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The Impact of the "Village" Model on Health, Well-Being, Service Access, and Social Engagement of Older Adults

Carrie L. Graham, MGS, PhD[1], Andrew E. Scharlach, PhD[1], and Jennifer Price Wolf, PhD[2]

Abstract

Background. Villages represent an emerging consumer-driven social support model that aims to enhance the social engagement, independence, and well-being of community-dwelling seniors through a combination of social activities, volunteer opportunities, service referral, and direct assistance. This study aimed to assess the perceived impact of Village membership on factors associated with the likelihood of aging in place. Additionally, the research examines the characteristics and service use of members who benefit the most. *Method*. Perceived impacts of Village membership in the areas of social engagement, service access, health and well-being, and self-efficacy for maintaining independence were assessed through a survey of 282 active Village members from five sites in California. Bivariate and multivariate analyses examined associations between member characteristics, volunteerism, service use, and self-reported impacts. *Results*. Villages have the strongest impact in the area of promoting social engagement and facilitating access to services. Three quarters of the participants report that the Village increases their ability to age in place. Positive impacts were associated with level of Village involvement, but less likely among members who had worse self-reported health. *Conclusion*. Villages represent a promising new model designed to support community-dwelling seniors with a number of positive impacts that may reduce social isolation, improve well-being, and increase confidence aging in place. Villages appear to have the greatest benefit for members who are most involved and fewer positive impacts for members in poor health, prompting questions about the long-term effectiveness of the Village model in helping more frail seniors to age in place.

Keywords

aging in place, consumer driven, social engagement, social support, Village model

Villages are an innovative type of grassroots organization that has emerged in the past decade in the organizational field of support services for community-dwelling older adults. Villages are described as "membership driven, grassroots organizations, run by volunteers and paid staff [to] coordinate access to affordable services . . . and offer vetted-discounted providers" (Village to Village Network [VtV], n.d.). There are currently more than 100 operational Villages in the United States, Canada, Australia, and the Netherlands, with at least 120 more in development (VtV, n.d). Most Villages are consumer driven—initiated, developed, and have ongoing input from older adults members (Greenfield, Scharlach, Graham, Davitt, & Lehning, 2012; Scharlach, Graham, & Lehning, 2012). More than three quarters are self-governing and independent, while the rest are developed as a program within an existing senior services agency or other organization. Villages provide a set of services in exchange for a flat yearly fee that averages about $500 (Greenfield et al., 2012). Villages aim to assist older adults to remain in their own homes, which is consistent with the wishes of most American seniors (Feldman, Oberlink, Simantov, & Gursen, 2004; Keenan, 2010). To achieve this, Village staff and volunteers provide services such as transportation, companionship, housekeeping, handyman, yard care, technology assistance, and health care advocacy. Villages also refer members to existing community services, called *preferred providers*. Villages promote social engagement by organizing social events, parties, group activities, and educational classes. They also offer opportunities for

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civic engagement through member-to-member volunteering (Greenfield et al., 2012).

There is substantial evidence that social engagement and active community participation promote a number of salutary outcomes, including better health and well-being, enhanced recovery from illness, and aging in place (Browning & Cagney, 2002; Emlet & Moceri, 2012; Galinsky, Cagney, & Browning, 2012; Giles, Glonek, Luszcz, & Andrews, 2005; Giles, Metcalf, Glonek, Luszcz, & Andrews, 2004; Mendes de Leon et al., 1999; Oh, 2003; Sabia, 2008). As individuals age, the risk of social isolation increases because of uncompensated functional deficits that prevent social participation, result in a lack of access to adequate transportation, and cause the loss of formal social roles and meaningful interpersonal connections (Burns, Lavoie, & Rose, 2012; Lee & Powers, 2002; Scharf, Piliipson, Kingston, & Smith, 2001; Sun, Waldron, Gitelson, & Ho, 2012; Yen, Shim, Martinez, & Barker, 2012).

Providing volunteer opportunities is a mechanism through which Villages try to promote meaningful social and community engagement. Approximately 41% of Village members volunteer either for other members or in Village governance (Graham & Scharlach, 2013). For older adults, volunteering is associated with reduced risk of isolation, better physical health, including reduced risk of mortality, better functional health, better self-rated health, improved psychological well-being, fewer depressive symptoms, and greater happiness and life satisfaction (Feldman & Oberlink, 2003; Morrow-Howell, 2010; Scharf et al., 2001).

Villages also seek to increase access to both social services and medical care for their members through transportation and information and referral services. Older adults in the United States experience markedly high levels of unmet needs for health care and social services, estimated at nearly 10 times the levels of unmet needs found in Sweden, for example (Shea et al., 2003). The combination of functional impairment, poor social support, and lack of assistance with care needs may in turn increase the risk of nursing home placement (Gardner, 2011; Kersting, 2001; Luppa et al., 2010; Miller & Weissert, 2000; World Health Organization, 2002).

Quality of life and emotional well-being are also important factors affecting the ability to age in place or prevent institutionalization (Gardner, 2011; Luppa et al., 2010). Research suggests that depression and poor life satisfaction are strongly associated with the risk of institutionalization in later life (Miller & Weissert, 2000). By providing social support and increased access to services, the Village model may reduce uncompensated functional deficits and social isolation, while enhancing quality of life and emotional well-being, thereby promoting aging in place, while having a possible secondary indirect effect on the long-term risk of nursing home placement.

This study assesses the perceived impact of Village membership on factors associated with the likelihood of aging in place. Because most Villages have not been in existence long enough to conduct a longitudinal study assessing whether they prevent institutionalization, this retrospective survey assesses self-reported impacts of four intermediate measures that may contribute to aging in place: (1) impact of the Village on members' social engagement, (2) impact of the Village on members' perceived service and health care access, (3) impact of the Village on members' perceived health and well-being, and (4) the impact of the Village on members' self-efficacy and maintaining independence. In addition, the study examines the characteristics of individuals most likely to benefit from Village membership, as well as the relationship between service use and self-reported impacts.

Method

Participating Villages

Nine Villages were selected by The Archstone Foundation to participate in their *Creating Aging Friendly Communities through the Expansion of Villages* initiative. This initiative provided a broad range of technical assistance to Villages and required them to participate in a multisite evaluation. Five Villages were operational at the onset of the initiative and were included in the analysis. All Villages were located in predominantly urban areas; with members predominantly White and English-speaking. Three of the Villages in the study were consumer driven and freestanding, while two were a program within a larger social services agency. Villages had been in operation for between 2 and 5 years at the time of their survey. The number of members in each Village ranged from 52 to 195.

Procedures

Each of the five Villages administered a retrospective survey questionnaire to their members. To increase response rates, Village members were offered the survey in a variety of ways, including self-administered online survey, self-administered paper survey, or administered by Village staff either in person or over the telephone. Staff members at each Village were trained to obtain informed consent and collect data through a webinar conducted by the evaluators followed by ongoing support. Unidentified completed questionnaires were transferred to researchers. The research protocol was awarded an exemption by the University of California, Berkeley Committee for the Protection of Human Subjects (Protocol ID 2011-09-3647).

The sample included 282 respondents with complete surveys, reflecting an overall response rate of 47.6%, with response rates for individual Villages ranging from 34% to 82%. The considerable variation among Villages was likely because of different levels of staffing that allowed for varying levels of follow up. In addition, some Villages used

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mailed surveys initially, which resulted in low response rates. These Villages were advised to cease mailing surveys in favor of telephone and in-person interviews.

Measures

Independent Variables. Member characteristics used in the analysis included *Gender (*male/female), *Race* (White/non-White), *Age range by decade* (50-59/60-69/70-79/80-89/90 years and over), *Educational attainment* (college graduate/less than college graduate), *Income* (financially insecure—below the county Elder Economic Security Index/financially secure—above the county Elder Economic Security Index [Insight Center for Community Economic Development, n.d.]), *Household composition* (lives alone/lives with others), and *Self-rated health* (excellent or very good/good/fair/poor).

Researchers worked closely with Village staff to develop categories that represented the most common services used by their members, including *Village-sponsored social and educational events* (e.g., parties, group outings, exercise classes, lectures, discussion groups), *Driving/transportation services* (e.g., car rides, medical visits, meal delivery), *Companionship* (e.g., friendly visitors, check-in calls), *Household assistance* (e.g., housework, home organization, gardening, home modification), *Technology assistance* (e.g., assistance with computers, mobile phones, television, or stereo equipment), *Information and advice* (e.g., referrals to outside service providers, health care advice, financial advocacy, miscellaneous information), and *Volunteer work for Village* (e.g., helping other members, assisting with Village administrative tasks or governance). Scores were assigned to each service category based on the most frequently used service within that category (1 = *not at all in past year*, 2 = *once a month or less*, 3 = *several times a month*, 4 = *at least once a week*).

Dependent Variables. Outcome variables were constructed to assess the perceived impacts of Village participation on members' social functioning, health and well-being, access to services, and self-efficacy (measures adapted from Bedney, Schimmel, Goldberg, Kotler-Berkowitz, & Bursztyn, 2007).

Social impacts. Village members were asked to indicate their level of agreement (1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*) with the following six statements: "I know more people than I used to," "I talk to more people than I used to," "I leave my home more than I used to," "I participate in activities and events more than I used to," "I feel more connected with other people than I used to," and "I am less lonely than I used to be." Scores on the six items were summed, with totals ranging from 6 to 24 (Cronbach's $\alpha = .931$). Scores for missing data were imputed from individual mean values in cases where no more than two item scores were missing.

Health and well-being. A health and well-being score was calculated by summing scores for the following three statements: "I feel healthier than I used to," "I feel happier than I used to," and "My quality of life is better" (scale range 3-12; Cronbach's $\alpha = .925$). Individual mean scores were imputed for cases where one item score was missing.

Service access. A service access scale was computed by summing scores for four statements: "I know more about community services than I used to," "I use community services more than I used to," "I am more likely to get the medical care I need, when I need it," and "I am more likely to know how to get assistance when I need it" (scale range 4-16; Cronbach's $\alpha = .729$). Individual mean scores were imputed for cases missing one item score.

Self-efficacy for maintaining independence. A self-efficacy scale was calculated by summing scores to the following three statements: "I have an easier time taking care of myself than I used to," "I have an easier time taking care of my home than I used to," and "I am more likely to be able to stay in my own home as I get older" (range 4-12; Cronbach's $\alpha = .660$). Individual mean scores were imputed for cases missing one item score.

Analysis

Datasets from the five participating Villages were merged for analysis. Chi-square, independent samples *t* tests, and analysis of variance tests were used to examine bivariate relationships between member characteristics, service use, and outcome variables. Data for bivariate analysis are not shown. Separate multivariate linear regressions were used to examine the effect of demographic and service-use variables on social impacts, service access, quality of life, and self-efficacy measures. Because of the sample size and the large number of individual analyses, an adjusted *p* value of .01 was used as the criterion for statistical significance. A multicollinearity matrix was examined to ensure that no variables had intercorrelations greater than .5. Income was excluded from the multivariate analysis because there were more than 10% missing. Because there were some differences in auspices across Villages studied (years of operation, number of members, freestanding vs. agency based), proxy variables representing each Villages were created and initially included in the multivariate model. As none of these proxy variables were significant, all were removed from the model (data not shown).

Results

Participant Characteristics

More than two thirds of the participants were female, most were in their 70s and 80s, almost all were White and

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Table 1. Demographic Characteristics of Village Member Survey Respondents (*N* = 282).

Demographic Characteristic	*n*	%
Age range (years)		
50-59	7	2.5
60-69	50	17.7
70-79	117	41.5
80-89	85	30.1
90-99	14	5.0
Missing	9	3.2
Gender		
Male	82	29.1
Female	200	70.9
Household composition		
Lives alone	115	40.8
Lives with others	167	59.2
Race		
White	267	94.7
Non-White	12	4.3
Missing	3	1.1
Educational attainment		
Less than college graduate	57	20.2
College graduate or above	225	79.8
Self-rated health		
Fair or poor	41	14.5
Good	83	29.4
Very good or excellent	158	56.0
Income[a]		
Financially secure	221	78.4
Financially insecure	25	8.9
Missing	36	12.8

[a]Income is measured by the Elder Economic Security Index as "above EESI" (financially secure) or "below EESI" (financially insecure).

English-speaking, approximately 80% had completed a bachelor's degree or graduate school, and 41% lived alone (see Table 1). Less than 10% of the participants reported that they were financially insecure, with incomes below the Elder Economic Security Index in their county.

Service Use and Volunteering

Almost all the participants (89.4%) used at least one Village service in the past year. Village-sponsored social or educational events were the most commonly reported services (used by 75.9% of members in the past year), followed by calls to the Village for information and assistance (51.1%), driving and transportation services (27%), companionship services (25.2%), household assistance services (17.4%), and technology assistance (14.9%; see Table 2). Almost half (43.9%) volunteered for the Village, either assisting other members or helping in the office.

Social Impacts

The mean social impact score across the six items was 2.65. Reported social interaction impacts were higher than participation impacts. Significant bivariate associations were found between social impact scores and more frequent volunteering, $F(2, 279) = 21.334$, $p < .001$; use of transportation services, $F(3, 278) = 7.367$, $p < .001$; companionship, $F(3, 278) = 15.741$, $p < .001$; household assistance services, $F(2, 279) = 14.647$, $p < 001$; information and advice services, $F(3, 278) = 7.712$, $p < .001$; attendance at social activities, $F(3, 278) = 46.111$, $p < .001$; and technology assistance, $F(1, 280) = 15.378$, $p < .001$. In the multivariate analysis, higher social impact scores were associated with more frequent volunteering, greater use of companionship services, and more frequent participation in social activities. The association between frequency of using transportation services and social impact approached significance (model $R^2 = .389$; see Table 3).

Health and Well-Being

The mean score for health and well-being impacts was 2.46, with the greatest reported impact on quality of life. In the bivariate analysis, higher health and well-being impact scores were found to be associated with volunteering more frequently, $F(2, 279) = 8.805$, $p < .001$, as well as more frequently using transportation services, $F(3, 278) = 4.584$, $p = .004$; companionship, $F(3, 278) = 8.966$, $p < .001$; household assistance services, $F(279) = 6.051$, $p = .003$; information and advice $F(3, 278) = 4.629$, $p = .004$; social and educational activities, $F(3, 278) = 27.633$, $p < .001$; and technology assistance, $F(1, 280) = 8.149$, $p = .005$. In the multivariate analysis, higher health and well-being impact was associated with greater use of technology services, and approached significance for respondents in better health, having less than a college education, and greater use of companionship (model $R^2 = .205$).

Service and Health Care Access

The mean service/health care access score was 2.66, with reported knowledge impacts greater than service-use impacts. Service/health care access had a significant bivariate association with more frequent volunteering, $F(2, 279) = 4.593$, $p = .011$, as well as use of transportation services, $F(3, 278) = 5.754$, $p = .001$; companionship, $F(3, 278) = 14.266$, $p < .001$; social activities, $F(3, 278) = 21.249$ $p < .001$; information and advice, $F(3, 278) = 7.737$, $p < .001$; household assistance services, $F(2, 279) = 8.604$, $p < .001$; and technology services, $F(1, 280) = 13.410$, $p < .001$. Multivariate analysis showed that greater impact on service access was associated with higher use of companionship and attending social activities (model $R^2 = .249$).

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Table 2. Self-Reported Service Use and Volunteering in the Past 12 Months (N = 282).

Service	Not at All = 0; *n* (%)	Once a Month or Less = 2; *n* (%)	Several Times a Month = 3; *n* (%)	At Least Once a Week = 4; *n* (%)
Village-sponsored social and educational events	68 (24.1)	152 (53.9)	38 (13.5)	24 (8.5)
Information and advice	138 (48.9)	125 (44.3)	15 (5.3)	4 (1.4)
Companionship	211 (74.8)	45 (16.0)	17 (6.0)	9 (3.2)
Driving/transportation services	206 (73.0)	59 (20.9)	12 (4.3)	5 (1.8)
Household assistance	226 (80.1)	54 (19.1)	2 (0.7)	0 (0.0)
Technology assistance	240 (85.1)	42 (14.9)	0 (0.0)	0 (0.0)
Volunteering for Village	158 (56.0)	94 (33.3)	30 (10.6)	0 (0.0)

Table 3. Linear Regression Coefficients for Demographic and Service Usage Variables Predicting Village Impact Scores (N = 282).

Variables	Social Impact (β)	Health and Well-Being (β)	Service Access (β)	Self-Efficacy (β)
Female	−0.790	−0.044	−0.085	−0.277
Age (by decades)	−0.308	−0.117	0.086	−0.034
College graduate	−0.872	−0.536*	−0.333	−0.596*
Lives alone	0.010	−0.259	−0.468	0.027
Self-rated health	0.499	0.296*	0.221	0.466**
Housekeeping and home maintenance services	0.468	0.125	0.176	0.146
Driving/transport services	0.472*	0.014	0.191	0.179
Companionship services	0.753***	0.241*	0.364***	0.274*
Social activities services	1.147***	0.026	0.379***	0.406***
Information/advice services	0.085	0.159	0.187	0.093
Technology services	0.218	0.363**	0.219	0.074
Volunteering services	0.569**	0.030	0.021	0.142

*p < .05. **p < .01. ***p < .001.

Self-Efficacy for Maintaining Independence

The mean score for the three self-efficacy statements was 2.46. While 77% of the participants agreed that they were more likely to stay in their own home as they got older, less than 30% reported that they have an easier time taking care of themselves or their home. Significant bivariate associations were found between higher self-efficacy scores and use of companionship, $F(3, 278) = 8.501$, $p < .001$; social activities, $F(3, 278) = 19.017$, $p < .001$; information and advice, $F(3, 278) = 5.466$, $p = .001$; household assistance services, $F(2, 279) = 5.913$, $p = .003$; and technology services, $F(1, 280) = 19.989$ $p < .001$; and to a lesser extent volunteer participation, $F(2, 279) = 4.276$, $p = .015$. Multivariate analysis showed greater impact on self-efficacy among participants in better health and who participated more in social activities. The association approached significance among those with less than college education or who used companionship services more frequently (model $R^2 = .232$).

Discussion

Old age is often characterized by gradual reductions in social networks and increased isolation, contributing to increased risk of unmet needs and possible health-related relocation (Sabia, 2008). The Village model strives to bolster social connections and increase independence by facilitating access to both volunteer assistance and existing services in the community. From the perspectives of the Village members in this study, Villages apparently are generally successful at achieving these objectives, although not universally so.

Village members reported the strongest impacts in some areas of social engagement. Nearly 79% of the respondents agreed that they knew more people as a result of the Village membership, and 59% felt more socially connected, a factor known to promote aging in place (Giles et al., 2005). Villages also appear to have a positive impact on their members' ability to access services and health care. Villages actively promote access to needed services through referrals to vetted providers and transportation. In this study, though a majority of the participants agreed that they *know more* about services and feel confident in their ability to access needed services, less than half said they actually have *used* more community services. This is likely because Village members tend to be fairly healthy and may have few service needs yet; nevertheless, knowledge of existing services may be a precursor to future service access. There is also some indication that Villages may improve members' overall well-being, with

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about one half of the respondents reporting that the Village improved their quality of life. Impact on health was lower, with only about one third reportedly feeling healthier because of Village membership. This may be because Villages do not currently offer many specific disease management or personal care–related services. Though more than three fourths of the respondents indicated that Village membership enhanced their confidence to age in place, only about a quarter said it improved their ability to take care of themselves and their homes. Long-term follow-up studies will be required to determine whether they indeed are able to do so.

Villages are a new type of consumer-driven organization that is still in the process of expanding and innovating. They currently provide a wide variety of services and activities for members (Greenfield et al., 2012). This research sought to examine what services were the most impactful. Village-sponsored social activities are attended by three quarters of Village members. Attending these events appears to have a positive impact on social engagement, health and well-being, and service access. Though less frequently used, companionship services (e.g., friendly visits or phone calls from other Village members) also contribute to enhanced social engagement and increased access to services. As has consistently been found for the general aging population (Morrow-Howell, 2010), volunteering in the context of the Village also appears to have positive benefits for social functioning. Finally, assistance with technology, although used by a minority of members, was found to be associated with increased confidence aging in place. This is a particularly promising finding, as the use of the Internet and communication technology can increase social engagement and facilitate access to health care information. Thus, technology assistance provided by Villages may be a means of ameliorating the "digital divide" in which older adults experience more barriers to using technology (Cresci, Yarandi, Morrell, 2010).

Though self-reported impacts are promising overall, especially in the areas of social engagement and service access, there is uncertainty about the Village model's ability to address the needs of the most vulnerable seniors. Nationally, Villages tend to attract senior members who are White, economically secure, and with relatively low levels of disability (Greenfield et al., 2012). The demographics of Village members in this study were similar, with participants more likely to be women, homeowners, high school graduates, English-speaking, and economically secure compared with all older adults in California (California Department of Aging, 2013; Insight Center for Community Economic Development, n.d.). Areas where impacts were not strong may be explained by the fact that many Village members have high social functioning and good health when they join, resulting in little perceived change. While Villages offer services like transportation and referrals that may increase access to health care, they offer few services that directly aim to improve health. Results from this research suggest that Villages tend to have the most positive impacts for members who are the healthiest and therefore have the lowest risk of institutionalization. This finding raises concerns regarding Villages' ability to meet members' needs as they continue to age over time. To meet the needs of aging members, Villages may need to redirect their resources toward services such as personal care, disease self-management, or medication reconciliation.

Study Limitations

Study participants represented only about one half of current Village members at the time of this study, raising concerns about generalizability, especially since the actual demographic characteristics of all Village members is unknown. Analysis was limited by the homogeneity of the study sample, with little economic, ethnic, or linguistic diversity, prompting the need for more research on Villages with greater diversity to better understand how Villages may impact the entire range of older adults. Furthermore, impacts were assessed using self-reported retrospective measures; longitudinal studies of Village membership, preferably with adequate controls, are needed to develop more objective estimates of the actual impact of Village membership.

Conclusion

As the aging population increases, there will be an urgent need to promote service access, social support, and social engagement, especially for individuals who do not live in service-rich living environments such as supported housing or qualify for means-tested support services. This study suggests that Villages represent a promising new model, with the potential for positively affecting seniors in ways that may reduce social isolation, expand access to services, increase well-being, and increase seniors' confidence in their ability to age in their own homes. Members reporting the greatest impacts are those who participate in Village-sponsored social and education events, use companionship services, volunteering, or receive technology assistance. However, Villages appear to have less impact for those members in worse health, prompting the need for further research examining the long-term effectiveness of the Village model in helping more vulnerable members to age in place.

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