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Comparative Perspective

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In the United States, the elderly population is larger, healthier, more educated, and better off financially than ever before (Federal Interagency Forum on Aging Related Statistics, 2002). Due to the institutionalization of retirement from the formal workforce, older adults have the commodity of time, sometimes 20 or more years after leaving a career job. Older adults also have a strong desire to make vital contributions to their families and communities (Bass, 1995). In short, the resources embodied in the older population are enormous and expanding. How will older adults and this society use these resources, which have been described as the only growing natural resource to this nation (Freeman, 1999)?

To answer this question, some gerontology scholars and aging advocates have called for a new perspective, the productive aging perspective, which broadens our view of the potential of the later stages of human life (Butler, Oberlink, & Schecter, 1990; Bass, Caro, & Chen, 1993). This view calls for the active engagement of older adults in economic, environmental, cultural, political, social, civic, and spiritual spheres (Morrow-Howell, Hinterlong, & Sherraden, 2001). Instead of frail and dependent elders or well-off and selfish elders (greedy geezers), the older population is seen as a fount of workers and volunteers; older adults are seen as the "new trustees of civil life" (Freedman, 2001). The productive aging perspective highlights the current and future capacities of our aging society.

Volunteerism and service are activities that take center stage in the discussions of a productive aging society (Bass, Caro, & Chen, 1993) because these volunteer/service programs are likely mechanisms through which this great resource will be put to use. Elder service grows from the intergenerational movement of the last twenty years and chases the well-established youth service movement. This paper considers the emerging institution of elder service. What is elder service? Why is elder service lagging behind youth service? What does elder service have to offer (that is, what are the known and anticipated effects of elder service? How do youth service and elder service compare? We conclude with a description of the complimentary nature of youth and elder service and argue that this society will benefit from well-developed service opportunities for people across the life span.

Service: What does age have to do with it?

We view service as "an organized period of substantial engagement and contribution to the local, national, and world community, recognized and valued by society, with minimal monetary compensation to the participant" (Sherraden, 2001, p. 2). More specifically, service can be viewed as a subset of volunteer activities, and there are certain features of these volunteer roles that lead us to identify them as service: (1) formal organization and structure; (2) identification as a service program (e.g., Americorps; Experience Corps); (3) defined role for service, comparable to a job description; (4) required level or duration of commitment; (5) articulated goal of improving a specific area of human or environmental affairs and (6) acknowledged and recognized as a valuable contribution (Morrow-Howell, Carden, & Sherraden, in press).

There is nothing about age in these definitions of service. However, when people think of service, they usually think of young people, taking a year or two between school and employment or involved in service learning projects as part of their formal education. Indeed, the service institutions that have developed over the last fifty years largely have focused on youth. In a survey of 210 service programs worldwide, 77 percent engaged youth as the servers; and only four programs targeted older adults as servers (McBride, Benitez, & Sherraden, 2003). Similarly, in a review of the literature on the effects of service programs on citizenship, Perry and Katula (2001) identified 37 studies, and all but eight programs included young people exclusively. Perry and Katula (2001, p. 330) comment that "many institutions and organizations have taken up the task of orienting people, *especially youth*, toward participation in public life in the United States."

Of course, older adults are part of our national service programs but volunteers aged 50 and over account for seven percent of the Peace Corps volunteers (Peace Corps, 2002); and fewer than three percent of AmeriCorps volunteers are over the age of 60 (Freedman, 2002). Learn and Serve America is strongly biased toward youth in its organization through schools, colleges, and universities (Center for Human Resources, 1999). With the exception of Foster Grandparents and Senior Companion, the largest and most widely known service programs are geared toward youth.

In sum, the elder service movement lags behind youth service, despite the potential of our aging society. Thus, we raise the question of *why* the service movement is biased toward youth? What does age have to do with it? We offer two explanations for the current situation.

Despite substantial and ever-growing evidence to the contrary, the stereotype of the physically and cognitively frail older adult prevails in this society. Older adults are generally viewed as incapable of handling important jobs or fulfilling challenging roles. The renowned gerontologist Dr. Robert Butler tells the story of his encounter with Sergeant Shriver in the early stages of Peace Corps (Butler, 1999). Butler communicated his excitement about the possibility of targeting older Americans as Peace Corps volunteers. Shriver discounted the idea; worried an older person would be a handicap overseas. Despite the accumulated evidence about the capacity of older adults, the greedy geezer and dependent elder images are still more prominent in our society than the competent older adult making valuable contributions to society. For example, surveys indicate that employers still hold negative perceptions of older workers, despite evidence of the positive impacts of older workers (Barth, 1997; Friedland, 1997). The negative stereotypes of older adults may in part explain their exclusion from the service movement.

Another possible explanation for the delay in the development of elder service is the initial ways that our society thought about the new institution of retirement. Retirement was long described as a "roleless" period (Rosow, 1967), where as a society, we were not sure what older adults should be doing with their time. Exit from the workforce was all-or-nothing, and there were no alternative structures for productive engagement (Moody, 2002). Time use studies reveal that American workers reallocate a large fraction of time from paid work to passive activities (watching television, listening to radio, relaxing, self-care) (Gauthier & Smeeding, 2003). Retirement came to be characterized by an expansion of leisure time, a time to step into less demanding roles.

These expectations have contributed to the lag in the development of opportunities for productive engagement of older adults in later life. The fundamental viewpoint of the "structural lag" theory (Riley, Kahn & Foner, 1994) is that structures to facilitate productive engagement, including employment, volunteer, and educational structures, are lagging behind the potential of older individuals. In sum, our society's initial visions about retirement and the social structures (or lack thereof) that developed accordingly did not expect older adults, did not provide for older adults to be actively involved in service roles.

Yet older adults and aging advocates are confronting the myths of aging and outmoded visions of retirement. Evidence is accumulating about the functional abilities of older adults, despite chronic health conditions that they may experience. Recent evidence suggests that a "compression of morbidity" is occurring, and that there is great potential to remain health and active until much later in the life span (National Institute on Aging, 1999; Svanborg, 2001). In fact, gerontologists have divided the third age of life into the third and fourth age, as we have extended life expectancy and increased vitality (see Baltes & Smith, 2002, for example). The third age, or young-old, may be viewed as a time of maximal capability combined with the experience of longer life. Not until the fourth age, or old-old, do stereotypes of dependent elderly become more accurate and medical illness precludes more active engagement in productive roles.

There may be an emerging trend toward "structural lead" in the area of elder service (Freedman, 2001); that is, there is the growth of service opportunities for older adults, under the assumption that there is a growing demand for such roles, both nationally and locally. Freedman (1999) argues that older adults themselves are taking the lead in developing structures for meaningful volunteer work. This is consistent with assertions of elder advocates that older adults are not satisfied with many of the current roles available to them and they want more challenging responsibilities (Morris & Caro, 1996). National surveys reveal that older adults want well-deserved leisure, but they also want meaningful engagement (Row and Kahn, 1998). Elder service is thus emerging as part of the service movement in this country; and hopefully, service endeavors will move away from a negative age bias to age-neutral or age-as-asset perspectives.

What is elder service?

There has been recent and substantial development of elder service programs, where older adults are specifically recruited for their time and talents, where there are older age criteria for inclusion. Through these programs, older adults are supported in challenging activities that seek to improve human or environmental conditions; and most often, the beneficiaries of the programs are children and youth. We focus in this chapter on service programs specifically designed for older adults, and we have not included in this analysis those programs that are age-neutral, programs where all people over the age of 18 are eligible to participate. The recruitment and deployment of older adults in these volunteer/service programs is another important topic that deserves serious scholarly attention. We also note that consideration of elder service possibilities outside the U.S. context is an important direction for future scholarship, but it is beyond the scope of the paper to discuss them here.

The Corporation for National and Community Service organizes the two best known elder service programs. Foster Grandparents serve as mentors, tutors, and caregivers for children and youth with special needs in such community organizations as schools, hospitals, Head Start, and youth centers (Senior Corps, 2002a). During 2001, about 30,200 Foster Grandparents served over 275,000 children and youth with a total of more than 27.3 million hours (Senior Corps, 2002a). The Senior Companions program matches older volunteers to frail adults who need assistance and friendship (Aguirre International, 2001). In the year of 2001, about half (49 percent) of the servers were 65 to 74 years old; 31 percent fell into the age bracket of 75 to 84; 15 percent range from 60 to 64 years; and five percent of Senior Companions were 85 years and over (Senior Corps, 2002b).

In a public/private partnership, there are national programs, like Experience Corps, where older adults assist in urban public schools in 13 cities across America. Through OASIS's Person-to-Person Peer Counseling program, older adults are recruited and trained to support other older adults; the program operates in over 13 cities with over 125 volunteers (OASIS Institute, 2000). Temple University's Home Friends program supports older volunteers who work with grandparents who are raising grandchildren (Temple University Center for Intergenerational Learning, 2000). Then there are local programs, operating in one or two communities, where older adults take on challenging roles to confront serious community concerns. For example, there is a program in two Texas cities where seniors work with hospitals and clinics to increase the number of children who get immunized (Center for Public Service, 2001).

We are in the process of cataloguing elder service programs and to date, we have described about 50 programs. These service programs go beyond traditional volunteer activities and utilize the skills and experiences of older adults to address serious problems-- failing schools, environmental degradation, youth drug abuse, and child maltreatment. Programs vary in the extent to which older adults are trained and supervised; and recognition/rewards include stipends, opportunity for personal growth and education, supplemental insurance, college credit, health screenings, and/or meals. Financial support for most of these senior service programs comes from foundations and private/corporate contributions, with some partnerships with state or local governments. Few programs receive substantial federal support, with Experience Corps, Foster Grandparents and Senior Companion being notable exceptions.

Comparing Youth and Elder Service

A more systematic comparison of youth and elder service programs is needed, but several observations can be made from the knowledge that exists. It appears that elder service programs may be largely national programs. There are few international and transnational opportunities that focus solely on older adults, and older adults are underrepresented in these types of service opportunities (McBride, Lombe, Tang, Sherraden, & Benitez, 2003). Also, the service programs available to older adults seem to require a different type of commitment (McBride et al., 2003). That is, fewer hours per week are requested, but for an extended period of time. For example, many of the tutoring programs request that the server commit to working with a child once a week throughout the full academic year.

This type of commitment (few hours a week over an extended period of time) lends itself to a different type of service—mentoring, coaching, counseling, and tutoring over time. Elder service programs seem to differ from youth service programs in that they are frequently targeted toward individual people (a child, a grandparent, an older adult needing assistance), whereas youth services are often targeted toward a community development enterprise, like building infrastructure or developing community projects (Iyizoba, 1982; Omo-Abu, 1997; Sikah, 2000). Relationship-building is a key component to many services aimed at assisting young people in difficult situations, in transition period, and in educational endeavors. This type of service can not be done in short, intensive periods of time; and in fact, these services are best done by older people who bring more life and work experience and, in general, more maturity and patience to the work. Research has documented that older adults are more dependable, more stable employees than younger adults, and these characteristics most likely extend to service roles (Zweigenhaft, Armstrong, & Quintis, 1996). Thus, we speculate that the type of work and the type of commitment needed for the work go hand in hand; and that youth and elder service may vary in the type of service work for which their physical, mental, and emotional abilities are best suited.

The differences in type of commitment, type of service, and location of service seem appropriate, given life stage differences between younger and older servers. A driving force behind the elder service movement is the factor of time associated with retirement from a career job; and older adults do have more non-paid work time than younger adults (Gauthier & Smeeding, 2003). Even though older adults are freer from work and child rearing responsibilities than younger adults, they remain closely involved in family life. For example, surveys indicate that over 40 percent are helping children and grandchildren and almost 25 percent are care-giving for a disabled person (Caro & Bass, 1992). In sum, it is more difficult for an older adult to commit to a full-time or a distant job, in the face of responsibilities at home. On the other hand, youth are more likely to have the flexibility to serve in distant locations and for intense periods of time.

Effects of Youth and Elder Service

Effects of Youth Service
Sherraden, Sherraden, and Eberly (1990) collected information about the anticipated outcomes of youth service and the following outcomes were of high or medium priority: promotion of cultural integration and political tolerance, expression of citizenship, increasing social development; increasing economic development, personal development/connections to adulthood for the server, education and training for the server, employment opportunities for the server. This study highlighted the "multiple effects" of youth service (Sherraden, 2001), which had been previously articulated by Eberly (1986) who noted that youth service is a lot of things to a lot of people: a rite of passage, a training ground for citizens, a service delivery program, experiential education, a source of labor.

In the world-wide search and description of the 210 programs identified, McBride, Benitez, and Sherraden (2003) note that these programs are intended to benefit the server and the served, but they conclude that youth service programs are more concerned with the server. The first most frequently listed goal of the programs in the survey was increasing the server's motivation to volunteer again. The next most frequently listed outcomes were increasing the server's skills

and increasing the server's social skills. These outcomes were listed more frequently than any of the outcomes regarding the people or community served. In terms of the served, the most frequently mentioned outcome was promoting cultural understanding. However, this outcome is not just about the improvement in conditions of life for the served population; it still involves a positive change to the server. Three outcomes regarding the served are often cited, but with less frequency than outcomes regarding the server. Fifty-five percent of programs listed creating/improving public facilities; 50 percent listed promoting sustainable land use; and 47 percent improving well-being and health of the population.

In a review of research on service, McBride et al. (2003) do not restrict their analysis to youth service programs, but these programs dominate their sample of 42 studies. In an assessment of effects, they conclude that both the server and the served are targets of intervention; but that an "overwhelming majority" of the effects that are studied pertain to the individual server. They lament the lack of attention to the effects of the program on the served.

In Table 1, we list studies that address the effects of youth service, and we classify the effects into two categories: effects on the server and effects on the served. It is important to note that documentation of youth effects has relied heavily on qualitative methods, including semi-structure interviews and focus groups with program administrators and program participants. In the research by McBride et al. (2003), 24 out of 42 studies used a combination of methods, e.g., survey, interview, and/or secondary data analysis, and 10 studies used a survey method only. Survey questionnaires were designed or developed specially for the study, except a few program evaluations that used standardized questionnaires, for example, Physical Quality of Life Index (PQLI) was used to measure the impact of Peace Corps programs on women (Cohn & Wood, 1985); Standard Achievement Test Scores were applied in the evaluation of AmeriCorps programs (Macro International, 2000; Moss, Hiller, & Moore, 1999). None of studies used an experimental design or random assignment; most of studies were exploratory and descriptive using convenience sampling without comparison groups (McBride et al., 2003). These methods yield the identification of these experienced or anticipated outcomes, and further quantification is in order if we are to move toward cost-effectiveness or cost-benefit analyses.

Effects of Elder Service
In Table 2, we overview the outcomes of elder service that have been documented through qualitative and quantitative research methods. Like youth services, multiple effects are evidenced and we organize them into effects on the server and effects on the served. There is a well-established literature on the effects of volunteering on older adults, which documents the positive relationship between volunteering and well-being in later life (Fengler, 1984; Havighurst, Neugarten, & Tobin, 1968; Herzog, Kahn, Morgan, Jackson, & Antonucci, 1989; Maddox, 1968; Oman, Thoresen, & McMahon, 1999; Ward, 1979). Most studies are limited to non-representative samples and cross-sectional designs; but several longitudinal studies with improved sampling and measurement have documented a link between volunteering and physical and mental health, mortality, and life satisfaction (Moen, Dempster-McClain, & Williams, 1992; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003; Musick, Herzog & House, 1999; Oman et al., 1999; Van Willigen, 2000). Quasi-experimental design and/or longitudinal data are also used in the program evaluations of Senior Companion (SRA Technologies, Inc., 1985) and Senior Corp Volunteers (Gartland, 2001).

Thus, these studies produce solid evidence that volunteer engagement in later life is related to improved well-being. In fact, Oman, Thoresen, & McMahon (1999) argued that the reduction in mortality associated with volunteering was larger than the reduction associated with exercising and attendance at religious service. The ability to establish causality has been limited by study design in this area of research, but Thoits and Hewitt (2001) used longitudinal data to demonstrate the reciprocal relationship between volunteering and personal well-being. Their analyses showed well-being facilitates volunteer involvement and that volunteer involvement subsequently augments well-being. A limitation of this knowledge regards the operational definition of the independent variable of volunteering. Any type of volunteer activity with any type of organization is usually included; and volunteer activities that we might classify as service are not specified.

Table 2 also demonstrates that elder service programs produce positive outcomes for the service recipients. Tutoring programs produce improvements in educational performance; mentoring programs produce improvements in behavior and attitude. Evaluations of elder service programs vary in rigor and completeness, but results overall are encouraging. Initially, the evaluation of intergenerational programs focused on process outcomes and how senior volunteers benefited from the participation (Ward, 1979). The programs listed in Table 2 demonstrate that current evaluation efforts surpass process analyses to demonstrate tangible impacts on the targeted issues. Evaluations document benefits to service recipients and their families. The trends in evaluation of elder service toward increased rigor and assessment of impacts should be continued.

In addition to effects on the server and the served, there are wider effects on families, communities, and society. We have yet to systematically collect data regarding these wider effects; but we gathered volunteer directors together at Washington University on June 25 and July 10, 2003 to brainstorm about wider effects of late-life volunteering; and we base the following discussion on the observations that they provided. Families express satisfaction and relief when an older adult finds meaningful engagement and new social connections. Family members benefit when the older persons transfer increased compassion or appreciation for youth or computer skills to the home setting. These families benefit a great deal when an older adult maintains independence through the active involvement of service work. Indeed, maintenance of physical and mental health has a positive ripple effect beyond families to society as a whole, where the provision of care to dependent older adults has high costs. The community benefits when older volunteers transition from volunteer work into a job, and the workforce gains older workers (who research shows is more reliable and satisfied than a younger worker). The host institutions, like schools or nursing homes, benefit from improved reputations in the community (Hegeman, 1985). In a specific nursing home example, the staff reported that they benefited from having a volunteer service program, despite not being directly involved in the program (Goyer, 1998/99). In a specific school example, the children's test scores were raised by the tutoring program, enabling the school to improve its ranking and the subsequent benefits (Project Star, 2001). Older adults are more active politically, more experienced in community affairs, and they become valuable advocates for the social causes that service programs connect them to. They are also more likely to have financial resources to make contributions to these important causes. There are likely more of these "wider" effects of participation in service roles, and

indeed a full cost/benefit accounting would require the consideration of these multiple effects. But measurement is very challenging and research designs to isolate the impact of service on these effects may be impossible.

Comparing Youth and Elder Service Outcomes
From the above review, we conclude that both youth service and elder service programs intend to produce multiple benefits, outcomes for both the server and the served. However, among youth service programs, more attention seems to be on the young servers. Service activities are intended to build servers' human and social capital, to make participants better citizens, more tolerant people, better equipped for the working world, better suited to a multicultural society. The products of social and economic development are important, but these program goals are articulated less prominently; and there are fewer efforts to document effects on the served.

The opposite seems to be true among the elder service programs. The primary focus is on the service recipients, on the children, youth, and families receiving the service. The advocates of the productive aging movement come from a social development perspective. They argue that human and environmental problems remain massive in the face of dwindling public resources, and that society cannot afford to ignore the growing number of older adults, who have the capacity and motivation to confront these problems. They did not advocate transforming social structures to achieve a productive aging society for the sake of older adults; they argued it for the sake of the wider community (Caro & Bass, 1992). As seen in the literature, many evaluations of elder service focus on the program's impact on the served. The benefits to the server are largely seen as by-product.

There is some empirical support for the idea that outcomes associated with service vary by age. Using a life-course perspective, Omoto, Synder, and Martino (2000) have tested the proposition that motivates and outcomes of volunteering vary between younger and older adults. They found that older volunteers reported greater service motivation than younger adults, who were more motivated by opportunities for social relationships. Further, they found partial support for the hypothesis that positive volunteering outcomes depended more on relationship experiences for younger volunteers and more on service experiences for older volunteers. These authors conclude that over the life course, there are sifting motivational agendas for civic participation, and attention to these sifts is important to achieve maximum participation and benefit.

It is clear that a primary focus of youth service is capacity building -- personal development for citizenship, for the workplace. There is a future orientation, an investment in human capital. Cries of ageism might arise from aging advocates who know that older adults are avid learners and seekers of personal development (as witnessed by the huge success of Elderhostel program and, in fact, development of service learning programs within Elderhostel). But the productive aging movement has been more about the *engagement of the capacity* of older adults than about the *building of capacity*. In fact, older adults are motivated by the opportunity to use their existing skills and knowledge; and they are rewarded when their capacities are recognized (this finding derives from four focus group that we completed with older volunteers in the spring, 2003; data analysis is in progress). Indeed, the most important incentive and recognition to older adults for their services provided may be this *honoring of capacity*.

Further, when the capacity of older adults is used and honored, it is more likely to be maintained. "Use it or lose it" has remained a powerful guideline when it comes to physical and mental health of older adults. Through involvement in productive roles, research documents that they are healthier, both mentally and physically, and happier. As Moen and associates (1992) have documented through longitudinal studies, older adults involved in volunteer roles maintain higher levels of functional ability. Thus, we argue that participation in service programs also *maintains capacity*. Svanborg (2001) suggests that perhaps the biggest contribution to the individual, family, and society of productive engagement is the postponement of functional decline associated with aging.

Thus, we propose the youth services are about *building* capacity and elder service is about *using*, *honoring*, and *maintaining* capacity. And both groups of servers accomplish these positive ends through social and economic development activities valuable to others and society at large.

Conclusion

The nature of the service activities and the emphasis on the desired outcomes of service programs may differ for servers across the life span; and from a life course perspective, these differences may be very appropriate. From this perspective, the life course is conceptualized as a series of transitions, varying roles, and activities that are age-specific in terms of meaning and challenges (Elder, 1994). Perhaps there is service for all seasons. Young people may be less obligated to family and freer to travel to distance places and commit intense periods of service. Although many older adults will relish these opportunities, they are more responsible to family and friends, and ample opportunities for local service activities will be important.

Further, older adults may be better equipped to take on certain types of service roles, where life and work experience, maturity, and stability/dependability are desired attributes. They may be better coaches, mentors, and advisors, especially on a one-to-one basis (although we must remember that older adults report that socialization aspects of service roles are important to them.) Young servers may be more comfortable in group activities aimed a community-level target—housing stock, infrastructures, land use, etc. Perhaps elder service programs are more concerned about the impact of these services on the served, rather than on the server. Developmental psychologists have posited that aging tasks include achieving generativity, finding meaning, transcending the self, and leaving a legacy (Erikson, 1986). (Erikson wrote: I am what survive of me. About 50 years ago, the AARP wrote its original motto: To serve, not to be served.)

To continue to allow elder service to lag behind youth service in the United States may be shortsighted. Why limit the expression of citizenship and the use of mature workers that we have tried to spawn through youth service? As we look at a youth server today, we need to be far-sighted and ask, what do we want her/him to be doing 50 or 60 years from today? If youth service is seen as an investment in the future, then elder service must be seen as a continuing return on that investment. Youth service and elder service advocates may be most effective by coming together to develop service across the life span.

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Table 1. Outcomes of youth service for the server and the served.

Outcomes for the server[1]
Increase maturity and personal autonomy
Become disciplined and reduce risk behavior
Promote social, ethnic, and cultural interactions and awareness
Improve understanding of self and community
Practice and increase skills
Explore career opportunities
Acquire human capital and educational award
Increase civic knowledge and value
Bring change in civic attitudes and participation
Increase the likelihood to vote

Outcomes for the served[2]
Improve school children's attendance and literacy
Enhance manpower distribution and rural infrastructure development
Develop community projects and build community capacity
Provide better services in rural areas and a steady stream of volunteers
Benefit local nonprofit sectors
Promote personal and professional development of the individual members
Build inter-organizational partnerships
Foster a sense of national integration and cultural integration
Improve social infrastructures, future earnings, and productivity
Promote national unity and democracy

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[1] Aguirre International, 1999; Center for Human Resources, 1999; Cohen, 1997; Edwards et al., 2001; Egan, 1994; Frees et al., 1995; Griffiths, 1998; Hadjo, 1999; Iyizoba, 1982; Janoski et al., 1998; Jastrzab et al., 1996; Jastrzab et al., 2001; Kalu, 1987; Macro International, 1997; Newton, 1992; Omo-Abu, 1997; Purvis, 1993; Sherraden et al., 1990; Sikah, 2000; Starr, 1994

[2] Aguirre International, 1999; Center for Human Resources, 1999; Ekhomu, 1985; Griffiths, 1998; Iyizoba, 1982; Kalu, 1987; Neumann et al., 1995; Omo-Abu, 1997; Sherraden et al., 1990; Thomson & Perry, 1998; Wang et al., 1995

Table 2. Effects of elder service on the served and the server.

Effects on the served				
Source	Sample	Program	Method	Major findings
Freedman, 1998	47 pairings of older adults and at-risk youth in 5 intergenerational programs	Foster Grandparent program	In-depth, semi-structured, one-on-one interview	37 out of 47 pairings form significant primary (16) and secondary (21) relationships. 3 examples of primary relationships showed strong kinship attachment and intimacy between youth and elders, and role model of elders to at-risk youth. 3 examples of secondary relationships showed elders help youth as good neighbors, reinforce the positive aspects of behavior, and have informal and public relationship with youth.
LoSciuto et al., 1996	729 students completed in the pretest, and 562 in both pretest and posttest	Across Ages, a national drug prevention program that provides intergenerational mentoring for at-risk youth	Randomized pretest-posttest control group design; instrument based on research on Positive Youth Development Curriculum (PYDC); Statistical analysis: ANCOVA, ANOVA	Those students who received mentoring, PYDC, and community service scored better in attitudes toward school, future, and elder; and frequency of substance use was less than those only attended PYDC and community service. They scored better than control group in attitudes toward school, future, and elder; Rand well-being scale; knowledge about older people; reaction to drug use; and community service.
Morrow-Howell, Kinnevy, & Mann, 1999	289 participants in OASIS	OASIS, a national network with community-based volunteer programs	A cross-sectional survey with telephone interview; specially developed instrument; Statistical analysis: ANOVA, MANOVA; Measurement: perceived benefits	85% report increased socialization; 77% increased generativity; 87% increased well-being; 90% report increased opportunities for participation in OASIS. The most perceived benefit is opportunity, followed by well-being, then socialization and generativity at the same level. Volunteers perceived more benefits in the four domains than tutors or class takers.

Continued

Table 2. *(Continued)*

Source	Sample	Program	Method	Major findings
RTI International, 2003	155 SCP directors and volunteer station supervisors 1520, 658, and 394 clients in 3 waves of surveys, respectively 803, 362, and 186 eligible family/ caregivers in 3 waves	Senior Companion Program (SCP)	Random sample of volunteer station staff; 3-wave telephone survey (3-month, 9-month follow-up); comparison groups of eligible clients and family caregivers; Statistical analysis: descriptive & multivariate analysis	64% agencies reported the SCP freed up their staff to do other work, and 75% agencies reported family members were better able to remain employed. 30% to 55% clients spent less on meal preparation, personal care, and transportation than before. SCP clients scored 87% higher in health; 16% lower in depression; 85% higher in life satisfaction than waitlist clients in 3-month follow-up survey. At 9-month follow-up, SCP family members reported 85% higher ADL functioning of clients than waitlist family members reported. Waitlist families were 23% as likely as SCP families to report being able to care for a relative well at 3-month follow-up.
Project STAR, 2001	Internal evaluation of 51 schools; Surveys of 70 school principals/staff and 273 teachers	Seniors for Schools, a Senior Demonstration project initiated by the National Senior Service Corps known as the Experience Corps	A standardized and non-standardized reading skills test were used in pre- and post-tests. Respondents reported benefits from their opinions.	92 % students increased reading skills measured by using standardized and non-standardized reading skill tests, and 85% increased measured through assessment tests. Over 81% of survey respondents showed students increased positive attitude toward reading, self-confidence in reading ability, and improved overall self esteem.
Effects on both the served and servers				
Granville, 2000	45 volunteers working in 3 projects in England	Intergenerational school-based projects	Semi-structured, one to one interviews over 6 months	For the servers: Overwhelmingly, older volunteers felt volunteering benefit their health, particularly mental health. They have a sense of purpose and direction. For the served: Older volunteers become champions for young people, teaching staff, and parents. They play a part in breaking down the stereotypes of old age.

Continued

Table 2. *(Continued)*

Source	Sample	Program	Method	Major findings
SRA Technologies, Inc., 1985	462 respondents (153 active Senior Companions, 70 waitlist companions, 179 clients, and 60 wait list clients) in round one data collection at six sites (1980)	Senior Companion Program	Quasi-experimental research design: 3-round (5 years) longitudinal evaluation within 4- group respondents; In-person interviews using a modified version of the Older American Resources and Services (OARS)	For the servers: Volunteers' financial resources increased from 0 to 50%, and the proportion of household income of at least $4,000 a year increased from 40 to 80%. The proportion of good mental health rating increased from 50 to 90%. For the served: Clients reported 10% decrease in impairment of social resources, while clients who stopped participation in the SCP increased 22%. Active clients reported 22% decrease in illness, while inactive clients increased 3 %.
Wheeler, Gorey, & Greenblatt, 1998	37 independent studies	All forms of volunteer activities: voluntary association membership, indirect and direct helping roles	Meta-analysis, using r index to test the strength of volunteer program outcome measures; Standardized, construct-qualitative, and construct-quantitative measures	For servers: 70% older volunteers scored higher on life quality measures than non-volunteers. 12 studies show those who engaged in direct helping derive greater rewards than others who engaged in more indirect or less formally helping roles. For the served: 85% clients were less isolated and depressed as compared with non-participating clients. 3 studies show that enablement or counseling-type services have larger interventive effect than other types.
Effects on the servers				
Gartland, 2001	Random sample of Atlantic Cluster senior volunteers, N=1,075	Senior Corps Volunteers	Quasi-experimental design; self-report survey	93% of respondents indicate that life is better since participation in volunteer program. Quality of life is significantly associated with income; lower income volunteers report high life satisfaction. Volunteers in Foster Grandparents programs report higher degree of positive change than volunteers in Senior Companions & Retired Senior Volunteers.

Table 2. *(Continued)*

Source	Sample	Program	Method	Major findings
Jirovec & Hyduk, 1998	120 respondents aged 62 and over in a large metropolitan hospital	Formal volunteering in a hospital	Cross-sectional design; mail survey; inferential statistics	Volunteering is significantly associated with mental health but not physical health. Older adults who donated 500 hrs (F=3.35, p< .05) and interacted with younger people (t=2.55, p= .01) had greater contentment.
Kornblum, 1981	198 from the mobile, organized older people in Philadelphia in the 1st wave, and 149 in the 2nd wave (6 month later)	Retired Senior Volunteer program (RSVP)	Pre- and post-test among 3 groups: experimental, 'drop out', and control groups; Standardized, repeated measures for life satisfaction index	There are no difference in outcome measures between volunteers and non-volunteers at Time1. Self-perception of volunteers is higher than non-volunteers at Time 2. There are significant differences between volunteers and non-volunteers in 3 indicators of self-assessed health at Time 2.
Morrow-Howell, Hinterlong, Rozario, & Tang, 2003	Secondary data: American's Changing Lives: 3 waves, subset to aged 60 and over, N=1669 in 1st wave	Formal volunteering in religious, political, educational, senior citizen or related organizations, etc.	Cross-sectional design; Statistics analysis: generalized estimating equations	Volunteer status positively affects late-life well-being in self-rated health, physical dependency, and depression. The impact of volunteering is at maximum at 100 hours per year.
Musick, Herzog, & House, 1999	Secondary data: American's Changing Lives: 3 waves, subset to aged 65 and over, N=1211	Formal volunteering in religious, political, educational, senior citizen or related organizations and others	Quasi-experimental design; Statistical analysis: SUDAAN, Taylor series linearization procedures; Instrument: National Death Index	There is a curvilinear relationship between volunteering and mortality. The lowest hazard rate ratio for mortality occurs among those volunteered for one organization and those who volunteered less than 40 hours. Volunteering effect was strongest among those who report low levels of informal social interaction and who do not live alone.

Table 2. *(Continued)*

Source	Sample	Program	Method	Major findings
Oman, Thoresen, & McMahon, 1999	1972 older residents in California; twice-- 1990-91 and 1995; aged 55+	Formal volunteering	Quasi-experimental: comparison among 3 groups; Statistical analysis: Cox proportional hazard modeling	High volunteers (for two and more organizations) had 63% lower mortality than non-volunteers. After multivariate adjustment, any level of volunteering reduced mortality by 60% among weekly attendees at religious services. Health habits, physical functioning, religious attendance, and social support partly explain lower mortality rates for community service volunteers.
Omoto, Snyder, & Martino, 2000	144 hospice volunteers from 5 organizations	Formal volunteering in hospices	Quasi-experimental: comparisons of 3 age cohorts, pre- and post-test; self-administered survey; Statistical analysis: MANOVA, ANOVA, hierarchical regression	Older volunteers reported greater overall satisfaction, more positive change in self-esteem than younger volunteers (F=4.32, p< .05), and perceived greater relative benefits (F=3.97, p< .05). Older volunteers experience a small increase in self-esteem, while younger and middle-aged volunteers had slight decreases (F=3.39, p< .05).
Van Willigen, 2000	Secondary data: American Changing Lives, 2 wave; N=3617 in 1st wave	Formal volunteering in religious, political, educational, senior citizen or related organizations and others	Quasi-experimental: comparison between older and younger volunteers; Statistical analysis: net effect models, OLS, Stata, probit-based lambda procedure	For elders, volunteering for more than one organization increases 26% in satisfaction & 63% in health. Volunteer hours is curvilinearly related to satisfaction among younger adults while linearly among seniors. Volunteer hours is linearly related to health for younger while curvilinearly for seniors; the physical benefits begin to decrease after 100 hours per year. The effect of volunteer role on health is more than 2.5 times greater for seniors than for younger adults.

Note: These programs represent a range of volunteer activities, from service programs to volunteering at various levels of engagement in various organizations.