Race and Gender Differences in Religiosity Among Older Adults: Findings From Four National Surveys

Jeffrey S. Levin, 1 Robert Joseph Taylor, 2 and Linda M. Chatters 3

¹Department of Family and Community Medicine, Eastern Virginia Medical School.

²School of Social Work and Program for Research on Black Americans,
Institute for Social Research, University of Michigan.

³School of Public Health and Program for Research on Black Americans,
Institute for Social Research, University of Michigan.

Using data from four national surveys, this article presents findings on racial and gender differences in religiosity among older adults. Surveys include the second Quality of American Life study, the Myth and Reality of Aging study, wave one of Americans' Changing Lives, and the 1987 sample of the General Social Survey. These four data sources collectively include a broad range of items which tap the constructs of organizational, nonorganizational, and subjective religiosity. In all four studies, and for most indicators, results revealed significant racial and gender differences which consistently withstood controlling for sociodemographic effects, including age, education, marital status, family income, region, urbanicity, and subjective health.

THE religious patterns of older adults have increasingly been the focus of empirical study in recent years. Gerontology journals have begun to publish reports describing religious behaviors and attitudes among older respondents, and the publication of books (Clements, 1988; Koenig, Smiley, and Gonzales, 1988; Levin, 1994), a journal (Journal of Religious Gerontology), chapters (e.g., Markides, 1987; Moberg, 1990; Palmore, 1987), and a forthcoming handbook (Kimble et al., in press) further points to a growing recognition of religion as an important topic for socialgerontological research. Yet, as with most emergent topics within fields such as gerontology, published research has been largely descriptive and has focused primarily on Anglos, especially White males. As a result, there has been little attention devoted to patterns of religiosity in older adult women and members of ethnic minority populations, save for the programmatic work of Taylor and Chatters on Black Americans (e.g., Chatters and Taylor, 1989; Taylor and Chatters, 1991) and of Markides and Levin on Mexican Americans (e.g., Levin and Markides, 1986; Markides, Levin, and Ray, 1987). Not surprisingly, with few exceptions (e.g., Markides, 1983), racial- and gendercomparative research is especially lacking. However, without such attention to the racial and gender diversity of older adults, empirical research on religion and aging, pioneered by the seminal work of Moberg 40 years ago (Moberg, 1953a, 1953b), will continue to be spoken of as an emerging field with its full emergence nowhere in sight.

Theoretical Perspectives on Race, Gender, and Religion

Inadequate attention has been given to explanations of the effects of race and gender on religious involvement. Persistent limitations in the conceptualization of race and gender as social phenomena have hindered an appreciation of the precise mechanisms through which these effects operate. Current models of African American religiosity (Baer and Singer,

1992; Lincoln and Mamiya, 1990), although not specifically concerned with racial comparisons, suggest that religion and religious involvement possess unique political, cultural, historical, and social meanings. Critical to understanding Black religious traditions is the view that, despite divergence in expression and forms, they all share a common interest and responsibility for improving the life conditions encountered by Blacks (Baer and Singer, 1992; Lincoln and Mamiya, 1990). Reflecting this, religious institutions historically have been closely involved in a variety of health and social welfare, educational, political, and civic and community activities, as well as addressing spiritual needs (Cone, 1985). The close association between spiritual and everyday concerns is thought to reflect a situation in which secular and religious spheres are only partially differentiated within African American religious traditions (Lincoln and Mamiya, 1990).

As with all religions, participation in religious communities provides members with a framework for deriving meaning from their life experiences and with structured opportunities to interact with others who are alike with respect to values, beliefs, and attitudes. Within African American traditions, religion emerges as a potent personal and institutional resource for managing various stressors that are experienced by individuals (Taylor and Chatters, 1986a, 1986b). In addition, Black religious communities provide a context for understanding those special life conditions and stressors that are uniquely related to race and economic status (e.g., racial and economic discrimination) and that negatively impact on African Americans as a group. The resiliency of African American religious traditions is found in their ability to confront these pernicious life conditions, to provide alternative methods (e.g., intrapsychic, institutional) for their amelioration, and to invest diverse meaning (e.g., personal, spiritual, cultural) in those experiences (Lincoln and Mamiya, 1990). African American religion, seen in these contexts, has produced a legacy of independent institutions and S138 LEVIN ET AL.

a tradition of worship that constitutes important spiritual, community, and cultural resources.

Participation in religious activities and concerns, then, has quite different meanings and consequences for African Americans than for Whites, and an understanding of these distinctions is critical for interpreting racial differences in religious involvement. For example, racial disparities in overall religious involvement reflect, in part, differences in rates of participation in formal church activities. African American religious traditions may require higher rates of formal involvement (e.g., church attendance, leadership roles) of their members relative to other groups. Further, given the central position of Black churches as community resources, participation in organizations and activities that are church-sanctioned or church-affiliated may further elevate rates of formal organizational participation. Alternatively, increased religious involvement among Blacks may indicate that the combination of adverse life circumstances (i.e., social and economic statuses), normative events, and distinctive stressors (i.e., racial discrimination) facing this group is much greater than for Whites and, further, that the religious context is particularly responsive to and effective in addressing these conditions (directly or indirectly). In this regard, Black religious communities are a significant social support resource and are important in the problem-definition process (i.e., problem recognition and appraisal), as well as in providing psychosocial (e.g., social support) and psychological (e.g., catharsis) coping resources. This suggests that further investigation is needed on religious coping resources and mechanisms and their mental and physical health consequences for African Americans (Levin and Vanderpool, 1989).

The study of gender and religion has occurred within a more explicitly comparative framework, and, across a number of investigations, women are found to be consistently more religious than men (Argyle and Beit-Hallahmi, 1975; Bengtson, Kasschau, and Ragan, 1977; Blazer and Palmore, 1976; Cornwall, 1989; de Vaus and McAllister, 1987; Koenig, Kvale, and Ferrel, 1988; Roof, 1978). Prominent models of gender and religion suggest that religious orientations are, to a greater extent, compatible with the social statuses, roles, and experiences of women. For example, the process of gender socialization involves learning genderspecific roles and orientations that emphasize particular traits, attitudes, and behaviors deemed appropriate for women and men that may be compatible or at odds with particular aspects of religious orientations. The content of female socialization experiences frequently reflects personality traits (e.g., external control orientations, social approval) and modes of conduct (e.g., cooperation vs competition, emotional regulation) that are compatible with a religious orientation. A recent investigation among college undergraduates (Thompson, 1991) suggests that religiousness is influenced more by "feminine" outlook than by being female. Analyses that controlled for gendered outlook (i.e., gender orientation) indicated that this factor was a significant predictor of religiousness above and beyond the effect of gender (or sex) as a demographic category.

Women's position in the social structure (i.e., social location theory) and particular features of the social and work roles in which they are typically involved provide differential

opportunities for involvement in religious concerns. Research in this area has centered on the impact of differences in rates of labor-force participation and employment, job tasks, and working environments for curtailing men's involvement and interest in religious concerns. Women's traditional family roles (e.g., as caregivers, religious socialization agents for young children) are thought to involve them in behaviors and attitudes (e.g., nurturance, guidance) that are compatible with a religious orientation. Furthermore, gender differences in health-related behaviors and pursuits (e.g., alcohol and tobacco use) may also reflect general modes of personal conduct that are either compatible or incompatible with particular religious proscriptions (Levin and Vanderpool, 1989).

Finally, in the context of a stress and coping paradigm, differential patterns and levels of adoption of family and social roles may predispose women and men to different levels of stress and, as a consequence, to differences in how they employ religion as a coping method. Women's typically greater participation in family roles, singly and in combination with paid employment activities and intensive caregiving (e.g., for chronically ill family members), will expose them to significant levels of stress. A religious orientation may be useful as a means of coping with these stresses through a number of tangible (i.e., social support from church members) and intrapsychic mechanisms. The enactment of family and caregiving roles within an explicitly religious framework may function to validate these experiences and accord them special meaning and value. Further, religious coping strategies that emphasize problem reappraisal and mood regulation may be crucial in counteracting stresses from these activities.

Previous Research Findings

Research from the National Survey of Black Americans investigating the interplay of religiosity, gender, and aging indicates high levels of organizational, nonorganizational, and subjective religiosity among both men and women throughout the life cycle, according to cross-sectional data (Levin and Taylor, 1993). Across seven age strata, women exhibited higher levels of religiosity than men for each of 12 religious indicators, a finding which persisted despite controlling for several established sociodemographic predictors of religiosity. For certain organizational indicators, this gender gap narrowed somewhat or even reversed in the very oldest age groups, not unlike the well-known "crossover" of Black and White mortality rates (see Markides and Machalek, 1984). Possibly, this gender crossover in religiosity is a function of a progressive selection-out of Black men relative to Black women due to declining health, an outcome variable found in many gerontological studies to be associated with declining organizational religious behavior (see Levin, 1989). This methodological artifact aside, it seems apparent that, at least among African Americans, women are more religious than men.

As noted earlier, gender is a consistent predictor of religious involvement across various groups, whereby women generally demonstrate higher levels of religious participation than men. Women have a greater likelihood of being church members, praying, attending church-related activities, reading the Bible, and engaging in numerous other religious

behaviors (Argyle and Beit-Hallahmi, 1975; Roof, 1978). Some work has demonstrated gender differences in religious behaviors, but not religious belief (Sloane and Potvin, 1983; Thompson, 1991). There is relatively little information addressing these issues among Black adults, as well as how race and gender together influence religious involvement.

Clearly, the next step for researchers interested in the relationship among religion, aging, race, and gender is to address these issues comparatively—that is, from within single data sets with enough Black respondents to enable meaningful and statistically powerful analyses. Unfortunately, several barriers have until now prevented such analyses, especially from a gerontological perspective.

First, there is a paucity of useful data sources. In order to adequately examine Black-White differences, samples should be both representative (i.e., each respondent should have a known probability of entering the sample) and relatively large. With regard to sample size, George (1988) argues that a sample should be large enough to (a) provide stable estimates of population parameters, (b) permit the multivariate analyses required to disentangle potentially causal linkages, and (c) capture the heterogeneity in the population. In racial-comparative studies, a large sample may also be necessary to capture the often ignored heterogeneity in particular racial strata (see Taylor et al., 1990). As an example, a national probability sample of 1,000 adults will not provide enough older respondents in general and older Black respondents in particular to permit stable race and age comparisons (George, 1988). Samples in which race differences among older adults can be adequately examined have to be either very large or contain an oversample of Black adults. Consequently, a large amount of work investigating Black-White differences in later life is compromised because of poor quality samples (George, 1988).

Second, among data sets that are representative of the population and have enough Black respondents to provide meaningful analyses of Black-White differences, there is the problem of an underrepresentation of broadly applicable religious indicators. Several notable surveys with large, national probability samples are available (e.g., Panel Study of Income Dynamics), but they primarily address income and retirement issues and fail to include measures of religious involvement.

In order to address and resolve these issues, four data sources were identified, each possessing relatively large Black and older adult samples or subsamples, a reasonably balanced gender split, and numerous indicators of the three key dimensions of religiosity relevant to older adults as identified by prior research (see Ainlay and Smith, 1984; Chatters, Levin, and Taylor, 1992; Koenig, Kvale, and Ferrel, 1988; Koenig, Moberg, and Kvale, 1988; Mindel and Vaughan, 1978). The present analyses incorporate a multivariate analysis strategy that controls for several potentially mitigating sociodemographic factors (i.e., age, education, marital status, family income, region, urbanicity, and subjective health) that are predictive of religiosity, especially among Blacks (see, e.g., Taylor, 1988). Each of the four data sets is a national probability survey, and jointly these investigations cover about a 20-year time period. This use of multisample replication has been recommended as an especially valuable strategy for comparative aging research (Liang and Lawrence, 1989), and replicated secondary data analysis has proven fruitful in many areas of social gerontology (George and Landerman, 1984).

Hypotheses

Based on current theoretical perspectives on race, gender, and religion, as described above, and on findings from previous studies of older adults, we can posit three hypotheses for the present analyses.

H1: Older women demonstrate significantly higher levels of religious participation than older men.

This hypothesis is based on theory and previous research findings which indicate that gender is the strongest and most consistent demographic predictor of religious participation (Argyle and Beit-Hallahmi, 1975; Cornwall, 1989). Research among both older Blacks (Chatters and Taylor, 1989; Levin and Taylor, 1993; Taylor, 1986, 1992) and older Whites (Bengtson, Kasschau, and Ragan, 1977; Koenig, Kvale, and Ferrel, 1988) indicates that women of both races display higher levels of organizational, nonorganizational, and subjective religious involvement than their male counterparts.

H2: Older Black adults demonstrate significantly higher levels of religious participation than older White adults.

Based upon our review of the literature, we agree with George (1988) that the common assumption of increased religious participation by older Blacks has yet to be adequately confirmed by empirical findings. Reported racial disparities often reflect only percentage differences (Gallup, 1984; Greeley, 1979) that may be diminished when important multivariate controls are applied. This is particularly critical given the substantial demographic differences existing between older Blacks and Whites. For example, lower levels of income and formal education in older Blacks (Abbott, 1980; Jackson and Gibson, 1985; Taylor and Chatters, 1988) could potentially mitigate racial differences in religious involvement. In addition, older Blacks are much more likely than older Whites to reside in the South. Because religious participation is generally higher in the Bible Belt of the South, Black-White differences may reflect place of residence rather than race (George, 1988).

H3: Race and gender do not demonstrate interactive effects on religious participation in older adults.

This hypothesis is fairly speculative due to the lack of research that adequately addresses the mutual impact of race and gender on religious involvement. We propose that race and gender have additive but not interactive influence on religious involvement. We believe that older Black women and men will display higher levels of religious participation than older White women and men.

METHODS

Data Sources

Data for this study came from four large-scale, national probability surveys of older adult Americans conducted in the 1970s and 1980s. These surveys contain both males and females, and Black and White respondents. Each survey either represents a sample or oversample of exclusively older

S140 LEVIN ET AL.

adults or contains a large number of older adults within a broader sample.

The second Quality of American Life (QAL) survey was conducted by Campbell and Converse (1984) at the University of Michigan in 1978. They collected data on social-psychological conditions and life needs and expectations from a national probability sample of adults ranging in age from 18 to 96. The sample consists of 3,692 respondents, 1,209 of whom were at least 55 years of age at the time of the survey.

The Myth and Reality of Aging survey was conducted by Louis Harris and Associates for the National Council on Aging (NCOA) in 1974 (National Council on Aging, 1979). Data on general issues and perceptions of aging were obtained from a stratified, national sample of the civilian population, oversampling for adults 55 years of age and older and for Blacks 65 and older. In all, there were 2,797 respondents at least 65 years of age.

The Americans' Changing Lives (ACL) study, the first wave of which was conducted by House (1989) at the University of Michigan in 1986, is a survey of at least two dozen wide-ranging social, psychological, and health-related topics. The ACL study used a national, multistage, stratified area-probability sample of adults 25 years of age and older, oversampling for Blacks and subjects over the age of 60. The sample consists of 3,617 respondents, 1,669 of whom were at least 60 years of age at the time of the study.

The National Data Program for the Social Sciences conducts the annual General Social Survey (GSS) for the National Opinion Research Center at the University of Chicago (Davis and Smith, 1990). The GSS is a series of cross-sectional, national studies of randomly sampled respondents that provide data on a wide spectrum of social indicators. The broadest range of religious indicators is available in the 1988 survey. However, the 1987 survey, which contains only slightly fewer measures of religiosity, encompasses a large Black oversample which facilitates racial comparisons. The 1987 survey and oversample jointly consist of 1,819 subjects, 551 of whom are at least 55 years of age.

The slight differences among data sets as to the cutoff ages which we used to denote older adulthood (e.g., 55, 60, 65) were based on purely pragmatic grounds. Because these studies used special stratified sampling methods such as oversampling of older adults, it was deemed best not to deviate from the cutoff ages used for these purposes in each respective survey in order not to compromise the representativeness of these samples. In no way do our choices of age cutoffs represent any substantive judgment as to what constitutes old age.

Variables

Across the four data sets, information was collected on a variety of religious indicators. For only a few of these measures are data available from each study (e.g., religious affiliation, religious attendance), as most of the religious items are unique to a particular study. However, across all four studies collectively there is a considerable array of key indicators of organizational, nonorganizational, and subjective religiosity. Through confirmatory factor analysis, these three constructs have been shown to be significantly inter-

correlated in older African Americans and to represent dimensions of a single, higher-order religiosity construct (Chatters, Levin, and Taylor, 1992). Use of indicators pertaining to these same three dimensions (variously named) is becoming increasingly common in empirical studies of religiosity in older adults (e.g., Ainlay and Smith, 1984; Koenig, Kvale, and Ferrel, 1988; Koenig, Moberg, and Kvale, 1988). The coding of response categories for most of these religious indicators varies across studies, precise details of which follow.

In the Quality of American Life (QAL), there are four religious indicators. These include three measures of organizational religiosity: religious attendance (1 = not at all, 2 = less than once per month, 3 = once per month, 4 = two to three times per month, 5 = once per week, 6 = more than once per week), religious affiliation (0 = no, 1 = yes), and religious instruction when growing up (1 = never, 2 = some of the time, 3 = most of the time, 4 = religious or parochial school); and one measure of subjective religiosity: religiousmindedness (1 = not at all, 2 = less than average, 3 = average, 4 = more than average, 5 = very).

In the Myth and Reality of Aging (NCOA), there are also four religious indicators. These include three measures of organizational religiosity: most recent religious attendance (1 = more than three months ago, 2 = two to three months ago, 3 = one month ago, 4 = no more than one to two weeks ago, 5 = no more than one to two days ago, religious affiliation (0 = no, 1 = yes), and talking with clergy (0 = no, 1 = yes); and one measure of subjective religiosity: importance of religion (1 = hardly, 2 = somewhat, 3 = very).

In the Americans' Changing Lives (ACL), there are seven religious indicators. These include three measures of organizational religiosity: religious attendance (1 = never, 2 = less than once per month, 3 = about once per month, 4 = two to three times per week, 5 = once per week, 6 = more than once per week), religious affiliation (0 = no, 1 = yes), and church volunteering (0 = no, 1 = yes); three measures of nonorganizational religiosity: reading religious books and listening to religious programs (both coded like religious attendance) and seeking spiritual comfort (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = almost always); and one measure of subjective religiosity: importance of religion (1 = not at all, 2 = not too, 3 = fairly, 4 = very).

In the 1987 General Social Survey (GSS), there are six religious indicators. These include two measures of organizational religiosity: religious attendance (eight categories from 0 = never to 8 = several times per week) and religious affiliation (0 = no, 1 = yes); two measures of nonorganizational religiosity: prayer (1 = never, 2 = less than once per week, 3 = once per week, 4 = several times per week, 5 = once per day, 6 = several times per day) and tithing (0 = no, 1 = yes); and two measures of subjective religiosity: religious intensity (1 = not very, 2 = somewhat, 3 = strong) and feeling near to God (1 = does not believe in God, 2 = not close at all, 3 = not very close, 4 = somewhat close, 5 = extremely close).

Data Analysis

For each of the four data sets, a table presents racial and gender breakouts for each available indicator. In this way,

levels of religious involvement can be examined, by data set. separately among Black males, Black females. White males. and White females. Differences across these race and gender categories are examined through two-way analysis of variance (ANOVA) using a factorial design which tests for main effects of race and gender and for their multiplicative interaction. In these analyses, the "Type III" solution is presented, whereby both main effects and the interaction term are estimated simultaneously. These analyses are then repeated using two-way analysis of covariance (ANCOVA), covarying the effects of exogenous variables known to be salient influences on religious involvement in older adults (Chatters, Levin, and Taylor, 1992; Taylor, 1986, 1988). This set of exogenous variables is identical in all four data sets and includes age, education, marital status, family income, region, urbanicity, and subjective health. The Type III solution is again presented. All analyses are conducted using the GLM procedure in PC version 6.04 of SAS, a computer software package for statistical analysis (SAS Institute, 1987).

RESULTS

Tables 1 through 4 contain results using data from the QAL, NCOA, ACL, and GSS surveys, respectively. Findings from the QAL (see Table 1) reveal statistically significant racial and gender differences in religious attendance

which persist at the net level (i.e., after controlling for all exogenous variables). Racial differences are also found in religious-mindedness and at the net level in religious instruction. For each of these indicators, higher levels were found in Black respondents. Finally, a small interaction between race and gender was found at the net level for religious affiliation, but in all subgroups the proportion of religiously affiliated approached 100 percent.

Results from the NCOA (see Table 2) point to statistically significant racial differences in all religious indicators and gender differences in religious attendance and importance of religion, for which there is a significant interaction effect as well. As in the QAL, higher levels are found among Blacks and females, and these differences persist despite controlling for exogenous effects.

These patterns are even more striking in data from the ACL (see Table 3) in which statistically significant racial and gender differences are found for six of seven religious indicators, all of which remain significant at the net level. Once again, higher levels are found among Black and female respondents, and a couple of net interaction effects were uncovered.

Finally, results from the 1987 GSS (see Table 4) highlight this same pattern of statistically significant racial and gender differences, except for religious affiliation. For tithing, only a racial difference appears. As before, higher levels of

Table 1. Racial and Gender Differences in Religious Indicators in the Quality of American Life (QAL) Survey, 1978 (N = 1179-1192)

		Black	White		Gross Effec	ts ^a	Net Effects ^{a,b}		
Variable				Race	Gender	Race × Gender	Race	Gender	Race × Gender
Religious	M	3.48	2.99	0.06**	13.47***	0.27	5.74*	11.44***	0.01
attendance	F	4.30	3.61	8.86**					
Religious	M	1.00	0.93	2.01	1.04	3.68	1.62	2.28	3.93*
affiliation	F	0.98	0.99	3.01					
Religious-	M	4.00	3.31	04 7/444	1.51	1.91	12.25***	1.14	1.79
minded	F	3.98	3.59	24.76***					
Religious	M	3.98	3.59	1 10	2.16	0.40	E 0.64	1.86	0.01
instruction	F	3.57	3.48	1.40	3.16	0.10	5.06*		

^{*}F-scores

Table 2. Racial and Gender Differences in Religious Indicators in the Myth and Reality of Aging (NCOA) Survey, 1974 (N = 2693-2723)

		Black	White		Gross Effec	ts ^a	Net Effects ^{a,b}		
Variable				Race	Gender	Race × Gender	Race	Gender	Race × Gender
Religious	M	3.87	3.64	4.014	4.89*	3.26	10.33**	7.03**	3.13
attendance	F	3.91	3.89	4.01*					
Religious	M	0.99	0.97	- 05·h	2.02	1.26	4.38*	2.38	1.56
affiliation	F	1.00	0.99	7.07**					
Talk with	M	0.12	0.04		0.07	3.96*	9.20**	0.02	3.68
clergy	F	0.10	0.07	16.81***					
Importance	M	2.71	2.46	26 50444	52.39***	5.11*	16.26***	54.96***	4.45*
of religion	F	2.86	2.74	36.58***					

^{*}F-scores

Estimated controlling for the effects of age, education, marital status, family income, region, urbanicity, and subjective health.

^{*}p < .05; **p < .01; ***p < .001.

bEstimated controlling for the effects of age, education, marital status, family income, region, urbanicity, and subjective health.

 $^{^{}c}N = 1987.$

^{*}p < .05; **p < .01; ***p < .001.

S142 LEVIN ET AL.

Table 3. Racial and Gender Differences in Religious Indicators in the Americans' Changing Lives (ACL) Survey, Wave I, 1986 (N = 1639–1644)

		Black	White	Gross Effects ^a			Net Effects ^{a,b}		
Variable				Race	Gender	Race × Gender	Race	Gender	Race × Gender
Religious	M	3.85	3.24	32.77***	15 06***	0.00	20 54***	10 00***	0.07
attendance	F	4.21	3.66	32.77	15.06***	0.09	38.54***	19.98***	0.07
Religious	M	0.98	0.90	20 06***	18.10***	6.39*	13.95***	19.30***	6.41*
affiliation	F	0.99	0.97	20.06***					
Church	M	0.22	0.23	0.64	0.23	0.03	6.44*	1.66	0.01
volunteer	F	0.23	0.25						
Read religious	M	3.75	3.13	36.12***	80.01***	0.06	30.76***	69.34***	0.00
books	F	4.73	4.06						
Listen to	M	4.53	3.17	246.18***	12.53***	4.01*	127.36***	7.03**	3.49
religious programs	F	5.09	3.32	240.18***					
Seek spiritual	M	3.76	2.95	67.63***	63.61***	4.58*	47.67***	59.44***	5.37*
comfort	F	4.21	3.74						
Importance	M	3.69	3.20	109.86***	52.65***	2.85	51.04***	46.62***	3.36
of religion	F	3.91	3.56	109.80***					

^{*}F-scores.

Table 4. Racial and Gender Differences in Religious Indicators in the General Social Survey (GSS), 1987 (N = 486-541)

		Black	White		Gross Effe	cts ^a	Net Effects ^{a,b}		
Variable				Race	Gender	Race × Gender	Race	Gender	Race × Gender
Religious	M	4.56	4.21	4 10*	7.26**	0.48	9.43*	5.91*	0.02
attendance	F	5.44	4.73	4.18*					
Religious	M	0.96	0.99	0.15	0.43	1.53	0.59	1.41	0.53
affiliation	F	0.99	0.98						
Tithing	M	0.88	0.79	7.95**	1.46	0.11	9.20**	1.94	0.15
	F	0.94	0.82						
Religious	M	2.09	1.97	5.23*	14.70***	0.84	4.86*	13.04***	0.41
intensity	F	2.54	2.24						
Feel near	M	4.46	4.06	21.32***	14.92***	1.18	9.94**	10.15**	0.64
to God	F	4.66	4.41						

^{*}F-scores.

religiosity are present in Blacks and females, and the findings remain significant at the net level.

DISCUSSION

This analysis has provided important baseline information on the religious behaviors and attitudes of older Blacks and Whites utilizing data from four data sets based on national probability samples. Both older Blacks and Whites display fairly high levels of religiosity, attend religious services a few times per month, indicate that religion is important in their lives, read religious materials, listen to religious programming, and pray on a frequent basis. In addition, almost all older adults indicated having a current religious affiliation. These findings are consistent with the results of previous research indicating the importance of religion to elderly adults (Greeley, 1979; Koenig, Smiley, and Gonzales, 1988).

Consistent with our first hypothesis, older women displayed significantly higher levels of religiosity than did older men. Of the 21 possible relationships with religious indicators (across the four data sets), gender displayed a statistically significant net main effect on 13 occasions. In each instance, older women were more religious than older men. High levels of religiosity and gender differences in religious involvement among older adults are both consistent with previous research. However, the present findings are noteworthy for several reasons. First, many of the previous gerontological investigations on this topic are limited because they are based on nonprobability samples representing defined geographical locations. Second, the failure to employ multivariate analysis procedures in several of these studies prevents the assessment of the independent effects of predictors such as gender. Third, the samples employed often represent the members of one specific religious denomination (e.g., the work of Ainlay and Smith, 1984, involving Mennonites). The present findings, because they address these limitations, lend greater credence to the impact of gender on religious involvement.

Consistent with our second hypothesis, older Blacks re-

Estimated controlling for the effects of age, education, marital status, family income, region, urbanicity, and subjective health.

^{*}p < .05; **p < .01; ***p < .001.

Estimated controlling for the effects of age, education, marital status, family income, region, urbanicity, and subjective health.

^{*}p < .05; **p < .01; ***p < .001.

ported a higher degree of religious involvement than did older Whites. These racial differences in religious participation persisted at the net level. In 19 of the 21 possible relationships with religious indicators, race exhibited a statistically significant net main effect. The two occasions in which race did not have a significant effect involved a dichotomous measure of religious affiliation used in the QAL and GSS. This is probably due to the extremely limited variance present in this measure; about 95 percent or more of the older adults in these four surveys reported a current religious affiliation. Overall, these findings clearly verify previous work which emphasizes the significance of religion and the heightened levels of religious involvement among older Black adults (e.g., Taylor, 1986).

The use of a multivariate analysis strategy was especially helpful in clarifying the impact of race on religious involvement. In particular, covarying the effects of sociodemographic characteristics believed to be of consequence for religious involvement and known to differentiate the social status of Blacks and Whites, in conjunction with estimation of gender effects, demonstrated the salience of racial differences in religiosity. Further, a couple of suppressor effects were uncovered, as it was only at the net level that significant racial differences emerged in religious instruction (in the QAL data set) and church volunteering (ACL). In the models assessing gross effects only, higher levels of religious instruction and volunteering in church among older Blacks were obscured. Conversely, whereas Race by Gender interactions for talking with clergy (NCOA) and listening to religious programs (ACL) were significant at the gross level, they were rendered insignificant in the multivariate context.

Consistent with our third hypothesis, there were few statistically significant interactive effects. Only 4 of 21 possible interactive relationships with religious indicators achieved significance at the net level. On the four occasions in which there was a significant interaction between race and gender, older White women displayed comparable (either slightly lower or slightly higher) levels of religiosity than older Black men. In particular, older White women were as likely as older Black men to report a religious affiliation (QAL and ACL), endorse the importance of religion (NCOA), and seek spiritual comfort (ACL). Overall, our findings indicate that both older Black men and women reported higher levels of religiosity than older White men and women, and older Black men displayed higher levels of religious participation than older White women.

To summarize, these findings point to fairly consistent racial and gender differences in religiosity among older adults. Specifically, higher levels of religiosity were reported by Blacks relative to Whites, and by females relative to males. Further, every statistically significant main effect for race or gender at the gross level remained significant after controlling for the effects of known predictors of religiosity. These results were obtained regardless of the particular religious measures examined, and whether they were indicators of organizational or public religious behavior, nonorganizational or private religious behavior, or subjective religious feeling. Furthermore, these results were replicated in four studies whose data collection frames jointly cover a period of about 20 years. In sum, among older adults, Blacks

and women are more religious than Whites and men, respectively, and this phenomenon appears neither to have emerged nor changed within the past generation.

On the basis of relatively scarce high-quality information, researchers on the topic of racial differences in religious involvement have concluded that older Blacks exhibit higher levels of religiosity than do older Whites. However, as others have suggested (George, 1988), this assumption has not been rigorously tested nor have sophisticated multivariate analyses been conducted. The analyses presented here have been fruitful in demonstrating persistent effects for race and limited interaction effects involving race and gender. However, several additional steps are required in order to more completely understand the nature of racial differences in religious involvement over the life cycle.

First, multifactorial path models are needed in order to more fully specify the interrelationships among race, dimensions of religiosity, and their known and hypothesized determinants. Second, the analyses presented here ought to be replicated, except substituting other identified predictors of religiosity for gender. Potential candidates for further such interaction-effect analyses include age, socioeconomic status, and region; their incorporation would ascertain whether the impact of race on religious involvement is conditional on these factors. Third, while the focus of this study was solely on race, gender, and sociodemographic variables, the interaction of race and other more "structural" religious factors, such as one's denominational affiliation, also merits examination in relation to religious involvement.

With respect to gender differences in religiosity, the classes of explanations that have been advanced (e.g., structural location, socialization experiences) require focused examination. Given the central position of involvement in family vs other roles as an explanation for gender differences, critical tests should incorporate measures of family life cycle, involvement in childrearing and socialization, and extent and type of work activity outside the home. Approaches that employ a stress and coping perspective could explore differences in the number and quality (i.e., stressfulness) of roles, experiences with and responses to stressors (i.e., coping), and specific use of various forms of religious coping (e.g., group social support, intrapsychic coping).

Finally, focusing more directly on theoretical and conceptual concerns, our understanding of religious involvement can be greatly enriched by an appreciation of emerging developments in the areas of African American religious traditions and a critical analysis of religion using a gender perspective. Lincoln and Mamiya's (1990) work extends earlier perspectives on Black religious involvement in developing a contextually based, dynamic model of African American religion. Other efforts (Ellison, 1991; Ellison and Sherkat, 1990; Sherkat and Ellison, 1991) attempt to examine a number of theoretical hypotheses regarding Black religious behavior that have existed in the literature (e.g., denominational switching), but had not yet received direct empirical verification. Proposed explanations for gender differences suggest that an understanding of religious involvement should acknowledge the various ways that religious phenomena reflect, either directly or indirectly, gender-relevant content as to the status and roles of women.

S144 LEVIN ET AL.

More fundamentally, however, recent conceptual developments and methodological refinements in the investigation of race, gender, and religiosity challenge us to move beyond simple comparative approaches, to examine how race and gender reflect particular social realities, and to investigate the precise mechanisms through which they influence religious involvement.

ACKNOWLEDGMENTS

The four data tapes used in this study were provided by the National Archive of Computerized Data on Aging (NACDA) of the Inter-university Consortium for Political and Social Research (ICPSR) at the University of Michigan. None of the original collectors of these data nor the data archives bear any responsibility for the analyses or interpretations presented here. The work of Dr. Levin was supported by the National Institute on Aging under NIH FIRST Award (R29) grant AG09462. The authors were supported by the National Institute on Aging under NIH Research (R01) grant AG10135 (Dr. Taylor, principal investigator). The authors wish to thank Carrie Gibbs, Linda Massengill, and Julie Burckhart for their assistance in the preparation of the manuscript.

Address correspondence to Dr. Jeffrey S. Levin, Department of Family and Community Medicine, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.

REFERENCES

- Abbott, Julian. 1980. "Work Experience and Earnings of Middle-Aged Black and White Men, 1965-71." Social Security Bulletin 43 (12):16-34.
- Ainlay, Stephen C. and D. Randall Smith. 1984. "Aging and Religious Participation." *Journal of Gerontology* 39:357-363.
- Argyle, Michael and Benjamin Beit-Hallahmi. 1975. The Social Psychology of Religion. Boston: Routledge and Kegan Paul.
- Baer, Hans A. and Merrill Singer. 1992. African American Religion in the Twentieth Century: Varieties of Protest and Accommodation. Knoxville: University of Tennessee Press.
- Bengtson, Vern L., P.L. Kasschau, and P.K. Ragan. 1977. "The Impact of Social Structure on Aging Individuals." In James E. Birren and K. Warner Schaie (Eds.), *Handbook of the Psychology of Aging*. New York: Van Nostrand Reinhold.
- Blazer, Dan and Erdman Palmore. 1976. "Religion and Aging in a Longitudinal Panel." The Gerontologist 16:82-85.
- Campbell, Angus and Philip E. Converse. 1984. Quality of American Life, 1978 [Codebook]. ICPSR Study Number 7762. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research.
- Chatters, Linda M., Jeffrey S. Levin, and Robert Joseph Taylor. 1992. "Antecedents and Dimensions of Religious Involvement in Older Black Adults." *Journal of Gerontology: Social Sciences* 47:S269-S278.
- Chatters, Linda M. and Robert Joseph Taylor. 1989. "Age Differences in Religious Participation Among Black Adults." Journal of Gerontology. Social Sciences 44:S183-S189.
- Clements, William M. (Ed.). 1988. Religion, Aging and Health: A Global Perspective. Compiled by the World Health Organization. New York: The Haworth Press.
- Cone, James H. 1985. "Black Theology in American Religion." Journal of the American Academy of Religion 53:755-771.
- Cornwall, Marie. 1989. "The Determinants of Religious Behavior: A Theoretical Model and Empirical Test." Social Forces 68:572-592.
- Davis, James A. and Tom W. Smith. 1990. General Social Surveys, 1972–1990: Cumulative Codebook [Codebook]. ICPSR Study Number 9505. Chicago: National Opinion Research Center.
- de Vaus, David and Ian McAllister. 1987. "Gender Differences in Religion: A Test of the Structural Location Theory." *American Sociological Review* 52:472-481.
- Ellison, Christopher G. 1991. "Identification and Separatism: Religious Involvement and Racial Orientations among Black Americans." *The Sociological Quarterly* 32:447-494.
- Ellison, Christopher G. and Darren E. Sherkat. 1990. "Patterns of Religious Mobility among Black Americans." *The Sociological Quarterly* 31:551-568.
- Gallup, George, Jr. 1984. Religion in America. Princeton, NJ: Princeton Religion Research Center.

- George, Linda K. 1988. "Social Participation in Later Life: Black-White Differences." In James S. Jackson (Ed.), The Black American Elderly: Research on Physical and Psychosocial Health. New York: Springer Publishing Company.
- George, Linda K. and Richard Landerman. 1984. "Health and Subjective Well-Being: A Replicated Secondary Data Analysis." *International Journal of Aging and Human Development* 19:133–156.
- Greeley, Andrew M. 1979. "Ethnic Variations in Religious Commitment." In Robert Wuthnow (Ed.), *The Religious Dimension: New Directions in Quantitative Research*. New York: Academic Press.
- House, James S. 1989. Americans' Changing Lives: Wave 1, 1986 [Codebook]. ICPSR Study Number 9267. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Jackson, James S. and Rose C. Gibson. 1985. "Work and Retirement among the Black Elderly." In Zena Blau (Ed.), Current Perspectives on Aging and the Life Cycle. Greenwich, CT: JAI Press.
- Kimble, Melvin A., Susan H. McFadden, James W. Ellor, and James J. Seeber (Eds.). In press. Handbook on Religion, Spirituality, and Aging. Minneapolis. MN: Fortress Press.
- Koenig, Harold G., James N. Kvale, and Carolyn Ferrel. 1988. "Religion and Well-Being in Later Life." The Gerontologist 28:18–28.
- Koenig, Harold G., David O. Moberg, and James N. Kvale. 1988. "Religious Activities and Attitudes of Older Adults in a Geriatric Assessment Clinic." Journal of the American Geriatrics Society 36:362-374
- Koenig, Harold G., Mona Smiley, and Jo Ann Ploch Gonzales. 1988. Religion, Health, and Aging: A Review and Theoretical Integration. New York: Greenwood Press.
- Levin, Jeffrey S. 1989. "Religious Factors in Aging, Adjustment, and Health: A Theoretical Overview." In William M. Clements (Ed.), Religion, Aging and Health: A Global Perspective. Compiled by the World Health Organization. New York: The Haworth Press.
- Levin, Jeffrey S. (Ed.) 1994. Religion in Aging and Health: Theoretical Foundations and Methodological Frontiers. Thousand Oaks, CA: Sage Publications
- Levin, Jeffrey S. and Kyriakos S. Markides. 1986. "Religious Attendance and Subjective Health." Journal for the Scientific Study of Religion 25:31-40.
- Levin, Jeffrey S. and Robert Joseph Taylor. 1993. "Gender Differences in Religiosity Over the Life Cycle Among Black Americans." *The Gerontologist* 33:16–23.
- Levin, Jeffrey S. and Harold Y. Vanderpool. 1989. "Is Religion Therapeutically Significant for Hypertension?" Social Science and Medicine 29:69-78
- Liang, Jersey and Renee H. Lawrence. 1989. "Secondary Analysis of Sample Surveys in Gerontological Research." In M. Powell Lawton and A. Regula Herzog (Eds.), Special Research Methods for Gerontology. Amityville, NY: Baywood Publishing Company.
- Lincoln, C. Eric and Lawrence H. Mamiya. 1990. The Black Church in the African American Experience. Durham, NC: Duke University Press.
- Markides, Kyriakos S. 1983. "Aging, Religiosity, and Adjustment: A Longitudinal Analysis." Journal of Gerontology 38:621-625.
- Markides, Kyriakos S. 1987. "Religion." In George L. Maddox (Ed.), *The Encyclopedia of Aging*. New York: Springer.
- Markides, Kyriakos S., Jeffrey S. Levin, and Laura A. Ray. 1987. "Religion, Aging, and Life Satisfaction: An Eight-Year, Three-Wave Longitudinal Study." *The Gerontologist* 27:660-665.
- Markides, Kyriakos S. and Richard Machalek. 1984. "Selective Survival, Aging, and Society." Archives of Gerontology and Geriatrics 3:207– 222.
- Mindel, Charles H. and C. Edwin Vaughan. 1978. "A Multidimensional Approach to Religiosity and Disengagement." *Journal of Gerontology* 33:103-108.
- Moberg, David O. 1953a. "Church Membership and Personal Adjustment in Old Age." *Journal of Gerontology* 8:207-211.
- Moberg, David O. 1953b. "The Christian Religion and Personal Adjustment in Old Age." *American Sociological Review* 18:87-90.
- Moberg, David O. 1990. "Religion and Aging." In Kenneth F. Ferraro (Ed.), Gerontology: Perspectives and Issues. New York: Springer.
- National Council on Aging. 1979. Myth and Reality of Aging, 1974 [Codebook]. ICPSR Study Number 7657. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research.
- Nelsen, Hart M. and Anne K. Nelsen. 1975. *Black Church in the Sixties*. Lexington, KY: University of Kentucky Press.

- Palmore, Erdman. 1987. "Religious Organizations." In George L. Maddox (Ed.), The Encyclopedia of Aging. New York: Springer.
- Roof, Wade Clark. 1978. "Social Correlates of Religious Involvement." Annual Review of the Social Sciences of Religion 2:53-70.
- SAS Institute. 1987. SAS Proprietary Software Release 6.04 [Software]. Cary, NC: SAS Institute.
- Sherkat, Darren E. and Christopher G. Ellison. 1991. "The Politics of Black Religious Change: Disaffiliation from Black Mainline Denominations." Social Forces 70:431-454.
- Sloane, Douglas H. and Raymond H. Potvin. 1983. "Age Differences in Adolescent Religiousness." Review of Religious Research 25:142-154. Taylor, Robert Joseph. 1986. "Religious Participation Among Elderly
- Blacks." The Gerontologist 26:630-636.
- Taylor, Robert Joseph. 1988. "Structural Determinants of Religious Participation Among Black Americans." Review of Religious Research 30:114-125.
- Taylor, Robert Joseph. 1992. "Religion and Religious Observances among Older Black Adults." In James S. Jackson, Linda M. Chatters, and Robert J. Taylor (Eds.), Aging in Black America. Newbury Park, CA: Sage Publications.

- Taylor, Robert Joseph and Linda M. Chatters. 1986a. "Church-Based Informal Support Networks among Elderly Blacks." The Gerontologist 26.637-642
- Taylor, Robert Joseph and Linda M. Chatters. 1986b. "Patterns of Informal Support to Elderly Black Adults: The Role of Family, Friends, and Church Members." Social Work 31:432-438.
- Taylor, Robert Joseph and Linda M. Chatters. 1988. "Correlates of Education, Income, and Poverty Among Aged Blacks." The Gerontologist 28:435-441.
- Taylor, Robert Joseph and Linda M. Chatters. 1991. "Nonorganizational Religious Participation Among Elderly Black Adults." Journal of Gerontology: Social Sciences 46:S103-S111.
- Taylor, Robert Joseph, Linda M. Chatters, M. Belinda Tucker, and Edith Lewis. 1990. "Developments in Research on Black Families: A Decade Review." Journal of Marriage and the Family 52:993-1014.
- Thompson, Edward H., Jr. 1991. "Beneath the Status Characteristic: Gender Variations in Religiousness." Journal for the Scientific Study of Religion 30:381-394.

Received July 20, 1992 Accepted August 25, 1993