Social Embeddedness and Psychological Well-Being Among African Americans and Whites

Lonnie R. Snowden

University of California at Berkeley

Using data from the National Medical Expenditure Survey, a household survey of more than 18,000 respondents, this study examined racial and gender differences in social embeddedness, an indicator of community well-being and social support. The study hypothesized that higher levels of social embeddedness would be found among African Americans than among Whites and that the association between social embeddedness and psychological well-being would be stronger among African Americans than among Whites. African American men reported themselves more socially embedded overall than White men and, in one instance, their social involvement was especially important in predicting psychological well-being. African American women were more likely than White women to report attending meetings of churches and community groups, but otherwise were less socially involved than White women. There was no evidence of a difference between African American and White women in strength of the connection between social embeddedness and psychological well-being. African American social involvement is more selective than previously believed and generalizations must be qualified on the basis of gender.

KEY WORDS: African Americans; social support; adjustment; coping; mental health.

Social and familial ties and community institutions, scholars believe, have played a crucial role in permitting African Americans to adapt socially and psychologically in the face of stigma and social rejection. Family and

¹This study was supported by Research Award R01 MH52908 from the National Institute of Mental Health.

²To whom correspondence should be addressed at Center for Mental Services Research and School of Social Welfare, University of California at Berkeley, 120 Haviland Hall, Berkeley, California 94720-7400; e-mail: snowden@uclink4.berkeley.edu.

extended family, neighbors, friends, churches, and civic and fraternal organizations, on this account, have offered sanctuary from a frequently hostile wider society and provided access to needed social, emotional, and material resources (cf. Martin & Martin, 1995).

This view rests on a supportive but limited research base. African Americans have been found to interact with neighbors more frequently than do Whites and in a greater variety of ways (Jackson, 1970; Lee, Campbell, & Miller, 1991), indicating the presence of extensive neighborhood-based and church-based support networks (Jackson, 1970; Stack, 1974; Lee et al., 1991; Walls & Zarut, 1991). The high degree of interdependence believed to occur in such communities has led some scholars (Saegert, 1989) to conceive of a "community household," comprising families and neighbors who share information, coping strategies, advice, and services (e.g. child care and transportation).

The Black church has been regularly identified as central to African American community life (Taylor & Chatters, 1991), serving as a focal point of social involvement, emotional reassurance, and political activism (Taylor & Chatters, 1991). The continuing prominence of the Black church extends a historical legacy begun in the rural South and maintained throughout waves of migration to the urban North. "The church was an agency of moral guidance and social control" (Jaynes & Williams, 1989, p. 173). Religious belief is strong among African Americans: in 1987, 74% of Blacks rated religion as "very important" compared to 55% of Whites. Church attendance on a regular basis is less common (60%) but again more common than that reported by Whites (56%; Jaynes & Williams, 1989).

The close-knit character and cooperative practices described as characterizing African American communities exemplify and enrich a wider concern among social scientists with social ties that furnish emotional and material support. Over the past two decades, many researchers (e.g. Brown & Harris, 1978; Cobb, 1976; Cohen & Wills, 1985; Jackson, 1992; Vaux, 1988) have documented associations of social support with health and wellbeing. Domains represented in this work include work, school, and family adjustment (Walls & Zarut, 1991; Wilcox, 1981), mental health (Brown & Harris, 1978), and physical health and mortality (Berkman & Syme, 1994; Mor-Barek, Miller, & Syme, 1991; Seeman & Syme, 1987). Social support is thought to enhance well-being and adjustment to stressful life events and conditions through its ameliorative and protective effects, as well as by promoting feelings of belongingness and kinship (Vaux, 1988).

The surge of research on social support was increasingly greeted with expressions of criticism. Social support came to be recognized as vague, expansive, and in need of being disaggregated into components (e.g., Leiberman, 1982). Barrera (1986) distinguished among three aspects of support—social embeddedness, perceived support, and enacted support—and demonstrated that each aspect functions as a distinguishable concept ultimately best understood within complementary theories of support.

One aspect of social support, social embeddedness, refers to ongoing relationships and continuing interaction patterns reflected in social status indicators (e.g., marital status) and social roles. Social embeddedness is comprehensively assessed through social network analysis (Barrera, 1986) and closely resembles social integration, which has been defined as "... the existence and quantity of [social] relationships..." (LaVeist, Sellers, Elliot-Brown, & Nickerson, 1997). In theoretical accounts of support, social embeddedness serves as a background against which support is enacted and might be perceived; although one step removed, social embeddedness has been associated empirically both with enacted and perceived support (Barrera, 1986).

Researchers and theorists have treated social embeddedness as an important concept in its own right. Evidence from a number of studies links embeddedness-related indicators of social status to poor health and shortened life expectancy (Berkman & Syme, 1994). One study of elderly, African American women (LaVeist et al., 1997) found that 5-year death rates of the socially involved and the socially isolated differed by a factor of three. Other theorists have interpreted embeddedness as "social capital" — "... the quantity and quality of interpersonal ties between people" (Aday, 1994, p. 491). Social capital serves not only as a social, health, and psychological resource but also as a form of economic capital, promoting productivity and material well-being (Coleman, 1988; Fukuyama, 1995). Another group of theorists has pointed to embeddedness-related linkageschurches, extended family, friendship and fraternal groups, and other "mediating structures"-in explaining the capacity of African American and other stigmatized communities to overcome sociopolitical oppression (Sonn & Fisher, 1998).

In recent years community psychologists have reported intriguing attempts to use selected features of embeddedness in accounting for African American social support and psychological functioning. Henly (1997) demonstrated that family structure was less important to psychological adjustment and work aspirations among young African American mothers than were emotional and material support. Chen, Telleen, and Chen (1995) found that support from family members predominated, although Miller-Lancar, Erwin, Landry, Smith, and Swank (1998) reported greater conflict in supportive family relationships among African Americans than among other groups and Davis and Rhodes (1994) found that problems in the mother–daughter

relationship were associated with psychological well-being to a greater extent than was maternal support. Rhodes, Ebert, and Fisher (1992) discovered the importance of having a mentor: mentored mothers appeared to take better advantage of social support and received greater psychological benefit.

Maton et al. (1996) focused attention on differences in well-being associated with differences in source of support. Among pregnant adolescents, they reported that peer support was more important among African Americans and partner support among Whites. In a second study of college freshman, Maton et al. found that family support was more important among African Americans and peer support among Whites. In yet another study, Maton (1990) showed that support from friends was associated with greater selfesteem among in-school African American males, but that support from friends was not associated with self-esteem among drop-outs.

Researchers also have studied the adjustment of African American students at major universities. Jay and D'Augelli (1991) reported no difference between African American and White freshman in support-related network characteristics or in availability or adequacy of support. Among graduate students DeFour and Hirsch (1990) demonstrated the importance of having African American peers and opportunities to interact with African American faculty.

The body of research, when considered as a whole, contains useful insights, but suffers at the same time from important limitations. Even though studies relying on convenience samples and focusing on groups of special concern help to clarify behavior in particular population niches, they cannot address the general African American population or general conditions of living. Nor have these studies focused on embeddedness itself, a concept central to theories of African American community life (cf. Milburn & Bowman, 1991). Studies broader in scope have used convenience samples, or have lacked non–African-American samples as a basis for comparison. As a result, investigators have been unable to establish with confidence that observed levels of social interaction generalize widely or apply to African Americans in particular.

In evaluating hypothesis about African American behavior it is sometimes important to adopt a comparative frame of reference. One investigator reported that African Americans facing mental health problems turned frequently to family and friends for help, but did so less frequently than Whites (Snowden, 1998). Another demonstrated that material support available to African Americans was notable, but often proved less than that available to Whites (Roschelle, 1997). Both researchers used probability samples from national surveys.

Another limitation of many previous studies is the relatively small samples they have used. Low statistical power to detect true differences between populations is a pervasive problem in behavioral research, evident in the widespread occurrence of Type II error (improper failure to reject the null hypothesis; Hunter, 1997). The problem is compounded when interaction terms are included in analytic models (McClelland & Judd, 1993). The resulting tendency to draw inappropriate conclusions has inspired a growing movement to ban the practice of testing statistical significance (Hunter, 1997).

The present study examined racial differences in support-related social embeddedness thought to be especially important to African Americans. Women and men were studied separately because of evidence from previous research indicating the frequent occurrence of gender-based interaction in studies of African Americans and Whites, attributable to gender-linked social and cultural patterns of experience (Hines, Snowden, & Graves, 1998; Jones-Webb, Snowden, Herd, Short, & Hannan, 1997; Snowden & Hines, 1998, 1999; Snowden, Libby, & Thomas, 1997).

Social embeddedness was represented following one of two broad approaches identified by Berrera (1986): assessing the frequency of interaction with friends and participation in groups and community organizations. The study addressed two related questions, seeking differences between African Americans and Whites in (1) level of social embeddedness; and (2) the association between social embeddedness and psychological wellbeing. Avoiding specialized populations and questions, the purpose was to test general hypotheses derived from a literature and pointing toward a social orientation and style of social functioning found especially among African Americans.

The first hypothesis arose from descriptions of African American communities as close-knit and tightly bonded. These characteristics were expected to result in high levels of social embeddedness, higher levels than those found among Whites.

The second hypothesis pertains to the functional and adaptive significance of social integration. Because of a special emphasis placed on interaction and relatedness in African American communities and a tradition of socializing to maintain morale (Dressler, 1985; Martin & Martin, 1995; Milburn & Bowman, 1991), it was expected that, among African Americans more than among Whites, persons who were socially engaged would have better mental health than those who were less engaged. The second hypothesis implies an interaction between African American versus White status and social integration in explaining psychological well-being—that the association between social integration and well-being would be greater among African Americans than among Whites.

METHOD

The data used for the study are from the 1987 National Medical Expenditure Survey (NMES), specifically from the NMES Household Survey. The NMES is a project of the Center for General Health Services Intramural Research of the Agency for Health Care Policy and Research (AHCPR).

The NMES Household Survey drew a national probability sample of the civilian, noninstitutionalized population and included an oversample of population groups of special interest—the poor, the elderly, African Americans, and Latinos. A parallel survey was conducted of American Indian and Alaska Native populations, the Survey of American Indian and Alaskan Natives (SAIAN).

The Household Survey proceeded from a stratified, multistate area probability design with a total sample of roughly 36,400 adults and children (children were excluded from the present analysis). Families participating in the Household Survey were interviewed four times over 16 months beginning in early 1987. Baseline data were collected on household composition, employment, and insurance, and the information was updated at each interview. Additional information was collected on illness, use of health services, and expenditures. The data were collected through face-to-face questions, from calendars/diaries of medical events, and from a self-administered questionnaire including attitude items used in the present study mailed and completed by respondents between Round 1 and Round 2 interviews. Data obtained from the Household Survey were partially corroborated and supplemented with data from the Medical Providers Survey and the Health Insurance Plan Survey that assessed, respectively, respondents' health care utilization as reported by their providers and health insurance benefits as documented by their insurers.

Table I provides demographic information on the weighted sample. Largely, the sample was composed of married adults living above the poverty line.

Measures

The NMES included five questions on social embeddedness. Three of them were answered on 7-point Likert Scales indicating frequency (over the past 30 days) of visits by friends, visits to friends, and telephone conversations with friend or relatives. Ratings indicated frequencies of contact ranging from *every day* to *not at all in the past month*. A fourth item asked about frequency of attending "church or go to meetings of clubs, lodges, parent groups or other voluntary groups you belong to." Responses were reported

	Percent $(n = 18, 432)^a$			
Race/gender				
African American women	6.0			
African American men	4.4			
White women	43.4			
White men	37.0			
Other women	4.9			
Other men	4.4			
Age				
18–39	49.0			
40–64	34.4			
65 and over	17.7			
Region				
Northeast	20.4			
Midwest	25.5			
South	34.8			
West	19.5			
Urbanicity				
Large SMSA ^b	26.1			
Small SMSA	48.5			
Not in SMSA	25.4			
Employment				
Employed all year	53.8			
Other	46.2			
	10.2			
Income Lives in poverty	11.3			
Other	88.7			
	00.7			
Marital status	(0.1			
Currently married	60.1			
Other	39.9			

Table I. National Medical Expenditures Survey: Sample Description

^aChildren under 18 were excluded.

^bSMSA—Standard Metropolitan Statistical Area: Population center and adjacent communities as defined by Federal Office of Management and Budget.

on a 6-point Likert Scale indicating frequency of attendance ranging from *every day* to *not at all in the past month*. Responses to this question covered only six Likert Scale points instead of seven; there was no response indicating a frequency of "twice a week" as was true of the 7-point items. A final question asked whether there was "Any one in your life with whom you can really share your very private feelings and concerns?" Response alternatives were *yes* or *no*.

Psychological symptom distress was assessed via the 5-item version of the Mental Health Inventory (MHI-5), an abbreviated version of the 18-item Mental Health Inventory 18 (MHI-18), itself a shortened version of a 38-item measure used as the principle mental health assessment instrument in the Rand Health Insurance Experiment (Newhouse, 1974). The questionnaire consisted of five questions asking respondents how often during the past 30 days they had been "a very nervous person," "felt downhearted and blue," or "felt so down in the dumps that nothing could cheer you up"; and in a positive vein (scored in the reverse) "were you a happy person?" and felt "calm and peaceful"? All questions are answered on a 6-point scale of frequency ranging from *none of the time* to *all of the time*.

The MHI-5 was carefully investigated and found psychometrically sound. Internal-consistency reliability (alpha) was established at .88. Reliability varied little among subsamples of respondents: elderly versus nonelderly, high school educated versus less than high school educated, physically ill versus healthy (Stewart, Hays, & Ware, 1988). Validity was shown through a strong association with DSM-III-R diagnosis as assessed by the Diagnostic Interview Schedule (DIS). The MHI-5 proved as good as the MHI-18 and the General Health Questionnaire-30 at detecting DIS-assessed diagnosis and better than the Somatic Symptom Inventory-28 (Berwick et al., 1991). The method used was ROC analysis (Swets, 1988), which calls for plotting the hit rate (sensitivity) as a function of false alarm rate (1 - specificity) and which thereby evaluates accuracy at all possible cut-points. On an index that is "conceptually the same and numerically virtually identical to the common-language effect size" (Rice, 1997, p. 417), the MHI-5 scored .79 out of 1-widely accepted as indicating a large-size effect (Rice, 1997).

Interaction Terms and Statistical Power

The detection of interactions ("moderator effects") in observational (nonexperimental, field-based) studies has bedeviled researchers for almost 30 years (e.g. Zedeck, 1971). McClelland and Judd (1993) discussed the joint distribution of interacting variables and showed that an optimum joint distribution possible in experimental studies is often approximated only poorly by interaction terms created in observational studies. The result is that in observational studies, residual variance available after accounting for main effects is often highly constrained, leading to weak tests of statistical significance.

Surveys of the literature have indicated the presence of this very kind of limitation. Two reviewers considered "much of the social science literature and reported that field study interactions typically account for about 1%-3% of the variance" (McClelland & Judd, p. 277). Low levels of variance explained are especially likely when differences expected in slopes of regression lines are less than dramatic differences in direction characteristic of "crossover" interactions, where regression lines reverse.

Even when accounting for low percentages of variance, however, interaction remains important to detect. Interaction indicates that a single regression coefficient is inappropriate and separate coefficients are needed thereby differentiating between competing theoretical accounts and prediction strategies. From statistical simulation, Evans (1985) concluded that as little as 1% of variance (carried by interaction) might have theoretical consequences worthy of note.

Tables of statistical power (Cohen, 1988) indicate that the sample of more than 18,000 respondents analyzed in the present study provided sufficient power for a 99% chance of detecting a 1% increment in variance at the .01 level of significance.

Transformation of Indicators

Social embeddedness was examined at the level of its individual indicators rather than as a composite. For purposes of examining culture-related differences between sociocultural and ethnic groups, investigators have argued (Betancourt & Lopez, 1993) for attention to specific modes of behavior lost in aggregation of individual items (Betancourt & Lopez, 1993).

Items are less reliable than scales according to psychometric theory, and the use of items may result in a loss in reliability. Any such loss must be considered in the context of possible gains in theoretical coherence and crosscultural validity. In the present analysis, patterns of difference in response between African Americans and Whites ultimately uncovered in the study would have been concealed through mutually canceling effects (African Americans had higher scores on some indicators but lower scores on others) in an analysis of composite scores (see later).

Response scales indicating frequency of interaction were dichotomized to indicate contact of once a week or more frequent contact ("every day," "several days a week," "twice a week") versus less than once a week contact ("2–3 times in the past month," "once in the past month," "not at all in the past month"). The recoding was performed to avoid problems associated with the use of highly skewed response distributions. As a check on any loss of information from use of categories rather than continuous scores, the analysis was repeated using original ratings (see later).

The independent variables described personal and geographical characteristics including race and gender reflected in a four-category nominal variable. Other sets of dummy variables denoted age, using younger adults, age 18–39 as the reference group; region of residence, using the south as the reference group (African Americans remain overrepresented in the south); and size of area of residence, using living in a small Standard Metropolitan Statistical Area as the reference group. In addition, variables were included to measure employment, education, and marital and poverty status.

Analysis

The analysis began by examining bivariate relationships between African American vs. White women and African American vs. White men on the one hand and social embeddedness indicators on the other. Associations were tested via chi-square. Logistic regression was then employed to model the effect of race–gender pairings on each attitude statement recoded to indicate once a week or more frequent contact or having a confidante, after controlling for characteristics confounded with African American vs. White status and gender that might lead respondents to agree with the statement. The resulting five regression equations were weighted to adjust for survey design effects and nonresponse.

A final round of analysis was conducted to determine whether there were differences in the association between social embeddedness indicators of psychological symptom distress. A series of regression equations was estimated using independent variables described previously, along with indicators of social embeddedness taken separately and in turn. The dependent variable was symptom distress, transformed (midpoint dichotomized at the item level) to avoid problems of skew and then summed. Internal consistency reliability (coefficient alpha) of the transformed scale was .78.

This procedure resulted in five regression equations, each of which included social embeddedness indicators (e.g., visits by friends) along with categories reflecting combinations of race and gender (African American females, etc.). Interactions were estimated between social embeddedness indicators and categories of African American vs.White status and gender. The method of regression was ordinary least squares.

As a check on transformations of the dependent variables, multivariate analyses were repeated substituting continuous ratings of social embeddedness indicators for categories using ordinary least squares. There was no difference between procedures in results with respect to which findings proved statistically significant. Logistic regressions are reported because they are free of assumptions about response distributions (i.e., homoskedasticity).

RESULTS

Unadjusted racial differences on indicators of social embeddedness are presented in Table II. African American women were more likely than White

	% women \geq once p	er week	% men \geq once per week		
	African American	White	African American	White	
Visits by friends	46.76	44.33*	51.27	42.32*	
Visits to friends	37.43	37.36	50.33	38.89*	
Phone close friends or relatives	82.33	89.21*	68.34	75.32*	
Church, clubs, lodges, other groups	60.76	53.25*	43.91	43.91	
Someone to share private feelings, concerns	82.69	88.23*	81.65	84.96*	

Table II. Gender Differences in Social Integration: African American vs. White

Note: Differences tested via chi square: (1) African American women vs. White women; (2) African American men vs. White men.

*p < .05.

women to report visits by friends and about equally likely to report visits to friends. African American women proved more likely than White women to indicate attendance at meetings of churches and community groups. On the other hand, White women were more likely than African American women to report making phone calls to close friends or relatives as well as to indicate the presence of someone with whom they might share private feelings and concerns.

Inspection of unadjusted differences among males indicates that African American men were more likely than White men to indicate that they had visited or been visited by friends. White men proved more likely to report having phoned friends or family and to report the existence of a confidante.

Table III portrays racial differences on variables described in Table II after adjustment for socioeconomic and geographical differences. African

		African American vs. White women			African American vs. White men		
$\% \ge once per week$	b	SE	OR	b	SE	OR	
Visits by friends Visits to friends Phone close friends	11 28* 43*	.07 .08 .09	.90 .76 .66	.19* .24* 24*	.09 .10 .11	1.20 1.27 .78	
or relatives Churches, clubs, lodges, other	45 .55*	.09	1.73	24 .21*	.11	1.24	
groups Someone to share feelings, concerns	16*	.07	.85	.01	.02	1.01	

Table III. Logistic Regression: Adjusted Black-White Differences in Social Embeddedness

Note: Models include age, region, urbanicity, employment, poverty, marital status as covariates. *p < .05.

American women were less likely than White women to have made visits to friends, phone calls to close friends and relatives, or to have a relationship where they could share emotions and concerns. On the other hand, African American women once again were more likely than White women to participate more frequently in churches, clubs, lodges, and other groups.

In controlled analysis African American men again proved more likely than White men to indicate being visited by friends and making visits to friends. Unlike in bivariate analysis, they also were more likely to report visiting churches, clubs, lodges, and other groups. White men continued to be more likely to report frequent phone calls to friends and relatives. There was no African American vs. White difference for men in whether or not someone was available to share private feelings and concerns.

Table IV presents main effects and interactions involving embeddedness on the one hand and psychological symptom distress on the other. For all indicators of social embeddedness, main effects were significantly associated with symptom distress, indicating that embeddedness is indeed a protective factor that enhances psychological well-being. The presence of an intimate emotional relationship was especially important; the difference between the presence and absence of such a relationship was, on average, more than two symptoms of distress on the 5-symptom scale.

Only one interaction was significant. Among African American men, visits-by-friends was associated more with symptom distress than it was among White men.

Least squares							
Principle independent		Main effect		Women ^a		Men ^a	
variable	R^2	b	SE	b	SE	b	SE
Visits by friends	.07*	12*	.02	.02	.04	.13*	.06 ^b
Visits to friends	.07*	25*	.02	.03	.05	.05	.06
Phone close friends or relatives	.07*	10*	.02	.06	.04	.00	.04
Churches, clubs, lodges, other groups	.08*	38*	.02	.08	.05	09	.05
Someone to share private feelings, concerns	.10*	-2.18*	.09	.25	.37	.38	.39

 Table IV. Social Embeddedness Associated With Psychological Symptom Distress: Ordinary Least Squares

Note: Models include age, region, urbanicity, employment, poverty, marital status as covariates. ^{*a*} Interaction terms: African American-by-White.

^bSeparate regression coefficients indicated by significant interaction: African American men: b = -.19; White men: b = -.06.

*p < .05.

DISCUSSION

Results from the study documented differences between African Americans and Whites in levels of social embeddedness and, to a lesser extent, in the functional significance of social embeddedness. The results also pointed to considerable variation according to gender.

African American men proved more likely than White men to be visited by friends, to make visits to friends, and to attend gatherings of churches, clubs, lodges, and other groups. Perhaps preferring face-to-face contact to interaction by telephone, they were less likely than White men to make phone calls to close friends or relatives. Moreover, African American men who were visited by friends were especially likely to avoid psychological distress; they enjoyed even greater protection from distress than White men did.

Overall, African American men demonstrated a higher degree of social embeddedness than White men did—more involvement on more indicators of embeddedness. Their behavior is consistent with a view of African American social interaction depicted in the literature: relatively frequent contact associated with active peer support networks and high levels of community involvement (Lee et al., 1991).

African American women, on the other hand, were less likely than White women to make visits to friends, as well as to make phone calls to friends or relatives. African American women were also less likely than White women to have a relationship in which they felt able to share private feelings and concerns.

Like their male counterparts, African American women proved more likely to have attended meetings of churches, clubs, lodges, and other groups. Their behavior was striking in this regard; the odds ratio was higher than others. Results from the study thereby confirm the contention that "African Americans participate quite extensively in voluntary associations" including the church (Milburn & Bowman, 1991, p. 31), and an unspoken assumption that they participate more than Whites do. Greater African America social involvement also helps to justify a premise of intervention agents (cf. Sonn & Fisher, 1998); many have predicated their thinking on belief in a cohesive African American community with a vibrant network of mediating structures. The evidence of limited friend involvement among African American women, on the other hand, suggests a need for caution and points to the importance of avoiding overly broad claims.

Results from the study help to clarify and extent findings on patterns of African American embeddedness and support reported in the literature. Thus, while community "... participation is correlated with positive psychological characteristics ..." among African Americans (Milburn & Bowman, 1991, p. 32), participation for the most part was equally benificial among Whites. Findings like those indicating a high rate of death among socially isolated African American women (LaVeist et al., 1997) point to an important source of risk, but do not tell us about its unique importance among African Americans. The present study suggests that it cannot be taken for granted that social involvement is particularly important for African Americans.

In another study reported in the literature, Jay and D'Augelli (1991) documented no difference between African Americans and Whites from examining characteristics of their social networks. The present study pointed to differential rates of social interaction, suggesting that equivalence in structural features of networks might not translate into equivalent interaction patterns; or that college freshman represent a special population and that generalization to the larger community is hazardous.

On the other hand, data from the study partially support findings like that of Maton (1990) who indicated that friend-based support was important to psychological well-being among in-school African American males. Maton found no connection between friend support and well-being among drop-outs. Thus, the experience of young African American males who remained in school appears, at least in this instance, to better represent the population at large.

That African American women have relatively low levels of social integration has not been reported elsewhere. Previous research does point to the possibility of problems in the support networks of African American women—especially a greater degree of mother–daughter conflict than among other groups (Davis & Rhodes, 1994). There has been little indication, however, of low involvement with friends.

African American women's lesser involvement with friends was offset partly by a greater involvement in churches, clubs, lodges, and other groups. Conceivably, these social connections serve as a source of mentors who have been shown to assist African American mothers in optimizing access to and use of social support (Rhodes, Ebert, & Fischer, 1992).

This lesser involvement with friends might further be explained by a greater involvement with family and extended family (Wilson, Greene-Bates, McKim, & Simmons, 1995)—social connections barely addressed in the survey. On the other hand, compensatory involvement with family cannot account for the lower percentage of African American than White women who lacked an intimate emotional relationship; the manner in which the question was worded placed no restriction on source and family members were therefore not excluded. Overall, the presence of an intimate emotional relationship proved notably associated with psychological symptom distress.

In view of the protective value of embeddedness demonstrated in the study, relatively low friend involvement and confidanteship place African American women, in comparison with other groups considered, at psychological risk. Evidence from epidemiologic studies is consistent with this contention (Snowden, 1998). For example, reports from successive national surveys (Hines, Snowden, & Graves, 1998; Jones-Webb & Snowden, 1993) documented higher rates of depression symptoms among African American women than among women from other groups. In the more recent survey (Hines, Snowden, & Caetano, 1999) African American women proved 1.5 times more likely than White women or Latinas to report symptoms reaching clinically significant levels.

The differences between African Americans and Whites observed in the study cannot be attributed to methodological factors. The size and representativeness of the sample greatly undermine appeals to statistical power and regional bias as possible weakness. Important demographic differences were controlled. Thus, although African Americans are less likely to be married and employed—both of which might affect levels of social interaction—the differences were controlled. Less telephone contact with friends might be affected by lack of access to the telephone. Control for poverty status helped to reduce, if not eliminate, this bias.

Results from the study suggest the importance of a differentiated view of African American community life and social involvement. The importance of gender stands out especially, and the need for gender-specific accounts of African American social and community participation. Other sources of differences that might be important to consider are urban–rural status, age, socioeconomic standing, and acculturation. More theory and research are needed at an intermediate level. These efforts must seek to describe African American embeddedness and social interaction in more qualified, specific terms than theory and research describing an overarching African American tradition, but with more general application than theory and research on social concerns (e.g., teenage, single parenthood) in special populations.

REFERENCES

Aday, L. A. (1994). Health status of vulnerable populations. Annual Review of Public Health, 15, 487–509.

Barrera, M. J. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology*, 14, 413–432.

Berkman, L. F., & Syme, L. S. (1994). Social networks, host resistance, and mortality: A nine year follow up study of Alameda County residents. In A. Steptoe & J. Wardle (Eds.), *Psychosocial Processes and Health: A Reader* (pp. 43–67). Cambridge, England: Cambridge University Press.

- Berwick, D. M., Murphy, J. M., Goldman, F. A., Ware, J. E., Barsky, A. J., & Weinstein, M. C. (1991). Performance of a five-item mental health screening test. *Medical Care*, 29, 169–173.
- Betancourt, H., & Lopez, S. (1993). The study of culture, ethnicity, and race in American psychology. American Psychologist, 48, 629–637.
- Chen, S. P. C., Telleen, S., & Chen, E. H. (1995). Family and community support or urban pregnant students: Support person, function, and parity. *Journal of Community Psychology*, 23, 28–33.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*, 300–314.
- Cohen, J. (1988). Statistical power analysis for Hte behavioral sciences. Hillsdale, NJ: Erlbaum.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 5, 310–357.
- Coleman, J. S. (1988). Social capital in the creation of human capital. American Journal of Sociology, 94(Suppl.), 95–120.
- Davis, A. A., & Rhodes, J. E. (1994). African American teenage mothers and their mothers: An analysis of supportive and problematic interactions. *Journal of Community Psychology*, 22, 12–24.
- DeFour, D. C., & Hirsch, B. J. (1990). The adaptation of black graduate students: A social network approach. American Journal of Community Psychology, 18, 487– 503.
- Dressler, W. W. (1985). Extended family relationships, social support, and mental in a southern black community. *Journal of Health and Social Behavior*, *26*, 39–48.
- Evans, M. G. (1985). A monte carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Deviance Processes*, *36*, 305–323.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: The Free Press.
- Henly, J. (1997). The complexity of support: The impact of family structure and provisional support on African American and white adolescent mothers well-being. *American Journal* of Community Psychology, 25, 629–655.
- Hines, A. M., Snowden, L. R., & Caetano, R. (1999). Depression, alcohol consumption, and AIDS-related sexual behavior among African American, Hispanic, and white women. Manuscript under review.
- Hines, A., Snowden, L. R., & Graves, K. L. (1998). Acculturation, alcohol consumption and AIDS-related risky sexual behavior among African American women. Women and Health, 25, 125–131.
- Hofferth, S. L. (1984). Kin network, race, and family structure. Journal of Marriage and the Family, 46, 791–806.
- Hunter, J. E. (1997). Needed: A ban on the significance test. *Psychological Science*, 8, 3–7.
- Jackson, J. J. (1970). Kinship relations among urban Blacks. Journal of Social Behavioral Sciences, 16, 1–13.
- Jackson, P. B. (1992). Specifying the buffering hypothesis: Support, strain, and depression. Social Psychological Quarterly, 55, 363–378.
- Jay, G. M., & D'Augelli, A. R. (1991). Social support and adjustment to university life: A comparison of African American and white freshman. *Journal of Community Psychology*, 19, 95–104.
- Jaynes, G. D., & Williams, R. M. (1989). A common destiny: Blacks and American society. National Research Council. Washington, DC: National Academy Press.
- Jones-Webb, R., Snowden, L. R., Herd, D., Short, B., & Hannan, P. (1997). Alcohol related problems among Black Hispanic and white men: The contribution of neighborhood poverty. *Journal of Studies on Alcohol*, 58, 539–545.
- Jones-Webb, R., & Snowden, L. R. (1993). Symptoms of depression among blacks and whites. American Hournal of Public Health, 83, 240–244.

- LaVeist, T. A., Sellers, R. M., Elliot Brown, K. A., & Nickerson, K. J. (1997). Extreme social isolation, use of community-based senior support services, and mortality among African American elderly women. *American Journal of Community Psychology*, 25, 721– 731.
- Lee, B. A., Campbell, K. E., & Miller, O. (1991). Racial differences in urban neighboring. Sociological Forum, 6(3), 525–550.
- Leiberman, M. (1982). The effects of social supports on responses to stress. In L. Goldberger & S. Breznitz (Eds.), *Handbook of stress: Theoretical and clinical aspects* (pp. 764–783). New York: The Free Press.
- Martin, E., & Martin, J. (1995). The helping tradition in the black family and community. Washington, DC: National Association of Social Worker Press.
- Maton, K. I. (1990). Meaningful involvement in instrumental activity and well-being: Studies of older adolescents and at risk urban teen-agers. *American Journal of Community Psychology*, 18, 297–320.
- Maton, K. I., Teti, D. M., Corns, K. M., Vieria-Baker, C. C., Lavine, J. R., Gouze, K. R., & Keating, D. P. (1996). Cultural specificity of support sources, correlates and contexts: Three studies of African American and Caucasian youth. *American Journal of Community Psychology*, 24, 551–587.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, 114, 376–390.
- Milburn, N. G., & Bowman, C. J. (1991). Neigborhood life. In J. S. Jackson (Ed.), Life in Black America (pp. 31–45). Newbury Park, CA: Sage.
- Miller-Lancar, C. L., Erwin, C. J., Landry, S. H., Smith, K. E., & Swank, P. R. (1998). Characteristics of social support networks of low socioeconomic status African American, Anglo, and Mexican American mothers of full-term and preterm infants. *Journal of Community Psychology*, U26, 131–143.
- Mor-Barek, M. E., Miller, L. S., & Syme, L. S. (1991). Social networks, life events, and health of the poor, frail elderly: A longitudinal study of the buffering versus the direct effect. *Family* and Community Health, 14, 1–13.
- Newhouse, J. (1974). A design for a health insurance experiment. Inquiry, 11, 5-27.
- Rhodes, J. E., Ebert, L., & Fischer, K. (1992). Natural mentors: An overlooked resource in the social networks of young, African American mothers. *American Journal of Community Psychology*, 20, 445–461.
- Rice, M. E. (1997). Violent offender research and implications for the criminal justice system. *American Psychologist*, 52, 414–423.
- Roschelle, A. R. (1997). No more kin: Exploring race, class, and gender in family networks. Thousand Oaks, CA: Sage.
- Saegert, S. (1989). Unlikely leaders, extreme circumstances: Older Black women building community households. American Journal of Community Psychology, 17(3), 295–316.
- Seeman, T. E., & Syme, L. S. (1987). Social networks and coronary artery disease: A comparison of the structure and function of social relations as predictors of disease. *Psychosomatic Medicine*, 49(4), 341–354.
- Snowden, L. R. (1998). Racial differences in informal help-seeking form mental health problems. *Journal of Community Psychology*, 26, 429–438.
- Snowden, L. R. (1998). Managed care and ethnic minority populations. Administration and Policy in Mental Health, 25, 125–131.
- Snowden, L. R., & Hines, A. M. (1998). Acculturation, alcohol consumption, and AIDS-related risky sexual behavior among African American men. *Journal of Community Psychology*, 26, 345–359.
- Snowden, L. R., & Hines, A. M. (1999). A scale to assess African American acculturation. Journal of Black Psychology, 25, 36–47.
- Snowden, L. R., Libby, A., & Thomas, K. (1997). Health related and utilization among African American women. Womens Health:Research on Gender, Behavior, and Policy, 3, 301–314.
- Sonn, C. C., & Fisher, A. T. (1998). Sense of Community: Community resilient responses to oppression and change. *Journal of Community Psychology*, 26, 457–472.

- Stack, C. B. (1974). All our kin: Strategies for survival in a Black community. New York: Harper & Row.
- Stewart, A. L., Hays, R. D., & Ware, J. D. (1988). The MDS short form general health survey. Medical Care, 26, 724–732.
- Swets, J. A. (1988, June 3). Measuring the accuracy of diagnostic systems. Science, 240, 1285– 1293.
- Taylor, R. J., & Chatters, L. M. (1991). Religious life. In J. S. Jackson (Ed.), Life in Black America (pp. 105–123). Newbury Park, CA: Sage.
- Vaux, A. (1988). Social support: Theory, research, and intervention. New York: Praeger.
- Walls, C. T., & Zarut, S. H. (1991). Informal support from Black churches and the well-being of elderly Blacks. *Gerontological*, 31, 490–495.
- Wilcox, B. L. (1981). Social support, life stress, and psychological adjustment. American Journal of Community Psychology, 9, 371–386.
- Wilson, M. N., Greene-Bates, C., McKim, L., & Simmons, F. (1995). African American family life. In M. N. Wilson (Ed.), African American family life: Its structural and ecological aspects (pp. 5–21). San Francisco: Jossey-Bass.
- Zedeck, S. (1971). Problems with the use of "moderator" variables. *Psychological Bulletin*, 76, 295–310.