

# Productivity & Engagement in an Aging America: The Role of Volunteerism

*Dawn C. Carr, Linda P. Fried & John W. Rowe*

*Abstract: Volunteering in late life is associated with health benefits such as reduced risk of hypertension, improved self-related health and well-being, delayed physical disability, enhanced cognition, and lower mortality. Although the mechanisms of these correlations are not clear, increases in physical activity, cognitive engagement, and social interactions likely play contributing roles. Volunteers are typically thought to represent a select group, often possessing higher levels of education and income, good health, and strong social networks. However, group evidence indicates that there are many members of groups of lower socio-economic status (SES), including elderly adults, who serve their communities on a regular basis and in high-priority programs. We propose that the impact of volunteering in an aging population be recognized and invested into, and that effective programs harness social capital of older adults to address critical societal needs and also improve the well-being of older adults. While members of low-SES groups are less likely to volunteer, they exhibit disproportionately great benefits. The Experience Corps represents a model of an effective volunteerism program, in which elders work with young schoolchildren. Existing federal initiatives, including the Foster Grandparent Program and Senior Companion Program – which target low-income elders – have had low participation with long waiting lists. Given the proven benefits and relatively low proportion of older persons who volunteer, enhancement of elder volunteerism presents a significant opportunity for health promotion and deserves consideration as a national public health priority.*

DAWN C. CARR is a Social Science Research Associate at Stanford Center on Longevity at Stanford University.

LINDA P. FRIED is Dean of the Mailman School of Public Health at Columbia University.

JOHN W. ROWE, a Fellow of the American Academy since 2005, is Professor at the Columbia University Mailman School of Public Health.

(\*See endnotes for complete contributor biographies.)

Recent and expected future increases in life expectancy and the increasing proportion of our population that will be elderly has stimulated substantial research into the factors that promote well-being and health in late life. Early research on aging was concerned primarily with understanding the average or usual physiologic and psychological changes associated with aging, particularly in the context of inevitable loss and decline as part of senescence. The first White House Conference on Aging in 1961, however, reoriented gerontological research to provide information that facilitates good societal and individual choices associated with positive aging outcomes.<sup>1</sup> More than twenty-five years later, John Rowe and gerontologist Robert Kahn – working as part of the MacArthur Foundation Research Network on an Aging Society – sought to advance discussions about

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successful aging to enhance our understanding of the mechanisms involved.<sup>2</sup> They proposed that successful aging should reflect the distinction between two non-pathologic forms of aging – usual and successful – and called for research investigating the factors underlying the heterogeneity among older people. Following a decade of systematic studies in this area, the MacArthur Network laid out three critical factors to successful aging: 1) avoidance of disease and disability; 2) maintenance of high cognitive and physical function; and 3) engagement with life.<sup>3</sup>

As discussed in the introduction to this volume, engagement through either paid work or volunteering is an important component of assuring that the United States will be a productive and equitable society as it ages. A substantial body of research indicates that remaining an active member of society through meaningful and productive social roles yields many benefits to the elderly.<sup>4</sup> For those concerned about the impact of aging at both the individual and population levels, volunteerism is an attractive area of study: it leverages human capital to create social capital, offers substantial health benefits that facilitate a successful aging lifestyle, and facilitates societal cohesion as a powerful tool for connecting generations through a shared sense of purpose.<sup>5</sup>

Distinct from forms of societal engagement such as caregiving, providing informal help to friends or family, or paid work, volunteering typically refers to what is commonly understood to include working for an organization for no (or very modest) pay in a capacity that would otherwise involve fiscal remuneration.<sup>6</sup> It also is presumed to be an activity in which the individual involved is uncoerced and driven primarily by a concern for his or her community.<sup>7</sup> Working in exchange for very limited compensation, often to cover transportation or meal expenses – so-called

paid volunteering – is considered part of the general category of volunteering. While there are definitional differences among many of the major available data sources, volunteer engagement among older people seems to be on the rise over the last several decades, with somewhere between one in four and one in three older people in the United States volunteering today.<sup>8</sup> Among older volunteers, approximately half dedicate two or more hours per week on average, with the rest involved only sporadically.<sup>9</sup>

A growing body of research and interventions related to volunteering has bolstered our understanding of the range of ways in which it is associated with positive health outcomes in later life.<sup>10</sup> Although the health benefits associated with volunteering are robust, we are only beginning to understand the mechanisms of the positive benefits attributed to volunteer engagement.

Three primary mechanisms have been hypothesized to produce these benefits: increased physical engagement, cognitive engagement, and social interaction.<sup>11</sup> First, with respect to physical benefits, volunteering has been shown to be associated with reduced risk of onset of diseases (including decreased risk of hypertension), decreased mortality risk, improved self-rated health, and delayed decline in physical functioning.<sup>12</sup> These physical health benefits purportedly stem, at least in part, from the extent to which volunteering involves increased levels of physical engagement, though most volunteer activities include only mild or moderate levels of activity. Second, with respect to cognitive benefits, volunteering has been shown to be related to enhanced cognitive function.<sup>13</sup> The cognitive benefits attributed to volunteering are proposed to relate to the level of cognitive engagement required to perform the tasks associated with volun-

teering, which include executive planning and use of memory.<sup>14</sup> Third, with respect to social interaction, in addition to being linked to decreased depressive symptoms,<sup>15</sup> social engagement in volunteering is associated with enhanced overall well-being, with increased benefits with more time spent volunteering.<sup>16</sup> Volunteer activities typically involve social interactions, with both the people whom the volunteers are helping and those whom they are volunteering alongside. Some researchers have presumed that the value of increased social interaction to mental health is based in part on the feeling of “mattering” to others.<sup>17</sup> However, the benefits of maintaining meaningful relationships with others has been shown to have far-reaching effects on longevity, and could point to physiological factors such as decreases in overall stress.<sup>18</sup>

In addition to our lack of detailed understanding of the mechanisms underlying the benefits of volunteering, we have scant information on the “dose response” of the benefits, including both the intensity and duration of the engagement. While a few studies suggest that two hours per week of volunteering produces the greatest benefits, with additional engagement producing no additional benefit and potentially leading to detrimental effects on health,<sup>19</sup> others suggest that engagement beyond two hours per week on average does, in fact, produce more significant health benefits.<sup>20</sup> Clearly the dose of volunteering that yields the greatest individual health benefits has yet to be determined, and new insights into dose responsivity will be key to the design of volunteering initiatives.

A key potential limitation of a major expansion of senior volunteering relates to selection effects: the significant differences between volunteers and nonvolunteers.<sup>21</sup> High educational attainment, sufficient income (in part because volunteers

are also more likely to work at least part time), being married (particularly for those whose spouse also volunteers), and being in good health all increase the likelihood of volunteering: these characteristics provide individuals with greater capacity to contribute than their lower resourced peers, and their social connections facilitate greater access to opportunities (for example, they are more likely to be asked to volunteer).<sup>22</sup> Research has shown that social networks that value volunteer engagement produce in their members a stronger sense of obligation to volunteer.<sup>23</sup> Offering a stipend and volunteer opportunities of high value to the community and especially to children are important strategies to attract significant numbers of volunteers from all racial and ethnic backgrounds. Minority groups also spend considerable time volunteering in church or other community groups that are often “under the radar” of scholars or agencies who evaluate volunteerism activities. In addition, sociologists Yunqing Li and Kenneth Ferraro found that individuals who struggle with depression are more likely to seek out volunteering opportunities, and that they experience a decrease in symptoms with formal engagement in volunteering.<sup>24</sup> Understanding the impact of such selection effects on the dynamics of volunteering is required to better understand the causal pathways between volunteering and well-being, particularly if we are interested in maximizing the public health impact of volunteer engagement.

Volunteering is not static: people frequently move into or out of this form of engagement. People may volunteer for many years and then stop when they experience a health event that prevents continued engagement, or they may switch from one organization to another that more readily accommodates their abilities.<sup>25</sup> In addition, some individuals who have never volunteered may reach later life and choose

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to begin volunteer engagement at the request of a friend. Although the factors driving these behaviors cannot be fully explained using the large observational data sets for which much of the research findings associated with volunteering are based, at a broader level, some important patterns have emerged.

First, once someone becomes a volunteer, he or she is more likely to remain one; thus, it is easier to keep a volunteer from quitting than it is to get a nonvolunteer to start volunteering, especially when the sociopolitical context values volunteering and offers positive reinforcement.<sup>26</sup> Second, those with past volunteer experiences are likely to return to volunteering if they do stop, particularly if they have a history of volunteering at higher intensity levels.<sup>27</sup> Third, those who have never volunteered are less likely to start; and if they have fair or poor health, are disabled, have limitations related to executive function, or have less than a high school education, they are highly unlikely to start volunteering.<sup>28</sup> Fourth, the dynamics associated with volunteering are influenced by the dynamics of engagement in other productive activities. In general, by simply engaging in any other productive activities (including caregiving or work) individuals are more likely to start a new volunteer role.<sup>29</sup> Decreasing time spent engaged in paid work is also associated with increased likelihood of starting a volunteer role<sup>30</sup> and compared to those who fully retire, those who choose to retire into a part-time job are more likely to start or continue volunteering.<sup>31</sup> Finally, despite the increase in volunteering that accompanies work-hour reductions, it is much more likely that a nonvolunteer will start volunteering in later life if they begin volunteering prior to retirement,<sup>32</sup> if they marry/are married to a volunteer, or if they are asked to volunteer.<sup>33</sup> Importantly, selection effects may influence not only who volunteers and to

what degree they are involved, but also how much they benefit from it. For instance, despite engaging in volunteering at much lower rates, individuals with lower levels of resources have been shown to experience disproportionately higher benefits from volunteering.<sup>34</sup>

The abundant evidence demonstrating that those who volunteer are better resourced and better poised to volunteer than those who do not has raised concerns about volunteering being a privilege.<sup>35</sup> If volunteering offers evidence of individual “success” in aging, the alternative (presumably unsuccessful or “usual” aging) may be depicted as a reflection of an individual’s poor choices.<sup>36</sup> In other words, since volunteering would seem to be a lifestyle choice, the onus for obtaining the benefits of volunteering is then placed on individuals, who may or may not have the means to participate. In addition, with volunteering producing such potent health benefits, the extent to which certain groups of individuals lack access to volunteer roles in later life suggests that unequal ability to participate in volunteering is a major public health and health-disparities concern. With these considerations in mind, a new agenda for volunteerism research has been to identify ways to minimize volunteer disparities and, by extension, minimize health disparities among older adults.

As noted above, individuals with lower levels of resources have been shown to experience disproportionately greater benefits from volunteering.<sup>37</sup> Interest in increasing participation in volunteering among underrepresented groups has led to several interventions designed to enhance participation among older people. The first step in building the interventions was to gain a clearer understanding of the key barriers to volunteering. These barriers include issues related to disability, cost to the individual, access, opportunity/incen-



tive, and social network and environmental factors. Institutional level responses have effectively enhanced participation of older nonvolunteers and retained existing volunteers using five primary strategies: 1) designing for high impact of service; 2) role flexibility; 3) recognition; 4) accommodation and training; and 5) compensation.<sup>38</sup> Offering flexible volunteer opportunities has been shown to increase participation, and it may be an especially effective tool for encouraging underrepresented groups who may have fewer resources and who are more likely to face greater informal and formal care responsibilities or time-consuming and potentially unpredictable health problems. Recognizing older adults' contributions are also important to increasing participation and maintaining volunteers. Older people want to ensure that the ways their time is being used matters, and tend to respond more strongly to positive feedback that relates to the benefit of younger people;<sup>39</sup> this positivity enhances the effect of rewarding altruistic commitments.<sup>40</sup> Older people who have fewer skills and abilities in later life (such as those with lower levels of educational attainment) often feel less confident about being able to volunteer, despite having a desire to do so. In addition to having fewer skills, those with fewer resources are also disproportionately more likely to have health problems that may limit mobility and, thus, the ability to volunteer. Organizations that offer training or skill development necessary to successful volunteering and who are able to accommodate mobility problems, including by providing transportation, enjoy an increase in sustained participation.<sup>41</sup>

The fourth and perhaps most controversial approach used to increase the participation of individuals in underrepresented groups in volunteering during later life is compensation, or so-called paid volunteering. Both monetary and nonmone-

tary compensations can incentivize volunteer participation. Nonmonetary incentives include training or skill development opportunities, but more common strategies include goods or services such as food; medical services such as free physical examinations; gift certificates; or prizes.<sup>42</sup> These strategies have been shown to be helpful for enhancing participation somewhat, but are minimally associated with sustained volunteer engagement.<sup>43</sup>

Compensation was proposed to increase sustained engagement specifically of underrepresented groups, but researchers discovered that all older adults – regardless of socioeconomic status – find the stipend important. This is for two reasons: 1) most elderly are on a fixed income, and the small stipend covers out of pocket costs of volunteering; and 2) a stipend lends credibility to the program, since it demonstrates that organizers believe its impact is worth the financial investment. Programs like Peace Corps and AmeriCorps have utilized monetary stipends to increase participation for decades, and the recently implemented Edward M. Kennedy Serve America Act of 2009 called for an increase in stipend volunteer roles for people of all ages. However, financial compensation for volunteer engagement during later life was first introduced by initiatives designed to increase community service engagement among low-income older adults. In 1965, the first program associated with today's "Senior Corps" programs was introduced: the Foster Grandparent Program. This program was designed to provide both a meaningful community and intergenerational engagement role for older adults, and an income supplement for low-income elders.<sup>44</sup> In 1974, another federally sponsored Senior Corps program was introduced: the Senior Companion Program. This program continues to offer financial stipends for income-eligible older people. The Senior Companion Program supports

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John W. Rowe*

older adult volunteers who visit the homes of frail elders, providing them with social support and thereby enhancing the resources they have available to age in place successfully. Both Senior Corps programs were designed to encourage high engagement volunteer roles – those requiring fifteen to forty hours of service per week – and support antipoverty efforts.

These volunteer programs have been minimally modified since their introduction, and there are no studies assessing the impact of the stipend or if the programs decrease disparities. Because funding levels are so limited, participation in these programs continues to be fairly low. For example, in 2012, the Foster Grandparent Program saw only 28,500 participating out of the eligible nineteen million adults aged fifty-five and above living at or below 200 percent of the poverty line. Lack of participation could be related to the stigma associated with receipt of a means-based stipend, poor health, lack of access to opportunities, or due to participation in other roles (such as paid work or caring for family members); but the presence of long waiting lists for these programs suggest that limited funding is playing a major role in their failure to grow. While the Foster Grandparent Program has elicited participation from diverse older adults who are income eligible, should funds become available to further expand eligibility, engagement by older adults with moderate and moderate-to-low income may greatly increase the public health and social impact of this program. Like other means-tested programs, some individuals who are income-eligible may not participate because of the attention brought to their financial circumstances. Furthermore, those unable or uninterested in high-engagement volunteering are also excluded.<sup>45</sup>

Although there are discrepancies in the extent to which it is an effective policy and program tool for all volunteer programs,

the use of stipends as an intervention to increase engagement of underrepresented older adults in volunteering and to improve the health of individuals and communities has been shown to be successful in a more recently introduced program: the Experience Corps. The Experience Corps brings older adult volunteers into public elementary schools to help improve students' academic achievement. Described below, the Experience Corps has observed higher recruitment rates, longer volunteer tenure, increased hours of engagement, and increased benefits associated with participation with use of stipends.<sup>46</sup>

The Experience Corps, the most robustly studied volunteer program designed for older Americans, has clearly demonstrated that volunteer interventions can play an important role in enhancing the well-being of older volunteers as well as the beneficiaries they serve. The core of the model that became the Experience Corps (a title suggested by Lyndon B. Johnson's Secretary of Health, Education, and Welfare, John Gardner) was independently designed and proposed by Linda Fried and Encore.org-founder Marc Freedman, who together collaborated on the final design in 1994. The overall strategy was to embed an evidence-based health-promotion/disease-prevention program in a senior volunteering initiative to create a community-based social model of high-impact health enhancement. The hypothesis was that this approach would deliver effective prevention and health promotion into the community for all older adults – including those who otherwise might not access health promotion programs – and would lead to decreased rates of mobility and IADL (instrumental activities of daily living) disability, frailty, falls, and cognitive decline. The approach would also produce delayed onset of these ailments at a pop-

ulation level, thus contributing to a compression of morbidity. The vehicle through which this prevention would occur would have a generative impact, organizing and amplifying the social capital offered by an aging society to support improved academic outcomes of vulnerable children and the teaching effectiveness and efficacy of teachers. Ultimately, the goal was to demonstrate that a new social institution could be designed to create meaningful roles and responsibilities for older adults while also exposing the benefits for all generations achieved through the increased engagement of older adults in an aging society. The Experience Corps model targets children from kindergarten to third grade, reflecting the research that suggests that children who do not succeed in school by the third grade are more likely to drop out.

Congressional support was provided for pilot studies in five cities: New York (via the Community Service Society); Philadelphia; Minneapolis; Port Arthur, Texas; and Portland, Oregon. Implemented through the Corporation for National and Community Service (with Linda Fried and Marc Freedman), the pilot project was conducted between 1996 and 1997 to assess design elements and roles for older adults, to identify requirements for implementation, and to determine feasibility and acceptability to older volunteers and schools. During this demonstration, it became evident that it was impossible in some cities to recruit for this significant time commitment (fifteen hours per week) without offering a stipend; as a result, all sites started offering a stipend at the level that the Foster Grandparent Program provided: \$200 per month. This potentiated older adults living on modest fixed incomes being able to serve by providing money for bus fare and other expenses of service.

The model was carefully designed, deploying a critical mass of older adults at each school, all of whom committed fif-

teen hours per week throughout the full school year. They served and were trained in teams for the roles they would perform, and learned the unique challenges associated with twenty-first-century schools. At the conclusion of the pilot demonstration, all five sites reported that the model met all of its original criteria for success: providing roles that were of importance to principals and meaningful to volunteers; using high intensity, fifteen-hours-per-week service; providing comprehensive training; deploying volunteers in teams; deploying a critical mass of volunteers in each school; providing a stipend; creating a diverse volunteer force; improving health of volunteers and building a vehicle for generative impact; establishing pathways to leadership for volunteers; and ensuring that all elements of the program be a win-win-win for children, schools, and older adults.

After the initial success of the pilot program, a second successful national demonstration was launched to target literacy at the original five sites. Linda Fried, who was then based at Johns Hopkins, led the initiative to expand the program to Baltimore. These demonstrations were followed by a highly successful pilot randomized trial, which was published in 2004.<sup>47</sup> Thereafter, Freedman started Civic Ventures (now Encore.org) in San Francisco to create a movement built around service by older adults and to organize a franchise of programs, formalized as Experience Corps™. The program has since grown to include twenty-three cities, many of whom provide funding for the program, and in 2009, the program became affiliated with the AARP. Studies of the Experience Corps model have shown remarkable results. K–3 students in the intervention schools, as compared to those in control schools, have shown improved standardized reading scores and markedly fewer referrals for behavioral problems. The results to date ap-

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John W. Rowe*

pear to suggest that boys benefit from the program more than do girls. Teachers and principals report large improvements in school atmosphere and climate (school safety, delinquency, classroom order, learning environment) with a critical mass of high time-commitment Experience Corps volunteers in the school.

The benefits to older adult volunteers have been particularly robust.<sup>48</sup> They reported experiencing higher levels of social integration and sense of generative achievement than controls. Additionally, the number of hours of service was proportional to benefits. Overall, there were modest benefits to lifestyle, intellectual, and physical activity at twelve months. Perhaps most important, those with low levels of each type of activity at baseline show meaningful and significant increases. For physical activity, increases were approximately 800 Kcal burned per week, an amount consistent with a modest exercise program. Experience Corps also showed the first evidence that a community-based activity engagement program directly impacts markers of brain health known to buffer the brain from the clinical expression of neuro-pathologies, such as Alzheimer's disease and vascular dementia. Findings indicated that length as well as dose of exposure matters: for men, the benefits emerge during the second year of service. Older women with baseline low/normal levels of cognitive function experienced improved executive function and corresponding brain activation on fMRI (functional MRI) within one year.<sup>49</sup>

At the outset of Experience Corps, the prevailing "wisdom" related to volunteering was based primarily on upper socioeconomic status (SES) white women. Experience Corps showed that levels of informal community, civic, and church-based service in the African-American community is significant. Fried correctly theorized that minority and lower SES old-

er adults would respond to the opportunity to volunteer for a program designed for high impact on the futures of children. This was conditioned on providing a modest monthly stipend (about \$200–250 taxable dollars per month) that covered the costs of volunteering (bus fare, lunches, and so on) for older adults who had limited resources. This stipend served as incentive to volunteer because it signified that society expects the volunteer service to make a difference. It also contributed to full participation: with a little money on the line, volunteers seemed to be motivated to get up each morning and participate when they may otherwise have decided not to. Perhaps more important, because of the stipend, minority older adults became the dominant volunteer group.

To date, the Experience Corps demonstrates that older people *will* volunteer to make a difference for the next generation, and that a societal institution that transforms human capital into social capital for generativity, in a model designed for high impact, can harness this energy. People participate to ensure their legacy as well as to give back. Retention is high because volunteers receive evidence that they are making a difference. The Experience Corps is both a volunteer and public health program, delivering a high and sustained dose of prevention to diverse older adults: fifteen hours per week of increased physical, cognitive, and social activity and social engagement/integration with meaning and purpose. The return on investment has been demonstrated to be high, and could increase dramatically when the long-term impact on children's and older adults' outcomes are assessed.

Unlike other health interventions that facilitate similar health benefits in late life, such as exercise, volunteer programs have the additional potential to provide a means to address important social problems and



thus strengthen civil society.<sup>50</sup> With the combination of addressing important social problems and the benefits offered to those who engage, volunteering has gained attention among policy-makers in the United States and in other developed and developing nations. In addition to positive contributions to the health of older adults – potentially facilitating delayed onset of morbidity and mortality – volunteering has also been shown to leverage human capital in a way that facilitates workforce opportunities. Particularly for those who have less financial resources in retirement, enhancing opportunities to maintain income in later life is critical. Volunteering increases available social resources by facilitating social network connections and opportunities to obtain skills that are valuable in the paid workforce. As we prepare for U.S. society to age successfully, volunteer engagement programs should play an important role. The Experience Corps demonstrates that a volunteer intervention can successfully leverage the accumu-

lating reserve of knowledge, skills, and experiences of older adults to target specific social problems and simultaneously facilitate compressed morbidity of the older population.

With these considerations in mind, and in view of the accumulated scientific evidence of its benefits, the time has come to identify late-life engagement through volunteering as a major public health issue, with special emphasis on engagement of individuals across the full socioeconomic spectrum, including those with fewer resources who have the most to gain. This effort will require federal and local support, as well as additional research to identify both the specific “dose” at which volunteering yields the maximum benefit and the best strategies to recruit individuals with diverse social characteristics. If successful, a comprehensive national effort to enhance volunteerism in late life can be an important component of our successful transition to a productive and equitable aging society.

Dawn C. Carr,  
Linda P. Fried &  
John W. Rowe

#### ENDNOTES

\* Contributor Biographies: DAWN C. CARR is a Social Science Research Associate at Stanford Center on Longevity at Stanford University. She edited *Gerontology in the Era of the Third Age: Implications and Next Steps* (with Kathrin Komp, 2011); has contributed articles to such journals as *Activities, Adaptation and Aging*, *The Gerontologist*, and *Journal of Health and Human Services Administration*; and serves on the editorial board of *The Gerontologist*.

LINDA P. FRIED is Dean of the Mailman School of Public Health, Senior Vice President of the Columbia University Medical Center, the DeLamar Professor of Public Health, and Professor of Epidemiology and Medicine at Columbia University. She is the designer and cofounder of Experience Corps, and also founded the Johns Hopkins Center on Aging and Health. She serves on the editorial boards of *The Journals of Gerontology: Biological Sciences & Medical Sciences* and *Aging*.

JOHN W. ROWE, a Fellow of the American Academy since 2005, is Professor at the Columbia University Mailman School of Public Health and Chair of the MacArthur Foundation Research Network on an Aging Society. He is the author of *Successful Aging* (with Robert L. Kahn, 1998) and was the Chair of the Institute of Medicine of the National Academies project the Future Health Care Workforce for Older Americans, which authored the report *Retooling for an Aging America: Building the Health Care Workforce* (2008).

- <sup>1</sup> Robert J. Havighurst, "Successful Aging," *The Gerontologist* 1 (1) (1961): 8–13, doi:10.1093/geront/1.1.8.
- <sup>2</sup> John W. Rowe and Robert L. Kahn, "Human Aging: Usual and Successful," *Science* 237 (4811) (1987): 143–149, doi:10.1126/science.3299702.
- <sup>3</sup> Robert L. Kahn, "Guest Editorial on 'Successful Aging and Well-Being: Self-Rated Compared with Rowe and Kahn,'" *The Gerontologist* 42 (6) (2002): 725–726, doi:10.1093/geront/42.6.725; and John W. Rowe, "The New Gerontology," *Science* 278 (5337) (1997): 367–375, doi:10.1126/science.278.5337.367.
- <sup>4</sup> Caroline E. Jenkinson, Andy P. Dickens, Kerry Jones, Jo Thompson-Coon, Rod S. Taylor, Morwenna Rogers, Clare L. Bamba, Iain Lang, and Suzanne H. Richards, "Is Volunteering a Public Health Intervention? A Systematic Review and Meta-Analysis of the Health and Survival of Volunteers," *BMC Public Health* 13 (2013): 773–783, doi:10.1186/1471-2458-13-773; Ming-Ching Luoh and A. Regula Herzog, "Individual Consequences of Volunteer and Paid Work in Old Age: Health and Mortality," *Journal of Health and Social Behavior* 43 (4) (2002): 490–509; Yunkyung Jung, Tara L. Gruenewald, Teresa E. Seeman, and Catherine A. Sarkisian, "Productive Activities and Development of Frailty in Older Adults," *The Journals of Gerontology: Psychological Sciences & Social Sciences* 65 (2) (2010): 256–261, doi:10.1093/geronb/gbp105; Nicole D. Anderson, Thecla Damianakis, Edeltraut Kröger, Laura M. Wagner, Deirdre R. Dawson, Malcolm A. Binns, Syrelle Bernstein, Eilon Caspi, Suzanne L. Cook, and the BRAVO Team, "The Benefits Associated with Volunteering among Seniors: A Critical Review and Recommendations for Future Research," *Psychological Bulletin* 40 (6) (2014): 1503–1533, doi:10.1037/a0037610; Hui-Xin Wang, Anita Karp, Bengt Winblad, and Laura Fratiglioni, "Late-Life Engagement in Social and Leisure Activities is Associated with Decreased Risk of Dementia: A Longitudinal Study from the Kungsholmen Project," *American Journal of Epidemiology* 155 (12) (2002): 1081–1087, doi:10.1093/aje/155.12.1081; Thomas A. Glass, Carlos F. Mendes De Leon, Shari S. Bassuk, and Lisa F. Berkman, "Social Engagement and Depressive Symptoms in Late Life Longitudinal Findings," *Journal of Aging and Health* 18 (4) (2006): 604–628, doi:10.1177/0898264306291017; Jesse E. Hinterlong, Nancy Morrow-Howell, and Philip A. Rozario, "Productive Engagement and Late Life Physical and Mental Health: Findings from a Nationally Representative Study," *Research on Aging* 29 (4) (2007): 348–370; Terry Y. Lum and Elizabeth Lightfoot, "The Effects of Volunteering on the Physical and Mental Health of Older People," *Research on Aging* 27 (1) (2005): 31–55, doi:10.1177/0164027504271349; Nancy Morrow-Howell, "Volunteering in Later Life: Research Frontiers," *The Journals of Gerontology: Psychological Sciences & Social Sciences* 65 (4) (2010): 461–469, doi:10.1093/geronb/gpqq024; and Jan E. Mutchler, Jeffrey A. Burr, and Francis G. Caro, "From Paid Worker to Volunteer: Leaving the Paid Workforce and Volunteering in Later Life," *Social Forces* 81 (4) (2003): 1267–1293, doi:10.1353/sof.2003.0067.
- <sup>5</sup> Generations United and the Generations Initiative, *Out of Many, One: Uniting the Changing Faces of America* (Washington, D.C.: Generations United, 2013), <http://www.gu.org/RESOURCES/Publications/OutofManyOne.aspx>; Jean E. Kincaide, Donna J. Rabiner, Shulamit L. Bernard, Alison Woomert, Thomas R. Konrad, Gordon H. DeFries, and Marcia G. Ory, "Older Adults as a Community Resource: Results from the National Survey of Self-Care and Aging," *The Gerontologist* 36 (4) (1996): 474–482, doi:10.1093/geront/36.4.474; and Greg O'Neill, Sarah F. Wilson, and Nancy Morrow-Howell, "The Civic Enterprise: Advancing Civic Engagement Opportunities in Later Life," in *Civic Engagement in an Older America*, ed. Greg O'Neill and Sarah F. Wilson (Washington, D.C.: Gerontological Society of America, 2010).
- <sup>6</sup> Morrow-Howell, "Volunteering in Later Life."
- <sup>7</sup> Ram A. Cnaan, Femida Handy, and Margaret Wadsworth, "Defining Who is a Volunteer: Conceptual and Empirical Considerations," *Nonprofit and Voluntary Sector Quarterly* 25 (3) (1996): 364–383.
- <sup>8</sup> Barbara A. Butrica, Richard W. Johnson, and Sheila R. Zedlewski, "Volunteer Dynamics of Older Americans," *The Journals of Gerontology: Psychological Sciences & Social Sciences* 64 (5) (2009): 644–655, doi:10.1093/geronb/gbno42.

- 9 Morrow-Howell, "Volunteering in Later Life."
- 10 Jenkinson et al., "Is Volunteering a Public Health Intervention?"; Anderson et al., "The Benefits Associated with Volunteering among Seniors"; Ben Heaven, Laura J.E. Brown, Martin White, Linda Errington, John C. Mathers, and Suzanne Moffatt, "Supporting Well-Being in Retirement through Meaningful Social Roles: Systematic Review of Intervention Studies," *The Milbank Quarterly* 91 (2) (2013): 222–287, doi: 10.1111/milq.12013; and Linda P. Fried, Michelle C. Carlson, Marc Freedman, Kevin D. Frick, Thomas A. Glass, Joel Hill, Sylvia McGill, George W. Rebok, Teresa Seeman, James Tielsch, Barbara A. Wasik, and Scott Zeger, "A Social Model for Health Promotion for an Aging Population: Initial Evidence on the Experience Corps Model," *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 81 (1) (2004): 64–78, doi:10.1093/jurban/jth094.
- 11 Anderson et al., "The Benefits Associated with Volunteering among Seniors"; and Fried et al., "A Social Model for Health Promotion for an Aging Population."
- 12 Luoh and Herzog, "Individual Consequences of Volunteer and Paid Work in Old Age"; Jung et al., "Productive Activities and Development of Frailty in Older Adults"; Lum and Lightfoot, "The Effects of Volunteering on the Physical and Mental Health of Older People"; Morrow-Howell, "Volunteering in Later Life"; and Mutchler et al., "From Paid Worker to Volunteer."
- 13 Anderson et al., "The Benefits Associated with Volunteering among Seniors"; and Wang et al., "Late-Life Engagement in Social and Leisure Activities is Associated with Decreased Risk of Dementia."
- 14 Michelle C. Carlson, Kirk I. Erickson, Arthur F. Kramer, Michelle W. Voss, Natalie Bolea, Michelle Mielke, Sylvia McGill, George W. Rebok, Teresa Seeman, and Linda P. Fried, "Evidence for Neurocognitive Plasticity in At-Risk Older Adults: The Experience Corps Program," *The Journals of Gerontology: Biological Sciences & Medical Sciences* 64 (12) (2009): 1275–1281, doi:10.1093/gerona/64.12.1275.
- 15 Glass et al., "Social Engagement and Depressive Symptoms in Late Life Longitudinal Findings"; Hinterlong, Morrow-Howell, and Rozario, "Productive Engagement and Late Life Physical and Mental Health"; and Lum and Lightfoot, "The Effects of Volunteering on the Physical and Mental Health of Older People."
- 16 Heaven et al., "Supporting Well-Being in Retirement through Meaningful Social Roles"; and Fried et al., "A Social Model for Health Promotion for an Aging Population."
- 17 Jane Allyn Piliavin and Erica Siegl, "Health Benefits of Volunteering in the Wisconsin Longitudinal Study," *Journal of Health and Social Behavior* 48 (4) (2007): 450–464, doi:10.1177/002214650704800408.
- 18 Seoyoun Kim and Kenneth F. Ferraro, "Do Productive Activities Reduce Inflammation in Later Life? Multiple Roles, Frequency of Activities, and C-Reactive Protein," *The Gerontologist* 54 (5) 2014: 830–839.
- 19 Luoh and Herzog, "Individual Consequences of Volunteer and Paid Work in Old Age"; Lum and Lightfoot, "The Effects of Volunteering on the Physical and Mental Health of Older People"; and Marieke Van Willigen, "Differential Benefits of Volunteering Across the Life Course," *The Journals of Gerontology: Psychological Sciences & Social Sciences* 55 (5) (2000): S308–S318, doi:10.1093/geronb/55.5.S308.
- 20 Nancy Morrow-Howell, Jim Hinterlong, Philip A. Rozario, and Fengyan Tang, "Effects of Volunteering on the Well-Being of Older Adults," *The Journals of Gerontology: Psychological Sciences & Social Sciences* 58 (3) (2003): S137–S145, doi:10.1093/geronb/58.3.S137; and Rodlescia S. Sneed and Sheldon Cohen, "A Prospective Study of Volunteerism and Hypertension Risk in Older Adults," *Psychology and Aging* 28 (2) (2013): 578–586, doi:10.1037/a0032718.
- 21 Peggy A. Thoits and Lyndi N. Hewitt, "Volunteer Work and Well-Being," *Journal of Health and Social Behavior* 42 (2) (2001): 115–131, doi:10.2307/3090173.

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Carr,  
Linda P.  
Fried &  
John W.  
Rowe

- <sup>22</sup> Morrow-Howell, "Volunteering in Later Life"; Butrica, Johnson, and Zedlewski, "Volunteer Dynamics of Older Americans"; Dawn C. Carr and Jon Hendricks, "Relevance of Social Capital and Lifestyle for the Third Age," in *Gerontology in the Era of the Third Age: Implications and Next Steps*, ed. Dawn C. Carr and Kathrin S. Komp (New York: Springer, 2011): 207–224; Tay K. McNamara and Ernest Gonzales, "Volunteer Transitions among Older Adults: The Role of Human, Social, and Cultural Capital in Later Life," *The Journals of Gerontology: Psychological Sciences & Social Sciences* 66 (4) (2011): 490–501; and Carroll L. Estes, Jane L. Mahakian, and Tracy A. Weitz, "A Political Economy Critique of 'Productive Aging,'" in *Social Policy and Aging: A Critical Perspective*, ed. Carroll L. Estes (Thousand Oaks, Calif.: Sage Publications, 2001), 187–200.
- <sup>23</sup> Butrica, Johnson, and Zedlewski, "Volunteer Dynamics of Older Americans."
- <sup>24</sup> Yunqing Li and Kenneth F. Ferraro, "Volunteering in Middle and Later Life: Is Health a Benefit, Barrier or Both?" *Social Forces* 85 (1) (2006): 497–519.
- <sup>25</sup> Butrica, Johnson, and Zedlewski, "Volunteer Dynamics of Older Americans."
- <sup>26</sup> Mutchler, Burr, and Caro, "From Paid Worker to Volunteer."
- <sup>27</sup> Francis G. Caro and Scott A. Bass, "Receptivity to Volunteering in the Immediate Postretirement Period," *Journal of Applied Gerontology* 16 (4) (1997): 427–441, doi:10.1177/073346489701600403; and Fengyan Tang, Nancy Morrow-Howell, and Eunhee Choi, "Why Do Older Adult Volunteers Stop Volunteering?" *Ageing and Society* 30 (5) (2010): 859–878.
- <sup>28</sup> Butrica, Johnson, and Zedlewski, "Volunteer Dynamics of Older Americans."
- <sup>29</sup> Ibid.
- <sup>30</sup> Mutchler, Burr, and Caro, "From Paid Worker to Volunteer."
- <sup>31</sup> Dawn C. Carr and Ben Lennox Kail, "The Influence of Unpaid Work on the Transition Out of Full-Time Paid Work," *The Gerontologist* 53 (1) (2013): 92–101.
- <sup>32</sup> Sheila R. Zedlewski, "Will Retiring Boomers Form a New Army of Volunteers?" *The Retirement Project: Perspectives on Productive Aging* (7) (2007): 1–7.
- <sup>33</sup> Butrica, Johnson, and Zedlewski, "Volunteer Dynamics of Older Americans."
- <sup>34</sup> Morrow-Howell, "Volunteering in Later Life."
- <sup>35</sup> Estes, Mahakian, and Weitz, "A Political Economy Critique of 'Productive Aging.'"
- <sup>36</sup> Kahn, "Guest Editorial on 'Successful Aging and Well-Being'"; and William J. Strawbridge, Margaret I. Wallhagen, and Richard D. Cohen, "Successful Aging and Well-Being: Self-Rated Compared with Rowe and Kahn," *The Gerontologist* 42 (6) (2002): 727–733.
- <sup>37</sup> Morrow-Howell, "Volunteering in Later Life."
- <sup>38</sup> Fengyan Tang, Nancy Morrow-Howell, and Song-lee Hong, "Inclusion of Diverse Older Populations in Volunteering: The Importance of Institutional Facilitation," *Nonprofit and Voluntary Sector Quarterly* 38 (5) (2008): 810–827, doi:10.1177/0899764008320195.
- <sup>39</sup> Laura L. Carstensen, "Social and Emotional Patterns in Adulthood: Support for Socioemotional Selectivity Theory," *Psychology and Aging* 7 (3) (1992): 331–338.
- <sup>40</sup> Morrow-Howell et al., "Effects of Volunteering on the Well-Being of Older Adults."
- <sup>41</sup> Andrea Galiette Skoglund, "Do Not Forget about Your Volunteers: A Qualitative Analysis of Factors Influencing Volunteer Turnover," *Health and Social Work* 31 (3) (2006): 217–220.
- <sup>42</sup> Ram A. Cnaan and Toni Cascio, "Performance and Commitment: Issues in Management of Volunteers in Human Service Organizations," *Journal of Social Service Research* 24 (3/4) (1998): 1–37.
- <sup>43</sup> Tang, Morrow-Howell, and Choi, "Why Do Older Adult Volunteers Stop Volunteering?"
- <sup>44</sup> Rosalyn Saltz, "Aging Persons as Child-Care Workers in a Foster Grandparent Program: Psychosocial Effects and Work Performance," *The International Journal of Aging and Human Development* 2 (4) (1971): 314–340.



- 45 Fengyan Tang, Nancy Morrow-Howell, and Song-Iee Hong, "Inclusion of Diverse Older Populations in Volunteering: The Importance of Institutional Facilitation," *Nonprofit and Voluntary Sector Quarterly* 38 (5) (2008): 810 – 827, doi:10.1177/0899764008320195.
- 46 Tang, Morrow-Howell, and Choi, "Why Do Older Adult Volunteers Stop Volunteering?"; and Amanda Moore McBride, Ernest Gonzales, Nancy Morrow-Howell, and Stacey McCrary, "Stipends in Volunteer Civic Service: Inclusion, Retention, and Volunteer Benefits," *Public Administration Review* 71 (6) (November/December 2011): 850 – 858.
- 47 Fried et al., "A Social Model for Health Promotion for an Aging Population."
- 48 Song-Iee Hong and Nancy Morrow-Howell, "Health Outcomes of Experience Corps: A High-Commitment Volunteer Program," *Social Science and Medicine* 71 (2) (2010): 414 – 420.
- 49 Carlson et al., "Evidence for Neurocognitive Plasticity in At-Risk Older Adults."
- 50 Caroline E. Jenkinson, Andy P. Dickens, Kerry Jones, Jo Thompson-Coon, Rod S. Taylor, Morwenna Rogers, Clare L. Bamba, Iain Lang, and Suzanne H. Richards, "Is Volunteering a Public Health Intervention? A Systematic Review and Meta-Analysis of the Health and Survival of Volunteers," *BMC Public Health* 13 (2013): 773 – 783, doi:10.1186/1471-2458-13-773.

Dawn C.  
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