

Ethnicity, gender and depression in older workers

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Abstract:

We used data from a prospective investigation of full-time workers aged 58 to 64 years and residing in a North Carolina metropolitan area at baseline to examine a causal model for depressive symptomatology among White men, White women, African American men and African American women. We found significant group differences. (1) White men were more vulnerable to social network losses than White women; (2) Work stressors had long-term effects on African American men whose levels of depressive symptoms were also elevated by poor health and retirement; and (3) The influence of income was more dominant among African Americans and its effect was greater for African American women.

Keywords: stressors | social support | retirement

Article:

Depression is the most common mental health problem in the elderly population (Burns & Taube, 1990). Whether conceptualized as a psychiatric disorder based on criteria set in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1987) or as a continuum of depressive symptoms, depression compromises functioning and quality of life particularly for those experiencing age-related physiological declines and the waning of social and economic resources. Findings from Epidemiologic Catchment Area studies indicate the six-month prevalences of depression based on diagnostic criteria to be lower in the population aged 65 years and over, ranging from 0.5% to .95%, in comparison to those younger than 65, with estimates ranging from 1.5% to 3.1% (George, 1993). On the other hand, levels of depressive symptoms have been found to be high in younger populations, to be lowest in middle age (around 45 years old), and to increase at subsequent ages (Mirowsky & Ross, 1992), a finding that holds for African Americans as well (Turnbull & Mui, 1995).

Depression varies by gender and ethnicity, key identifiers of an individual's locus in the social structure which, in turn, determines the individual's access to the resources that are available in

the society. Women tend to be more depressed than men on measures based on diagnostic criteria and depressive symptoms (Blazer, Burchett, Service, & George, 1991; Pearlin, 1989). Minority status exhibits a similar effect on depressive symptoms. African Americans, the largest minority group in the United States, are reported to have higher levels of depressive symptomatology in contrast to Whites (McBarnette, 1996; Ulbrich, Warheit, & Zimmerman, 1989). These differences may be exacerbated as individuals age. Data from the 1984 National Alcohol Survey indicate that African Americans aged 50 years and older had a higher proportion of individuals scoring at or above the cut-off point for clinical depression on the Center for Epidemiological Studies Depression Scale than Whites in the same age range (Jones-Webb & Snowden, 1993). Two large population-based studies, however, failed to show differences in the rates of psychiatric disorders between African Americans and Whites (Robins and Regier, 1991; Kessler et al., 1994).

Though research on gender and ethnic differences in depression has proliferated, there are few studies that contrast older men and women of majority and minority ethnic groups. One of the more unfortunate consequences of the paucity of research in this area is that it leaves unanswered the question of whether differences are leveled off or exacerbated as people age. Moreover, findings from available studies are inconsistent. For instance, Murrell, Himmelfarb, and Wright (1983) found depressive symptoms to be highest among older African American women followed by White women, African American men, and White men, whereas Reskin and Coverman (1985) found levels of depressive symptoms among African Americans to be lower than those of same-sex Whites although the difference was significant only among women. But Brown, Milburn, and Gary (1992) found no gender differences in depressive scores in a community-based sample of 148 African Americans 65 years and older, a finding that they attribute to the similarities of the subgroups in their exposure to stressful life events and number of social roles, factors that were hypothesized to be associated with depressive symptomatology. There is also some indication that gender differences level off with increasing age among African Americans (Antonucci, Jackson, Gibson, & Herzog, 1994).

Variations in the prevalence and levels of depression are commonly attributed to the differential distribution of stressors and resources in society. Using a longitudinal data set derived from a sample of men and women who were 58-64 years old and who were all fully employed when they were recruited into the study, we examine whether depressive symptomatology levels measured two years after baseline, are distributed differentially by ethnicity and gender and whether these differences may be accounted for by the differential distribution of stressors and resources. Findings on whether differences exist, where these differences lie, and which factors are responsible for them will assist in determining whether policies should be universally applicable or should accommodate the needs of more vulnerable subgroups of the older population. Our dependent variable, it should be noted, refers to symptoms of depression, rather than to the presence of a clinical disorder. We utilize a stress-coping model as the framework of our study as it provides a perspective for relating differences in depressive symptoms to differences in the distribution of stress and resources that occur among groups stratified by ethnicity and gender.

Background

Stress

Stress theory holds that stressors or environmental demands that lead to physiological or behavioral adjustment have physical or mental health outcomes that may be positive or negative, depending upon such factors as the qualitative characteristics and timing in the occurrence of stressors (Thoits, 1995). Acute life events such as divorce, more persistent chronic strains such as disability, and daily hassles constitute the three major types of stressors (Thoits, 1995). Evidence indicates that although people from disadvantaged groups do not necessarily suffer more negative stressful life events, they do experience more ongoing strain than those who are more socially advantaged (Brown & Harris, 1978; Thoits, 1995). While strain may be related to a number of social roles as well as individual factors, it may also be rooted in discrimination and inequity (Pearlin, 1989; Aneshensel, 1992). Pointing to the persistent ethnic differences in health indicators and rejecting the behavioral model that attributes these differences to minorities' lifestyle choices including smoking, alcohol use, and unhealthy diet, Bayne-Smith and McBarnette (1996) argue that ethnic stratification limits the opportunities of minorities not only in the economic sphere, but in all societal structures.

Variations in depressive symptomatology that occur despite similarities in the rate of exposure to stressors may be attributed to differences in vulnerability or susceptibility to stressors. Members of disadvantaged groups, such as the elderly and those of low socioeconomic status, have been found to be more vulnerable or to be more depressed in response to stressors than their more fortunate counterparts (McLeod & Kessler, 1990; Thoits, 1995; Ulbrich et al., 1989). Vulnerability, however, may also vary by type of stressors. Men have been shown to be more reactive to financial and work-related events while women are more reactive to events occurring in their social networks (Conger, Elder Jr., Simons, & Ge, 1993) because of socialization into gender roles. We therefore expect the associations between stressors and depressive symptoms to vary by minority groups who may have been made more vulnerable to certain types of stressors by their life circumstances.

Social Support

There is a general understanding in the stress literature that people are not passive recipients of stress; they draw on personal and social resources to deal with it and even transcend its effects. Social support is, perhaps, the most studied of these resources, with a history that dates back to Durkheim's observations on the relationship between group affinity and prevalence of suicide (Durkheim, 1951). Despite a wide range in the conceptualization and definition of the variable, its effect on physical and mental health either directly, as an index of social integration, or indirectly, as a moderator of the impact of stressors is well-established (Berkman & Syme, 1979; Cohen & Wills, 1985; Thoits, 1995). Cassel (1976) considers expressive or emotional support to be more important than any specific function that social support could provide. Gove, Hughes, and Style (1983) found quality of the marital relationship to be an important predictor of outcome. As with stressors, social support varies by gender and ethnicity. Women tend to have wider social networks than men (Antonucci, 1991). African Americans derive social support from both kin and nonkin (Taylor, Chatters, Tucker, & Lewis, 1990) although a recent study (Burton, 1992) suggests that social support among African Americans may be eroding in inner cities.

Background factors cover the physical and social characteristics that influence one throughout a lifetime. We consider socioeconomic status and health as the background variables in our study. Socioeconomic status reflects the financial resources, social and intellectual skills, and prestige that directly affect well-being. High levels of socioeconomic status protect against depressive symptoms. Poor health, with its pain, confinement, uncertainty, and high costs of treatment increases depressive symptoms. When socioeconomic deprivation and poor health are chronic conditions, they tend to generate stress persistently, with effects on depressive symptoms that have been found to be more adverse than those of stressful life events (Thoits, 1995).

Using a model based on stress and coping paradigms, we will assess the effects of stressors arising from roles in the workplace and social networks in conjunction with social support and socioeconomic assets provided by income and education as resource variables, on the levels of depressive symptoms in a mature population of White men, White women, African American men, and African American women. First, we examine whether depressive symptoms vary among these groups. We hypothesize that African American women will have the highest levels of depressive symptomatology, followed by White women, African American men, and White men. Second, we examine whether the distribution of stressors and resources vary among these groups. We expect a differential distribution of stressors and resources that parallels the pattern of variability in levels of depressive symptomatology. Thus, White men will have the lowest exposure to stressors and the highest levels of resources, followed by African American men, White women, and African American women. Third, we use a causal model to investigate whether the effects of stressors and resources are similar for White men, White women, African American men, and African American women. We predict that stressors will elevate levels of depressive symptomatology in all groups, with the effect of type of stressors varying by gender. Thus, we expect stressors associated with the worker role to increase depressive symptoms in men, but not in women, and stressors associated with social networks to increase depressive symptoms in women, but not in men. We expect social support, income, and education to decrease depressive symptoms and poor health to have the opposite effect in all four groups.

Methods

Sample

We use data from a prospective investigation of the transition from full-time employment to retirement of a sample of mature men and women residing in a North Carolina metropolitan area. The list of names that made up the original sample was randomly drawn from driving records maintained by the North Carolina Department of Motor Vehicles. Of 1,331 men and women who met eligibility criteria, 62% consented to participate in the study. The response rates varied by gender and ethnicity. They were 60.2% for men, 64.2% for women, 64.4% for Whites, and 54.3% for African Americans. A comparison between our sample and the population of fully employed men and women between the ages of 58 and 64 years old in the Raleigh-Durham Metropolitan Area showed the two groups to be similar in the proportions of African Americans that they contained (18.4% of African Americans in the study sample versus 19.4% in the Raleigh-Durham metropolitan population). The educational distribution of our sample approximates the Raleigh-Durham metropolitan population for high school graduates and those

with some college education, but overrepresents higher levels (college graduates and beyond). We also find higher proportions of our sample in managerial and professional occupations and in upper-income brackets (U. S. Bureau of the Census, 1992). The baseline sample, first interviewed in 1992, consisted of 826 men and women, aged 58 to 64 years old, working at least 35 hours a week, and residing in the Raleigh-Durham-Chapel Hill area. The respondents were tracked twice every year to obtain information on work status, i.e., whether they were still working full-time or had already retired. Those who had retired were then interviewed for a sixth month post-retirement interview, four to six months after the month of retirement. They were then re-interviewed one year, and then two years, after retirement. Respondents who were still working full-time were re-interviewed in the second half of 1994. Data from the 1994 interviews of full-time workers were merged with data from those post-retirement interviews conducted on dates that were closest to the period of data collection for the second interview of full-time workers to make up Wave 2 data. Thus, only one set of post-retirement interview went into the Wave 2 file for those retirees who had been interviewed more than once after retirement. Data were collected using computer-assisted telephone interviews (for more details on sampling and data collection, see Mutran, Reitzes, Bratton, & Fernandez, 1997).

A total of 758 respondents were interviewed at Wave 2. The attrition rate of 8.8% includes 14 deaths. Of those who were lost to follow-up at Wave 2, 44.1% ($n = 30$) were White men; 26.5% ($n = 18$) were White women; 14.7% ($n = 10$) were African American men; another 14.7% ($n = 10$) were African American women. Of 749 respondents who provided usable data for analyses, 303 (40.4%) were White men, 318 (42.4%) were White women, 54 (9.2%) were African American men, and 74 (9.9%) were African American women. Based on results of the t-test procedure for two independent means, there were no significant differences between those who were out of and those who remained in the sample used for analysis on all Time 1 variables except on education, with those who were out of the sample having completed fewer years of school (13.45 vs. 14.45). Croup comparisons revealed differences that were significant at the .05 level or below. White men who were not in the sample had a mean for social support that was lower than the mean of those who were in the sample (10.08 vs. 10.60). White women who were not in the sample had an educational level that was lower than their group mean (12.65 vs. 13.82). African American men who were not in the sample had means for social support, income, education, and symptoms of poor physical health that were lower than those who were in the sample (9.22 vs. 10.35 for social support, 3.45 vs. 4.95 for income, 10.64 vs. 14.20 for education, and 6.91 vs. 8.51 for symptoms). African American women who were not in the sample had a mean for work stressors that was lower, and a mean level of social support that was higher, in contrast to those who were in the sample (.17 vs. 1.07 for work stressors and 10.42 vs. 9.48 for social support).

Measures

Depressive Symptoms.

We used the Center for Epidemiological Studies Depression Scale (CES-D) to measure our dependent variable (Radloff, 1977). The scale is widely used to measure depressive symptomatology in nonclinical populations. Respondents were asked how often they experienced each of twenty symptoms characteristic of depressive affect in the past week.

Responses ranged from "rarely or none of the time," scored as 0, to "most or all of the time," scored as 3. The scale had interitem reliabilities, measured by Cronbach's alpha, of .85 at Time 1 and .86 at Time 2. We consider depressive symptoms at Time 2 as our dependent variable. But since depressive symptoms may also be the result of a lifetime of exposure to negative events and circumstances rather than of immediately preceding acute events, we also enter depressive symptomatology at Time 1 as one of the predictors of depressive symptomatology at Time 2 as well as an outcome variable through which Time 1 exogenous variables exert their effects on depressive symptoms at Time 2.

Stressors.

The study used a checklist of 21 stressful life events based on inventories formulated by Holmes and Rahe (Rahe, 1989). Since the literature has demonstrated that life events show variability in their effects on outcome variables by type of event, we distinguish stressful life events that are work-related from those referring to roles in social networks that encompass spouse, children, other family members, and friends. Our measures are simple counts of the number of work stressors and role losses that respondents experienced in the past year. Our list of seven work stressors consisted of changing to a new type of work, major change in work hours or conditions, major change in responsibilities at work, major business readjustment, being fired or laid off from work, troubles with boss, and spouse beginning or stopping work. We included seven stressful life events in our list of network stressors. These are deaths of spouse, family member or friend, marital separation, divorce, son or daughter leaving home, and major change in the health or behavior of a family member.

Social Support.

We evaluated social support as the quality of support derived from relationships with members of one's social networks. Our measure is the sum of three items referring to the degree of satisfaction with marital or dating relationships, with friendships, and with one's offspring. Each item is measured on a four-point scale, with one representing "very dissatisfied with relationships," and four representing "very satisfied with relationships." A score of 2.5, the mid-point of the scale representing a neutral value, was arbitrarily assigned in the absence of marital or dating relationships, friendships, or offspring.

Background Variables.

Income at Time 1 was measured along ten categories of gross household income per year ranging from \$7,500 or less (1) to \$200,001 and over (10). Education was assessed as number of completed years of formal education. We assessed physical health as the frequency, measured as (1) never, (2) sometimes, and (3) often, with which respondents were experiencing symptoms indicative of poor physical health and undiagnosed medical conditions at the time of their interview. These symptom items were used in the National Longitudinal Surveys of Labor Market Experience (Parnes & Less, 1985). The seven indicators of poor health were (1) pain, (2) tiring easily or having no energy, (3) feeling weak or lacking strength, (4) aches, swelling or a sick feeling, (5) fainting spells or dizziness, (6) shortness of breath or trouble breathing, and (7)

difficulty eating, dressing, bathing, or using the toilet. Our measure of poor health had a scale reliability of .77 at Time 1 (Cronbach's alpha).

Retirement Status.

We included retirement status as one of our control variables, as 41% of our respondents had retired in the second wave of the study. The retirement variable was dichotomized as retired (1) and not retired (0). Respondents who were working less than 35 hours a week were considered as retired with the exception of those who did not define themselves as retired, even though they were working under 35 hours a week, and those who were laid off and were looking for fulltime work. Fewer than five cases fell under these exemptions.

Results

We used a one-way ANOVA procedure to test whether subgroup means were equal to the population mean and, if they were not, we performed the Bonferroni post-hoc comparison test to identify those groups that differed significantly from each other. Means and standard deviations for study variables are shown in Table 1. Results of multi-group comparisons are given in Table 2.

Table 1. Mean Levels of Depressive Symptoms, Stressors, Resources, and Retirement Status for Total Sample and by Groups

Variables	Total Sample	White		African American	
		Men	Women	Men	Women
Depressive symptoms T ₁	5.9 (6.6)	5.4 (6.0)	5.8 (6.5)	6.0 (6.6)	8.2 (8.5)
Depressive symptoms T ₂	5.1 (6.2)	4.2 (5.1)	5.3 (6.7)	5.4 (6.0)	7.3 (7.5)
Work stressors T ₁	.7 (1.2)	.7 (1.2)	.8 (1.2)	.6 (1.0)	1.1 (1.4)
Role losses T ₁	.8 (.9)	.8 (.9)	.9 (1.0)	.7 (.8)	.8 (.9)
Social support T ₁	10.3 (1.3)	10.6 (1.2)	10.2 (1.3)	10.4 (1.2)	9.5 (1.3)
Income T ₁	5.1 (1.8)	5.9 (1.7)	4.7 (1.6)	4.9 (1.8)	3.6 (1.4)
Education	14.4 (3.1)	15.3 (3.3)	13.8 (2.3)	14.1 (3.9)	13.7 (3.2)
Poor health T ₁	9.9 (2.4)	9.6 (2.3)	10.2 (2.5)	9.5 (2.6)	10.3 (2.4)
Retirement status (1 = retired, 0 = not) T ₂	.41 (.49)	.35 (.48)	.44 (.50)	.46 (.50)	.50 (.50)
N	749	303	318	54	74

Table 2. Results of Group Comparisons on Depressive Symptoms, Stressors, Resources, and Retirement Status

Variables	Overall F-value	Comparison pr > F	Groups that differ significantly from each other at $p \leq .05$				Difference Between Means
			White Men	White Women	African American Men	African American Women	
Depressive symptoms T ₁	3.6692	.012	X			X	-2.8
				X		X	-2.4
Depressive symptoms T ₂	5.3261	.001	X			X	-3.1
Work stressors T ₁	2.6792	.046	no significant differences between groups				
Role losses T ₁	.6582	.578	no significant differences between groups				
Social support T ₁	9.1717	.000	X	X			-4
Income T ₁	48.1381	.000	X	X			1.2
			X		X		1.0
			X			X	2.2
				X		X	1.1
					X	X	1.3
Education	15.4267	.000	X	X			1.5
			X		X		1.2
			X			X	1.6
Poor health T ₁	4.1677	.006	X	X			-6
Retired '94	2.6463	.048	no significant differences between groups				

We found variations in levels of depressive symptomatology by ethnicity and gender. However, differences were significant only between African American women and Whites (both men and women) at Time 1 and between African American women and White men at Time 2. We failed to find support for the group ranking that we had predicted. Levels of depressive symptomatology did not vary significantly among White men, White women, and African American men at both time periods.

There were no significant differences in exposures to work stressors and role losses. A number of investigators similarly report an absence of variability in the distribution of stressors by gender and minority status, along with indications of differences in the distribution of resources that enhance mental health (Brown et al., 1992; Thoits, 1995). Means in Table 1 indicate that White men have the highest levels of social support, income, and education while African American women have the lowest. Group comparisons in Table 2 show that the only significant difference on the social support variable was that between White women and White men. White women found their relationships with their spouse or partner, friends, and children to be significantly less satisfying than those of White men. African American women had significantly lower incomes compared to White men and White women, but had significantly lower educational levels only in comparison to White men. Although middle-aged and older African Americans are reported to have more major chronic illnesses and higher mortality rates than Whites (Chatters, 1993), the only significant group difference in our analysis appeared between White men and White women, with White women being significantly less healthy than White men at Time 1. Our sample, however, had to be reasonably healthy to maintain full-time employment, an eligibility criterion for recruitment into the study. Those who had dropped out of the workforce or cut back their working hours because of physical illnesses were excluded from the study.

Table 3. Changes in Fits of Model Modification

Models	χ^2	df	Probability
Model 1: Coefficients constrained to be equal	94.7639	46	.00031
Model 2: Frees path from income to depressive symptoms at Time 1 for African American men	85.1474	45	.00028
Model 3: Frees path from work stressors to depressive symptoms at Time 2 for African American men in addition to path specified in Model 2	77.1913	44	.00146
Model 4: Frees path from retirement status to depressive symptoms at Time 2 for African American men in addition to paths specified in Model 3	67.3271	43	.01029
Model 5: Frees path from role losses to depressive symptoms at Time 2 for White women in addition to paths specified in Model 4	59.2841	42	.04038
Model 6: Frees path from physical health to depressive symptoms at Time 2 for African American men in addition to paths specified in Model 5	52.9840	41	.09942
Model 7: Frees path from income to depressive symptoms at Time 2 for African American women in addition to paths specified in Model 6	48.2920	40	.1728

Note: All decreases in χ^2 were significant at $p < .05$ and lower.

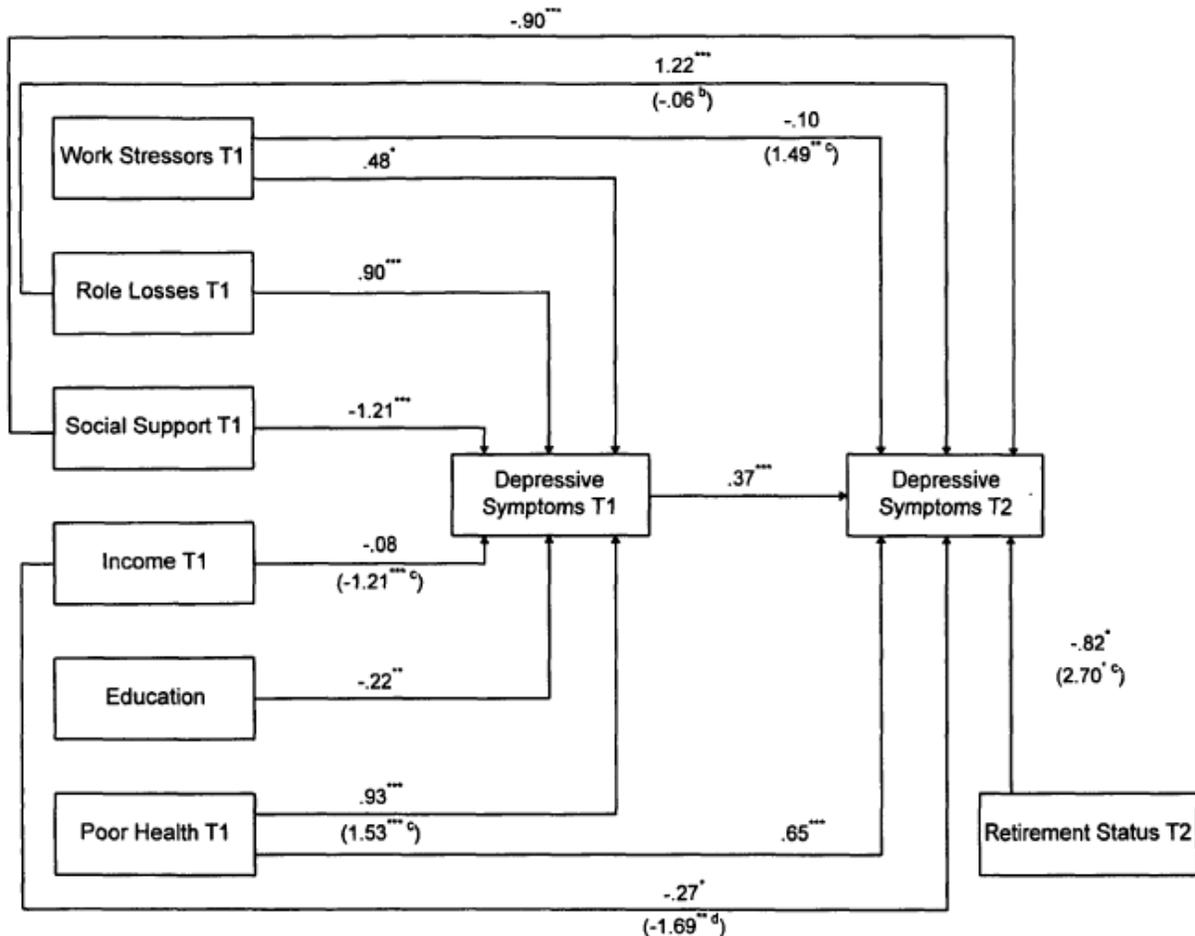


Figure 1. Model showing the relationship between stressors, resources, and retirement status on depressive symptoms.

Note: Values in parentheses represent unstandardized structural coefficients for White women (b), African American men (c), and African American women (d) for paths where significant differences in the χ^2 values were found. Values not in parentheses are the coefficients for the main (White men) model (a).

* $p < .05$, ** $p < .01$, *** $p < .001$.

We used LISREL (Jöreskog & Sörbom, 1989) to examine the causal effects of stressors, resources, poor health, and retirement status on depressive symptoms. We corrected for errors in the measurement of poor health and depressive symptomatology at Time 1 and Time 2 by including their error variances in our model estimations. We further explored the model to test whether the groups differed significantly from each other. In our initial model, we constrained the paths from the set of exogenous variables to depressive symptomatology at Time 1 and Time 2 to be equal. This yielded a χ^2 value of 94.7639 with 46 degrees of freedom ($p = 0.00003113$, GFI = 0.9628), indicating that the model could be improved. Freeing the path from income to depressive symptoms at Time 1 for the group of African American men improved the model significantly, yielding a χ^2 value of 85.1474 with 45 degrees of freedom ($p = 0.0002803$, GFI = 0.9628). The difference in χ^2 values between the two models, 9.8165 with 1 degree of freedom, was larger than the critical value at the .01 level of significance for χ^2 values. With size of modification indices as guide, parameters were freed where it made theoretical sense to do so, one at a time, until significant improvements in the fit of the model could no longer be found. The final model had a χ^2 value of 48.2920 with 40 degrees of freedom ($p = 0.1728$, GFI = 0.9747). Model modification results are shown in Table 3.

Figure 1 presents the unstandardized coefficients where there were significant relationships between variables or significant differences between groups. The coefficients of the group or groups that differed significantly from the main (White men) model are shown in parentheses.

We found general support for the stress and coping paradigms in our study. Stressors and resources influenced levels of depressive symptomatology at Time 2 as expected, either directly or indirectly, through their effects on depressive symptomatology at Time 1, which significantly predicted depressive symptomatology at Time 2. Work-related stressors and role losses were significantly related to increased depressive symptomatology at Time 1. Role losses had significant long-term effects on depressive symptomatology as well, except among White women. Higher incomes decreased depressive symptoms at Time 2, but did not do so at Time 1 for most groups. This may be because the effects of low income are cumulative, becoming manifest only after a series of deprivations. People may also adjust to low income through coping efforts directed at making ends meet, which may delay the onset of depressive symptoms. The more immediate impact of income at Time 1 on depressive symptoms among African American men may be the result of the significance that a breadwinner role has for this group as well as the scarcity of coping resources for financial needs. Education decreased depressive symptomatology at Time 1 for all groups, exerting its influence on depressive symptoms at Time 2 through its effect on depressive symptoms at Time 1. Poor physical health and retirement status had significant influences on depressive symptoms. The more physical symptoms one had, the more depressive symptoms one tended to have at Time 1 and Time 2. Being retired at Time 2 was associated with decreased levels of depressive symptomatology.

Model modification results showed significant group differences for the effects of work stressors and role losses on depressive symptoms at Time 2. Work stressors had a persistent effect on African American men that was not evident for other groups. The more work stressors African American men had at Time 1, the more depressive symptoms they had at Time 2. Role losses showed significant group differences in that the longer-term effect of role losses on depressive

symptomatology was stronger for White men than for White women, a finding that contrasts with that of Conger et al. (1993) who found women to be more reactive to social network events than men. Group differences show the importance of income in reducing depressive symptomatology among African Americans. Income had a significant protective effect against depressive symptomatology among African American men at Time 1. Its protective effect against depressive symptomatology at Time 2 among African American women was much greater compared to its effect on other groups. The effect of physical health on depressive symptoms at Time 1 was greater for African American men than for other groups. While retirement decreased depressive symptoms in other groups, it elevated depressive symptomatology levels in African American men. The findings on the persistent effects of work stressors and retirement status among African American men may indicate the importance of the work role for this group.

Discussion

Our analyses were based on a group of fully employed men and women residing in a North Carolina metropolitan area who were 58-64 years old at baseline and 60-66 years old at Wave 2. Our choice of sample may therefore limit the generalizability of our findings to younger cohorts of workers and other regions. The sample size that we had for African American men was small. Despite the low power associated with small sample size, we had significant findings for this group. However, our comparison of the characteristics of respondents who remained in the sample and those who were lost to follow-up indicates the need for caution in generalizing our findings, particularly for African American men. Considering the longitudinal nature of our data and the paucity of comparative investigations of groups that differ by ethnicity and gender, our findings contribute to the body of empirical findings on how the relationships between stressors, resources and mental health vary for different groups, particularly for African American men, about whom very little is known.

In comparing depressive symptoms and their potential determinants among four groups that varied by ethnicity and gender, we found that White women and African American men did not have significantly higher levels of depressive symptomatology than White men. However, we did find African American women to have significantly more depressive symptoms than White men and White women. Our attempts to identify potential determinants for depressive symptomatology revealed that African American women derived the same degree of satisfaction in their relationships with spouses or partners, friends and offsprings as those in other groups. But despite educational levels that were comparable to those of White women and African American men, they had levels of household income that were lower than those of White men, White women, and African American men. These resources, however, are also associated with marital status. We had relatively larger proportions of women who were in the not-married category, which is to be expected because our initial sample consisted of fully employed men and women. With no spouses to depend on, single women are more compelled to work, drawing household incomes that are lower compared to men and to married, employed counterparts whose spouses may also be employed. African American women constitute the largest segment of the single elderly. In 1990, 75% of African American women fell into the married-spouse absent, widowed, divorced, and never married categories as opposed to 59% of White women, 46% of African American men, and 26% of White men among those over 64 years old (U.S.

Bureau of the Census, 1991). The proportion of elderly single women will continue to increase in the future. Thus, and programs such as those that allow women to take extended leaves of absence for family exigencies should be encouraged to make this segment of the population less economically vulnerable.

Our model for depressive symptomatology was confirmed for all groups. All baseline explanatory variables affected depressive symptoms assessed two years later, either directly, or indirectly, through baseline depressive symptoms. The more work stressors and losses in the social network one had, the more depressive symptoms one tended to have. More satisfying relationships, higher incomes, higher educational levels, and better health decreased depressive symptoms. Retirement status was also associated with fewer depressive symptoms. However, there were significant group differences in the effects of certain variables. Losses in the social network had more persistent effects on White men than White women. Work stressors influenced concurrent depressive symptomatology but its direct effects wore off over time for all groups, except for African American men, whose levels of depressive symptomatology were still elevated by work stressors two years after their occurrence. Poor health had a larger effect on African American men than other groups. Where retirement decreased depressive symptoms in other groups, it increased depressive symptoms in African American men. With the decline of job opportunities in manufacturing industries, the traditional sources of stable and high-paying jobs for African American men (Wilson, 1996), the benefits that African American men expect to have at retirement are likely to be low in comparison to other groups (Gibson, 1991). Thus, it is not surprising that African American men are more disturbed by retirement than other groups. Income had a dominant influence on depressive symptoms among African Americans compared to Whites. Its effect was greater for African American women than African American men.

These findings suggest that intervention strategies on depressive symptoms may be more effective when they take group differences into account. There is a need to recognize that men also experience difficulties in dealing with separations and deaths and that African American men are not impervious to the loss of the work role through disability, a threat that is more real to them than to any other group. And finally, the dominance of the influence of income on depressive symptoms among African Americans, particularly for African American women who also lag behind all other groups in income, suggests that the effects of federal programs and legislation that address discrimination have not been equal for all groups. These differences are going to be exacerbated in older age. Jackson, Lockery, and Juster (1996) warn that without significant policy interventions and the maintenance of programs that are their main sources of support, future cohorts of the elderly in minority groups will be even more disadvantaged in comparison to Whites, and even to current minority elders.

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