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Health and Function of Older Persons Volunteering for Habitat for Humanity

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ABSTRACT

The purpose of this mixed method research study was to describe the health and functioning of a group of 40 older persons volunteering for Habitat for Humanity. We used qualitative interviews, participant observation, the updated version of the Short-Form-12 Health Survey (SF-12v2™), and health items on a questionnaire to explore health and functioning of older adult volunteers ages 57 to 88. The older participants were not physically healthier, but were mentally

healthier than their community dwelling counterparts. Major health and functioning themes identified were: *I'm still healthy*; *Adjusting to limitations*; *Everyone contributes*; and *Working hard*. Participants discussed accommodations for age-related changes but performed a wide variety of tasks necessary to build a house. Implications are that older persons can provide valuable services beyond "traditional" volunteering activities and should be recruited and supported in these activities.

Keywords: Older Persons, Volunteers, Mixed Method, Habitat for Humanity

Health and Function of Older Persons Volunteering for Habitat for Humanity

Older persons represent a large portion of potential volunteers for numerous needs of communities and nations. Today, older persons are healthier, better educated, and the largest group ever in United States (U.S.) history.⁷ National policy focus worldwide is shifting from attention on dependency, frailty and poor health commonly thought of as associated with aging toward a focus on healthy and productive aging and quality of life.¹ In the year 2006 in the United States, 23.8% of older persons ages 65 and over volunteered in some capacity: 16.2 million.²⁸ Baby Boomers volunteer today at higher rates than past generations: 30.9%.⁵ Further, older persons working through Retired & Senior Volunteer Programs spent over 500,000 hours in 2000 providing disaster relief and housing rehabilitation/construction.⁴

No studies have examined older adults and volunteer work that involves manual labor, like that of Habitat for Humanity. It is also not clearly known whether volunteering contributes to better health and life satisfaction for older persons or if only healthier and more satisfied older persons volunteer.² Therefore, the purpose of this mixed-methods research study was to describe the health and functioning of a group of older persons volunteering for Habitat for Humanity.

Background

A number of research studies have specifically addressed health in older volunteers either as a factor influencing volunteering choices or as a beneficial effect of volunteering. Both physical and mental health have been explored in these studies.

Health as a Benefit of Volunteering

Positive relationships between volunteering and well-being, suggest that volunteering is beneficial to older adults. Volunteering is associated with better physical² and psychological well-being,^{8,9,12,20} increased life satisfaction,^{3,30,34} lower mortality risk^{10,13,25} and lower functional dependence and depression.^{2,12} Volunteering was associated with increased longevity and improved quality of life

even when other activity outlets such as physical activity and hobbies were controlled.²⁵

A meta-analysis of 37 independent studies of older North Americans by Wheeler³⁴ and associates concluded that older volunteers' sense of well-being was significantly bolstered through volunteering. In addition, several longitudinal studies^{11,15,21,30} have looked at the long-term benefits for older persons of volunteering concluding that older persons experienced greater positive changes in perceived health than did younger volunteers and that volunteering slowed decline in health and functioning, improved mortality rates and reduced depression.

Few studies addressed the amount of time spent volunteering that is most beneficial for participants. Musick and colleagues¹³ found protective effects of volunteering were strongest for those volunteering for only one organization or less than 40 hours per year, while others^{9,12,25} found that volunteering, even in low to moderate amounts still had beneficial effects.

Health as a Determinant of Volunteering

Health has been identified as a determinant to volunteering with studies finding that older volunteers had higher levels of functional and psychological well-being prior to volunteering, and that health status was significantly related to volunteer hours.^{21,3} Both old-old and young-old volunteers were found to regard themselves as healthier and better functioning than non-volunteers.^{25,19} Findings of successful aging by Rowe and Kahn²³ indicated that older adults with higher scores in areas of mental and physical functioning were twice as likely to volunteer as seniors with lower scores.

While it would seem that health would be a major determinant of volunteering for older persons, several studies have contradicted that assumption.^{30,31} One study found that poor health was not a factor that appeared to differentiate volunteers from non-volunteers, rather that volunteers were more likely to feel younger and have better perceived health.³¹

More research is needed in the area of health and older volunteering. It has been suggested that further research is needed that incorporates standard measures of health status² and that future studies should take the type of work into consideration when examining the effects of volunteering on health.^{9,13} This study expands knowledge in the area of older volunteering by addressing these gaps.

Theoretical Framework

Margaret Newman's theory of health as expanding consciousness¹⁸ provided the theoretical framework for this study. Newman defines consciousness as the "informational capacity of the system to interact with the environment".^{16p24} It can

be seen in the quality and diversity of interaction between human beings and their environment. Expanding consciousness is viewed as a process whereby a person becomes more of oneself, finds greater meaning in life, and reaches new connectedness with other people and the world in which they live.¹⁷ Within this framework, volunteering is viewed as a factor that is a catalyst for changes in patterns of person-environment interactions. As persons volunteer, they expand their interactions with others. The resulting expanding interactive patterns of interpersonal relationships that occur during the process of volunteering are therefore viewed as manifestation of patterns of expanding consciousness and a manifestation of health for these older volunteers.

Methodology

Design

A mixed methods, triangulated, approach was used to learn about health, motivation, culture and volunteering patterns of a convenience sample of 40 older persons who participated in an organization sponsored Habitat Blitz Build in East Tennessee in late 2006. Triangulation methods are used when the researchers value convergent and consensual validity and “in which it is deemed appropriate to use information from one source to corroborate another”.^{24p573} This article is a report of one phase of analysis of the larger study. The research questions for this paper are: (1) what is the general health status of these individuals? And: (2) how do these older persons function on a Habitat Blitz Build? Both quantitative and qualitative data were collected at the same time and received equal emphasis to answer the research questions.

Sample

A convenience sample of older adults aged 55 and above who were volunteering for a Habitat for Humanity Blitz Build was used for this study. University IRB approval was obtained prior to beginning the study. Participants were observed and interviewed in a naturally occurring setting. Confidentiality was preserved throughout the study. Fictitious names are used for participants, locations, and other potentially identifiable information. Individuals transcribing the interviews and the research team members signed a confidentiality agreement prior to being given any materials for the study. Face-to-face semi-structured interviews, identified only by ID numbers, were audiotaped and completely transcribed for analysis. Transcribed data and field notes were identified by code only.

Data Collection

A research team consisting of faculty members and graduate students from the University of Tennessee, Knoxville collected data during the week of the Habitat Blitz Build. When volunteers signed in for the Blitz Build and signed the standard Habitat for Humanity Release of Responsibility forms, they were given forms

describing the study inviting them to participate. Older persons who signed the forms were contacted by a research team member to arrange an interview. No one who was willing to participate was excluded. Forty older adults agreed to participate in the study. Additionally, the Habitat for Humanity foreman and County Habitat Executive Director were interviewed to enrich study contextual content (total N=42).

Semi-structured interviews were used to qualitatively obtain answers to the research questions. Participants were asked to describe their participation in the Habitat build, their health and any limitations, benefits from participating and reasons for participating. Members of the researcher team used participant observation according to Spradley²⁶ by working alongside the participating volunteers to gather data by observing the entire cultural milieu and taking field notes and photographs. Participants signed a "Consent to Participate Form" and "Consent to Photograph Form". Additional contextual data included newspaper articles, newsletters, or other artifacts pertaining to the activity.

Quantitative data collection included completion of a 14-item demographic questionnaire which provided a sample description. One item on the demographic questionnaire asked participants to indicate if they had any of the following disease conditions: hypertension, arthritis, heart disease, cancer or diabetes. The Short Form-12 Health Survey (SF-12v2 TM or SF-12) was used as a measure of health. Protocols were established for administering the demographic profile instrument and the SF-12v2 TM.

The SF-12 is a widely used, 12-item, generic questionnaire designed to evaluate various aspects of health from the individual's point of view. It measures eight domains of health: physical functioning (PF); role physical (RP); bodily pain (BP); general health (GH); vitality (VT); social functioning (SF); role emotional (RE); and mental health (MH). It is also possible to compute combined physical measure scores (PCS, physical component score) and combined mental health measure scores (MCS, mental component score). According to Resnick and Nahm,²² the revised SF-12 is a reliable and valid measure of health status in independent living older adults. Demographic questionnaires and SF-12 forms were completed by participants in advance of the interviews and reviewed by researchers at the time of interviews to help minimize duration of the interview session.

Data Analysis

Qualitative interview data were analyzed and interpreted by a research team utilizing ethnographic methodology according to Spradley.²⁶ The ethnographic method of analysis allowed the research team to gain an "emic" or insider, understanding of the health and functioning of this group of older volunteers. During coding of transcripts, each individual event or description of a phenomenon was identified and given a name. Team members discussed coding

names and agreed on codes and exemplars. Similar concepts were collapsed into themes which were further developed in terms of their properties and dimensions to qualitatively answer the research questions.

Descriptive statistics were used to quantitatively analyze the demographic questionnaires and the SF-12 data was interpreted according to instrument author guidelines.³³ One sample T-tests were performed to compare the SF-12 results to the U.S. population norms established by the developers of the SF-12 instrument from data within the 1998 National Survey of Functional Health Status.³³

Findings

Demographics

Participants for this study were 40 men and women, age 57 and older plus two Habitat for Humanity personnel who were among the one hundred or more individuals who participated in the Habitat Blitz Build. The project was a cooperative effort of the Woodmen of the World (WOW) Life Insurance Society, a fraternal organization, and Habitat for Humanity. During a Blitz Build, a home is built in one week from foundation to completion. The majority of the volunteers were older WOW members from approximately eleven southern and eastern states. Few participants had worked in construction or related field as a profession. Most participants were Caucasian. Ages of these volunteers ranged from 57 to 88 years with a mean of 68.7 years. See Table 1 for demographic characteristics of the sample.

Table 1

Demographic Characteristics of Older Volunteer Participants

	N †	%
Gender	40	100.0
--Male	24	60.0
--Female	16	40.0
Race	40	100.0
--Caucasian	24	60.0
--Hispanic	16	40.0
Age	Mean=68.64	SD=6.27
--55-64	9	23.1
--65-74	26	66.6
--75 and above	4	10.3

Marital Status	40	100.0
--Married	35	87.5
--Widowed	5	12.5
Education Level	40	100.0
--No high school diploma	7	17.5
--High school graduate	22	55.0
--Some college	7	17.5
--Bachelor's degree or higher	4	10.0
Employment Status	40	100.0
--Full-time employed	8	20.0
--Part-time employed	28	70.0
--Other	4	10.0
Income Status	34	100.0
--Under \$24,999	8	20.6
--\$25,000 – 34,999	4	11.8
--\$35,000-\$49,999	9	26.5
--\$50,000 - \$ 74,999	8	23.5
--\$75,000 and above	5	14.7

† The number of participants answering these questions varied.

Research Question 1: What is the general health status of these individuals?

Demographic health items were examined and compared to the questions asked in the *Older Americans Update 2006*, as reported by the Federal Interagency Forum on Aging-Related Statistics.⁶ See Table 2 for the comparison.

Table 2

Comparison of the Participants Age 65 and Over (N=30) and the General Elderly Population † with regard to Chronic Health Conditions

Chronic Health Condition	Percentage of Incidence	
	Research Participants	Older Americans
Hypertension	37.5	51.9
Arthritis	30.0	49.9
Heart Disease	20.0	31.7
Any Cancer	25.0	20.6
Diabetes	25.0	17.0

† Reference data based on the *Older Americans Update 2006* , which reports data only for persons age 65 and older (2006, p.24).

Thirty percent of the participants reported having one health condition while 60% reported having two or more conditions. Because the *Older Americans Update 2006* document reported findings only on older persons aged 65 and above, percentages for the thirty participants who were in that age range are the only data presented in this article. Initially, it appeared from this data, that the older volunteers had less hypertension, heart disease, and arthritis and more cancer and diabetes than the general population in that age group.

When data from questionnaires were triangulated with qualitative interview data, it became apparent that some participants had under-reported disease conditions. Qualitative interviews were compared, participant-by-participant, with the demographic questionnaires to identify the discrepancies in reporting. One participant failed to mark heart disease, but discussed it in the interview. Another talked about diabetes in the interview, but did not mark it on the questionnaire. The most noticeable finding was that the questionnaire failed to capture a large number of musculoskeletal conditions. Eight participants reported such problems as: “knee problems”; “back problems”; “shoulder spur”; “broke back”; and “hip and shoulder replacement”. These older adults did not mark arthritis as a condition on the questionnaire and this musculoskeletal health information would have remained unknown if not for our mixed-methods approach. Ninety Five percent of participants reported their health as good to excellent. Further, all participants reported their quality of life (QOL) as good to excellent.

The SF-12 provided quantitative information about general health and functioning. Table 3 presents the S-F 12 findings compared with the U.S. population norms.³³

Table 3

Results of One-Sample t-Test of Health as Measured by the SF-12

Dimensions of SF-12	Sample		U.S. Population †	
	N	Mean	Mean	t
1. Physical Functioning (PF)	40	45.9	44.4	.98
2. Role Physical (RP)	37	44.6	45.1	-.32
3. Bodily Pain (BP)	39	47.3	47.5	-.14
4. General Health (GH)	40	46.4	46.4	-.06
5. Vitality (VT)	39	53.4	49.3	2.83*
6. Social Functioning (SF)	39	52.7	49.2	3.0*
7. Role Emotional (RE)	37	48.2	47.5	.38
8. Mental Health (MH)	38	55.6	51.5	3.1*

Physical Component Score (PCS)	36	44.2	44.0	.12
Mental Component Score (MCS)	36	55.4	50.5	3.65*

† Population norms are calculated based on data from the SF-12 scoring manual (Ware, et al., 2005, pp. 84 – 85)

* $p < 0.01$, two-tailed

The study participants scored statistically higher than the population norm on subscales for vitality, social functioning and mental health and in the summary mental component score (MCS). However, the study sample did not appear to be significantly different from the reference population on any of the markers of general health or physical functioning.

One qualitative theme: “*I’m still healthy*”, described participants’ perceptions of their health and provides additional information related to the first research question. Despite major disease conditions, participants perceived themselves as being healthy. They perceived their conditions as an inconvenience, and as long as the condition was not currently bothering them, they felt it was something in the past, rather than presence of any type of illness. As Charles stated:

I've had a lot of problems. But I'm still healthy. If you look on there (survey), you'll see. I've had tuberculosis. I had a kidney out when I was 19 years old with tuberculosis. Ah, I've had open heart surgery. I've had by-passes done. I'm 69 years old. I had colon cancer oh, about 18 months ago, something like that. Went back for my check up this year... everything is fine!

Research Question 2: How do these older persons function on a Habitat Blitz Build?

The second research question was answered mainly through the qualitative methods of participant observation and semi-structured interviews. Three themes were identified that described this functioning: “*Adjusting to limitations*”; “*Everyone contributes*” and “*Working hard*”.

Adjusting to limitations. Each participant recognized the limits of their physical abilities and worked safely within those limits. They adjusted their pace and the type and amount of work that they did. There were no injuries observed during the week despite the rugged and steep lot site and the complexity of the work accomplished. As Mark explained when asked about physical limitations:

Somewhat, as I mentioned about not walking the walls anymore when your knees start getting a little weak and you have to pry yourself up with your hands. Ah, it’s kind of hard to have the ability to walk up there anymore. And I get ah... a little short of breath due to some heart problems. And ah, so, I have to, I don't run the 100 yard dash anymore. Um... I might walk fifty. But ah... the, to me the thing is, staying with it until you get it done.

Everyone contributes. Every participant contributed in his/her own way. Some participants painted, framed, put up siding, roofed, sawed lumber, did electrical work or hung cabinets. Others cooked, brought water, and ran errands. Walls were plastered and painted. The entire 1300 square foot home plus a shed and dog house were basically completed in a one week time frame. Sometimes, the participant's health conditions placed some significant restrictions on their ability to participate in the Build. But everyone found a way to be of help. Rod explained:

I was diagnosed with throat cancer and had radiation...March, I had lung surgery and they removed 40% of my right lung... It slowed me down a lot...I couldn't do much of the heavy work. I just socialized, carried water, picked up trash or I call it 'be a gopher'... I've tried to be of some help

The oldest participant was Sid, who was 88 years old. He was at the Build site every day registering volunteers. He explained his job:

...they have waiver and release forms...I keep up with that, do small jobs...I've never tackled a roof or ladder and I'm not going to

Working hard. A day typically began at 6:00 A.M. with breakfast at the camp and ended at 6:00 or 6:30 with the evening meal at the camp. Sometimes work necessitated that some volunteers return to the house in the evening to complete tasks so that the next day's schedule would not need to be altered. Research team members expressed surprise at the intensity and duration of the work performed by the older volunteers. The older volunteers laughed and joked while working with each other, with Habitat personnel and with the family receiving the home during the entire week, no matter how hard the work got or the weather changed. The Habitat for Humanity executive director described the health and functioning of this group of older volunteers in the following statement:

...they have health issues but they do not let those health issues put limitations on them. They work as hard as they can for as long as they can. And sometimes they work a little harder than they should and they pay the price the next day, but they don't let it stop them at all

Discussion

Older persons who volunteered for the physically demanding work required to build a Habitat for Humanity house were no more physically healthy than the general population for their respective age groups. These findings support previous reports that health is not a determinant of older volunteering.^{[2,30,31](#)} However, knowledge in this area has been expanded by our study because the previous volunteering studies did not focus on physically demanding volunteer activities.

Our volunteers, aged 65 and greater, were significantly mentally healthier than the general population for their age groups. They scored higher on the summary MCS score and on the dimensions vitality, social functioning, and mental health. Whether the higher mental functioning was present before the Habitat Blitz Build began, or was a benefit of the interactions and activities during the build is not known and cannot be determined from this cross-sectional study.

An unexpected finding from this study that only could have been uncovered with mixed-methods study design was the under-reporting of disease conditions. This may be a common phenomenon in older persons and may explain why previous researchers have determined that older volunteers are healthier than non-volunteers.

Support for Newman's theory of health as expanding consciousness can be inferred from the study findings. The older person's perception of health was a better indicator of functioning than the presence of disease conditions. These older volunteers had a variety of physical conditions and limitations, but perceived themselves as healthy and functioned at high physical levels. They also interacted at high levels with other volunteers, the Habitat for Humanity workers, and the family who received the home. The significantly higher mental health levels could possibly be attributed to these increased social interactions and viewed as an indicator of expanding consciousness.

Limitations of this study are that all participants were members of the same organization and all were residents of the southeastern United States. Findings are limited to closely similar groups of older adults. Another limitation of this study is the small sample size which impacts statistical significance of the quantitative findings, especially when comparing our sample SF-12v2 TM scores to general population scores. This is the first study of its kind and will be used as a pilot study for future larger studies exploring health of older persons who volunteer for physically taxing activities such as older persons who have volunteered for hurricane or other disaster relief efforts.

Implications

This study provides strong evidence that older persons can provide valuable services beyond "traditional" volunteering activities. Anecdotal evidence from colleagues, church groups, and Habitat for Humanity personal indicates that significant numbers of older volunteers are providing such services. This is a rich area of information and knowledge regarding successful ageing and should not be overlooked.

Nearly 24% of older persons in the U.S. volunteers (U.S Department of Labor, 2006), therefore, approximately 76% of older persons do not volunteer. It has been suggested that organizations do not value older volunteers.³² A 2005 survey by the United States National Council on the Aging (NCA) showed that

few organizations were ready to take advantage of the surge in interest or tap into the professional skills of older Americans.¹⁴ Van Ryzin²⁹ has aptly stated the task and challenge for non-profits: "How to translate the 'golden years of leisure' into 'golden opportunities for meaning, success, and contribution'" p.12. Nurses, through their involvement in communities, especially faith-based communities, are in a position to promote volunteering as an activity choice for older persons. Many churches and community groups have volunteer projects that older adults could be encouraged to participate in.

The ability of health questionnaires to accurately indicate the presence of disease conditions in older adults living with chronic conditions is challenged by our study findings. Further research is needed in this area. Nurses who are assessing health status may need to ask more probing questions about health conditions to gain accurate information. Also, nurses need to realize the importance of health perception, rather than the presence of disease conditions, as an important factor for older adult functioning. Older adults themselves, define their health status and functional abilities. Ageist attitudes about abilities of older adults must be corrected in nursing education programs.

Conclusions

Nations cannot afford to undervalue the resource they have in potential older volunteers. Public officials and agencies will find it necessary to be creative in attracting and retaining older volunteers, especially those with lower incomes.²⁷ Except for those older persons with very poor health, almost any older person can be a volunteer in some capacity. Further, this study has shown that even older persons with health problems can and should be encouraged to participate in a wider range of volunteer activities that have been previously considered.

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