### **Functional Status and Church Participation of the Elderly: Theoretical and Practical Implications**

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#### **Abstract:**

This paper shows how functional impairment on five dimensions, physical health, mental health, economic resources, ability to perform the activities of daily living, and social resources, affected church participation of the elderly in a rural county of North Carolina. The data consist of 412 interviews with persons who were 60 years old or older in 1985. The instrument was a modified version of the OARS. The implications of these findings for the design of both studies of the relationship between aging and church participation and church programs to facilitate the involvement of the frail elderly are discussed.

#### **Article:**

Churches provide elderly persons with important opportunities for religious and social involvement.<sup>1</sup> There are positive associations between religious activities and both happiness and adjustment to old age.<sup>2</sup> It is thus potentially very important to find ways for churches to facilitate the continued involvement of older persons.

The literature focusing on the relationship between aging and church attendance shows different results. Crosssectional studies suggest that church attendance peaks when people are in their sixties but decreases in advanced old age. This suggests that people become more religious as they age,<sup>3</sup> but cease attending church when they are very old and unable.<sup>4</sup> Longitudinal studies, on the other hand, suggest that the relationship between aging and church attendance can be explained by cohort membership.<sup>5</sup> In other words, older persons attend church more often than younger and have maintained it during old age. At least one study discusses a period effect on church attendance. Wingrove and Alston reported that all cohorts showed declines in church attendance after 1965, a pattern that reflects the secularization of American society.<sup>6</sup>

One problem with the studies cited above is that they relied on chronological age as the only measure of both aging and cohort membership.<sup>6</sup> The relationship between aging and church participation can also be studied by using a functional rather than a chronological measure of age. For example, researchers have shown that poor physical health, one functional indicator of old age, is related to low church attendance.<sup>8</sup>

Physical health, however, is not the only measure of age-related functional capacity. Researchers at Duke University have stressed the importance of viewing the older person's ability to function holistically. They have developed a method of multidimensional functional assessment called the Older Americans Resources and Services (OARS) strategy.<sup>9</sup> The OARS methodology is designed to measure the older person's levels of impairment in physical health, mental health, economic resources, social resources, and ability to perform the necessary activities of daily living. Each dimension of functional impairment is constructed from a long battery of questions. For example, the measure of physical health combines information from 47 questions. Each summary measure is a six point scale that divides persons into those who are: (I) unimpaired. (2) slightly impaired, (3) mildly impaired, (4) moderately impaired, (5) severely impaired, and (6) completely impaired on that dimension. The validity and reliability of these scales are well established.<sup>10</sup>

Although no study on church participation has used the OARS measures of functional capacity, scattered studies have shown that poor economic resources<sup>11</sup> and inability to perform the activities of daily living<sup>12</sup> are relevant, in addition to poor physical health. There appear to be no studies on the relationship between church participation and either mental health or social resources. There also appear to be no multivariate studies that have simultaneously controlled for the effects of all five dimensions of functional status on church participation.

Demographic characteristics of the older population are also related to church participation. Women participate in religious activities more often than men.<sup>13</sup> Highly educated persons engage more in ritual practices than less educated persons.<sup>14</sup> Blacks attend church activities more frequently than whites.<sup>15</sup> Since church participation varies by demographic subgroup of the older population, any study of the effect of functional impairment on church activity should control for these effects.

This paper shows how functional impairment on five dimensions of functional status measured by the OARS methodology affected church participation of the elderly in Davidson County which is in rural North Carolina. The instrument used in the Davidson County study was a modified version of the OARS instrument. Some of the questions used to measure functional status were intentionally omitted. Decisions about which questions to eliminate were made based on information provided in a document available from Duke University.<sup>16</sup> This document reports on statistical models that use fewer variables to predict the summary measures than the original method of compiling the data. In this research, we used the shorter method of creating the measures of mental health, social resources, and ability to perform the activities of daily living.

The implications of the findings for the design both of future studies of the relationship between aging and church participation and of church programs to facilitate the involvement of the frail elderly are discussed.

#### THE DATA

This paper is based on data from a house-to-house survey of 412 residents of Davidson County, North Carolina, who were 60 years old or older in 1985. According to the 1980 census, Davidson County had 113,162 residents, 14% of whom were 60 years old or older. It includes two cities, Lexington and Thomasville, which had 15,117 and 14,144 residents in 1980, respectively. The rest of the county is rural, but dotted with small towns.

A random sample of 95 census blocks and sections of enumeration districts was selected. Interviewers were instructed to interview every person 60 years old or older who lived on these blocks. The exception to this rule was the situation in which three or more eligible persons lived in one household. In this situation, the interviewer questioned only the oldest and the youngest person 60 years old or older.

Sixty-five interviewers, most of whom were county employees, were trained by representatives of the University of North Carolina at Greensboro's Center for Social Research and Human Services. Although only 13% of the interviewers had conducted this type of interview before, 88% used similar skills in their work. One-fifth of them had masters or professional degrees, and another 45% had graduated from college. Almost all of them had contact with older persons during a typical week, in their family (70%), at their church (73%), as clients (74%), in their neighborhoods (52%), or as friends (74%).

The interviews were usually conducted during working hours, because the interviewers were given release time for this purpose. The interviews took place between February 13 and April 30, 1985. The average length of the interviews was 83 minutes.

As mentioned above, the resulting sample included 412 persons who were 60 years old or older. The proportion of blacks in the sample was the same as in the population, but no members of other minority groups were interviewed. Younger men were under-represented, probably because of the time of day most of the interviews were conducted. The younger men who responded were mainly interviewed after business hours and thus probably were not different from their counterparts who eluded the interviewers.

The distribution of age and sex in the sample more closely resembled the 1985 population projections than it did the 1980 Census data. The data were thus weighted to reflect the 1985 population projections. Table 1 includes the resulting distributions of the sample on selected demographic variables.

Table 2 shows the frequency distribution of each dimension of functional impairment. Notice that older persons in Davidson County tended to have very good social and economic resources,

## TABLE 1

## FREQUENCY DISTRIBUTIONS OF VARIOUS DEMOGRAPHIC VARIABLES

Demographic Variable	Category	Percent	
Age (N=408)	(1) 60-64 (2) 65-69 (3) 70-74 (4) 75-79 (5) 80-84 (6) 85+	30.2 24.6 19.0 12.7 8.0 5.5	
Education (N=406)	<ol> <li>0-4 years</li> <li>5-8 years</li> <li>Some High School</li> <li>High School Graduate</li> <li>Trade School</li> <li>College Incomplete</li> <li>College Graduate</li> <li>At least some Graduate School</li> </ol>	11.2 34.7 20.4 15.4 5.9 6.3 4.1 2.1	
Race (N=408)	<ul><li>(1) White</li><li>(2) Black</li></ul>	91.5 8.5	
Sex (N=411)	<ul><li>(1) Male</li><li>(2) Female</li></ul>	42.5 57.5	

#### TABLE 2

		Dimension of Impairment				
Level of Impairment		Social (N=394)	Economic (N=406)	Physical (N=412)	Mental (N=396)	ADL (N=386)
(1)	% Unimpaired	51.3	66.5	0.5	29.4	21.2
(2)	% Slightly Impaired	26.5	24.4	1.4	42.5	3.8
(3)	% Mildly Impaired	11.2	3.2	48.2	19.6	38.5
(4)	% Moderately Impaired	8.0	2.8	25.6	5.6	9.2
(5)	% Severly Impaired	3.1	2.0	16.9	2.9	22.5
(6)	% Completely Impaired		1.1	7.5		4.8

## FREQUENCY DISTRIBUTIONS OF THE FIVE DIMENSIONS OF FUNCTIONAL IMPAIRMENT

to be mildly impaired both physically and in performing the activities of daily living, and to be slightly mentally impaired.

Two measures of church participation. frequency of church attendance and membership in a church social club whose members are all 60 years old or older, were used in this research. See Table 3 for their frequency distributions. Note that church attendance was very high among the members of this sample; over half of them attended church at least once a week. The measure of membership in an over-sixty church club is somewhat inadequate, because respondents were not asked whether their

TABLE 3FREQUENCY DISTRIBUTIONS OFMEASURES OF CHURCH PARTICIPATION					
Church Participation Measure	Category	Percent			
Church Attendance	(0) Never	13.2			
(N=404)	(1) < Once/year	6.3			
	(2) About once/year	3.1			
	(3) Several times/year	13.2			
	(4) About once/month	2.7			
	(5) 2-3 times/month	10.4			
	(6) Every week	41.7			
	(7) Several times/week	9.4			
Over-Sixty Club	(0) No	77.7			
(N=403)	(1) Yes	22.3			

churches had over-sixty clubs. Only about 30% of the churches in Davidson County had over-sixty clubs.<sup>17</sup>

#### RESULTS

Table 4 shows the standardized regression coefficients, or betas, resulting from the regressions of each measure of church participation on the five dimensions of functional impairment and the demographic variables. The regression coefficients shown are those that emerged when all variables were included in the equation simultaneously. A positive beta means that a high score on the variable (e.g., education) made church participation more likely, regardless of the scores on the other variables included in the equation. A negative beta means that a high score on a variables (e.g., economic impairment) made church participation less likely, regardless of the scores on the other variables included in the score was used. In other words, one can be 90% confident that the findings discussed below are not due to chance.

To check the appropriateness of regression analysis, the predicted residuals were plotted against the studentized residuals. The linearity assumption was not violated because the residuals were randomly distributed about the horizontal line through 0. The equality of variance assumption was met, because the spread of the residuals was random. Histograms of the studentized residuals indicated that the residuals were skewed to the right. Correcting the distributions to meet the assumption of normality did not change the results, so the nontransformed data are reported here.

The relationship between church attendance and race, sex, and education was as predicted from previous literature. Blacks, females, and well-educated persons had higher church attendance than others. When controlling for other demographic factors and level of functional impairment on five dimensions, age was not related to church attendance.

Persons who were economically impaired or had difficulty with the activities of daily living attended church less often than persons unimpaired on these dimensions, regardless of other factors. The negative effect of inability to perform the activities of

Independent	Dependent Variables			
Variables	Church Attendance (residual $df = 345;$ $R^2 = 0.15)$	Over-60 Club (residual df = $344$ ; $R^2 = 0.07$ )		
Demographic:				
Age	0.02	0.09		
Race	0.11**	0.01		
Sex	0.11**	0.15***		
Education	0.10*	0.05		
Functional				
Impairment:				
Social	-0.06	-0.10*		
Economic	-0.13**	-0.10*		
Physical	-0.09	0.08		
Mental	0.04	-0.06		
ADL	-0.22****	-0.09		

daily living was particulary strong. Other dimensions of impairment were not related to church attendance.

The predictors of participation in an over-sixty club are more difficult to interpret due to the measurement problem mentioned above. One interpretation of the findings is that females, persons with good social resources, and persons with good economic resources were more likely to participate than others, regardless of other factors. Another interpretation is that churches with congregations that are predominantly female, socially integrated, and comfortable economically are more likely to have over-sixty clubs. Either interpretation is plausible. In actuality, both interpretations probably amount to the same thing. A certain type of member — female, socially supported, or economically well-off — is probably more likely to join or encourage the establishment of an over-sixty club. Age, race, level of education, physical health, mental health, and ability to perform the activities of daily living did not affect participation in an over-sixty club, when controlling for other factors.

## DISCUSSION

The findings presented here have implications for the design of both further studies of the relationship between aging and church participation and programs to facilitate the involvement of the frail elderly in church activities. These implications are discussed below.

This paper clearly shows the importance of using functional measures, in addition to a chronological measure, of aging. Chronological age was not a predictor of church participation when controlling for functional status and other demographic variables. this suggests that cohort membership, at least within this elderly population, was not predictive of church participation. In order to make further progress in understanding the relationships between aging and church participation, one would need to do a study of persons of all ages that included measures of both functional and chronological age. Such a study would also benefit from the inclusion of measures of life cycle stage, family life cycle stage, and other things known to be correlated with age. Such variables were not included here, because there would have been very little variation on them.

As others have observed, churches vary in what services they offer to facilitate the participation of their older congregants.<sup>18</sup> For this reason, it is important to consider the relationship between functional status and church participation in context. One would expect to find a stronger relationship between functional impairment and low church participation among persons whose churches offer no special programs than among those whose churches do. In other words, if the programs are successful, impairment should not make it less likely that older persons participate in church activities. Although we had data available on what types of programs were offered by the churches in Davidson County,<sup>19</sup> we did not ask the elderly respondent which church he or she attended. We were thus unable to do the contextual analysis suggested here.

Poor economic resources was related to both poor church attendance and lack of participation in an over-sixty club. One can only speculate about why this relationship existed. Perhaps economically impaired elderly do not have access to transportation or appropriate clothing. In some cases, they may feel unable to donate the expected amount of money to the church. It is possible that programs designed to provide transportation to church activities to the elderly, to supply them with clothing, or to reduce the social pressure on them to offer monetary donations to the church would facilitate their attendance.

Impaired ability to perform the activities of daily living was also related to poor church attendance. Once again, transportation programs might help. In the case of the activities of daily living impaired elder, the church might want to provide a private escort, in addition to a driver. Depending on the nature of the activities of daily living impairment, a special vehicle or assistance in preparing for church might also be necessary. Special arrangements during activities might be necessary for those with visual or auditory impairment. The physical structure of the church itself might need to be modified to accommodate persons with certain types of impairments.

Poor social resources was an indicator of lack of participation in an over-sixty club. Once again, lack of access to transportation might explain this relationship. It is also possible that feelings of isolation inhibit persons from participating in such social organizations. Visiting or calling uninvolved older persons on the telephone might be useful here. Of course, one of the reasons many of the elderly persons did not participate in an over-sixty club is that their churches did not have them. Perhaps participation in an over-sixty club is what leads to good social resources, rather than good social resources facilitating participation as we have assumed.

In summary, studies of the general population that include measures of functional impairment will further clarify the effects of aging on church participation. Contextual studies would be particularly useful. The findings reported here, however, do suggest some directions for the development of programs designed to facilitate the involvement of older persons in church activities.

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