

Other psychologists are working to ensure that entire communities support older residents' ability to age in place.

James Sallis and colleagues of San Diego State University, for instance, have developed a “walkability” index that assesses whether there are places to go in a neighborhood and easy ways to get there on foot—key factors for older people no longer willing or able to drive.

Now Abby King, of Stanford University, is building on that and other research. In an ongoing study, King is looking at the effects on older people of environmental factors such as easy access to shops, well-maintained sidewalks and sufficiently long traffic lights on older people.

The goal? To help urban planners, developers and others help older people stay healthy and independent.



Further Reading

Frank, L.D., Sallis, J.F., Conway, T.L., Chapman, J.E., Saelens, B.E., & Bachman, W. (2006). Many pathways from land use to health: Associations between neighborhood walkability and active transportation, body mass index, and air quality. *Journal of the American Planning Association*, 72, 75-87.

King, A.C., Toobert, D., Ahn, D., Resnicow, K., Coday, M., Riebe, D., Garber, C.E., Hurtz, S., Morton, J., & Sallis, J.F. (2006). Perceived environments as physical activity correlates and moderators of intervention in five studies. *American Journal of Health Promotion*, 21, 24-35.

Rogers, W.A., & Fisk, A.D. Cognitive support for elders through technology. (2006). *Generations: Journal of the American Society on Aging*, Summer, 38-43.



KEEPING OLDER PEOPLE ENGAGED

January 1, 2008 was a momentous occasion for the generation of Americans born in the post-World War II era -- the so-called Baby Boomers: On that day, the first of their generation reached age 62 and eligibility for Social Security benefits. For many people in this age group, however, inadequate savings mean retirement is a far-off dream.



But according to psychologist Michael Smyer, of Boston College, financial factors are just one of the reasons older people decide to stay in the workforce.

Smyer and his colleagues found that many in this age group will keep working past the traditional retirement age because they want to. Work, the researchers note, plays a central role in their identities.

For some, a desire to stay active or continue workplace social relationships is what motivates their continued presence in the workplace. For others, it is more a matter of the status and self-esteem a job brings. Still

others want to pass on their skills and knowledge, a desire the researchers say may be especially important to this generation.

Employers should keep these motivations in mind if they want to keep these workers and their valuable experience in the workplace, says Smyer. Part-time jobs and flexible policies that allow time for volunteering, for example, could meet their need to give back to their communities.

Finding ways to keep older people engaged goes beyond helping individual workers, say other psychologists. It could also help the economy, which is facing a workforce shortage and brain drain as older people retire.

Encouraging career development for all workers—no matter their age—is one way to keep older workers working, according to Harvey Sterns and his colleagues of the University of Akron.

In the past, Sterns explains, most employers did not bother to make training available to older workers. Now employers—and older people themselves—must recognize that life long training is beneficial to the organization as a whole.

Employers, says Sterns, should give older workers access to training, mentoring programs, sabbaticals and other opportunities to update their skills. They

should offer them challenging assignments. And they should evaluate individuals based on their own merits rather than stereotypes about older people.

Employers should also make sure that older people are poised to take full advantage of workplace technology, says psychologist Neil Charness, of Florida State University.

The rapid technological change that has transformed the workplace can threaten older workers' sense of self-efficacy, he and his colleagues warn. Age-related changes in perception, cognitive abilities and dexterity can make technology use even more problematic.

Fortunately, says Charness, there are promising fixes.



An older person whose arthritis makes it difficult to operate a keyboard or mouse may do just fine with speech-recognition software, for instance.

Employers must also consider older workers' special needs when they offer training in how to use various technologies. According to Charness and his colleagues, extra time for training, plenty of feedback and hands-on learning can all help compensate for the declines in memory and other cognitive capacities that may accompany aging.



Further Reading

Charness, N., Czaja, S., & Sharit, J. (2007). Age and technology for work. In K.S. Schultz, & G.A. Adams (Eds.), *Aging and work in the 21st century* (pp. 225-249). Mahwah, N.J.: Lawrence Erlbaum Associates Publishers.

Rothwell, W., Sterns, H., Spokus, D., & Raeser, J. (2008). *Working longer: New strategies for managing, training, and retaining older employees*. New York: AMACOM.

Smyer, M.A., Besen, E., & Pitt-Catsoupes, M. (In press). Boomers and the many meanings of work. In R. Hudson (Ed.), *Boomer bust?: The new political economy of aging*. New York: Praeger.

SUPPORTING CAREGIVERS



Big changes are taking place in the American family.

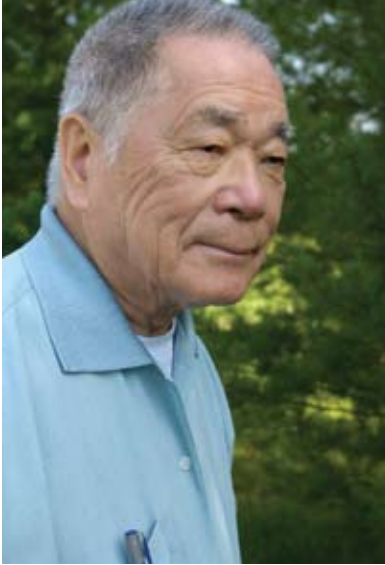
As psychologists Toni Antonucci and James Jackson, both of the University of Michigan, point out, dramatically improved life expectancy has led to an increase in the number of living generations within families. At the same time, the number of individuals within the youngest generation has shrunk.

Couple that trend with greater geographic mobility, women's growing role in the workplace and high divorce rates, and you've got a potential crisis when it comes to caring for the oldest generation.

Providing that care can be rewarding, notes psychologist William Haley of the University of South Florida. The benefits of caregiving include enhanced self-esteem, a sense of purpose and strengthened relationships.

But caregiving can also be burdensome, according to Haley's review of the literature. Watching someone suffer, coping with fear and uncertainty and having to manage physical care and treatment are especially stressful.

That stress can have a big impact on caregivers' lives, putting caregivers at higher risk of depression, anxiety and trouble sleeping. There are also social and economic costs. Time spent providing care means less time for paid employment or socializing, Haley points out.



Psychologists are not just studying challenges to caregiving, however. They are also developing practical ways to support caregivers.

Dolores Gallagher-Thompson, of the Stanford University School of Medicine, for instance, has developed an intervention to help Chinese-American caregivers minimize the stress of caring for older relatives with dementia.

To overcome the reluctance of many Chinese-Americans to share problems outside the home, Gallagher-Thompson and her colleagues developed an in-home intervention based on the principles of cognitive-behavioral therapy.

The researchers then compared the intervention to telephone support over four months. The in-home behavioral management program outperformed the telephone support when it came to reducing depression and severe stress.

Now Gallagher-Thompson is spreading the word to a much wider audience: She has taken what she has

learned in her research and developed a DVD and workbook for caregivers.

In the DVD, Mandarin-speaking actors depict effective—and ineffective—ways to handle stressful caregiving situations. The Alzheimer's Association is planning to distribute the DVD to Chinese-American caregivers through its national office, says Gallagher-Thompson.

Of course, older people are not just recipients of care. They also serve as caregivers themselves, providing care to spouses, adult children with disabilities, grandchildren or others who need help.

The number of grandparents with custody of their grandchildren, for example, is growing dramatically, notes psychologist Burt Hayslip, Jr., of the University of North Texas.



Acting as a safety net, these grandparents step in when parents die, go to jail, succumb to addiction or become otherwise unable to parent.

They have an impact that goes far beyond the physical care they provide, says Hayslip.

These custodial grandparents can serve as positive role models for grandchildren. And despite the financial, physical and emotional challenges involved, custodial grandparents typically enjoy close relationships with their grandchildren and a renewed sense of purpose.

Several strategies can help these grandparents overcome the isolation that often accompanies their caregiving role. Information about services and benefits available to them is crucial.

But custodial grandparents also need social support, says Hayslip. His own research has revealed that a parent training and psychosocial support group he developed can lessen depression and improve relationships.



Further Reading

Antonucci, T.C., & Jackson, J.S. (2007). Intergenerational relations: Theory, research, and policy. *Journal of Social Issues, 63*, 679-693.

Gallagher-Thompson, D., Gray, H.L., Tang, P.C., Pu, C.Y., Leung, L.Y., Wang, P.C., Tse, C., Hsu, S., Kwo, E., Tong, H.Q., Long, J., & Thompson, L.W. (2007). Impact of in-home behavioral management versus telephone support to reduce depressive symptoms and perceived stress in Chinese caregivers: Results of a pilot study. *American Journal of Geriatric Psychiatry, 15*, 425-434.

Haley, W.E. (2003). Family caregivers of elderly patients with cancer: Understanding and minimizing the burden of care. *Journal of Supportive Oncology, 1*, 25-29.

Hayslip, B. (2003). The impact of a psychosocial intervention on parental efficacy, grandchild relationship quality, and well-being among grandparents raising grandchildren. In B. Hayslip, & J. Hicks-Patrick (Eds.), *Working with custodial grandparents* (pp. 163-176). New York: Springer.

Hayslip, B., & Kaminski, P.L. (2005). Grandparents raising their grandchildren: A review of the literature and suggestions for practice. *The Gerontologist, 45*, 262-269.

RECOGNIZING OLDER PEOPLE'S DIVERSITY



As the overall US population becomes more ethnically diverse, so does the population 65 and older. Over the next quarter century or so, the Census Bureau projects, the percentage of older Americans who are non-Hispanic whites will drop by 11 percent.

Indeed, age is one of the few things that older people have in common. Even then, considerable diversity exists in thoughts, perceptions, and beliefs.

As psychologist Barbara Yee, of the University of Hawaii, points out, for example, refugees, immigrants and other older people may not even share the mainstream culture's most fundamental beliefs about mental illness.

For older Vietnamese immigrants, they may believe the cause to be weakness or turmoil in the nervous system. For older Laotians, they may believe the source to be angry ancestors. Traditional treatment may involve the use of amulets, sorcerers or exorcism.

As Yee notes, even the *Diagnostic and Statistical Manual of Mental Disorders* now recognizes that mental health symptoms can be manifested or understood in different ways across cultures. Cultural and ethnic beliefs can also lead to such feelings of intense shame or stigma that older people do not disclose mental health problems or seek help, says Yee.

Even within a single ethnic group, Yee emphasizes, there can be marked differences in migration history,

linguistic skills, degree of westernization and urbanization and other characteristics. Gender, age and social class also play key roles, she adds.

Older people's diversity—in everything from race and ethnicity to geographic location to sexual orientation—has important implications for how psychologists do their work.

Take assessment, for example.

You might assume that diagnostic tests for conditions like Alzheimer's disease work the same for all older people, right? Wrong, says psychologist Jennifer Manly, of Columbia University.

Past research has suggested that African Americans are more prone to Alzheimer's disease than their white counterparts. But according to Manly's research, testing issues may account for some of that apparently increased risk.

That is because neuropsychological tests typically adjust for years of schooling to better determine how well individuals should score. But data show that a year of schooling in the segregated South does not mean the same thing as a year in an integrated northern school, says Manly.

An alternative method, Manly has found, is to base expectations of neuropsychological test performance



on reading levels. In a study of 1,002 older people, she discovered that literacy level was a better predictor of cognitive decline than years of education or race.

Older people's diversity also has implications for psychological treatment.

Older rural residents, for instance, often lack access altogether. By recognizing their unique needs, psychologist Forrest Scogin and his colleagues at the University of Alabama have come up with a unique solution: taking treatment to people's homes.

In a study of 134 older residents of rural Alabama, the researchers found that in-home cognitive-behavioral therapy increased participants' quality of life and decreased anxiety, depression and other psychological problems in this often-overlooked population.

Of course, some older people are diverse in more ways than one. Psychologist Steven David, of the University of California, Los Angeles, studies older, gay African Americans, for example.

In a study of 383 younger, middle-aged and older African-American and white gay men, David found that the older African Americans faced a triple whammy of ageism, racism and what David calls “homonegativity.”

Not surprisingly, the older African Americans felt more stigmatized. They were also more likely to handle that stigma by using “disengaged” coping styles—less helpful strategies such as denial and self-blame—rather than more positive coping strategies. However, those traits did not translate into full-fledged mental health disorders.

The study participants may have been an especially resilient group, says David. But further research could determine who is coping best and how they do it—important lessons for anyone facing stigma.



Further Reading

David, S., & Knight, B.G. (2008). Stress and coping among gay men: Age and ethnic differences. *Psychology and Aging, 23*, 62-69.

Manly, J.J., Schupf, N., Tang, M., & Stern, Y. (2005). Cognitive decline and literacy among ethnically diverse elders. *Journal of Geriatric Psychiatry and Neurology, 18*, 213-217.

Scogin, F., Morthland, M., Kaufman, A., Burgio, L., Chaplin, W., & Kong, G. (2007). Improving quality of life in diverse rural older adults: A randomized trial of a psychological treatment. *Psychology and Aging, 22*, 657-665.

Yee, B.W.K., & Chiriboga, D.A. (2007). Issues of diversity in health psychology and aging. In C.M. Aldwin, C.L. Park, & A. Spiro (Eds.), *Handbook of health psychology and aging* (pp. 286-312). New York: Guilford Press.

Yee, B.W.K., & Nguyen, H. (2000). Southeast Asian women: Indigenous cultures and acculturation. Presentation at Indigenous Women’s Conference, Honolulu, Hawaii.

TRANSFORMING THE HEALTH-CARE SYSTEM



With the aging of the baby boom generation, the US will soon find itself with a larger-than-ever-before population of older people. With them will come soaring rates of cognitive impairment, diseases like diabetes and cancer and other age-related problems.

Yet the health-care system is unable to meet the needs of today's older people. All too often, they receive poor-quality care for problems both physical and mental.

Fragmentation is one reason. While most health-care professionals now recognize the interconnection of physical and psychological factors in their patients' lives, that understanding is not always reflected in the way they practice.

Even though most older patients have multiple problems, the multiple professionals they see typically do not work together. To get what they need, older people must often visit one office after another and see many providers— few of whom are likely to be talking to one another.

In addition, older people are often reluctant to seek help for mental health problems. That is especially true if they have to go to traditional settings like therapists in private offices, clinics or psychiatric hospitals. Instead, they typically seek help from their primary care physicians, who are already much too pressed for time.

Without an overhaul, the health-care system will do an even worse job as the number of older patients grows ever larger.

Now psychologists are working to make sure that does not happen. APA's Presidential Task Force on Integrative Health Care for an Aging Population is calling for an integrated approach to health care. The task force was led by co-chairs Toni Antonucci, and Antonette Zeiss of the Veteran's Administration.

Taking the mind/body connection to heart, the task force proposes a holistic model of care: Interdisciplinary teams would work with each other—and with older people and their families—to assess patients, figure out what needs to be done and then provide coordinated care.



This model is already proving successful in venues ranging from geriatric primary care offices to long-term care facilities to US Department of Veterans Affairs medical centers.

The task force's *Blueprint for Change: Achieving Integrated Health Care for an Aging Population* offers a number of recommendations for making this vision a reality everywhere. The task force is already taking action. The first step is to create resource materials for key audiences – Members of Congress, psychology training directors, and older people and their families.



Further Reading

American Psychological Association, Presidential Task Force on Integrated Health Care for an Aging Population. (2008). *Blueprint for change: Achieving integrated health care for an aging population*. Washington, DC: American Psychological Association.

FUTURE DIRECTIONS



What will psychologists contribute to this endeavor in the future? Psychologists Peter Lichtenberg, chair of APA's Committee on Aging; Michael Smyer, co-editor of *Challenges of an Aging Society: Ethical Dilemmas, Political Issues*; and Margaret Gatz, editor of *Emerging Issues in Mental Health and Aging* offer their thoughts about some future research directions:

Brain health. Psychologists will play a central role in figuring out what individuals can do in early old age, middle age and even earlier to reduce their chances of developing dementia. Researchers will also find ways to combat distress and offer support to those in the early stages of Alzheimer's disease.

Overlooked mental health disorders. While there is plenty of research on depression in older people, there is a need for further research on anxiety, substance abuse and other problems. Also urgently needed are epidemiological data on mental disorders in older populations and greater understanding of the fast-growing 85-and-over population.

Genetics. With genetic information becoming more available to individuals, psychologists will find opportunities to provide that information in ways that are understandable, useful and ethical.

Strategies that allow older workers to continue working. As people live longer, more will want or have to keep working. To help make that possible,

psychologists will help identify methods for recruiting, managing and retaining older workers. Findings from psychological science are being used to explore ways that retirees can remain involved in their communities.

Decision-making capacity. With the aging of the baby boomers will come a huge increase in the number of older people who may no longer be fully capable of making medical, financial and other decisions for themselves. Psychologists will find better ways to assess decision-making capacity and keep older people involved in making choices about their own lives even in the face of disability.

Long-term care. As options for supportive living environments and long-term care increase, psychologists will determine what makes a good program and how to enhance life for residents. Their primary goal? To improve the fit between older people's changing abilities and care environments that compensate for those changes.

Collaborative health-care. Psychologists will find new ways of working with physicians and other professionals to ensure the best treatment of diabetes, heart disease and other conditions. They will also discover the best strategies for helping patients adhere to medical regimens and develop healthy habits.

This booklet was written by Rebecca A. Clay.



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