

Report

**Productive Engagement of Older Adults:
Effects on Well-being**

Nancy Morrow-Howell

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George Warren Brown School of Social Work

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by

**Nancy Morrow-Howell
Center for Social Development
Washington University
Campus Box 1196
One Brookings Drive
St. Louis, Missouri 63130 USA
tel 314-935-7433
fax 314-935-8661
email csd@gwbmail.wustl.edu**

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Overview

Life expectancy has changed dramatically since the turn of the century. In 1997, the typical person retiring at age 65 could look forward to another 18 years of life, perhaps 12 of these active years (Center for Disease Control, 1999). In the face of this longevity, gerontology scholars have focused on well-being within those extended years. Recently, data from the MacArthur Foundation Study of Successful Aging has led Rowe and Kahn (1998) to propose that successful aging has three components: low probability of disease, high functioning, and active engagement with life. In their perspective, active engagement with life has two major components: 1) activity and 2) social support. Indeed, activity has long been associated with positive outcomes in later life (see Everard, Lach, Fisher, & Baum, 2000). However, there are numerous types of activity. And in fact, the “busy ethic” that has shaped modern retirement seems to suggest that any activity will do (Ekerdt, 1986). But Freedman (in press) argues that all activity is not created equal – to the individual, the family, and society.

This white paper focuses on a certain subset of activities -- productive activity. There are many definitions of productive activity offered in the literature. In this paper, I use a narrow definition offered by Bass, Caro, & Chen (1993): productive activity is any activity that produces goods or services, whether paid for or not. Activities included in this definition are volunteering, working, and caregiving. These activities are clearly a subset of activities in which older adults engage, and they have a common element: they have social benefit, benefits that extend beyond the individual.

Older adults engaged in these productive activities are performing valued functions to society. In fact, it is argued that there will be increased demand for elders in these roles in future years. The labor market will demand longer work lives (Blondal & Scarpetta, 1998; Barth, McNaught, & Rizz, 1995). Growing social problems and reduced public expenditures will demand increased volunteerism (Abraham, Arrington, & Wasserbauer, 1996; Cnaan & Cwikel, 1992). Increased numbers of the oldest old will require a larger force of caregivers (Butler, 1997). Thus, our society may require the productive engagement of older adults. Butler (1997) argues that we should transform retirement by extending work life and by expanding volunteer roles, *for the benefit of society as well as the individual*.

Yet we do not know a great deal about the effects of this type of engagement on well-being outcomes for the older adult. If older adults come forward in larger numbers to fill these roles in the extended late-life period (or if our society increases the demand on older adults to fill these roles), what will be the effect on the individual? To some extent, there is an assumption that productive engagement, in and of itself, is a good thing. Indeed, this assumption is supported by a great deal on literature on the benefits of social engagement. Yet a more refined research agenda is needed to elucidate the effects of the types, quantity, and conditions of activity on older adults. In this paper, I review what we do know about the impact of productive engagement on the individual older adult. This paper will focus on employment, volunteering, and caregiving as independent variables in regards to outcomes related to well-being in the later years of life. Well-being outcomes include mortality, physical health, mental health, functional

ability, and life satisfaction. I will also highlight what is not known and what research questions should be a priority.

Key research findings

A long tradition in health and mental health research associates social involvement with positive outcomes (as examples, see Berkman & Syme, 1979; Billings & Moos, 1982; Mendes de Leon, Glass, Beckett, Seeman, Evans, & Berkman, 1999; Moen, 1998). For examples, various forms of social participation have been linked to reduced mortality (House, Landis, & Umberson, 1988; Strawbridge, Cohen, Shema, & Kaplan, 1997; Rushing, Ritter, & Burton, 1992). Social isolation is linked to increased risk of depression (Kaplan, Roberts, Camacho, & Coyne, 1987). Participation in a variety of voluntary formal organizations is associated with higher life satisfaction (Fengler & Danigelis, 1982). The research review that follows focuses on a subset of this literature -- studies that look specifically at the impact of productive engagement in later life.

Engagement in paid work

A substantial body of literature documents a positive relationship between employment and well-being, even when health and financial status have been controlled (Conner, Dorfman, & Thompkins, 1985; Mathers & Schofield, 1998; Thompson, 1973). Methodological limitations have weakened causal conclusions in most of this work because health and mental health factors are both causes and effects of employment status (Kasl & Jones, 2000). However, almost twenty years ago, Soumerai and Avorn (1983) achieved an experimental design to test the effects of part-time work on older adults perceived health and life satisfaction. Retirees applying for part-time work with a park beautification project were randomly assigned into control and experimental groups; after six months of work, the employed elders reported more positive outcomes than the non-working controls (who, with the exception of one person, did not find other work during the six month observation period). In a two year study of older, unemployed blue-collar workers, prolonged unemployment during that period was associated with depression, reduced hope, and financial problems; although the sample was small, confounding variables that could be affecting both depression and unemployment status (like locus of control, sickness, passivity, and age) were controlled (Frese & Mohr, 1987).

More recently, a large, longitudinal study confirms the positive relationship between employment and health. Gallo, Bradley, Siegal, & Kasl (2000) studied older adults working in plants over a two-year period. Those who were involuntarily laid off during the observation period had poorer physical functioning and mental health outcomes, controlling for pre-job loss health status, labor income, and net worth. The strongest negative effects were on mental health outcomes. Furthermore, those older adults who regained employment had improved health and mental health outcomes at subsequent observations. These researchers conclude that late-stage job loss has important consequences for well-being, including mental health, health, and financial outcomes. They point out that older workers are displaced from jobs more than younger adults; thus these negative effects need to be considered as part of any counseling or relocation services offered.

The mechanisms by which employment contributes to well-being are not thoroughly understood. Mor-Barak, Scharlach, Birba, & Sokolov (1992) posited that for older adults, employment is related to larger social networks and, through this relationship, to better perceived health. They tested three social networks factors (family, friend, and confidant relationships) and found that employment was related to the friendship component. Mor-Barak (1995) further explored the meaning of work for older individuals and found that the generativity factor -- that is, viewing work as a way to teach, train, share skills with younger generation -- is particularly important to older adults. Aquino, Russell, Cutrona, Altmaier (1996) considered paid and unpaid work (volunteering) and tested the hypothesis that employment is associated with social support and companionship, controlling for age, income, mental and physical health. They found that the number of paid hours is related directly to life satisfaction (not through social support). On the other hand, volunteer work related to increased social support, and social support related to life satisfaction. In sum, paid work has a direct relationship to life satisfaction while unpaid work (volunteering) has an indirect relationship to life satisfaction.

The positive effects of employment seem to be conditioned by various factors. Herzog, House, & Morgan (1991) find that older people whose work patterns reflect their personal preferences report higher levels of physical and psychological well-being than people whose involvement in work is not under their control due to involuntary retirement or other factors. Rushing, Ritter, & Burton (1992) report that for whites, being employed is a protective factor for mortality; whereas blacks, whether employed or unemployed, are at greater risk for poorer health. Gallo et al. (2000) documented that older workers and unmarried workers had worse mental health outcomes in face of involuntary job loss.

In a recent review of the literature on job loss, retirement, and health, Kasl and Jones (2000) conclude that unemployment is associated with 20-30% excess in mortality in most studies, that the impact of unemployment on morbidity is evident, and that unemployment clearly increases psychological distress. They separate their discussion of unemployment from that of retirement because these are two different phenomena. Retirement involves being unemployed but, in most cases, one enters retirement in a voluntary, planned, on-time way. Of course, retirement can be entered involuntarily or off-time, and it is suggested that this trajectory may be associated with negative outcomes, yet there is only minimal evidence to support this (Ekerdt, 1995). They conclude that the research supports no adverse outcome of retirement per se and that variations in post-retirement outcomes most likely reflect preretirement status in physical health, social and leisure activities, well-being, and life satisfaction.

In sum, the productive activity of paid employment is, in general, associated with increased health and mental health of older workers. However, there are certain subgroups of older adults who do not benefit from such positive outcomes, including workers who are not in positions that reflect their preference. Additionally, some subpopulations do not benefit as much from employment, such as black older adults. Given the current trend toward actively recruiting older adults,¹ it is important to recognize older employees may be differentially affected. There may be financial, physical, and emotional gains for some individuals. However, it has been suggested that older adults are the “shock absorbers” for the changing American economy, and they are

¹ Older adults are in high demand as workers due to labor shortages and to the recognition of the maturity, high commitment, low absenteeism, and work ethic of older adults (Cavanaugh, 1998; Fyock & Dorton, 1995).

vulnerable to lay offs, inadequate salaries, and discrimination (Kaye & Alexander, 1995). Thus, the consequences of working in this larger context need further investigation.

Engagement in volunteer work

Many researchers over the years have documented a positive relationship between volunteering and well-being and life satisfaction, suggesting that volunteering can play an important role in maintaining good health in later life (see Havighurst, Neugarten, & Tobin, 1968; Herzog, Kahn, Morgan, Jackson, & Antonucci, 1989; Maddox, 1968; Ward, 1979). Despite the fact that most of the literature on the effects of volunteering on well-being outcomes is limited to description of associative factors rather than causal relationships, several well-design studies offer compelling evidence.

Moen, Dempster-McClain and Williams (1992) studied a sample of 300 women over a 30-year period. They found that involvement in clubs and organizations at the first observation was related to duration of health over the observation period, controlling for baseline health status. Volunteering related to subsequent functional ability. These researchers conclude that occupying multiple roles, including volunteer roles, is associated with on-going social integration and subsequent positive health outcomes, even after considering other background and health variables.

Furthermore, Musick, Herzog, and House (1999) document in an eight-year prospective study of more than 1,200 adults over the age of 65 that volunteers have lower mortality hazard than non-volunteers. The positive effect of volunteering was found after controlling for several aspects of health, socioeconomic status, and social integration, suggesting that volunteering has a positive effect over and beyond these factors.

Older adults serving in the Senior Companion Program² showed improved mental health after volunteering, compared to a wait-list control group who should no significant changes (SRA Technologies, 1985). Similarly, a large study of Foster Grandparents compared participants to those older adults on the waitlist. Over a three-year observation period, mental health and social resources improved for the volunteers while it declined for those who did not gain access to the program. Also, 71% of foster grandparents reported “never feeling lonely” while 45% of the waitlist group reported “never feeling lonely.” Over 80% of the foster grandparents reported being more satisfied with their lives since joining the volunteer effort (Litigation Support Services, 1984).

Research has yet to reveal the causal links between volunteering and improved health outcomes, given the reciprocal relationships between health, social resources, and volunteering. It is suggested that older volunteers benefit from the experience because of increased feelings of usefulness and boosted self-esteem (Hunter & Linn, 1980-81). Volunteer roles may replace work roles and prevent elders from the negative effects of role loss (Chambre, 1987) and social isolation (Moen et al., 1992). Freedman (1994) observes that the desire for older adults to volunteer may be driven as much by a “strong and straightforward desire for structure, purpose,

² Senior Companion is a federally-sponsored program where older adults are paired with and provide support to frail or isolated elders.

affiliation, growth and meaning” than by altruism (page 40). Perhaps volunteering provides an “inoculation” from the hazards of retirement, physical decline, and inactivity (Fischer & Schaffer, 1993).

In a now-dated study of 1400 elders in New England (Fengler, 1984), volunteering was related to life satisfaction when controlling for health, education, and work status. What is notable about this study, however, is that Fengler looked at subgroups of the older population and documented a stronger relationship between volunteering (as well as working) and life satisfaction within what he called “disadvantaged” subgroups -- elders living alone, in urban areas, and in poor health. He found an especially strong relationship between service-oriented volunteering and life satisfaction; that is, elders involved in volunteer service roles to their communities (like through the federally sponsored RSVP program which matches older volunteers with service opportunities in their communities) had higher life satisfaction. Building on the work of Larson (1978), he suggests that participation in work and volunteer activities is not as significant for older adults with personal and social resources (living with others, good health, education). However, when other resources are scarce, these productive activities have added significance.

Musick, Herzog, & House (1999) further demonstrate the importance of specification of conditions leading to positive outcomes by documenting that volunteers are not affected equally by their participation. This research reveals a curvilinear relationship between level of involvement and mortality, with moderate involvement offering the most benefit. That is, the protective effects of volunteering were strongest among those volunteering for only one organization and volunteering for modest amounts of time. They conclude that an older adult does not have to volunteer to a great extent to gain the benefits of volunteering. Although their findings are not conclusive, their work also suggests that volunteering has the most protective effect on those older adults with lower levels of informal social interaction. Specifically, the protective effect of volunteering was evident for those older adults with little informal social interaction, while the effects were not present for those with higher levels of interaction.

In sum, there are several sophisticated studies that demonstrate that volunteering contributes to improved health and well-being outcomes. There are projections that larger numbers of older adults in subsequent generations will seek meaningful volunteer experiences (Peter D. Hart Research Associates, 1999; Soo & Gong-Soog, 1998); and it is probable that subsequent generations of older adults will be in greater demand as volunteers because women, who have traditionally provided a large volunteer force, continue to increase participation in the paid labor force (Caro and Bass, 1995). Thus, research efforts to understand the subpopulations and conditions leading to the most positive outcomes are important.

Engagement in caregiving

There is abundant evidence, from almost 20 years of research, that caregiving for a dependent relative can negatively impact a person’s physical health, mental health, and financial status (Cantor, 1983; George & Gwyther, 1986; Doty & Miller, 1993; Wilcox & King, 1999). Of course, a great deal of the research involves nonrepresentative samples and do not involve comparison groups (Marks, 1998); but the association of caregiving for dependent elders with negative outcomes seems undeniable. Caregivers report higher levels of depression (Hoyert and

Seltzer, 1992; Schulz, Visintainer, and Williamson, 1990; Strawbridge, Wallhagen, Shema, & Kaplan, 1997); worse self-perceived health (Schulz et al., 1990); more physical health symptoms (Wallsten, 2000); increased physical decline (White-Means & Thorton, 1996) and worse mental health (Tennstedt, Cafferata, and Sullivan, 1992).

Biological studies have documented that caregivers have altered immune function (Kiecolt-Glaser et al., 1991; McCann, 1991; Esterling et al., 1994) and higher levels of metabolic dysfunction (Vitaliano et al., 1996a/b). Cardiovascular reactivity and blood pressure elevations are increased under stress in caregivers as compared to controls; also it is documented that caregivers have metabolic changes compared to non-caregivers, including insulin levels, glucose levels, and weight gain (Vitaliano et al., 1993; Vitaliano et al., 1996a/b; King et al. 1994). The impact of the physical and psychological stress of caregiving leads to higher levels of medical help-seeking and medication use than non-caregiving control groups (Schulz et al., 1995) as well as higher incidence of physical illness (Kiecolt-Glaser et al., 1991; McAnn, 1991; and Schulz et al., 1995). Indeed, Schulz & Beach (1999) document that among co-residential spousal caregivers, caregivers reporting caregiving strain had mortality risks 63% higher than non-caregivers, after controlling for health status and other sociodemographic factors.

Zarit, Gaugler, & Jarrott (1999) remind us that caregiver burden results from care-related stressors, mediated by contextual variables and available resources; and that individuals vary greatly in their response to caregiving. Townsend et al. (1989) used longitudinal data to document the great variability in adaptation to caregiving. Sources of this variation have been studied quite a great deal. Most studies report that women experience more negative outcomes than men (Stoller, 1992; Collins & Jones, 1997; Yee & Schulz, 2000) and that spousal caregivers are more strongly impacted than caregivers with other relationships (Biegel et al., 1991; Neal, Ingersoll-Dayton & Starrels, 1997). Caregivers experiencing health problems report more negative outcomes than non-ill caregivers (Bull, 1990). Coping style and social support have been widely tested as moderators (Coe, Miller, & Flaherty, 1992; Intrieri & Rapp, 1994; Williamson & Schultz, 1993). Age and prior resources moderated effect of caregiving on well-being (Moen, Robison, Dempster-McClain, 1995). Caregivers who found meaning in the role were less depressed; finding meaning meant that they held positive beliefs about the caregiving situation and the self as caregiver (Noonan & Tennstedt (1997). When caregivers perceived a more positive relationship with the care recipient (described as “mutuality” by the researchers), caregivers reported less burden (Robinson, 1990).

There are examples of null findings in the literature, as well as work that highlight some positive aspects of caregiving. For examples, Seltzer and Li (2000) found no difference between caregivers and non-caregivers in personal growth and depression. Strawbridge et al. (1997) found no difference in physical health outcomes between caregivers and non-caregivers over a twenty-year period. Moen, Robison, Dempster-McClain (1995) found no direct effects of caregiving or duration of caregiving on well-being measures. Marks (1998) studies midlife caregivers and non-caregivers and found few negative effects of caregiving on positive dimensions of psychological wellness (purpose in life, self-acceptance, environmental mastery). They assessed work-family conflict differences between caregivers and non-caregivers. After controlling for conflicts experienced in the workplace due to caregiving, the negative effects of caregiving were attenuated. Further, when work-family conflicts were controlled, some positive

effects of caregiving were revealed (more positive relations, more purpose in life, more personal growth). These researchers conclude that work place policies and environments can reduce work-family conflict for caregivers and thereby reduce the negative effects of caregiving and allow the psychological benefits of caregiving to emerge.

Satisfaction is the most common positive outcome associated with caregiving, and caregivers generally articulate more rewards associated with the role than problems (Walker, Shin, & Bird, 1990). Potential benefits reported in the literature include enhanced sense of self-efficacy, improved relationship with care recipient, congruence with one's religious or ethical principles, sense of purpose and meaning, and reassurance that care recipient is getting optimal care (see Scharlach, 1994 and Kramer, 1997 for overviews).

It has been suggested that additional productive roles in addition to caregiver may lead to beneficial effects on well-being outcomes (Moen et al., 1989, 1992). The positive aspects of combining caregiving and work have been documented (Scharlach, 1994). Tennstendt et al. (1992) found that non-employed caregivers were more depressed than employed caregivers. Moen, Robison, Dempster-McClain (1995) interviewed over 300 women in 1956 and again in 1986, and caregivers with higher levels of religiosity and multiple role involvement (as volunteer and workers) had higher levels of emotional health. Spitze, Logan, Joseph, and Lee (1994), studying a large sample of midlife men and women, found that combining employment with caregiving related to less distress for men. However, for women, there was no effect of combining employment and caregiving. A majority of employed caregivers view their work as a break from caregiving (Lechner & Gupta, 1996), and Faison, Faria, and Frank (1999) propose that employment represents resources that maintain the mental health of caregivers.

In sum, the vast majority of research on outcomes on caregiving use a stress and coping framework to document the negative outcomes associated with this extremely important role in later life. Clearly, research on outcomes of caregiving shows the need to specify the conditions of the involvement on consequences for the caregiver. We should seek to better understand what conditions of engagement maximize positive outcomes or at least reduce negative outcomes for the caregiver. Also, Kramer (1997) argues that research has not focus on understanding the positive impacts of caregiving; and this lack of attention has skewed perceptions of the caregiving experience. She points out that caregivers experience both positive and negative emotions, and we need to understand the gains of caregiving if we are to truly support and develop program for caregivers

Research related to engagement in productive activities versus other activities

There are some studies that address the relative impact of various types of activities. Findings about which type of activity has the most positive impact are mixed. There is some suggestion that volunteer involvement in service activities may have more positive impact on well-being than other social activities. For example, in an evaluation of OASIS, a national non-profit organization that provides educational and volunteer opportunities to older adults, members who volunteered reported more benefit from participation than member who took educational classes (Morrow-Howell & Kinnevy, 1999). However, when comparing the impact of social, productive, and physical fitness activity on mortality, all three activities had a positive effect on

survival, with social and productive engagement having just as much effect as physical fitness activities (Glass, Mendes de Leon, Marottoli, & Berkman, 1999). However, productive activities had no more impact than social activities. These researchers suggest that programs aimed at improving physical health outcomes look beyond fitness activities and offer social and productive activities, given the possibility that health and survival are influenced via other pathways than cardiovascular and musculoskeletal.

Young & Glasgow (1998) advocate a conceptual and empirical difference between voluntary formal social participation and other forms of social ties, including informal participation and social networks. They point out that research on the effects of social involvement on well-being outcomes often fails to distinguish these types of involvements. When the concepts are measured separately and tested simultaneously, formal participation has an independent affect over and above informal participation. They argue that formal participation (including volunteering, membership in clubs and political organizations, and involvement in recreational, cultural, and educational services) has an independent effect on health outcomes, “net of other social determinants, such as marriage, work, and informal ties” (p. 345). They hypothesize that formal social participation is associated with physiological enhancement stemming from some supra-individual process associated with the nature of the involvement (perhaps service, purpose, etc.). In their research, they document that instrumental social participation (volunteering and membership in clubs and political organizations) had the strongest link and most consistent positive effect on self-perceived health across gender and age; while for women, expressive participation (involvement in cultural, educational, and recreational organizations) was also associated with improved health ratings.

In sum, activity itself, whether productive or not, has been shown to have a positive effect on well being outcomes (Mor et al., 1989; Glass, Mendes de Leon, Marottoli, & Berkman, 1999). Yet there is this preliminary evidence in the literature to warrant a closer examination of the differential impacts of different types of activities, especially productive activities (Glass, Seeman, Herzog, Kahn, & Berkman, 1995). Older people do not see themselves as “old” or do not report being treated as “old” (Kaufman, 1986) as long as they are active in some meaningful way. In fact, the unique importance of productive activity in the larger context of successful aging should be explored, building on Rowe and Kahn’s (1998) proposition that active engagement in life is one component of successful aging.

Conclusions and research recommendations

Overall, there is enough evidence from related studies of health, mental health, and life satisfaction to conclude that, in general, engagement in productive roles of work and volunteering is beneficial to older adults. Although some beneficial psychological aspects of caregiving are documented, the very important role of caregiving to dependent elders is often related to negative health and mental health outcomes for the older caregiver. There is some support for the idea that multiple role involvement (or role enhancement) improves the well-being outcomes for caregivers, suggesting that combining work or volunteer roles with caregiving roles may enhance outcomes.

Given the ever-growing and increasingly diverse group of older adults who will engage in these productive roles, we need to advance a research agenda that moves beyond these general conclusions. We need to more fully understand the individual characteristics and the socioenvironmental conditions -- and the interrelationships between these two dimensions (Gubrium, 1972, 1973) -- that influence the effect of productive engagement on the quality and quantity of life for older adults. Almost twenty years ago, Fengler (1984) pointed out that, despite the generally positive relationship between activity and well-being, this relationship depends on the personal and social resources of the older adult and the nature of the activity. His work documented that older adults experiencing the greatest number of resource deficits benefited most from formal activities. The research on the effects of productive engagement has only begun to specify the conditions under which engagement produces positive outcomes for the individual. Thus, this White Paper recommends that new research in this area carry forth the idea that the relationship between productive engagement and outcomes for the older adult is modified by 1) the subpopulations participating in the activity and 2) the type of activity.

What are the differential impacts of productive engagement on subpopulations of older adults?
The literature to date fails to distinguish effects among age groups *within* the older population. For example, in a study conducted by Metropolitan Life Insurance (1999) on employed caregivers, caregivers were selected because they were over 45, but 24% of the sample was over 65 years of age. The report does not consider that the experience of working caregivers may vary greatly between 45 year olds, 55 year olds, and 65 year olds, much less those individuals who continuing working and caregiving into their 70's.

Gender and ethnic differences are also likely to be very important. For example, McIntosh & Danigelis (1995) document that the relationship of productive activity to subjective well-being depends on gender and race. They found that volunteer work for religious organizations decreases negative affect for black women, while non-religious volunteer involvement produces more positive outcome for both black and white men.

The older adult's health, mental health, and social network characteristics are likely to moderate the effects that productive engagement have on well-being. There is evidence that older adults in poorer health experience the impact of caregiving differently than those in good health. There is evidence that older adults with weaker social ties experience the impact of volunteering differently than those with strong social ties. What other personal characteristics are salient if we are to engage individuals in the productive roles that are likely to have the most benefit to them?

What are the differential impacts of the various types and combinations of productive engagement on well-being outcomes of older adults?

Some older persons may benefit from one type of productive engagement more than another. The type of productive involvement leading toward the most positive outcomes for the older adult depends on individual preferences, cultural preferences, and family circumstances. An older person may benefit from respite from caregiving to engage in full or part-time work; or the older employee may benefit from exchanging work involvement for caregiving activities. These exchanges between types of productive engagement highlight questions about transitions between types of productive engagement and about policies and organizational structures that provide choice to individuals for productive involvement (Morrow-Howell, Hinterlong,

Sherraden, & Rozario, in press). To improve the outcomes of caregiving, it will be important to test institutional structures that give caregivers a choice to move between work and caregiving, or to do both simultaneously with less negative consequences.

Perhaps some individuals may benefit most from being involved in multiple productive activities. Involvement in multiple roles has been linked to better health and longevity outcomes (Berkman and Breslow, 1983; House, Landis, and Umberson, 1988; Moen, Dempster-McClain, and Williams, 1989); and it has been suggested that in later life, multiple role occupancy may protect people from role reduction (Morgan, 1988). However, studies that consider the impact of multiple roles on well-being outcomes have, by in large, focused on middle-aged people (Dautzenberg, Diederiks, Philipson, & Tan, 1999). What are the effects of multiple roles for different age groups in later life? Do caregivers in their 60's or in their 70's fare better if they also have volunteer involvement or part-time work?

Questions regarding the impact of combining types of productive activities to maximize positive outcomes raise issues of balance. Role theorists suggest that role strain or role overload is associated with negative health and mental health outcomes, but role enhancement (achieved through multiple role involvement) leads to positive outcomes because it increases social integration, augments power, prestige, and resources, and heightens sense of identity (Thoits, 1983, 1986). Given that there is a fixed quantity of time, energy, and commitment available (Goode, 1960), researchers should seek to understand the optimal balance of time in multiple productive roles. And what about leisure time? Survey research indicates that older adults want "well-deserved leisure" and they want "to continue to be productive" (Rowe & Kahn, 1998). We need to clarify how much leisure is optimal to the older adult. How much productive engagement? What balance of the two in later life leads to increased well-being?

The literature on volunteerism suggests that the type of volunteer activity affects the outcomes experienced by the older volunteer. There is some evidence that service-oriented volunteer assignments (Senior Companion or intergenerational tutoring) and volunteer work with religious organizations have more positive impact than other types of volunteering. It is suggested that some volunteers may benefit more (and be more involved) if the nature of the work is challenging and meaningful. In other words, pushing a hospital cart or stuffing envelopes may not have as much impact as being a tutor or a peer counselor. Research on the effects of volunteering have not considered the nature of the activities (Morris & Caro, 1996; Fenger, 1984), and these issues are especially salient given the increasing educational levels of older volunteers and the likelihood that unskilled and clerical tasks will not be fulfilling (Chambre, 1993).

What are the differential impacts of various organizational structures on the outcomes experienced by older adults engaged in productive roles?

Related to type of productive involvement are the various socioenvironmental conditions in which the activity takes place. These conditions very likely influence the outcomes experienced by the older individual engaged in work, volunteer, and caregiving roles. In regards to work, there are many new employment structures, like job-sharing and bridge employment, that may affect the experience of working in later life. Rowe and Kahn (1998) suggest the introduction of the four-hour work module to increase flexibility in work arrangements to the potential benefit of

younger and older workers alike. Bass, Quinn, and Burkhauser (1995) suggest that new policies provide part-time employees with prorated benefits and reduce private health care costs for employers employing older workers. What impact will these organizational arrangements have on the older worker's well-being?

In regards to volunteering, well-being outcomes may be related to the organizational environment that the older adults experiences -- the amount of socialization involved, the characteristics of the volunteer assignments, the extent to which constructive working relationships between workers and volunteers exists, various types of compensation or reimbursement or recognition given (Morris & Caro, 1996). In the area of caregiving, we need to understand the impact that public policies, like tax credits or "cash and counseling" programs,³ have on caregiving outcomes. Other institutional structures that impact caregivers' health and mental health regard the availability and affordability of formal services to assist with the caregiving tasks, laws affecting job security (Family Leave Act); and company policies that affect eldercare (Gonyea, 1997; Hooyman & Gonyea, 1995).

Final thoughts

The research questions posed above are difficult to answer. This type of inquiry will continue to be plagued by the difficult problem of social causation versus social selection (Verbrugge, 1983). Does involvement in productive activity improve well-being outcomes; or do people with increased well-being engage in productive roles? Most probably, both social causation and social selection operate simultaneously. Further, there is always the possibility that a third factor creates a spurious relationship between productive engagement and improved well being (for example, a genetic tendency toward productive involvement as well as good health). We will need stringent experimental designs, longitudinal data, strong measures, and state-of-the art statistical analyses to deal with these challenges.

The research will also be challenged by the probability that individual choice is an important mediator in the relationship between productive involvement and well-being outcomes (Sherraden, Morrow-Howell, Hinterlong, & Rozario, in press). Individual preference and choice are likely important ingredients in maximizing positive outcomes, but these constructs are difficult to measure with high degrees of validity. Furthermore, they are likely shaped by culture, gender, social class, and life experience. Isolating the effect of individual choice in the study of the effects of productive engagement in later life will be a major challenge but an essential task in this work.

It will be important to conduct cost-benefits analyses that capture the true value of expanding opportunities for older adults to be workers and volunteers and the true value of policies and programs that support caregivers. A full accounting of benefits will include effects on the individual, the family, and the community. The full benefits of productive engagement in later life may not be fully understand until we know if productive activity postpones physical and cognitive decline. If so, the cost-savings to society of programs and policies that promote engagement may be remarkable. In fact, Svanborg (in press) suggests that a primary justification

³ "Cash and Counseling" are demonstration programs through which low income, dependent elders receive public money and education/advice to make their own care arrangements, including paying relatives to provide care.

for late-life productivity may be the postponement of functional decline of the older population and the subsequent impact on society.

We are in the midst of a longevity revolution. How we will spend time in these extended years is not fully determined and the possibilities are numerous. Hopefully, we can be purposeful in the roles and expectations that we create for this new “third age” of human life. We need to define the possibilities and create the opportunities based on knowledge about what improves society and what improves the health, mental health, and life satisfaction of our large older population. Our 21st century society may seek the involvement of its older citizenry in work, volunteer, and caregiving roles, and the baby boomers and subsequent generations may seek increased involvement. How we shape and support these roles and how we match opportunity to capacity and preference may influence the impact of these activities on older adults’ well-being. Let us proceed with as much knowledge about the effects of productive engagement as possible.

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